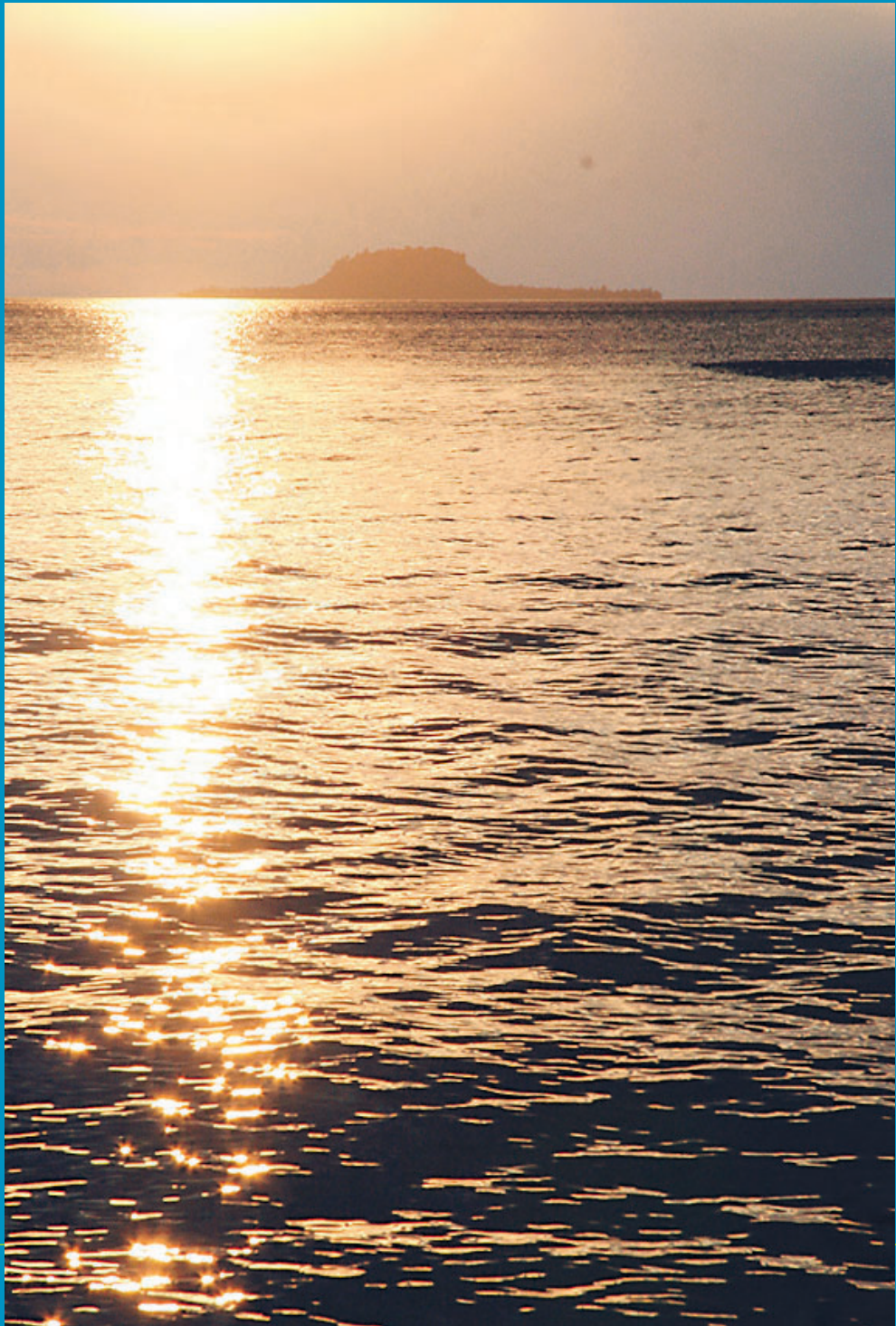


# Chief Roi Mata's Domain

Nomination by the Republic of Vanuatu for  
Inscription on the World Heritage List





Cover image: Artok Island, viewed from mainland Efate

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## State Party

Republic of Vanuatu

## State, Province or Region

Shefa Province

## Name of Property

Chief Roi Mata's Domain

## Geographical coordinates to the nearest second

E 168° 10'58.4"

S 17° 37'44.2"

## Textual description of the boundary of the nominated property

The boundary of Chief Roi Mata's Domain consists of a rough triangle formed by and incorporating the three principal sites of Mangaas, on the mainland of Efate Island, Fels Cave, on Lelepa Island, and the entire land area and fringing reef of Artok (Retoka) Island.

## Justification

### Statement of Outstanding Universal Value

Chief Roi Mata's Domain is an outstanding illustration of the exceptional living connection between Pacific people, their landscapes and their traditions. The last holder of the paramount chiefly title of Roi Mata, who died in the late sixteenth or early seventeenth century, remains the central figure of a body of oral tradition still recounted today in Vanuatu. His innovative strategies for the resolution of widespread conflict on the island of Efate, including the institution of land-holding *naflak* matrilineal systems, continue to be observed and celebrated in contemporary Efate society. Narratives about Chief Roi Mata sustain the moral values that he instituted, and have guided archaeologists to key sites associated with his life and death. These sites, all of which lie within his former domain, include Roi Mata's chiefly residence at Mangaas, the site of his death at Fels Cave, and the mass burial at his grave on the island of Artok. The ongoing customary *tapu* prohibition on the further use of Mangaas or Artok Island following the death of Roi Mata is without parallel in the world, and has preserved the unique cultural and natural values of these places over the last four centuries.

Chief Roi Mata's Domain is an exceptional example of a continuing cultural landscape organised around the principles of a chiefly title system. Chiefs, who continue to play a major role in social life within the Domain, derive their authority from the traditions relating to previous title-holders and from the material proofs of these ancestors that are still present in the landscape. The most dramatic of these material proofs is the mass burial on the *tapu* or forbidden island of Artok, in which the body of Roi Mata is surrounded by more than fifty of his family and retainers, a site which is exceptional on a global scale and unique in terms of the scale of the local polity and population. Amongst the limited number of societies around the world that continue to function under the authority of traditional chiefs, there are none in which the historical depth of the institution is so dramatically affirmed through the convergence of oral tradition and archaeological discovery, and attested to by an entire landscape serving as evidence for the past, as Chief Roi Mata's Domain.

The Outstanding Universal Value of Chief Roi Mata's Domain is grounded firmly in the fundamental integrity of the continuing cultural landscape, and in the ongoing

## Map of the nominated property, showing boundaries and buffer zone

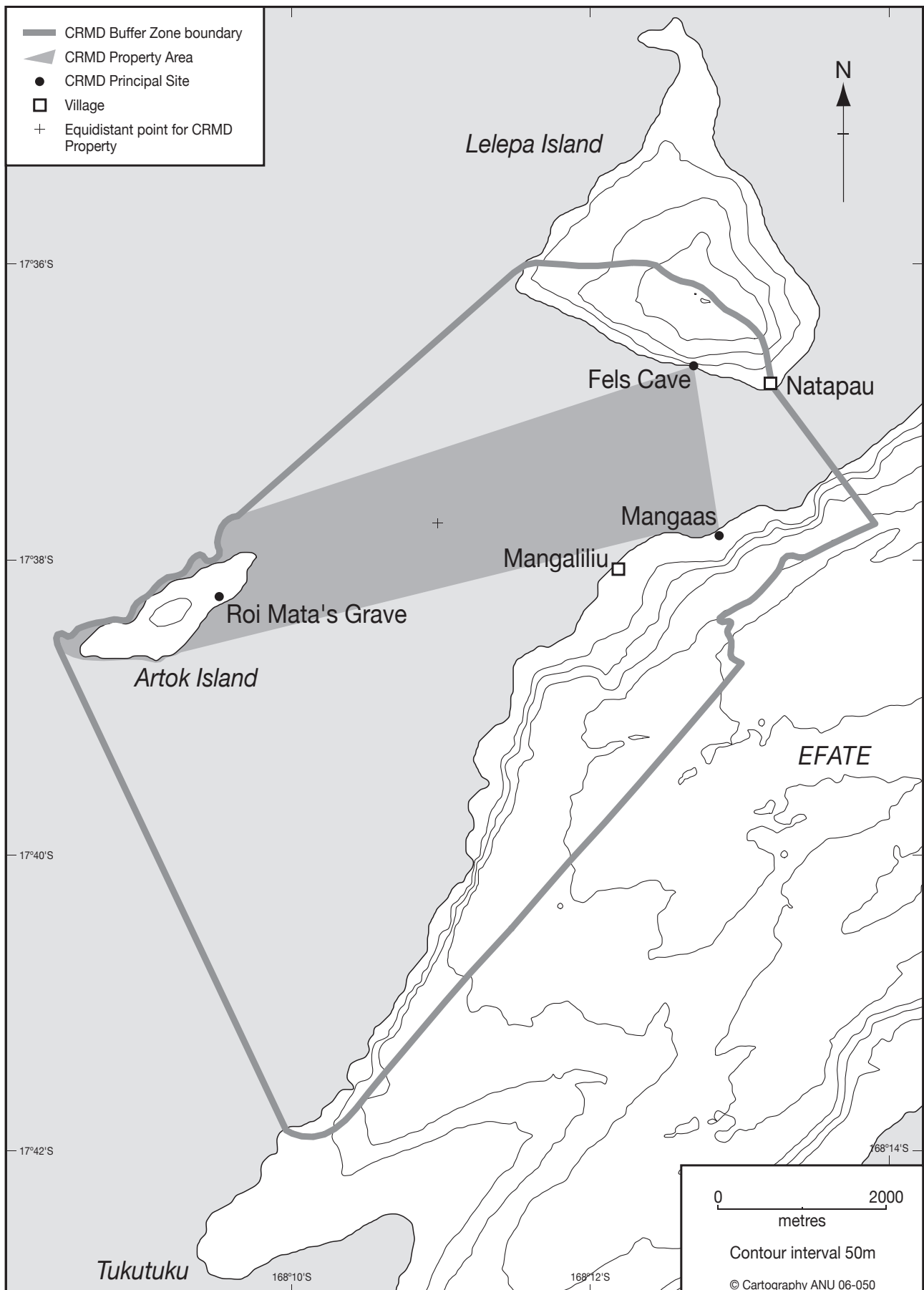


Figure 1.1 Boundary of CRMD and surrounding buffer zone

and evolving organic relationship between people and the land. The customary *tapu* prohibition on residence or intensive use of Roi Mata's residence at Mangaas and his gravesite on Artok Island continues to be respected, and constitutes a unique history of community-level conservation. The key sites associated with Roi Mata anchor a wider landscape of tradition that bears witness to and reinforces the continuing significance for living communities of Roi Mata's social revolution of the unique system of *naflak* matrilineal clans, indicating the exceptional importance in modern Vanuatu and the Western Pacific of the past and of custom in guiding community life in the present.

### Criteria under which property is nominated

Cultural criteria (iii), (iv) and (vi), as a Continuing and Associative Cultural Landscape

### Name and contact information of official local institution/agency

Organisation: Vanuatu Cultural Centre

Address: PO Box 184 Port Vila, Vanuatu

Tel: (678) 22129

Fax: (678) 26590

E-mail: [vks@vanuatu.com.vu](mailto:vks@vanuatu.com.vu)

Web address: [artalpha.anu.edu.au/web/arc/vks/vks.htm](http://artalpha.anu.edu.au/web/arc/vks/vks.htm)



Beach landing for Lelepa Island, with Artok Island at centre in distance.



# CHAPTER 2

Nomination Dossier



## 1. IDENTIFICATION OF THE PROPERTY

### 1.a Country (and State Party if different)

Republic of Vanuatu

### 1.b State, Province or Region

Shefa Province

### 1.c Name of Property

Chief Roi Mata's Domain

### 1.d Geographical coordinates to the nearest second

E 168° 10'58.4"

S 17° 37'44.2"

### 1.e Maps and plans, showing the boundaries of the nominated property and buffer zone

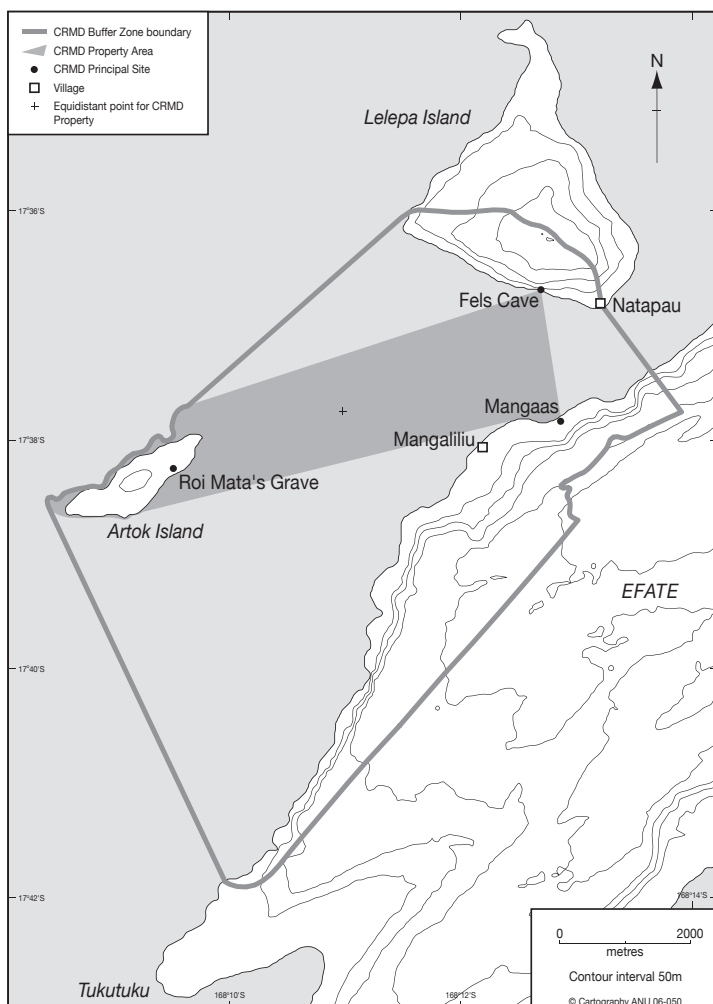


Figure 1.1 Boundary of CRMD and surrounding buffer zone (above)

### 1.f Area of nominated property (ha.) and proposed buffer zone (ha.)

Area of nominated property	4106.58 ha
Buffer zone	1275.42 ha
Total	5382.00 ha

## 2. DESCRIPTION



Figure 2.1 Visual catchment of CRMD; the view from Artok Island, Lelepa Island top left, Efate top centre and right

### 2.a Description of Property

The Republic of Vanuatu is pleased to present the Continuing and Associative Cultural Landscape of Chief Roi Mata's Domain for inscription on the World Heritage List. Chief Roi Mata's Domain consists of a littoral landscape, encompassing two islands, an adjacent mainland coast, and the intervening stretch of sea. Three principal sites within this cultural landscape serve to tell the tale of the life and deeds of a remarkable chief, Roi Mata, who lived and died in the late 16th or early 17<sup>th</sup> century. Chief Roi Mata's life and deeds continue to resonate in contemporary Vanuatu society, and the sites with which he is associated in tradition have been maintained and respected for almost four centuries since his death. Chief Roi Mata's Domain bears unique testimony to a living cultural tradition, serving as an outstanding example of a Western Pacific chiefly domain, and as the material witness to the continuing legacy of an innovative conflict resolution strategy initiated by Roi Mata.

#### 2.A.i Setting: the Lelepa Region of Northwest Efate

Chief Roi Mata's Domain (CRMD) is located in the Lelepa region, along the northwest coast of the main island of Efate, in Vanuatu's Shefa Province (Figure 2.1). Efate, centred at about 17°40' S and 168°20' E, and about 770km<sup>2</sup> in area, is the fourth largest island in the Vanuatu archipelago, and hosts the national capital, Port Vila, with a population of more than 30,000 (Figures 2.2 and 2.3). The smaller near-shore islands of Lelepa and Artok (also known as Retoka or Eretoka) form the western margins of Havannah Harbour, a deepwater harbour along the northwest coast of Efate (Smith 1991).

A semi-humid climate prevails over the northwest coast of Efate, which lies in a rain shadow created by the central range of Efate, sheltering the northern coast from the dominant southerly winds. Rainfall is typically 1600 mm per annum in the Lelepa region, compared with 2500 mm per annum on the south coast of Efate, and up to 5000 mm per annum in the upland interior of the main island (Quantin 1992). Normal seasonality consists of a warm, humid period from November to April, followed by a cooler and drier period associated with the southeast trade winds, from May to October.

The geology of northwest Efate is dominated by recent limestones and raised coral reefs. However, rich soils along the narrow coastal plain of the Northwest Efate mainland have combined with an exceptionally diverse marine environment in the Lelepa region to provide the subsistence basis for a long history of relatively dense settlement.

A significant biogeographic boundary separates the terrestrial fauna-rich areas of Near Oceania (including New Guinea, the Bismarck Archipelago and the Solomon

Islands) from the relatively depauperate faunal region of Remote Oceania, which includes Vanuatu (Green 1991). The only mammals native to Vanuatu are bats, of which there are seven species on Efate (Flannery 1993). Mammals known to have been introduced by humans prior to colonial contact include the dog, pig, two species of rat and one mouse. Other fauna include sixty-one species of land and freshwater birds (four of which are introduced), two introduced amphibian species, and nineteen reptile species – seventeen lizards and two snakes, of which three lizards and a snake have been introduced (Chambers and Bani 1988: 124).

Most of the natural vegetation of Chief Roi Mata's Domain and its buffer zone is disturbed. Formerly, the landscape probably consisted of coastal strand vegetation flanked by littoral forest, grading inland to dry rainforest. However much of the region has now been entirely replaced either by cultivation or by stands of invasive species. Some indigenous elements exist, particularly around prohibited sites, the significance of which has ensured their persistence (Bickford 2005).

### 2.A.ii Chief Roi Mata

Chiefs are an enduring and widespread feature of both historical and contemporary political landscapes in the Western Pacific. The term “chief” refers to a traditionally sanctioned leader, but there is considerable variation in the form and authority of chiefly status across the region. In social evolutionary schemas, chiefs usually relate to political groupings that number in the thousands – polities that are larger than the bands of hunter-gatherer societies, but smaller in scale than unified kingdoms or states. Within Vanuatu alone, there is great variation amongst the different types of leaders that are now collectively referred to as chiefs. However, the chiefs of Central Vanuatu, and especially those of Efate and the neighbouring Shepherd Islands to the north, traditionally exercised considerable authority over their domains.

The great Central Vanuatu chiefly title of Roi Mata features in many oral narratives still told in the region. Although many individuals probably held the title of Roi Mata over a long period, the actions of chiefs bearing this title are often conflated and attributed to a single individual. The scope for this historical confusion has been enhanced by the fact that no-one has claimed the title for the last 400 years, after the death of the last Roi Mata in about 1600 AD and his burial on the forbidden (*tapu*) island of Artok (see Appendix 1 for a glossary of terms in the national language of Vanuatu, Bislama, and the local Lelepa language).

Chief Roi Mata can presently be said to exist in at least three different registers, as:

- a mythical or historical figure in oral narratives;
- an archaeological or material presence; and
- a living entity in contemporary Vanuatu.

#### 2.A.ii.a The Mythical / Historical Roi Mata

Roi Mata features in a common core of legends – narratives that appeared to combine historically specific events with mythic exploits – that are widely repeated over a wide area of what is now Central Vanuatu. The “earliest” group of legends relates the arrival of the first Roi Mata as the captain of a canoe that approaches Efate from the south and lands at Maniora, the easternmost tip of the island. There, Roi Mata confers titles on the crew of his vessel, and embarks on the settlement and control of much of Efate, installing chiefs amongst the indigenous inhabitants of Efate and its outlying islands,



Figure 2.2 Map of the Pacific region showing the location of Vanuatu

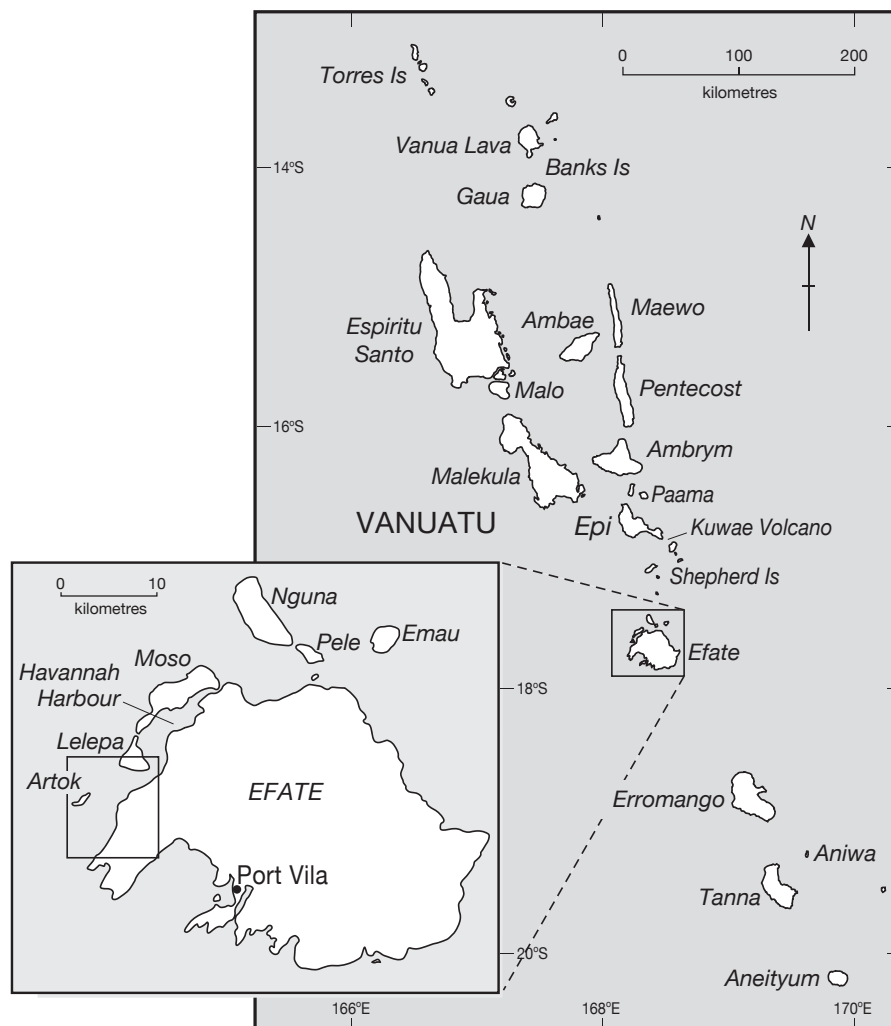


Figure 2.3 Map of Vanuatu showing the location of Efate (Inset: Figure 2.1, Northwest Efate)

before establishing himself in northwest Efate. A contrasting series of legends posits an indigenous Roi Mata as a child living at various sites along the northwestern coast of Efate – many of these appear designed for an audience of children, in their emphasis on simple “just-so” narratives that account for the origins of his title (and those of his brothers Roi Muru or Muri and Roi Mantae), or in their relation of Roi Mata’s childhood in the context of stories about diminutive autochthonous *mutuama* or *sangalengale* characters (Guiart 1973a: 289-90; see also Appendix 2).

Legends that may relate to the last holder of the Roi Mata title converge around three key episodes during his adult life. The first is Roi Mata’s institution of the matriclan or *naflak* system (see below) and the *natamwate* peace feasts as a means of settling the Great Efate War (Guiart 1973a: 290-1, Luders 2001). A *naflak* is a form of kinship reckoning (Guiart 1973b). Individuals assume membership in the *naflak* to which their mother belongs; thus children share the same *naflak* as that of their mother, but not that of their father (though marriage with someone of the father’s *naflak* is also prohibited). Calling together all of the warring parties and communities of Efate, Roi Mata is said to have presented each community with a totemic symbol of their identity, such as a crab or a coconut, enjoining them not to wage war against members of the same *naflak* or matriline. Roi Mata’s revolutionary institution of the *naflak* system thus provided people with allegiances that extended beyond the confines of their immediate settlements and their more narrow existing social groups, and is widely credited with ending the long era of island-wide conflict known as the Great Efate War (Luders 2001). Something similar to the *naflak* system may already have been in existence in the region, but the last Roi Mata is credited with reinvigorating or confirming the significance of the *naflak* system, and extending its functions as a system of land tenure to the regulation of marriage and thus of conflict.

The second significant episode in traditions of Roi Mata’s life is a specific adventure in which Roi Mata is blown off-course in his canoe to the island of Emae, in the Shepherd Islands to the north. Unrecognised, he is held as a slave by Chief Ti Vaitini, until he uses his chiefly power (*natkar*) to bring down illness upon his captors (Guiart 1973a: 291-2). Comparable stories about Roi Mata’s life and deeds are found throughout Efate, on every one of its offshore islands and across all of the islands of the Shepherds Group (e.g. Guiart 1973a, Facey 1988, Thieberger (ed.) 1999).

The third key episode is Roi Mata’s death. In the Shepherd Islands and elsewhere, Roi Mata’s death is often attributed to his murder at the hands of his brother, Roi Muru, who reputedly shoots him with a poisoned arrow. However, in the Lelepa region, an alternative and probably more plausible account describes Roi Mata visiting the settlement of Lou Patrou on Lelepa Island for a competitive *naleoana* feast, at which chiefs and their magic specialists or *munuwai* sought to outdo each other in the production and consumption of food. By now an old man, Roi Mata’s powers appear to have deserted him, and he falls mortally ill after over-consuming at the feast. Carried into Fels Cave, he dies there, and his body is borne by canoe back to his residence at Mangaas.

Roi Mata’s family and court, fearful of his extraordinary chiefly powers (Lelepa: *natkar*) even in death, opt not to bury him within his residential yard at Mangaas. Instead, they acquire the right to bury him on the small near-shore island of Artok, which is visible from almost all points within Roi Mata’s Domain and yet lies at a safe distance from most settlements. After Roi Mata’s body has been carried around the various

settlements in his domain, his *munuwai* magic men part the sea, creating a path from the mainland point of Nangus Katou across to Artok Island, along which his body is carried to its final resting place. Once buried with members of his court and family, many of them alive at their interment, Roi Mata is left undisturbed on Artok Island for almost four centuries, as the island was declared forbidden land (Lelepa: *fanua tapu*). His former residence at Mangaas is also abandoned and left unsettled and uncultivated for almost four hundred years.

#### 2.A.ii.b The Archaeological Roi Mata

Following the lead of anthropologist Jean Guiart, who had documented Roi Mata narratives in Central Vanuatu (then the New Hebrides) during the 1950s, archaeologist José Garanger went to the Lelepa region in search of possible archaeological traces of Roi Mata and his deeds. Garanger conducted excavations at the three principal sites associated with Roi Mata in the Lelepa region: his residence or *natkon* at Mangaas (or Mangaasi) on the northwest mainland coast of Efate, the site of his death in Fels Cave on Lelepa Island, and his burial site on Artok Island. Garanger's excavations, together with subsequent excavations by a joint team from the Vanuatu Cultural Centre and the Australian National University, identified a late layer of occupation at Mangaas now dated to between about 1450 AD and 1600 AD (Spriggs 2006). This corresponds with a distinct black linear phase of painted rock-art at the second site, Fels Cave, depicting male figures holding clubs and various marine and terrestrial animals, dated to about 1600 AD. At the third site, the burial site on Artok Island reputed to contain Roi Mata's burial, Garanger found a mass grave containing the remains of approximately fifty people arranged around a central figure lying in a deeper pit, the skeleton of an old man laid out in a chiefly pose and with his head resting against the base of a large basalt headstone. Recent re-dating of this burial suggests a date of about 1600 AD. Dates from all three of the principal sites associated with Roi Mata thus converge on the period at the end of the 16<sup>th</sup> century, and support the notion that a historical figure bearing the title Roi Mata can be linked with each of these sites. Details of the archaeological research conducted at each site are contained in sections 2.A.iv, 2.A.v and 2.A.vi below.

#### 2.A.ii.c The Living Roi Mata

Chief Roi Mata still lives for many people in contemporary Vanuatu, as a source of chiefly power (*natkar*) immanent both in the landscape and in the currently un-attributed title, and as an inspiration for people negotiating their lives and, especially, the fate of their land. Many of the stories about Roi Mata that were told to Jean Guiart in the 1950s are still recounted in Central Vanuatu today, but their significance and importance has been augmented by the archaeological findings and by the continuing relevance of Roi Mata for disputes over the ownership of land.

Garanger's excavation of Roi Mata's burial on Artok Island provoked intense interest amongst the communities of Efate, the local colonial community, and archaeologists internationally, and public presentations of his results in Port Vila drew large crowds. Roi Mata featured in radio



Figure 2.4 Vanuatu's Coat of Arms

shows that told the story of his life and death, and in plays by the national theatre group, Wan Smolbag (Dorras and Walker 1992:12):

Roymata, Roymata, Roymata!  
Your name falls down the years  
And is remembered with great pride.  
Roymata! The man who brought peace  
To these islands!

Roi Mata has emerged as a symbol of cultural heritage for Vanuatu as a nation. At Independence in 1980, Roi Mata's death and burial featured as the sole indigenous contribution to the exhibition on the nation's history held in Port Vila, and many indigenous Vanuatu (ni-Vanuatu) people now identify the male figure in Vanuatu's coat of arms as Roi Mata (Figure 2.4), in his new guise as a national culture hero; in fact this figure was redrawn from a 19<sup>th</sup>-century illustration of a family from Havannah Harbour, adjacent to Lelepa Island.



Figure 2.5 Chief Kalkot Murrur and Douglas Kalotiti paying homage at the gravestone of Chief Roi Mata

Finally, Roi Mata has emerged as an international figure through his appearance in the US reality television show, “Survivor” in 2004, which featured tales of his exploits and visits to his grave on Artok Island, and the French reality television show “Koh-lanta”, shot during January-February 2006, which was centred on Roi Mata’s residence of Mangaas.

Since Vanuatu’s independence in 1980, there has been a gathering boom in the long-term lease or effective sale of land by indigenous communities to foreign investors. Over 55% of the land on Efate has now been alienated or leased. In this rush for property, chiefly titles have proved crucial to claims over land, and a critical element in much of this dispute has been the role of Roi Mata’s matrilineal (*naflak*) system (see above). Importantly, it appears that discrete areas of land, at least in northwest Efate, were primarily owned by individual *naflak*, and that chiefly titles relating to these lands passed not from father to son, but from a man to his sister’s son, thus retaining the same *naflak* identity for successive chiefs. From the second half of the nineteenth century, the *naflak* system suffered under the influence of Presbyterian missionaries, who insisted on the strict observance of patrilineal succession of titles and rights to land, throwing land tenure systems on Efate into chaos. Today, many of those seeking to stem the flow of land leases have appealed to the more communal *naflak* system as a means of preventing leases by individuals.

But it is in Chief Roi Mata’s former domain, amongst the living communities of Lelepa and Mangaliliu, where his significance endures most profoundly. The landscape of Chief Roi Mata’s Domain is suffused with material traces of his presence, such as trees, stone walls and grave stones, and the principal sites of Mangaas, Fels Cave and Artok Island act as central nodes for a sacred geography towards which the communities continue to show the deepest respect. The unity of the Lelepa and Mangaliliu people as a community, and the links that they claim to their land, hinge upon the figure of Roi Mata. The respect still shown by the community towards Roi Mata is as strong as ever, with ceremonies involving the beating of *tamtam* drums and drinking of kava taking place at Mangaas, and dream specialists recounting lengthy narratives of their encounters with Roi Mata’s spirit.

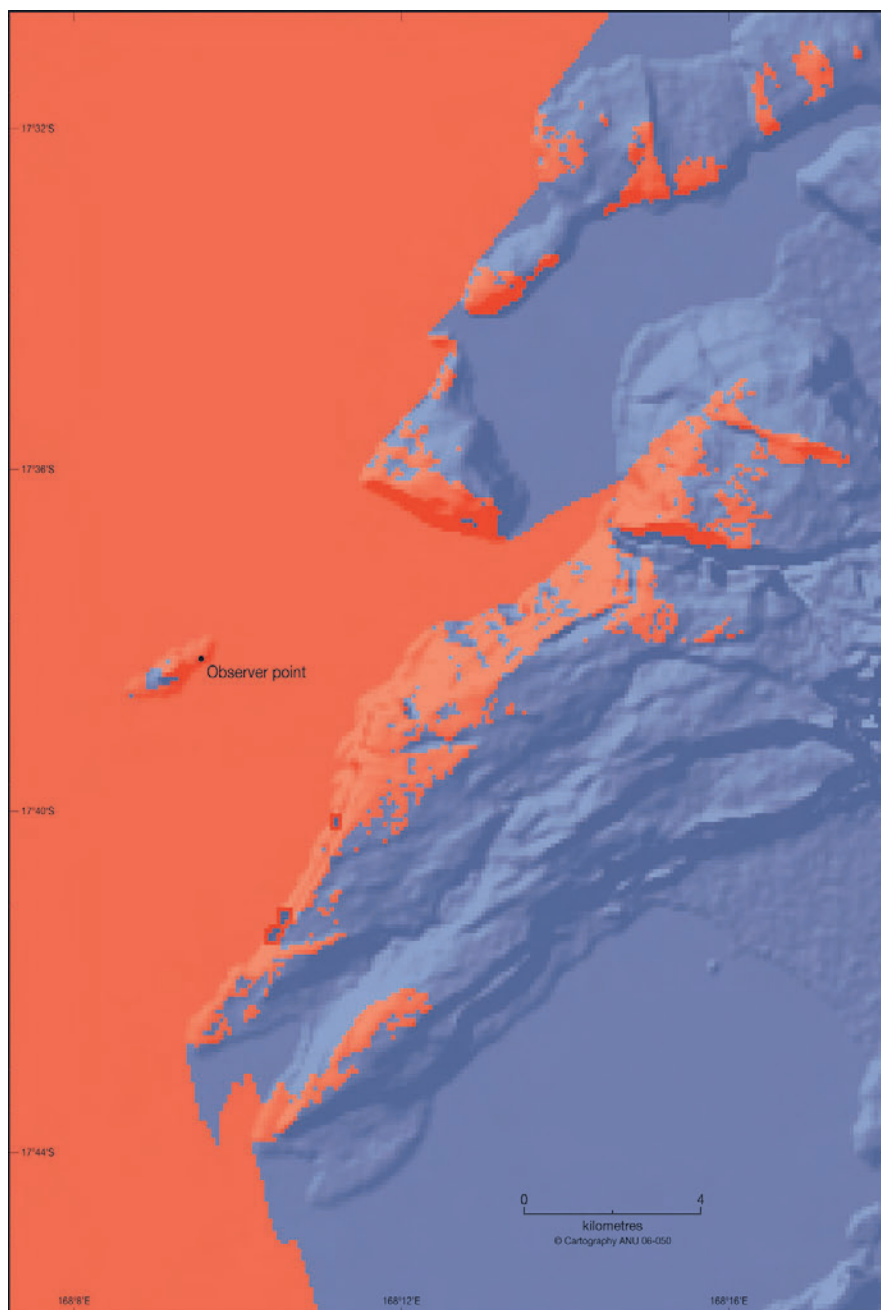
### 2.A.iii Chief Roi Mata’s Domain

Chief Roi Mata’s Domain encompasses much of the Lelepa region, the entirety of which was formerly his chiefly domain. The property being nominated for World Heritage status as Chief Roi Mata’s Domain represents a substantial portion of the Lelepa region (the lands claimed by the related villages of Natapau on Lelepa Island, and Mangaliliu on the Efate mainland). The three principal sites associated, respectively, with the life, death and burial of Roi Mata form the core components of the World Heritage-nominated property. These three principal sites are:

- the abandoned mainland settlement site of Mangaas, which was Roi Mata’s personal residence;
- the cave of Fels, on Lelepa Island, where the old Roi Mata drew his last breath; and
- the small nearshore island of Artok, where Roi Mata was buried, together with approximately 50 members of his family and court.

The property being nominated for World Heritage status consists of a rough triangle formed by these three principal sites and the intervening area of sea (Figure 1.1).





**Figure 2.6 Visual catchment of CRMD**

Around the World Heritage-nominated property, a buffer zone has been defined on the basis of the “visual catchment” of Artok Island. The visual catchment consists of all those places within the Lelepa Region from which Artok Island can be seen, or which a person standing on Artok Island can see. Figure 2.6 illustrates the extent of this visual catchment buffer zone.<sup>1</sup> The actual boundary defined for the buffer zone modifies this visual catchment in two important ways:

1. by eliminating inter-visible but distant areas that are not contiguous with the CRMD area (mostly in the upland interior of the Efate mainland and on Moso Island); and

<sup>1</sup> Figure 2.6 was generated by Anthony Bright (ANU Cartography) using Viewshed analysis in ArcGIS 9.0. The observer point is located on Artok Island at E168°9'30.9" S17°38'14.9" at an elevation of 100m, and the digital elevation model is 3 arcsecond SRTM Version 2, <http://www2.jpl.nasa.gov/srtm/>.

2. by removing from the buffer zone those marginal areas that are not under customary ownership (including a small cluster of bungalows near Lelepa Landing, and the large cattle ranch which covers Tukutuku Point to the southwest of the CRMD area and the plateau that extends above the cliffs that lie behind Mangaas and Mangaliliu Village).

The buffer zone thus encompasses the entire island of Artok, the southwestern portion of Lelepa Island, including Fels Cave and its surrounds, and the adjacent stretch of the coastal mainland of northwest Efate. The buffer zone also encompasses the mainland interior up to the crest of the cliffed ridge behind the site of Mangaas. Finally, both the buffer zone and the nominated property area incorporate a body of sea that links the three principal sites, an inclusion which indicates the symbolic importance of the sea to the essentially maritime communities of Efate and the Western Pacific more widely as a means of communication rather than a barrier to movement and ideas (Hau'ofa 1994). Within Chief Roi Mata's Domain, the principal sites mark the major events of Roi Mata's life and death, while the sea passages between them recall the transitional flow of his movements between life, death and burial.

## 2.A.iv Mangaas – Roi Mata's Residence

### 2.A.iv.a Location and Ecology of the Mangaas Site

The principal site of Mangaas (or Mangaasi) is renowned as the former residence of the paramount Chief Roi Mata (Figure 2.7). It is also one of the most significant archaeological settlement sites in the Western Pacific region. Mangaas is located on the northwest coast of Efate, about 1.8 km to the east of Mangaliliu Village. Access to the site is by road, via Roao Primary School (near Mangaliliu), and then 100m by foot. The central portions of the site are owned by Chief Meto Kalotiti, Chief Kalkot Murmur, Chief Pierre Fartepar and Mr Kalfau Palinga.

Mangaas is located on a very narrow but fertile coastal plain, hemmed in to the south by steep raised coral reef ridges and cliffs rising to 200 m. The ridges consist of tuffs

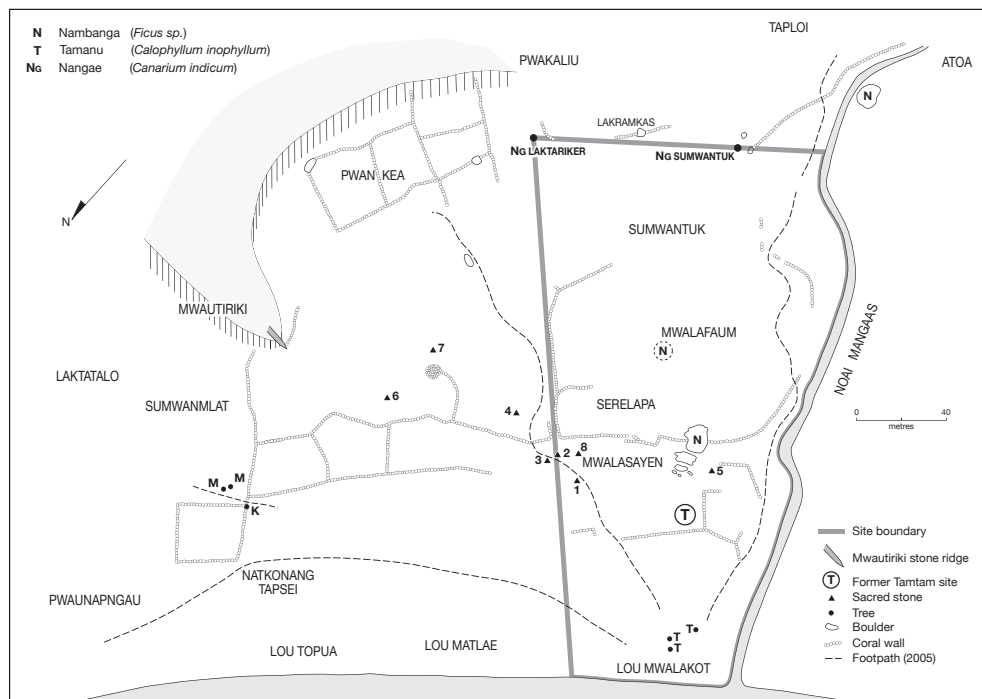


Figure 2.7 The site of Mangaas

and clays capped by Pleistocene and Plio-Pleistocene limestones, while the plains are also raised reef, representing the most recent phase of tectonic uplift. The upland ridges are deeply incised by a series of streams that debouch through the coastal plain, though some of these streams sink into the basal coralline limestone and have no visible mouth at the sea. The coastal plain is differentiated by a series of beach ridges, behind which in-wash materials from the slopes have mixed with airborne volcanic ashes and local deposits to form relatively deep soils. Several outlier hillocks and massive limestone boulders dot the coastal plains, and these are usually identified by the community as spirit locations.

### Flora

Floral composition in the Mangaas area is striking in terms of the significant presence of endemic species at the site. The presence of these endemic species in the immediate vicinity of the area of Mangaas most closely associated with Roi Mata can be attributed directly to the *tapu* or prohibited status of this site. Nearly 70% of Efate's lowland forest has already been completely destroyed and, with the pressure for coastal development set to continue, such destruction is unlikely to abate. While sections of the wider Mangaas coast have been infiltrated by invasive species, the flora in the vicinity of the precise area nominated for World Heritage status, particularly around the banyan (Bislama: *nambanga*) tree at Mwalasayen and the canarium (Bislama: *nangae*) tree at Sumwantuk, is characteristic of a less disturbed coastal flora. This area, which corresponds approximately to the location of Roi Mata's former residence, has been identified by the Forestry Department as one that should be conserved on the basis of its composition of lowland forest. At least ten endemic plant species are found at Mangaas: *Gardenia tannaensis*, *Pycnarrhena ozantha*, *Pseuderanthemum carrurhersii*, *Tarrenna efatensis*, *Tylophora aneityensis*, *Sterculia banksiana*, *Santalodes desmos*, *Acalypha forsteriana*, *Veitchia macdanielsii* and *Cupanipsis neo-ebudarium*.

### Fauna

The significance of the fauna of the Mangaas area appears to be related directly to the cultural importance of the site and its connection with Roi Mata. Information about the fauna at Mangaas has been recorded from members of the local community, with an emphasis on the relationship between particular animals and the *tapu* prohibitions of the area (Kalfatak 2005). For instance, there is a sacred rooster that is said to live at Mangaas, in the roots of the Mwalasayen banyan. Members of the local community have heard its calls but have never laid eyes on it, suggesting that it belongs to the spirit world. There was a period after the recent archaeological excavations at Mangaas when the rooster was silent but, apparently encouraged by the recent revival of cultural respect in relation to Mangaas, the rooster is crowing once again. In similar fashion, a Pacific Imperial Pigeon (*Ducula pacifica*) is reported to reside in the canarium tree at Sumwantuk (Figure 2.7), where Roi Mata's house once stood. A complete faunal survey of Mangaas is intended for the area (see the *Plan of Management* for Chief Roi Mata's Domain).

### Marine

The recent history of the status of the marine ecology at Mangaas is also indicative of the power of the *tapu* restrictions on use of the area. In the years after 1927, when Lelepa Islanders began to garden in the Mangaas area again for the first time since the death of the last Roi Mata, it is said that the reef in front of the beach at Mwalakot teemed with thousands of fish that showed no fear of fishermen, unaccustomed as they were to human presence following more than three centuries of *tapu* restrictions. Marine life on the reef at Mwalakot is now relatively depauperate both in terms of



**Figure 2.8** The tamanu trees at Mwalakot

fish diversity and numbers, and the reef floor is largely covered in calcareous algae and other small seaweeds, possibly a by-product of the last major cyclone in 2004 (Hickey 2005b). Coral coverage is minimal compared with other parts of CRMD. Today, in an effort to allow regeneration of the reef and encourage growth in fish stocks, Mwalakot represents the eastern limit of the 'banned area' for Mangaliliu Village, within which fishing restrictions are enforced.

Of more significance in relation to the cultural landscape at Mangaas is the interrelationship between the marine world and the recent revival of interest in Lelepa's cultural heritage. Since January 2006, when people began playing the newly erected slit drums at Mangaas, three dugongs have been sighted close to the beach, an event regarded locally as a rare and especially propitious omen.

#### **2.A.iv.b Visible Features of the Mangaas Site**

This section reviews visible features of the Mangaas site, the locations of which are mapped in Figure 2.7.

### Mwalakot – Roi Mata’s beach landing

Mwalakot (or Mwalakoto) is the beach landing area immediately in front of Roi Mata’s residential area at Mangaas. The name Mwalakot is so widely known through Central Vanuatu that it is often employed as a synonym for Mangaas in oral narratives. The entrance from the sea to the thin passage through the fringing reef is bordered on either side by massive coral heads, identified by name as Likanas (“the breasts [*nas*] of the shark [*ika*, lit. fish]”). Chiefs of Mangaas, from Roi Mata to the present day, have exercised right of way over this passage, and others landing at Mwalakot will pull their canoes to one side on the beach to allow direct access for the chief’s canoe. The landing area, Lou Mwalakot, is shaded by several massive trees, including three ancient tamanu (*Calophyllum inophyllum*) trees (Figure 2.8), said to have been planted by Roi Mata, two large casuarinas (*Casuarina equisetifolia*), a *Hernandia nymphaeifolia* and a *Pouteria costata*. Immediately to the west of Lou Mwalakot is the mouth of the small but energetic stream, Nwai Mangaas.



Figure 2.9 The banyan at Mwalasayen

### Mwalasayen – the public dancing ground

Mwalasayen is the area immediately inland from the beach landing of Mwalakot, and is dominated by an ancient and very large banyan (*Ficus subcordata*) tree (Figure 2.9). Between the banyan and Mwalakot is a level area identified as the *mwalala* or dancing ground of Mwalasayen, which includes the former location of the standing slit drums (Lelepa: *napwea*; Bislama: *tamtam*) that were beaten to summon the community and accompany dances. The banyan of Mwalasayen towers over the surrounding forest canopy and is clearly visible when approaching Mangaas from the sea. The banyan, which is widely attributed to the time of Roi Mata, was planted on an even older stone wall (a common practice), which now appears to be swallowed by the banyan's roots, only to emerge again on the far side of the tree. It is unlikely that the banyan would have been planted after the death of Roi Mata and the abandonment of the settlement in about 1600 AD. The banyan's age is thus probably in excess of 400 years.

### Sumwantuk and Mwalafaum – Roi Mata's own residence and dancing ground

Immediately inland from Mwalasayen there formerly stood a second banyan tree, apparently of a similar antiquity though not as large as the banyan at Mwalasayen. This second banyan, which was destroyed by an accidental fire in about 1976, marked the area known as Mwalafaum, which was Roi Mata's residential yard. The area between

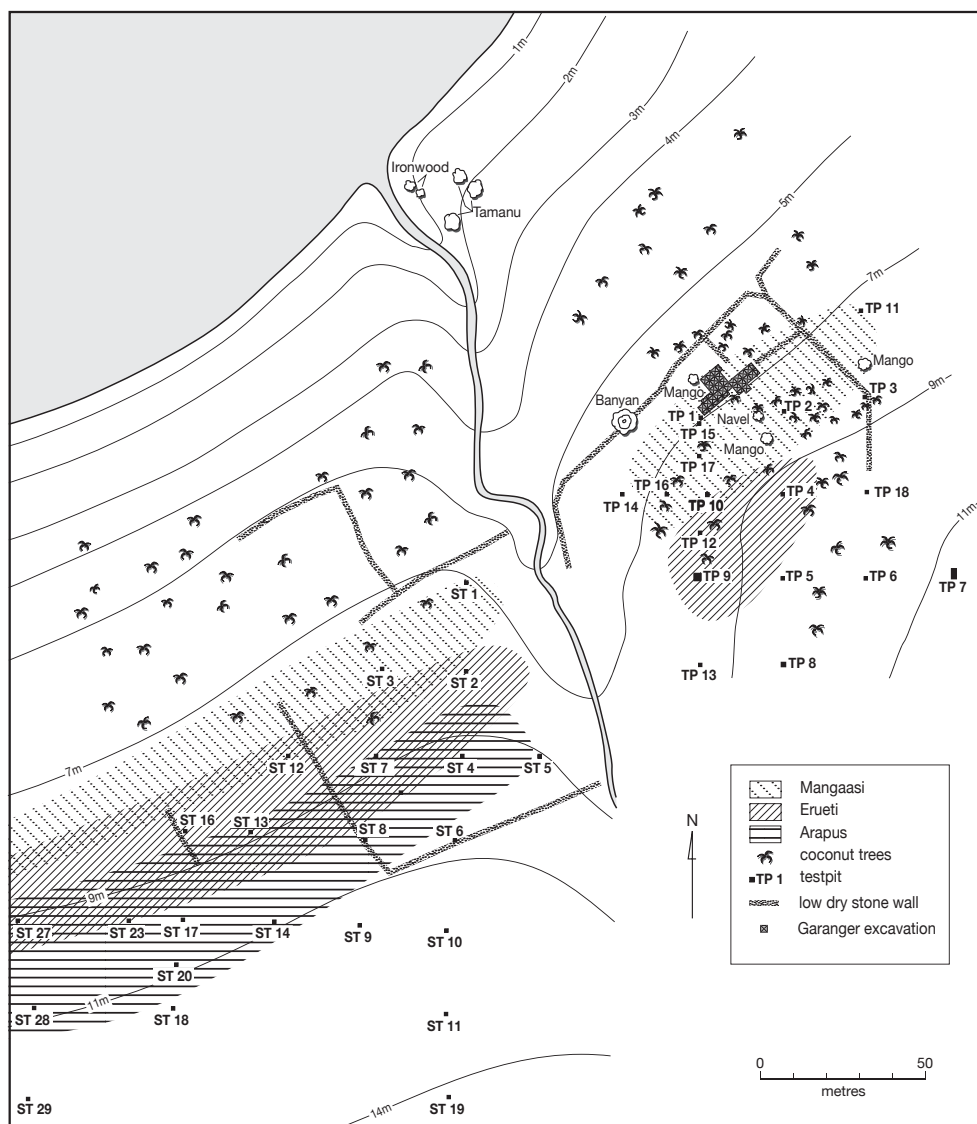


Figure 2.10 VCC-ANU survey map of the area west of Mangaas stream

the site of the Mwalafaum banyan and the giant canarium (*nangae*) tree known as Roi Mata's Nangae or Nangae Sumwantuk is identified as Sumwantuk. Sumwantuk is said to have been the precise location of Roi Mata's personal house.

### Stone Walls

The remnants or foundations of a system of stone walls are still visible across much of the Mangaas area, on either side of the Mangaas Stream. The walls around Mwalasayen were sketched but not surveyed by Garanger in 1967, and then surveyed by the World Heritage project team in 2005 (Figure 2.7). The area west of Mangaas Stream was systematically surveyed and mapped between 1996 and 2003 (Figure 2.10) as part of a joint Vanuatu Cultural Centre-Australian National University (VCC-ANU) project (see 2.B.ii.a).

Most of the walls are organised around a series of long walls constructed parallel to the beach on the crests of successive beach ridges, taking advantage of the natural breaks in slope. Coral boulder material for the walls was probably provenanced in the immediate vicinity from the enclosed areas and from the stretches of reef debris along the adjacent foreshore. At Mangaas, as on Artok Island and elsewhere in the Western Pacific region, it may be possible to distinguish between the earliest stone walls, laid out on an irregular curvilinear plan, and later enclosures forming a more regular series of square or rectangular outlines. At Mangaas, the walls in the immediate vicinity of the banyans of Mwalasayen and Mwalafaum form an irregular curved enclosure, while the walls on the perimeter of the residential areas become increasingly rectilinear. One exceptional feature of the stone walls at Mangaas is an apparent gateway or entrance, formed by two in-curving sections of wall, which serve to break the largest and longest of the straight beach-ridge walls (the same wall on which the banyan at Mwalasayen is growing). This entrance may have been the formal means of access to Roi Mata's residential area at Mwalafaum and Sumwantuk.

Most of the yards enclosed by stone walls at Mangaas are identified by name, and are associated with particular chiefly titles within the court of Roi Mata. The yard names listed by Guiart (1973a: 288) are still regarded today as largely accurate, and Garanger's preliminary mapping of the yard names onto specific enclosed plots at Mangaas has been an invaluable basis for the production of the map in Figure 2.7.

Wider-ranging foot surveys to the west and east of Mangaas have established limits for the stone wall system, and show it to be concentrated on either side of the Mangaas stream (Figure 2.10). This concentration, together with the small areas enclosed by the walls, suggests that the primary function of the walls was the demarcation and clearance of residential yards for an extensive settlement. Most of the gardens associated with this settlement were probably located beyond the areas enclosed by the stone walls.

As might be expected of exposed 400-year old features in an unforgiving environment, the walls at Mangaas are no longer in pristine condition, with no single instance of a wall standing at what may have been its original height. However, the foundations of the walls are preserved and extend above the surface in most locations, though in certain areas these foundations have been plundered since 1927 for copra pits. Fortunately, wide berms of accumulated soil, garden detritus and ancient household waste have formed around many of the stone walls, serving to partially obscure but also protect them. A more intensive, sub-surface exploration for the foundation of stone walls will ultimately permit a near-complete plan of the entire stone wall field system at Mangaas.



Figure 2.11 Roi Mata's personal sacred stone at Mangaas

### Sacred Stones

Scattered throughout the Mangaas area are sacred stones, often of exotic geological provenance and portable in size, and commonly either spheroidal or slab-like in shape. At least eight such stones have been identified in the area immediately surrounding Mwalasayen and Mwalafaum at Mangaas, and these have been individually photographed and mapped (see Figure 2.7). Although they have been obscured by dense vegetation for almost four centuries, these stones, which are associated with the period of Roi Mata's residence at Mangaas, are still regarded as extremely powerful and treated with profound respect by the community. Figure 2.11 shows an individual stone close to the banyan tree at Mwalasayen that is still identified as Roi Mata's personal sacred stone.

### Burials

In addition to the five sub-surface burials exposed by Garanger's excavation at Mwalasayen, which suggest that other burials may be widespread across the Mangaas area, three other areas of Mangaas almost certainly contain burials. The first area of burials, which lies within the World Heritage property, is indicated by the presence of large slab-like gravestones now regarded as magic stones, located on Figure 2.7 as stones 3 and 8. Two other areas of Mangaas which lie just outside the World Heritage Property but within the buffer zone, contain obvious burial features. The first of these is an unusual circular mound, 5.7m in diameter and 40cm high, and about 110 m to the northwest of the banyan at Mwalasayen, linked to the enclosing stone walls by a curving stone wall (shown near the centre of Figure 2.7). The identification by community elders of this mound as a *tapu* space associated with burials appears to be confirmed by fragments of human bone still visible in the mound. The other burial feature, located at Lakmwolmwol on the western side of Mangaas Stream, is an apparent grave, marked by upright stone slabs, similar in form to those at Roi Mata's grave on Artok Island. No memories have been retained of the identity of the person or people buried at any of these locations, but the upright slabs strongly suggest the burials of chiefs or persons of high rank, possibly including earlier holders of the Roi Mata title.



### Surface Artefacts

In addition to the artefacts excavated by Garanger in 1967, and by the VCC-ANU excavations from 1996-2003, there are numerous artefacts still visible on the surface. Dense scatters of surface pottery are evident throughout the Mangaas area, and can be found almost continuously as far as Mangaliliu Village to the southwest. A fragment of a stone bowl or grinding slab is still visible at Mangaas, propped on top of a stone wall by its discoverer.

In the Lelepa region, as elsewhere in many parts of the Western Pacific, crushed coral pebbles have traditionally been scattered over the floors of houses and residential yards. At Mangaas, in areas where garden activity has taken place since 1927, these coral pebbles have been brought to the surface and are visible as thin pavements of crushed coral. The distribution of these coral pavements in the wider Mangaas area corresponds strongly with the area of stone wall enclosures, further strengthening the association between stone walls and residential yards. At Mwalasayen there is little or no surface coral. This is taken to reflect the lack of post-occupational disturbance in this area, where no one has attempted to garden since the death of Roi Mata, for Garanger's 1967 excavation at Mwalasayen uncovered a coral pavement at a depth of about 20 cm below the surface. Thus there is both the evidence for the presence of a residence at Roi Mata's own enclosure, and the additional evidence for abandonment of the area over a long period.

Many of the stone walls, sacred stones and surface indications of burials listed above were identified only during the 2005 surveys for the World Heritage nomination process, and further survey work at Mangaas will undoubtedly continue to add to the range of historical and archaeological evidence for the significance of the site.

### 2.A.v Fels Cave – Roi Mata's Death

#### 2.A.v.a Location and Ecology of the Fels Cave Site

Fels (or Feles) Cave is held to be the location at which Chief Roi Mata drew his last breath, having crossed to the island of Lelepa from his residence at Mangaas in order to attend a *naleoana* feast at the former settlement of Lou Patrou. Falling ill after the feast, he was taken to Fels Cave, where he died. From the mouth of the cave, one looks across directly to the island of Artok, where Roi Mata was subsequently buried. The continuing historical importance of Fels Cave and its connection with Roi Mata are captured in narratives documented from other areas of Central Vanuatu. Certain of these narratives identify Fels Cave as a residence of the first, largely mythical holder of



Figure 2.12 Fels Cave

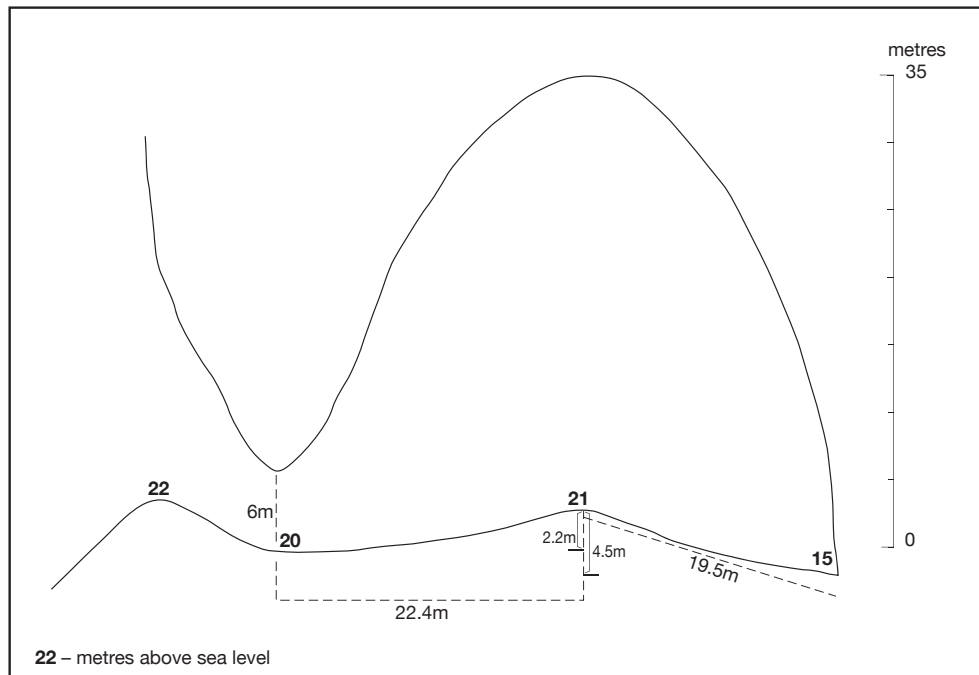


Figure 2.13 Fels Cave profile (sketch)

the Roi Mata title and recount how he would open and close behind him the rock wall at the mouth of the cave by striking it with two enchanted sticks. The Lelepa language term *fels* is a contraction of the term *falesa* in the Nakanamanga language of north Efate and the Shepherds, which simply means 'cave'.

Fels Cave is a massive circular chamber with inner walls covered in ancient paintings and engravings. While there is no contemporary knowledge of the significance of the art, some of the paintings in black pigment have been AMS radiocarbon dated to the time of the last Roi Mata at about 1600 AD. Elders in the Lelepa community have voiced the opinion that one or more of the large painted figures of armed men, which are drawn in the same style and within the immediate vicinity of the dated paintings, are depictions of Roi Mata himself.

The chamber cave of Fels, currently 22m above sea level, has developed within the pumice breccias or tuffs of the Efate Pumice Formation, which are overlain and protected by raised corals of the Reef Limestone Formation (Ash et al. 1978). The consolidated volcanic tuff within which the cave has been formed is referred to in Lelepa language as *fta*. The chamber has a maximum depth of 47m, a maximum width of 52m, and is approximately 35m high, with a large 2m-high mound of roof fall and other detritus close to the centre of the cave that slopes down to a rear wall which is approximately 2.5m lower than the entrance (Figure 2.13).

#### Fauna

The fauna inhabiting Fels Cave has not yet been formally surveyed. In 2005, Glossy Swiftlet (*Collocalia esculenta*) guano was noted on the cave floor and swiftlets themselves were occasionally seen flying around the chamber. These birds are presumably nesting on the roof of the cave but this proved difficult to determine due to the height of the roof (estimated at 35 metres above floor level). There have also been local reports of insectivorous bats (L: *mankurkum*) inside the cave, but whether they are currently dwelling there would need to be determined through survey.

### Flora

The only floristic elements of Fels Cave that have been examined in any detail are the algal and lichen growths on some surfaces of the rock. These were inspected as part of a conservation and monitoring program for the site (Sale and Hall 2002: 7). A brief survey of the distribution of these micro-flora found that they are associated with damp surfaces that are also exposed to sunlight. Algal growth is particularly destructive in rock-art contexts as it can cause the rock-surface and pigment to deteriorate. A low forest of *Psidium gouyava* or *Leucaena leucocephala* is found on the lower limestone terraces surrounding the cave and a grassland of *Themeda gigantea* and *Imperata cylindrica*, or *Heteropogon contortus*, covers the hilltop above the cave (Quantin 1972-1979). This suite of relatively weedy vegetation is said to typify extremely dry environments in the tropical Pacific that are subject to fire (Mueller-Dombois and Fosberg 1998). The need for a thorough survey of the flora and fauna present in and around Fels Cave is stipulated in the *Plan of Management*.

### Marine

The marine environment of Aupa Beach (the closest beach landing for Fels Cave) represents the northwestern extremity of the Lelepa banned area – a c. 200m stretch of coastline along which fishing is strictly prohibited. The reef off Aupa beach is relatively flat, with limited corals and small fish. This reef is highly exposed to cyclone damage and storm surges passing to the west, offering it little opportunity for regeneration and development. The threat of cyclonic reef damage reduces further to the east, closer to the centre of the main settlement of Natapau (Hickey 2005b).

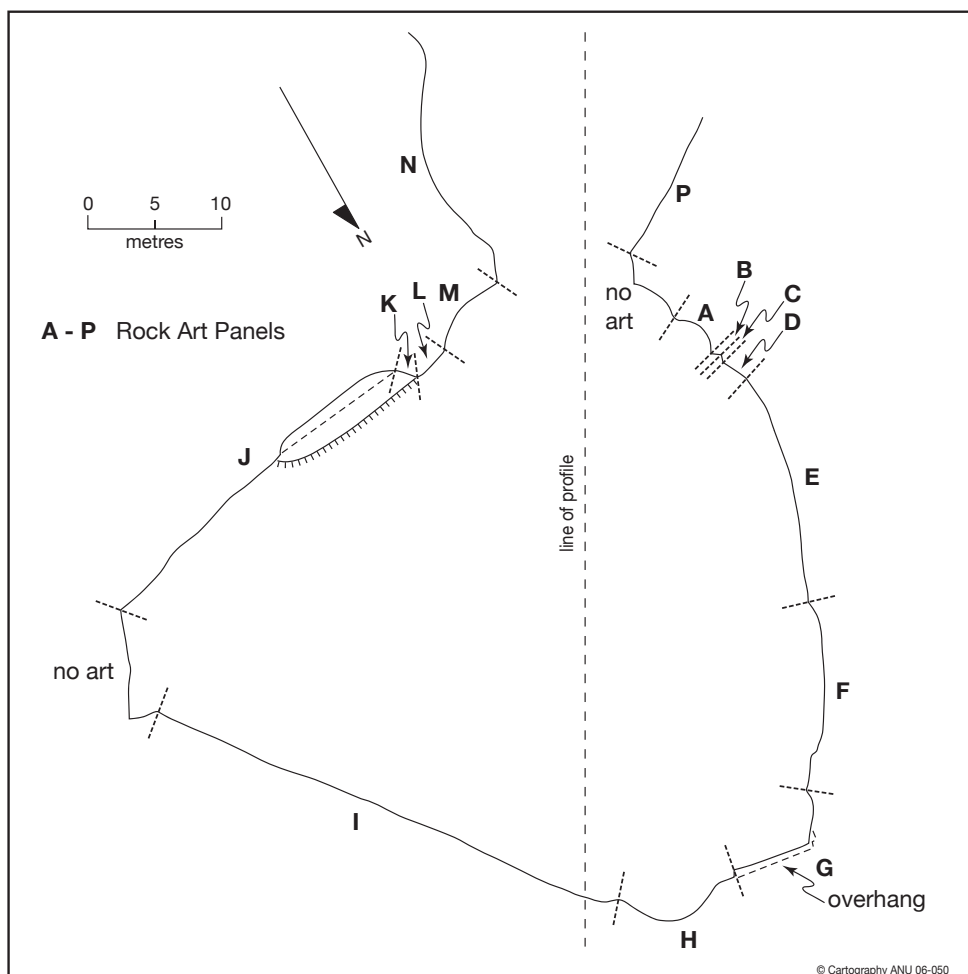


Figure 2.14 Plan of Fels Cave, showing the locations of rock-art panels

### 2.A.v.b Visible Features of the Fels Cave Site

Almost all of the wall surfaces of Fels Cave are covered at head height in rock-art, with the exception of the darkest corner of the rear wall and the left or western wall of the entrance. Figure 2.14 shows the distribution of rock-art, identified for the purposes of documentation in terms of distinct panels. The rock-art at Fels Cave consists of a diverse range of painted and engraved images. Several cases of superimposition have been recorded, offering some insight into the sequence of stylistic and technical changes at the site. The black painted motif range includes numerous figurative forms, including birds (resembling roosters), fish and various dynamic anthropomorphic figures with flexed limbs, as well as a range of non-figurative designs, including bisected chevrons and complex rectilinear motifs incorporating diamonds and triangles. The most common engraved motifs at the site are cupules, found in various configurations, semi-circles, straight lines and elaborate ovoid forms embellished with outer rays and internal spokes), some of which have been infilled with black pigment. There is also a small suite of red painted rock-art, including hand-stencils, 'blotches' (mostly circular, and configured in either lines or groups), a zigzag, and a flexed-limbed anthropomorph (Wilson 2002).

### 2.A.vi Artok Island – Roi Mata's Burial



Figure 2.15 Artok Island

#### 2.A.vi.a Setting and Ecology of Artok Island

The small coral island of Artok is renowned as the burial place of the last holder of the chiefly title of Roi Mata. Archaeologists now consider that this last Roi Mata was buried at about 1600 AD, some 400 years ago. Ever since the time of his burial, Artok Island has been *fanua tapu*, or a sacred island, and it has been forbidden to garden or sleep there. Known as Retoka, Eretoka or Aretoka more widely through the Efate and Shepherd Islands region, the name is characteristically contracted as Artok in the local language of Lelepa. The island's distinctive shape has always attracted the attention of European voyagers, such as Captain Cook in 1774 (Beaglehole (ed.) 1969), and Andrew Cheyne in 1845-46, who referred to it as 'a remarkable island' (1852:38). Its European name, Hat Island, was given to the island by Captain Erskine of HMS *Havannah* in 1849 (Erskine 1853), and derives from its distinctive shape of a crown and fringing brim. Figure 2.16 is the first known image of the island, drawn by Lieutenant Vigors on board HMS *Havannah* on its second visit to Havannah Harbour in 1850 (Vigors 1850). Figure 2.17 is a later sketch by Russian traveller Nikolai Miklouho-Maclay, made in 1879, as he approached Havannah Harbour from the south.

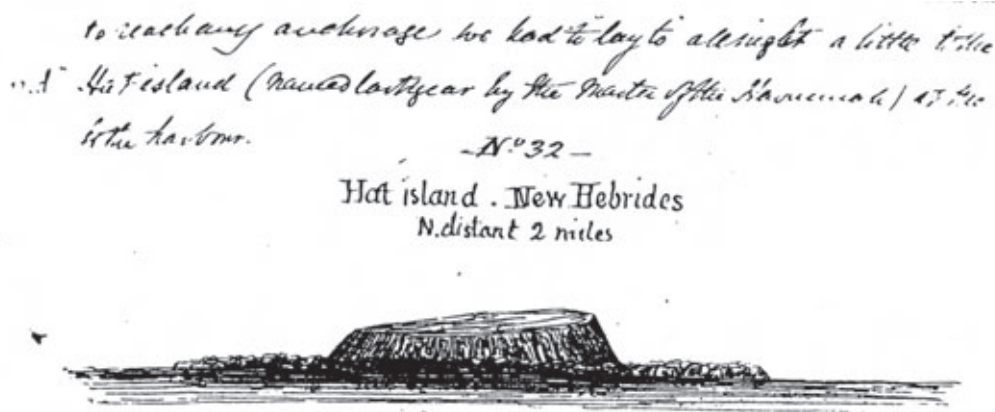


Figure 2.16 Early sketch of Artok Island by Lieutenant P.D. Vigors, 1850

Artok Island is located off the northwest coast of Efate, and is approximately 2.3 km in length with a maximum width of 670 m (Figure 2.18). The island consists of 'a cap of uplifted coral limestone on top of stratified pumice tuffs. Around the central peak (45 metres in altitude) a coastal platform corresponding to the last uplift (5 metres) is formed of sand and recent coral limestone' (Obellianne 1961: 183). The stratified pumice breccias or tuffs of the central peak or plateau, which correspond to the broader Efate Pumice Formation, are matched by the tuffs on Lelepa Island within which Fels Cave has developed. The protective coral cap on the central plateau, which reaches a peak of about 90m, is composed of calcirudites of the Reef Limestone Formation (Ash et al 1978: 13).

The island's perimeter consists largely of a raised coral platform of about 2m in height, broken intermittently by short stretches of sandy inlet. The one notable anchorage is the small, shallow bay of Asnei, on the northern side of the island (Figure 2.18). Most of the coastal platform forming the island's "rim" is about 5m above sea level, and rises gently inland towards a low central spine consisting of a ridge about 8m above sea level, aligned with the central plateau and marked by a line of large, protruding coralline boulders.

It is likely that most of the vegetation of Artok Island has been transformed through human interference, over the presumed 3100-year history of use of the island. Unusually, however, as a consequence of the *tapu* prohibition on re-settlement of the island after the burial of Roi Mata, the last 400-year period has probably seen less human interference on Artok Island than any other period since the initial human settlement of Efate.

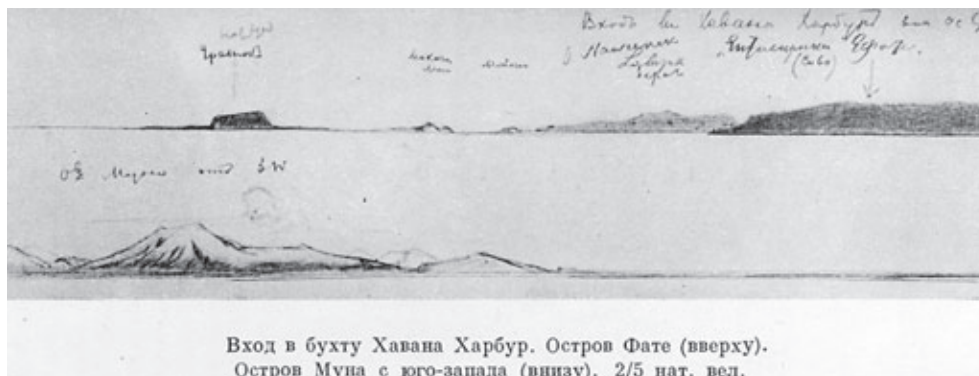


Figure 2.17 Early sketch of Artok Island (at top left) by N. Miklouho-Maclay, 1879

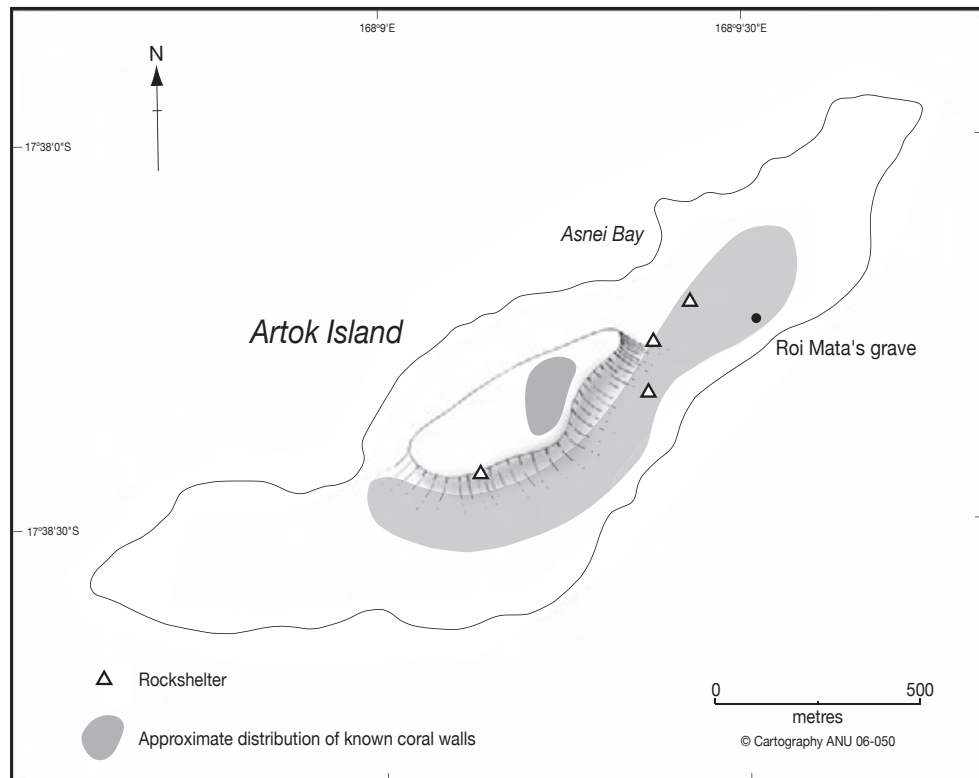


Figure 2.18 Map of Artok Island

### Flora

The flora on Artok Island is described as 'coastal strand, littoral and dry rain forest vegetation', and is exceedingly well preserved compared with other coastal forest regions on Efate (Bickford 2005, Chanel 2006). The Forestry Department regards this island as a 'shelter' for a number of endemic and functional species that have been largely eradicated on the Efate mainland due to clearing for plantations, agriculture and habitation. The eight endemic plant species recorded on Artok Island include: *Tylophora aneityensis*, *Santalodes desmos*, *Veitchia macdanielsii*, *Cupanipsis neo-ebudarum*, *Croton levatii*, *Homalium anaityensis*, *Xylosma guillauminii* and *Maesa efatensis*. Of these, *Croton levatii* is regarded as the most important species for protection. An endemic of west Efate, this small tree is today found sporadically on the mainland around the area of Tukutuku. Its presence as a dense community of several hundred trees on top of the plateau of Artok Island is therefore a significant find. It has been strongly recommended that protection be extended to Artok Island on the basis of this finding alone, as it is the last stand of *Croton levatii* found anywhere in the world that has a reasonable chance of survival (Chanel pers. comm. 2005). The forest of Artok Island has remained largely undisturbed for at least the past 400 years, and the survival and widespread presence of *Croton levatii* on Artok Island is undoubtedly a consequence of the history of protection of the island under traditional *tapu* prohibitions.

In addition to being a haven for rare endemic plant species, Artok Island is also home to a number of plants that are accorded significant cultural meaning. While native species abound, particularly notable are the large numbers of cycads (*Cycas seemannii*). Cycads tend to be found in less disturbed forest environments but are now a rare component of coastal dry rainforests in Vanuatu (Bickford 2005). This species is also listed as 'vulnerable' on the IUCN Red List of Threatened Species. On the protected northeastern side of Artok Island cycads can be spotted from almost any vantage point, and are found in abundance. These are important trees in many parts of Vanuatu and

are often associated with chiefs. Cycads are prevalent around Roi Mata's burial site, and are a dominant presence immediately behind Roi Mata's headstone.

### Fauna

A clear link exists between the cultural *tapu* prohibitions associated with the island and the development of its fauna. Information about the terrestrial fauna on Artok Island was provided by the local community during the 2005 Natural Values Workshops (Kalfatak 2005) and through a reptile survey conducted on the island in 2005 (Jennings 2006). The information obtained is far from complete, and further survey work is anticipated in the *Plan of Management*.

The survival of particular faunal species on Artok Island provides a fascinating confirmation of the continued interplay between existing natural and cultural conditions. This interplay is perhaps best exemplified in the lizard populations of Artok Island. Three species of lizard have been visually identified on Artok Island: *Cryptoblepharus novahebridicus* (Scincidae), which is endemic to Vanuatu, and *Emoia impar* (Scincidae) and *Gehyra oceanica* (Gekkonidae), both of which are widespread Pacific species (Jennings 2006). A large population of *C. novahebridicus* was identified on Artok Island. Preliminary data suggest that this population is genetically distinct from other islands (Jennings 2006) and possesses its own unique lineage, perhaps warranting designation as a previously unrecognised endemic species deserving of conservation attention (Moritz and Faith 1998; Pearman 2001). While lizard diversity on Artok appears to be low, the variety of species present on the island is regarded as 'unique'. Three species of introduced lizards – *Lipinia noctua*, *Lepidodactylus lugubris*, and *Hermidactylus frenatus* – all of which have extremely widespread distributions on mainland Efate and most other islands in Vanuatu, are absent from the island (Jennings 2006: 1). At some sites surveyed on mainland Efate these three introduced species were the most abundant lizards observed. The absence of these invasive species on Artok Island is testimony to the strength of the *tapu* prohibition placed on Artok Island at the time of Roi Mata's death, which forbade any form of habitation or gardening on the island.

Several other rare animal species thrive within Chief Roi Mata's Domain because their habitats remain intact. The Coconut Crab (*Birgus latro*), which has become extinct or endangered throughout Efate due to over-harvesting, is abundant on Artok Island. The Incubator Bird (*Megapodius freycinet*) also seeks refuge in the abandoned landscape of Artok Island. The Flying Fox (*Pteropus tonganus*) is said to roost in the roots of the banyan (*Ficus subcordata*) at Mangaas and to relocate to Artok Island to feed during the fruiting season. Both of these places are devoid of human habitation, a preference for this timid mammal. Specific *tapu* prohibitions are associated with only one creature on Artok Island: while visiting the island it is forbidden to touch or kill a snake. The only other fauna that are locally described as occurring on Artok Island are land crabs, hermit crabs, turtles, bush fowl and goats.

### Marine

The traditional *tapu* prohibitions associated with Artok Island have also led to the development of a rich and spectacular marine environment. Artok Island is a renowned scuba-diving location because of the diversity of fish and spectacular corals in its vicinity. Recent surveys have established that the diversity and abundance of fish species at Artok Island far exceeds that of other sampled areas, such as Tukutuku on the nearby mainland Efate coast, and Pele Island – another north Efate offshore island. Particularly abundant species recorded during a 2004 Reef Check survey include

Angel fish species (*Centropyge flavissimus*, *C. bispinosis*, and *C. loriculus*); the Moorish Idol (*Zanclus cornescens*); Domino, Fusilier and Green Chromis Damsels (*Dascyllus trimaculatus*, *Lepidozygus tapeinosoma*, *Chromis viridis*), Longnose and Pelewensis Butterfly species (*Forcipiger flavissimus*, *Chaetodon pelewensis*), and Anthias species (*Pseudanthias lori* and *P. tuka*) (Hill 2004). The diversity and abundance of fish at Artok Island and the health of the reef reflects the isolated nature of this island. Members of the local community fish around the island only if they are targeting a particular species, or accompanying tourists during a spearfishing expedition. Recent interest in Artok Island's ornamental reef fish by the aquarium trade has prompted the establishment of regular reef check surveys, overseen by the Department of Fisheries, to monitor the effects of collection and reduce the likelihood of over-harvesting (see the *Plan of Management*).

In summary, even on the basis of preliminary ecological surveys, there is strong evidence to suggest that the sacred or *tapu* status of Artok Island during the past four centuries is powerfully reflected in the composition of the floral, faunal and marine components of the local environment.

#### 2.A.vi.b Visible Features of Artok Island

Artok Island was completely abandoned about four centuries ago to accommodate the mass burial of the last Chief Roi Mata. Other than some minor late colonial constructions, the visible cultural heritage of Artok Island is essentially unchanged over the past four centuries, offering exceptional perspective on the landscape of a 16<sup>th</sup>-century chiefly domain.

#### Roi Mata's Burial Site

The site of Roi Mata's grave (referred to in Lelepa language as *Matogon Roi Mata*) is marked on the surface by two large and several smaller headstones, and several large conch shells (Figure 2.19). The grave is about 50 m from the southern coast of Artok Island, facing the mainland (Figure 2.18). The precise location of the grave is UTM

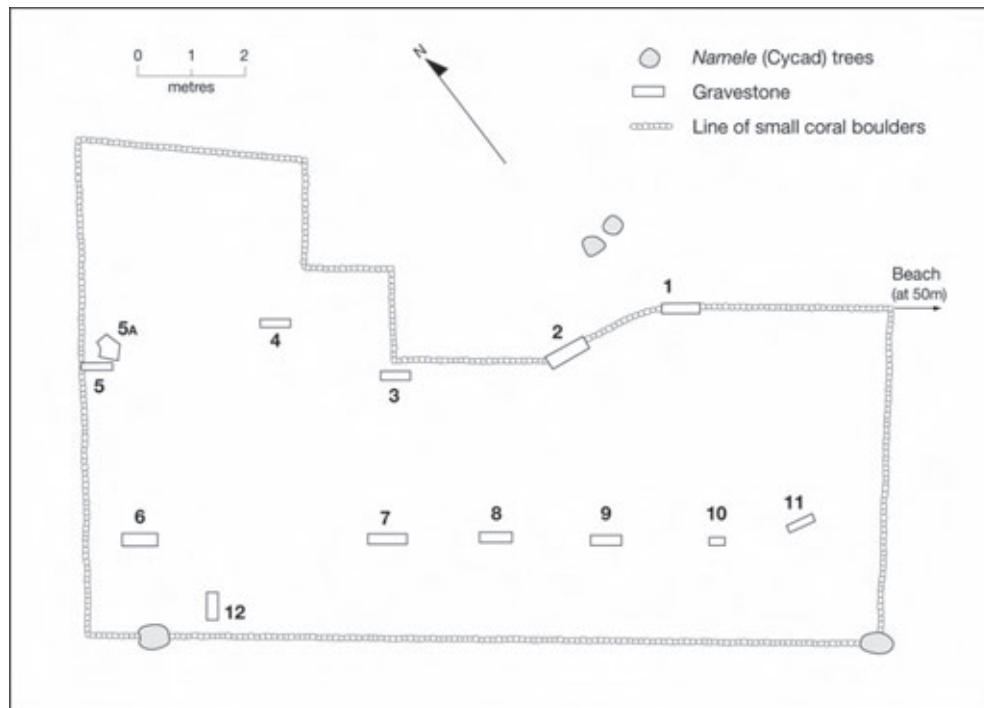


Figure 2.19 Plan of Roi Mata's burial site, showing locations of gravestones



S1738.248 E16809.515. A line of stones approximately marks the irregular perimeter of Garanger's 1967 excavation. These stones, together with the resurrected headstones, were set up by the excavation foreman, Johnson Napengau of Mangaliliu Village, once the excavation was completed.

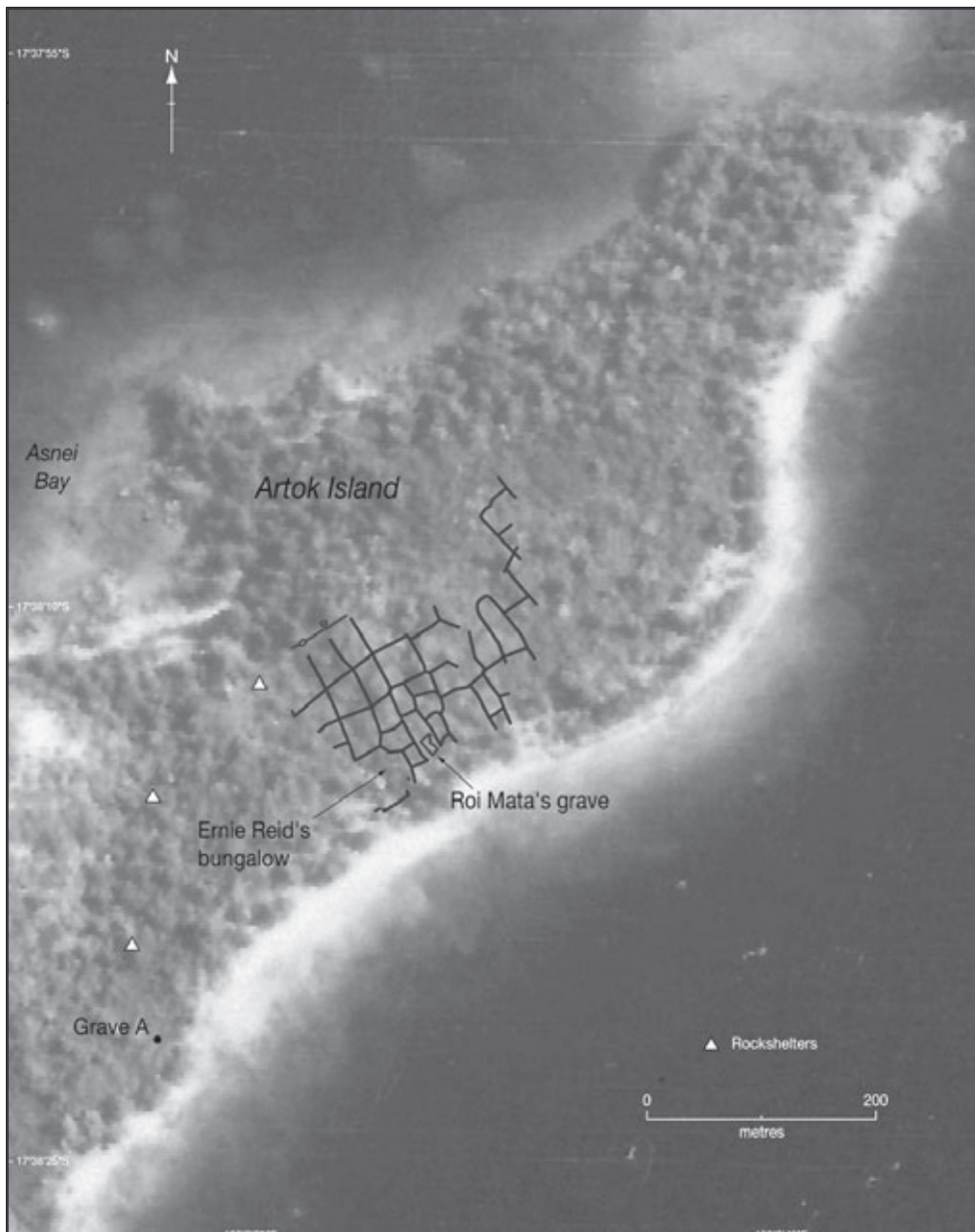


Figure 2.20 Aerial view of surveyed position of stone wall system on Artok Island

### Other Grave Sites

Several other grave sites or possible grave sites have been identified on Artok Island, and further surveys will no doubt reveal yet more. The most striking of these other graves (Grave A) is located approximately 330m along the coast to the south and west of Roi Mata's grave site, and is marked by a series of stone slabs of identical material to that used at Roi Mata's grave (Figure 2.20). The 1996 VCHSS survey also identified unusual alignments of cycad trees to the north and east of Roi Mata's grave, under which stones aligned in rectangles may denote the presence of additional graves. The 1996 survey attempted a brief test excavation of Burial Site A, but the excavation was abandoned at a depth of 34cm when a large patch of charcoal was encountered (Batick 1996); no artefacts were recovered from the fill above this level. There are no oral

traditions attached to any of the other graves, and it is presumed that they relate to burials that took place before Roi Mata's burial and the abandonment of the island.

### Stone Wall Field System

The stone wall field system on Artok Island covers most of the level areas of the island's surface above an altitude of 5 m. This includes the low-lying coastal platform as well as the raised plateau in the centre of Artok Island. Strictly speaking, these walls are composed of coral blocks, rather than stone, all of the material for the walls being found on the island's surface, within a few metres of the walls. Most of the stone walls consist only of the wall foundations, with scatters of coral blocks on either side deriving from the collapsed walls. Figure 2.18 illustrates the approximate extent of the stone wall field system along the low-lying coastal platform and the raised plateau. Figure 2.21 shows a more detailed sketch of a limited portion of the field system, in the area immediately surrounding Roi Mata's grave (this area is situated more clearly on the aerial photo of the northeastern half of Artok Island in Figure 2.20).

Following analyses performed on stone wall and ditch field systems elsewhere in the Pacific and in Europe (e.g. Williamson 1986, Barber 1989, Ballard 1995), the areas of smaller enclosures and more irregular, curvilinear walls may represent the earliest elements of the field system, and are possibly residential yards. The larger enclosures, within straight, rectilinear walls, are probably more recent extensions, and may be field enclosures. On Artok Island, these apparently more recent walls extend from the coast inland towards the low central "spine" or ridge of the coastal lowland plain, where they appear to be aligned on large boulders (see Figure 2.21).

The stone wall system on Artok Island was originally bounded by a concentric series of perimeter sea walls (not shown in Figure 2.21), now largely destroyed by sea action and evident only in certain sections. Immediately within the sea walls lay the residential yards and, towards the centre of the island, the possible garden enclosures. The presence of

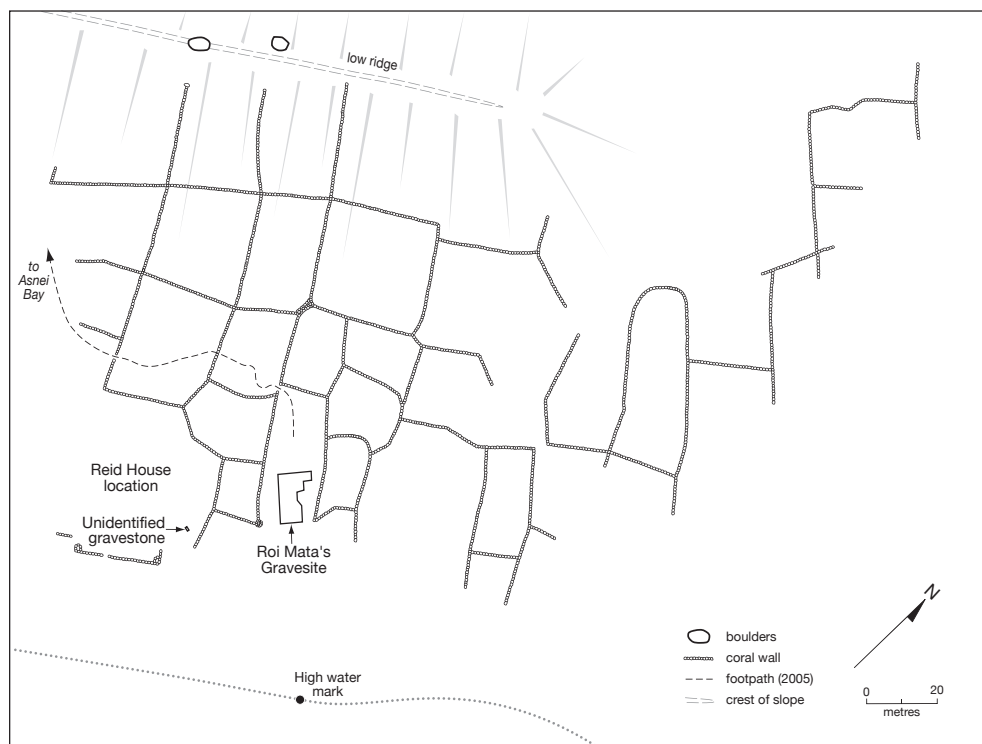


Figure 2.21 Map of stone wall system on Artok Island

stone walls on top of the central plateau suggests that this area may also have been selected for defensive purposes, as access to the plateau is via very steep slopes. Along the coastal platform, one obvious benefit of piling stones up in large walls was to remove stone from the enclosed areas, “ponding” the thin soils and creating gardens. Beyond the perimeter sea walls, the absence of any surface soil is immediately apparent. A limited area of stone walling in the vicinity of the colonial leaseholder Ernie Reid’s bungalow site is visibly more modern than the other walls, and almost certainly represents walls built during the 1960s for Ernie Reid by his Mataso Island labourers (see Section 2.B.iv.c).

### Rockshelters

At least three substantial rockshelters have been identified on Artok Island, each with evidence for use and occupation. None of the shelter deposits has yet been tested for depth of cultural deposit. These shelters are likely to have been used on a casual basis by gardeners, during the period when Artok Island was occupied, and by hunters or fishermen visiting the island after 1600 AD. However, they may be a useful means of establishing or confirming the presumed antiquity of use of the island, and of exploring the nature of cultural life on the island at the time of the last Roi Mata.

### Significant Trees

Two categories of tree on Artok Island are particularly important: the sacred cycad trees (*Cycas seemannii*; Bislama: *namele*) trees, associated with chiefs, which are thickly distributed throughout the northeastern coastal lowland area, especially in the vicinity of Roi Mata’s grave, and appear in some areas to be aligned with each other; and a particular casuarina tree situated on the southern tip of the central plateau. This casuarina tree, which is visible from Lelepa Island, juts out from a corner edge of the central plateau known as Nafsing For. Particular individuals on Lelepa still possess the knowledge required to foretell the weather and, in particular, the ability to predict the occurrence of major cyclones, on the basis of the passage of the setting sun in relation to Nafsing For, as viewed from a particular location on Lelepa Island. Both the cycads and the Nafsing For casuarina bear witness to the continuing significance of Artok Island’s cultural heritage for living residents of Chief Roi Mata’s Domain.

### European Constructions

Despite the *tapu* prohibitions placed on Artok Island after Roi Mata’s burial, two minor constructions on the island since the 1960s should be noted, if only because they serve to confirm the limited impact on the island even after colonial rule was imposed on the region. These European constructions on Artok Island are limited to the remains of the foundation of a bungalow built during the 1960s by the late colonial leaseholder, Ernie Reid, and a light-tower. Ernie Reid’s bungalow, constructed along the lines of a traditional *farea* house with a sand floor, open walls and a thatched roof, was built as a weekend retreat for its owner, who resided principally in Port Vila. He stocked the island with goats for sport hunting and, as a keen fisherman, took advantage of the exceptional pelagic fishing grounds around the island. All that remains now of the bungalow is a series of three small concrete foundation pillars for the kitchen and food store, two parallel lines of beer bottles stuck top-down into the soil which mark the entrance to the house, and some low stone walls which formerly marked the front of the bungalow’s yard (Figure 2.21, at bottom left). Ernie Reid also constructed a light-tower for shipping on the crest of the central plateau. A cement plaque at the base of the tower gives his name and the date of May 1970, presumably indicating the date of construction. This metal and wood tower is now decaying, and the light fittings have long since perished.

## 2.B History and Development

### 2.B.i History and Development of Chief Roi Mata's Domain

The following brief summary of the history and development of Chief Roi Mata's Domain provides a broad context for the histories of the three principal sites of Mangaas, Fels Cave and Artok Island.

The first human occupation of Efate is currently dated to about 3100 BP, when communities using distinctive Lapita pottery were present at the Teouma settlement in south Efate (Shing et al. 2005). It can be presumed that people were also present in the area of Chief Roi Mata's Domain from this same period, even though the first definite date for human presence at the Mangaas site is only at 2900 BP. A series of different pottery wares are used by archaeologists to distinguish between successive phases of settlement at Mangaas and elsewhere in the Efate region, but pottery does not appear to have been locally produced or traded after about 1500 BP.

On current evidence, the end of pottery production on Efate precedes the local innovation or introduction from outside of a chiefly title system, related to similar title systems in Western Polynesia, from as early as about 1200 BP-1000 BP. This title system, and life more generally in Central Vanuatu, experienced a major period of disruption following the eruption of the Kuwae Volcano (Figure 2.3), one of the largest eruptions in the world of the Holocene era, in the Shepherd Islands to the north of Efate in 1452 AD (Espirat 1973, Robin et al. 1994).

In about 1600 AD, a long period of continuous warfare and conflict on Efate, known as the Great Efate War, appears to have come to an end. The resolution of this conflict is attributed in oral traditions to the agency of Chief Roi Mata of Mangaas, who established an innovative system of *naflak* or matrilineal clans that cut across and moderated the solidarity of warring groups and promoted novel forms of land tenure and the transmission of rights, including chiefly titles. Many of the senior chiefs resident on Efate appear to have decamped to the Shepherd Islands to the north, where they remain to this day, prompting some historians to suggest that Roi Mata's intervention also constituted a social revolution (Luders 2001).

European contact with communities in the Lelepa region and Havannah Harbour, the bay formed in the shelter of Lelepa and Moso islands, began from about the 1840s, and by the 1860s there were numerous European settlers established in what was then the greatest concentration of settlers and traders in the New Hebrides. Presbyterian mission teachers were also established at Havannah Harbour from 1846, and later in Mangaliliu Village in 1870, though the communities of Lelepa were the last in the Efate region to hold out against the missions, converting only in 1898. Epidemics of various diseases and the outbreak of warfare with modern weapons decimated the population of Efate and its surrounding islands, forcing the survivors into a handful of large settlements along the coast. During the same period, vacated lands were acquired en masse by European settlers and planters, with much of this land remaining alienated until Vanuatu gained Independence in 1980.

### 2.B.ii History and Development of the Mangaas Site

#### 2.B.ii.a History of Research at the Mangaas Site

This section briefly reviews the history of research at the Mangaas site, tracing the process of growth in understanding of the site, and identifying key contributors and their publications.

### Guiart, 1957

French anthropologist Jean Guiart conducted intensive surveys of chiefly systems and associated oral traditions throughout Efate and the Shepherd Islands during the 1950s (Guiart 1973a). This project was conducted under the aegis of the Tri-Institutional Pacific Program (involving the Bishop Museum, Yale University and the University of Hawai'i, and the Carnegie Foundation). Although he never visited the site of Mangaas, Guiart documented details of the court of Roi Mata and the distribution of the residential yards and dance grounds associated with each chiefly title in the Mangaas area. He did this on the basis of interviews with a group of senior men and women during an overnight visit to Lelepa Island in 1957. The full details of his survey are given in his 1973 publication on the chiefly titles of Central Vanuatu (Guiart 1973a). Guiart's list of titles and associated residential yards at Mangaas has been an invaluable foundation for later research, and his work on Roi Mata was instrumental in guiding José Garanger (see below) to conduct archaeological excavations in the Lelepa region.

### Garanger, 1967

Following Guiart's directions on the importance of Roi Mata in the history of Central Vanuatu, French archaeologist José Garanger initiated two seasons of archaeological survey and excavation in the Lelepa region during 1964 and then again in 1966-67. Garanger's work was conducted as part of a joint program under the Centre National de la Recherche Scientifique and the Ecole Pratique des Hautes Etudes, with the assistance of ORSTOM and under the supervision of Guiart. On his return to Lelepa in 1966-67, Garanger was directed by the chiefs to Roi Mata's residence at Mangaas, where he conducted surface surveys and then an extensive excavation in 1967 of 118 square metres immediately adjacent to the giant banyan at Mwalasayen (Garanger 1971, 1972a, 1972b, 1976, 1982, 1996). There Garanger found evidence of a settlement that might correspond to the period of Roi Mata, and the remains of at least one earlier phase of occupation, marked by dense concentrations and surface scatters of a distinctive "incised and applied relief" pottery ware, which he named Mangaasi ware, after the site (Garanger 1971). Five individual burials were also uncovered, confirming the practice known from 19<sup>th</sup>-century ethnography of burying the dead within their own residential yards.

### VCC-ANU Excavations, 1996-2003

Questions raised by Australian archaeologist Graeme Ward about the interpreted chronology for the Mangaasi site led Garanger to accept that only further excavation could resolve the complex stratigraphy of the site (Ward 1989, Garanger 1996). A joint Vanuatu Cultural Centre (VCC) – Australian National University (ANU) project was initiated in 1996, ultimately running until 2003, which sought to conduct a more wide-ranging surface survey of Mangaas and adjacent areas, and to expand on Garanger's original excavations through an extensive series of smaller test-pits. The results of this long-running project are summarised in a recent report by the project leader, Professor Matthew Spriggs (ANU) (Spriggs 2006). In combination with Garanger's earlier work, these results establish Mangaas as one of the most thoroughly excavated and reported settlement sites in the Western Pacific.

### World Heritage Survey, 2005

During the second half of 2005, members of the VCC's World Heritage project re-surveyed visible surface features of the Mangaas area, concentrating especially on features likely to be associated with the period of Roi Mata. A tape-and-compass survey of the Mangaas site was conducted, mapping the stone walls, significant trees and the locations of sacred stones and other notable components of the site (Figure 2.7).

### 2.B.ii.b Pre-Colonial History (3100 BP – 1870 AD)

Although the coastline around Mangaas was almost certainly used by the earliest human settlers of Central Vanuatu, from about 3100 BP, when the Lapita settlement of Teouma in South Efate was occupied (Shing et al. 2005), the first indication of human presence at the site of Mangaas dates to only 2900 BP. Distinctive Lapita-related pottery named for the Arapus area of Mangaas was being produced on the site between 2900-2750 BP, to be superseded first by Erueti ware, from 2750-2400/2300 BP, and then by the distinctive incised-and-applied-relief pottery named Mangaasi ware by José Garanger, from 2400/2300-1500 BP.

Three volcanic eruptions during this period have produced important stratigraphic marker ashes in the Mangaas sequence: an un-attributed ash at 3100 BP, just before initial human settlement, a second ash at 2400/2300 BP, possibly from the volcanoes at Nguna Island off north Efate, and a third ash attributed to the well documented eruption of Kuwae in 1452 AD, in the Shepherd Islands north of Efate.

During this long history of occupation, the coastline at Mangaas has progressively moved out towards the sea due principally to a series of minor tectonic uplift events. The different early phases of occupation are thus distributed from the earliest (and deepest) levels which lie furthest inland, to the most recent levels which lie closer to surface and to the present shoreline.

After almost continuous settlement at Mangaas since 2900 BP, the site appears to have been abandoned at around 1100 BP, though the precise date for this event is far from certain. Towards the end of the early occupation sequence, the site was apparently used as a garden area, with yam being identified as a possible cultivar in use at this time. The history of the Mangaas area from 1100-400 BP remains unclear, with little archaeological evidence and no pottery being produced. The summary report by Matthew Spriggs (2006) reviews in detail the early history of the Mangaas site.

On the basis of oral historical narratives relating to the history of chiefly titles on Efate and in the adjacent Shepherd Islands, the period 1100-400 BP may correspond to a series of social upheavals (Luders 2001). The chiefly title system still in use in Central Efate may have been introduced to the region between about 1200 BP and 1000 BP, blending with indigenous institutions to form a novel regional culture. The site of Mangaas appears not to have been resettled until the emergence of a final occupation level after the eruption of Kuwae in 1452 AD. This final occupation level is linked to the stone wall system that covers the Mangaas area, and to other obvious evidence for settlement such as burials and crushed coral pavements. It is this final occupation level at Mangaas that is most strongly identified with the title of Roi Mata.

The senior chiefly title of Roi Mata forms part of a “family” set of titles that take Roi as their prefix, including Roi Mata (“the eldest, first”), Roi Muru or Muri (“the junior, the one that comes behind”) and Roi Mantae (now glossed literally as “faeces”, but probably a corruption of some other original term). The personal territories or *namrakin* of the Roi chiefs form a linked domain that extends from Pwauluku in the southwest to Mangaas in the northeast. Beyond these boundaries, on either side, extend the lands of junior chiefly titles that stood in a relationship of tribute or mutual exchange to Roi Mata. This wider region, which encompasses the full territory over which the holder of the Roi Mata title exercised some form of moral

authority, extended from Tukutuku in the southwest, to Samoa Point within Havannah Harbour to the northeast, and included the islands of Lelepa and Artok, and much of the interior upland area of Efate inland from Mangaas. The last holder of the Roi Mata title was almost certainly the last chief in residence at Mangaas before its final abandonment at some point after about 1600 AD.

The two more reliable calibrated radiocarbon results for the final occupation level at Mangaas (ANU-10647 and ANU-10648 in Table 2.1 below) date this level to the period between the mid-15<sup>th</sup> century and the mid-17<sup>th</sup> century. However, a general problem with the radiocarbon calibration curves for the last 500 years means that most determinations that fall within this period lack precision. The most plausible summary of our present knowledge of this archaeological level is that Mangaas was re-settled after the Kuwae eruption of 1452 AD (and possibly fairly soon after, reflecting the local increase in population on Efate as communities fleeing from the Shepherd Islands sought refuge, either for decades or permanently). It served as a residential seat for one or more holders of the Roi Mata title from at least the late 16<sup>th</sup> century until the death of the last Roi Mata, after which the site was abandoned entirely until the present. The date of the death of the last Roi Mata must fall well after 1452 AD given the extensive stone wall system at Mangaas which dates to this last phase of settlement (and which does not appear to have been substantially modified or extended following the abandonment of Mangaas), and a date of approximately 1600 AD is thus a plausible estimate, based solely on the Mangaas evidence.

**Table 2.1: Calibrated dates for the Final Occupation Level at the Mangaas Site (drawn from Spriggs 2006)**

Code	Site context (Test Pit No., depth below datum [bd])	Material dated	Calibrated dates BP (2sd) (Calib. REV5.0.2)	Age range (AD)
ANU-10647	TP3, 25-30 cm bd	Charcoal	568 - 443	1382-1507 AD
ANU-10648	TP3, 30-50 cm bd	Charcoal	504 - 289	1446-1661 AD
ANU-10656	TP4, 70-85 cm bd	Charcoal	435 - 0	1515 AD-modern

### 2.B.ii.c Colonial History (1870 – 1980)

After about 1600 AD, and presumably shortly after the death of Roi Mata and his burial on Artok Island, the settlement of Mangaas was abandoned for the last time, and never re-settled. It is tempting to speculate that Roi Mata's death also proved fatal for his community and that it dispersed or moved elsewhere. It is quite probable that the resumption of conflict forced the Mangaas community, along with other mainland communities, to flee to offshore islands. Certainly the living descendants of the Mangaas community, including the lesser chiefly titles associated with Roi Mata's court, were all to be found on the island of Lelepa by the end of the 19<sup>th</sup> century.

As with Artok Island (see below), the first European planters found it relatively easy to obtain leases for the unsettled portions of mainland Efate, and two contiguous areas near present-day Mangaliliu Village were sold by Lelepa Islanders to planters, as Title 103 in 1889, and Title 104 in 1904. Copra plantations were developed on both leases, but no attempt was made to lease or develop the area of the Mangaas site, and it is likely that any such attempt would have met with local resistance.

The Mangaas area had apparently become completely overgrown and was home to giant trees, only a few of which remain today. For almost four centuries no one attempted to clear or garden in the vicinity of Mangaas, and few would even land at the reef passage of Mwalakot in front of Mangaas, for fear of the power of Roi Mata. The first individual to break this powerful *tapu* prohibition was the senior chief from Roi Mata's former community, Masia Kalotiti. Returning from his training as a Presbyterian mission teacher at the Tangoa Training Institute in 1927, and fired by Christian zeal, Masia took a bible to Mangaas, set it alight, and scattered the burning ashes over the land in order to diminish the power of Roi Mata and free the land from what he now felt to be the hold of the heathen "era of darkness". He then set about felling the giant forest and planting coconuts for copra, though initially he found few people willing to help or join him. Within the immediate area of Roi Mata's residence, Masia was more restrained, restricting himself to the planting of a few green vegetables. Masia's death in 1974 is attributed by his family to the delayed effects of an unsuccessful attempt to fell and set on fire the large banyan tree at Mwalasayen. During the 1960s and 1970s, and particularly after Garanger's excavation of the Mangaas site in 1967, increasing numbers of Lelepa Islanders cleared land and established gardens on the coastal plains to the west and east of Mangaas, but the immediate area of Roi Mata's residence remained almost entirely untouched. Ironically, the most important act of devastation at the Mangaas site was an accident: the burning down of Roi Mata's own banyan at Mwalafaum when a match was carelessly tossed onto post-cyclone debris near the banyan in about 1976.

#### **2.B.ii.d Post-Colonial History (1980 – Present)**

Population growth at Natapau Village on Lelepa Island led to the establishment on the mainland of Mangaliliu Village by part of the community in the early 1980s, under the leadership of Chief Mormor (since deceased; his place has been taken by Chief Kalkot Murmur). One consequence of this migration to the mainland was the individualisation of claims to land in the Lelepa region, and garden areas in the Mangaas area were assigned to or claimed by individuals. Currently, most of the land to the northeast and southwest of Mwalafaum and Mwalasayen is under active cultivation or fallow, mostly for subsistence crops such as cassava, banana and taro. The coconuts planted since 1927 are no longer systematically harvested and most have been felled. However, throughout this process of transformation in land use at Mangaas, the area immediately surrounding the banyan at Mwalasayen has been left almost entirely untouched. It was not planted with coconuts formerly and has not been cleared for gardens since.

During January and February 2006, parts of the Mangaas site served as a backdrop to shooting of the French television series "Koh-lanta". The communities of Mangaliliu and Lelepa, and staff of the Vanuatu Cultural Centre and the World Heritage Project were involved in all aspects of planning for this section of the shooting, negotiating for the mitigation of impacts on the site. The Koh-lanta team, in return, constructed a light vehicle track from Mangaliliu as far as the stream of Nwai Mangaas.

### **2.B.iii History and Development of the Fels Cave Site**

#### **2.B.iii.a History of Research at the Fels Cave Site**

This section briefly reviews the history of research at the Fels Cave site, tracing the process of growth in understanding of the site, and identifying key contributors and their publications.



### Early Documentation

By the 1870s, Fels Cave was already one of the leading tourist attractions in the New Hebrides, with regular visits from visiting British naval vessels, the crews of other ships and missionaries (Macdonald n.d.). The earliest known foreign visitors to Fels Cave include the unknown author of graffiti dated “1874”, “1877” and “1879”. The last date may be linked to a visit to the cave in 1879 by Russian ethnographer Nikolai Miklouho-Maclay. While he does not appear to have documented any of the rock-art at the site, Miklouho-Maclay did sketch a plan of the cave floor, noting its dimensions, and spent a considerable amount of time drawing individual people and other aspects of the material culture on Lelepa, including detailed reproductions of a stand of slit-drums located near to the cave. Many of the designs carved and painted on these slit-drums bear a strong resemblance to the rock-art designs in Fels Cave and may thus permit ethnographic access to the meaning of some of the rock-art.

The famous Australian photographer, J.W. Lindt, is the first person known to have documented the rock-art of the cave, taking a series of photographs inside the cave with the aid of magnesium flares in 1883. The original glass plates and prints of these photographs are yet to be located. Reverend Daniel Macdonald (1889: 171) was the first to comment in writing on the rock-art of Fels Cave, identifying it as a remnant of ‘sun and moon’ worship in Vanuatu.

Macdonald (n.d.) also described the first excavation, an amateur trench dug at the entrance of Fels Cave by officers of HMS Pearl in August 1876, and noted in passing that, ‘The figures on the walls of the cave did not attract very much attention. The probability is that they are a register of deaths’. The Swiss ethnographer Felix Speiser visited and excavated three trenches in Fels Cave in March 1912, noting that according to ‘native lore’ the cave was inhabited by ‘evil dwarf spirits’ (Speiser [1923]1996: 85). He made no mention of the numerous painted images at Fels Cave but did remark on and photograph the rows of engraved circular depressions (cupules) that decorate large areas of the rock surface. No interpretations were offered to Speiser by the local community as to the meanings of these engravings, but he speculated that they denoted either a form of tally (such as those used on other material objects which record the number of human enemies killed and devoured, or pigs sacrificed) or a temporal measure (indicating the changing phases of the moon). Speiser’s excavations at Fels Cave failed to uncover any substantial cultural material.

The French colonial officer Bernard Hébert visited Fels Cave in 1960, briefly describing the rock-art and noting its location at the site (1963-65: 85). Hébert suggested that some of the paintings at the cave appear to be recent.

### Garanger, 1964-67

The French archaeologist José Garanger (1972a) was the first to attempt a more thorough description and documentation of the rock-art at Fels Cave, and to conduct detailed excavations. His first pit (test pit A) was excavated 6 metres from the entrance. His second excavation (test pit B) was positioned at the base of a rock face containing a series of black linear images (Garanger 1972a: Figure 55; see also Figure 54 for the locations of the two test-pits). Garanger correctly noted that cupules engraved on isolated rocks or on rocky faces are known throughout the Oceanic region, but did not attempt a formal comparative and statistical analysis. Following Speiser, he pondered the intended meaning of the engraving cupules and other rows of dots and dashes which occur in red and black pigment, wondering whether they might be some form of



Figure 2.22 Rows of engraved cupules, Fels Cave

computation, or perhaps a simple count (Figure 2.22). At the base of test pit B, at a depth of around 1m, Garanger encountered a block of original wall surface that was decorated with cupules and crescents. A dated charcoal sample beneath this block, which was recovered at a depth of 1.5m, yielded an uncorrected age of  $910 \pm 85$  AD (GX-12632).

The two excavations, which extended 160cm below the surface of the cave, uncovered a considerable quantity of fragmented charcoal stratified in fine layers and separated by powdered tuff and rocky debris fallen from the roof. No artefacts or bones were produced. Garanger speculated that Fels Cave was too dangerous to be inhabited and was therefore probably used only for socio-religious purposes. He further postulated that the paintings on the wall adjacent to his test pit B were perhaps contemporary with the 'first Roi Mata' and that the different figures related to the various personal totemic symbols associated with the *naflak* matrilineal system. For further insight into the cave's significance Garanger refers to the body of myths collected by Jean Guiart who recorded the belief that Fels Cave is linked to a *mutuama* spirit (identified in some narratives as the father of the twins Roi Mata and Roi Muri). Garanger was also the first to document the tradition, narrated by an old man on Lelepa related to Roi Mata, that the dying chief was carried to Fels Cave, where he drew his last breath.

#### Wilson, 1996

In 1996, Australian archaeologist Meredith Wilson sketched and photographed the rock-art at Fels Cave and then compared it to rock-art found elsewhere in Vanuatu and the Western Pacific (Wilson 2002). She determined that Fels Cave is one of a number of sites in Vanuatu that, on the basis of motifs, techniques, and superimposition represented at the site, provide extensive insight into a cohesive style sequence found across the Western Pacific region. Details of the sequence of rock-art in Vanuatu are given below (2.B.iii.b).

#### Rock-art dating project, 2000-2001

During 2000-2001, an Australian archaeological team including Bruno David (Monash University), Alan Watchman (ANU), Meredith Wilson (ANU) and Ugo Zoppi (ANSTO) obtained material for AMS radiocarbon dates from three of the black linear images

at Fels Cave. These results, which confirm Wilson's (2002) theory that the black linear rock-art of Vanuatu is dated to within the last 1500 years, are shown in Table 2.2 below. Moreover, these dates offer the first tangible chronological link between the rock-art of Fels Cave and the period associated with Roi Mata at the Mangaas and Artok Island sites.

### Sale and Hall, 2001

In 2001, Nicholas Hall and Katherine Sale, of the Australian Government Department of the Environment and Heritage in Canberra, undertook a preliminary conservation assessment of this site and set up several monitoring points. Some of the conservation issues at the site include the growth of micro-flora on the surfaces, the presence of dust (caused by the fine tuff substance in its powdered form) that is concealing much of the rock-art, salt and mineral deposits, areas of rock-spalling and potential block collapse. These and other conservation and management issues are addressed in the *Plan of Management*.

### World Heritage, 2005

In November 2005, a group of tertiary students from the University of Queensland and the University of New South Wales joined the Roi Mata World Heritage project team to record those features of Fels Cave that were not comprehensively recorded by Wilson in 1996. This included the production of a concise map of the floor and profile of the cave with exact locations for the rock-art panels present at the site; polythene tracings of the densely decorated engraving panels; detailed polythene tracings of selected complex images; a review of the conservation monitoring points set up by Katherine Sale and Nicholas Hall in 2001; and a complete photographic inventory of every image (painted and engraved) present at the site. This work also resulted in the identification of several previously unrecorded images.

In January 2006 a group of students from the United States assisted the World Heritage and Tourism Committee with the construction of a walking track up to Fels Cave. This work was carried out in response to one of the key recommendations for the management and protection of the site. These and other actions to be taken in relation to Fels Cave and in connection to the World Heritage Project are listed in the *Plan of Management* and the Cultural Tourism Strategy for Chief Roi Mata's Domain.



Figure 2.23 Red hand stencil, Fels Cave

### 2.B.iii.b Pre-Colonial History and Site Use at Fels Cave

The corpus of rock-art at Fels Cave provides an exceptional chronological sequence of engraved and painted art, representing most of the major styles of rock-art in the Western Pacific region (Wilson 2002). The art ranges from the earliest known styles, associated with initial Lapita settlement of Vanuatu and the Western Pacific, through the long history of engraved and red- and black-painted designs, with the most recent designs dating from the 17<sup>th</sup> or 18<sup>th</sup> century. The earliest art at Fels consists of red blotches and red hand stencils, probably produced between about 3100 and 2200 BP (Figure



Figure 2.24 Red rectilinear figure, Fels Cave

2.23). This early “Lapita-era” art is typically found in inaccessible locations (high above ground level) and predates all other traditions of rock-art known throughout the Western Pacific. While there are no direct dates available for this early tradition, a minimum age is provided by the oldest black-hand stencil so far known in Vanuatu, which is dated to approximately 2200 BP (Zoppi et al 2004).

Fels Cave also contains a small number of red rectilinear rock-art designs (Figure 2.24). This red rectilinear style is undated at Fels Cave but is known to have been produced elsewhere in the Western Pacific during the last 1400 years. During the same period, a black rectilinear art was also being produced at Fels Cave (see Figure 3.3), as elsewhere in the Western Pacific. This black painted art is thought to derive historically from the red painted tradition, though it appears not to have followed the stricter cultural rules dictating rock-art production in other traditions.

Garanger’s (1972a) excavations at Fels Cave yielded a date of around 1000 BP for cultural material lying above a frieze of cupules that had fallen from the cave wall into an adjacent floor deposit. This date does not indicate when the cupules were produced, informing only on the date at which the cupule frieze was incorporated into the adjacent floor deposit (Spriggs and Mumford 1992). It does, however, provide a maximum age for some of the painted rock-art at the site which overlies the scar left from the fallen frieze (Spriggs and Mumford 1992).

The Vanuatu rock-art dating project (see above) generated a series of dates for the black linear rock-art at Fels Cave, summarized in Table 2.2 below.

Table 2.2: AMS Radiocarbon Dates and Uncalibrated Ages for Black Linear Designs at Fels Cave

Design	AMS C14 Date (uncalibrated)
Fish	495±35 BP
Bush fowl	260±40 BP
Bird/fish	570±40 BP

These results broadly confirm Garanger's earlier results, and suggest that the black linear rock-art at Fels Cave was being produced as recently as the 17<sup>th</sup> and 18<sup>th</sup> centuries, up to and including the period associated with the life and exploits of the last Roi Mata.

### 2.B.iii.c Colonial and Post-Colonial History and Site Use at Fels Cave

The colonial history of Fels Cave is partially documented in the graffiti at the site. These graffiti are easily produced in the soft volcanic tuff walls at the entrance of the cave, but natural scouring action outside the entrance also effaces or removes much of the external graffiti within a matter of years. Among the graffiti documented inside the entrance to Fels Cave are the early European dates of 1874, 1877 and 1879, the names of members of the missionary Milne family, based on the island of Nguna, and the names of various visiting tourists and ship's crews of the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. American servicemen stationed on Efate in World War II, and ni-Vanuatu visitors to Lelepa Island are just some of the 20<sup>th</sup> century visitors to the cave who have left their mark on its walls. Over the last twenty years visitors to Fels Cave have increasingly arrived on organised tours, as independent travellers (residents from Port Vila and people arriving by yacht), or from the local communities at Lelepa and Mangaliliu.

On 3 January 2002, at 4.22am, Vanuatu experienced a major earthquake (7.3 on the Richter scale), which resulted in the collapse of a large part of the entrance of the site. This does not appear to have affected any of the rock-art of the site but has certainly altered the topography of the cave roof and floor. Seismic activity together with a range of other natural phenomena (including salt deposition and the growth of micro-organisms on rock-art surfaces) have obvious implications for the long-term survival of Fels Cave and safety for tourists. Contingency plans for natural hazards have been developed as part of the Roi Mata World Heritage Project and are documented in the *Plan of Management*.

For the contemporary population of Lelepa, Fels Cave is still regarded as sacred or *tapu*. Some people believe that Roi Mata had his last meal in the cave (in other words, his funerary rights were initiated while he was alive in the cave). People also continue to believe that when a Lelepa islander dies their spirit goes to reside in Fels Cave. One is said to be able to observe footprints at the entrance, which are the traces of spirits of the recent dead entering the cave at night. When someone dies on Lelepa, people occasionally still sweep the entrance to the cave, leave, and then return to find the footprints of the spirits. Certain members of the community are reluctant to enter the cave for these reasons. Members of the community also claim the power to cause the chamber's interior to grow lighter, by beating the distal end of a dry coconut frond on the dusty floor of the cave.

Fels Cave is a central feature of the Roi Mata Cultural Tour, which commenced in April 2006. As a precursor to this Tour, community workshops have been undertaken to determine community concerns and aspirations associated with tourism and conservation of the site. A list of these workshops, including the participants from the local community who attended them, can be found in Appendix A of the *Plan of Management*.

## 2.B.iv History and Development of the Artok Island Site

This section briefly reviews the history of research at the Artok Island site, tracing the process of growth in understanding of the site, and identifying key contributors and their publications.

### 2.B.iv.a History of Research on Artok Island

There appears to have been little interest shown by outsiders in Artok Island before the 1960s. Leased to European planters from about 1871 (see below), the island remained undeveloped until the construction of a small bungalow by the leaseholder, Ernie Reid, who used the island as a weekend retreat. The only survey of any substance conducted on the island before the 1960s was a 1929 cadastral survey, which mapped the island in detail for the first time, and noted variations in vegetation cover (Figure 2.25)

#### José Garanger's Excavation, 1967

In 1967, the French archaeologist José Garanger, following information given to him by anthropologist Jean Guiart about the regional importance of Roi Mata (Guiart 1966), was guided to the exact location of his burial site by the European leaseholder of Artok Island, Ernie Reid.

Reid had previously been alerted to the great importance of the burial by Lelepa islanders, recounting their traditions of Chief Roi Mata (see Appendix 2). Garanger was able to gain permission from the Lelepa community to excavate Roi Mata's grave and, with an excavation crew composed of Lelepa villagers, he uncovered a large burial site, with a single central figure buried with his head against the largest of the headstones (Garanger 1972a, 1972b, 1976, 1979, 1982, 1994, 1996, 1997). Around this central skeleton, which is almost certainly that of Roi Mata, are the bodies of approximately 50 of his family and court, including men and women and a few children (Figure 2.26). Many of the men and women are arranged in couples, with the women turned towards and embracing the men. None of the skeletons were removed (despite popular beliefs still held today in Vanuatu), and the bodies are all still present in their burial site, together with the headstone grave markers. However, a small fragment of bone from the femur of Roi Mata was removed for bone collagen dating, yielding a



Figure 2.25 1929 cadastral map of Artok Island  
(Title 41 "Hat Island", Department of Lands Records, Port Vila)



Figure 2.26 Garanger's excavation of Roi Mata's burial site, 1967

date of approximately 1265 AD (685 $\pm$  140 BP). Most of the stone and shell artefacts which decorated the bodies were removed to Paris for analysis and later returned to the Vanuatu National Museum, where they are now held in trust for the Lelepa and Mangaliliu communities.

Local Efate historian David Luders (2001) has recently argued that certain of the burials in the northern corner of Garanger's excavation may not be related to Roi Mata's mass burial but instead to another burial. However, the stone wall enclosure within which the burial site is located, and which presumably pre-dated the burial, does not allow for much extension of the burials to the north. In addition, the consistently even spacing between the second-phase burials across the whole site, their presence on a

single identifiable surface, and their obvious horizontal relationship to the burials in the deep pit, strongly suggest that the burials collectively represent a single event or closely related pair of events. Garanger clearly identified three later burials of children at the site, but insisted that the remaining burials related to a single event, albeit in two phases (see below).

Although the focus of Garanger's attention was firmly on the burial site on Artok Island, he did also briefly survey the area around the grave, noting areas of former habitation, marked by the presence of surface pottery and the remains of stone walls. These former habitation areas are shown in Garanger's map of the island (Garanger 1972a: Figure 145; compare with Figure 2.18 in this document). The surface surveys also yielded 26 shell adze blades, a basalt adze blade and other worked shell artefacts.

### The 1996 VCHSS Survey

After the first post-independence lease agreement for Artok Island was signed in 1994 (see Section 2.B.iv.d below), a team of the Vanuatu Cultural Centre's (VCC) Vanuatu Cultural and Historic Site Survey (VCHSS) conducted a field visit to determine the scope for impact on cultural heritage sites of any future development on the island. The team surveyed the island over the course of five days, from 15-19 January 1996. Within just the northern half of the island, the team found and mapped extensive areas of stone walls, inhabited rockshelters, additional burial sites, and lines of sacred cycad (*Bislama: namele*) trees. Unfortunately, the VCHSS coordinator, Jean-Paul Batick, passed away soon after the field visit and the report produced from the survey remains incomplete (Batick 1996).

### Re-dating of the Garanger Materials, 1996

Although Garanger's reports of his excavations brought the Artok Island burial to worldwide prominence, no further surveys or excavations were undertaken on the island for the next 30 years. However, advances in radiocarbon dating since the 1960s encouraged archaeologist Matthew Spriggs, of the Australian National University, to re-date some of the Artok Island materials. In collaboration with José Garanger, he submitted more reliable shell ornaments for Accelerator Mass Spectrometry (AMS) dating in 1996, deriving dates that tend more towards the 16<sup>th</sup> and 17<sup>th</sup> centuries AD. This considerably revised the date previously assumed by Garanger for the life and death of the last Roi Mata.

### The 2005 World Heritage survey

In November 2005, at the request of the Director of the VCC, the leaseholder of Artok Island gave permission for the island's cultural heritage resources to be surveyed. In the event, limited time and resources allowed for only a brief reconnaissance survey and mapping of the island. The 2005 survey was conducted over two days, from 3-4 December, by a collaborative team from the VCC's World Heritage Project, the University of New South Wales and the Queensland University of Technology. This survey established the widespread occurrence of stone wall enclosures across the island, including almost all level areas higher than 5m above sea level, and even on top of the central plateau. Figure 2.18 shows the approximate extent of the stone wall field system. Sections of these stone walls in the vicinity of Roi Mata's grave site were mapped in detail in order to explore the nature of the field and residential yard system formed by the walls (Figure 2.21). Precise locations were also mapped for rockshelters and some additional burial sites or possible burial sites.



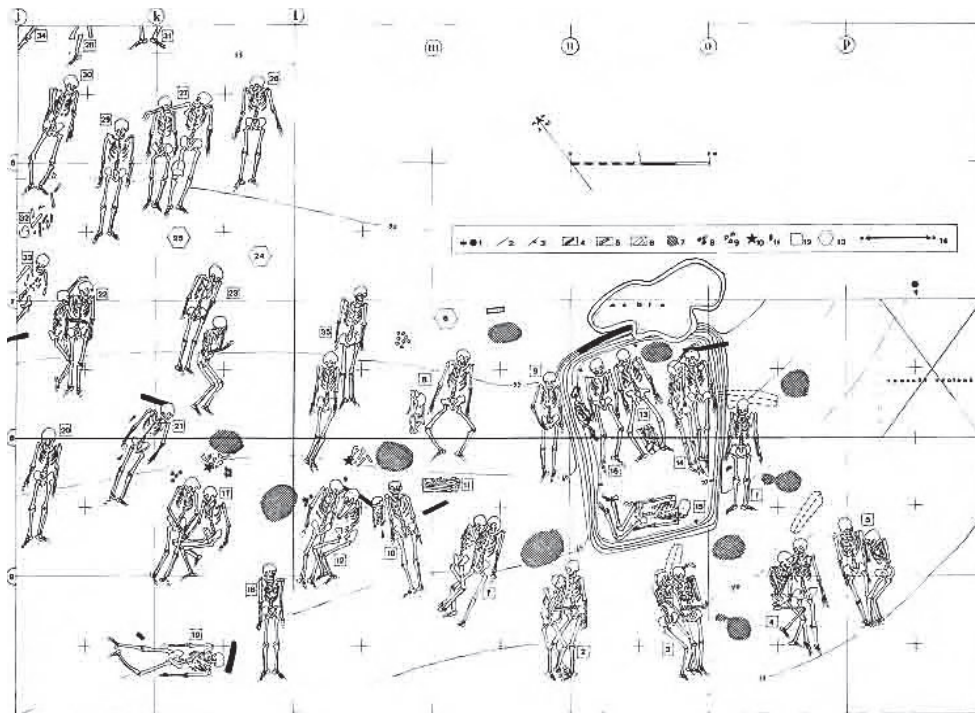


Figure 2.27 Plan of Garanger's excavation of Roi Mata's burial site

#### 2.B.iv.b Pre-Colonial History (3100 BP – 1870 AD)

Artok Island is likely to have been visited and exploited by the first humans to settle Efate, presumed to be the producers of Lapita pottery, from about 3100 BP, although definitive proof of this early use has not yet been identified on the island. However, those areas of the island covered in stone walls also contain surface scatters of Mangaasi pottery, dated between about 2400 – 1500 BP, indicating that the island was being fairly intensively used and almost certainly served as a residential base, during part or all of this period. The find of a single sherd of early Aknau ware on Artok Island indicates use of the island during the period 950 – 800 BP, and indicates connections at this early date with the Shepherd Islands, where Aknau pottery was probably produced (Garanger 1972a). Finally, the stone wall field systems on Artok Island most likely correspond to the period during which similar walls were being constructed on the mainland, at locations such as Mangaas, dating to the 200-year period after the eruption of Kuwae in 1452 AD and before the abandonment of the island at about 1600 AD.

Although various early chiefly owners of Artok Island are identified in oral narratives, the island appears to have been owned and used during the period 1452-1600 AD by members of the "Alpat family", who later relocated to the settlement of Alpat, on the hill of Lelepa, above and behind Fels Cave. The Alpat family derived from the Nanu Pwarsa matrilineal clan or *naflak*, originally from the settlement of Mintopu, in the hills above Tukutuku Bay. At some point, under pressure from rival settlements in the interior of Efate, they moved to the northern coastline at Naktaf, before moving again to take possession of Artok Island and establish the Alpat settlement on Lelepa. All of these movements appear to have taken place before the death of the last Roi Mata in c.1600 AD. At Roi Mata's death, his family and court approached the Alpat family in order to exchange the island of Artok for some good garden land near Mangaas (the area now known as Amalal, immediately to the southwest of the stream of Nwai Mangaas). The Alpat family is led today by Chief Pierre Fartepar, who is resident on Lelepa Island.

### Roi Mata's Burial

Artok Island is known principally for its association with the burial of Roi Mata, and Garanger's excavation of this burial site provides the bulk of present archaeological knowledge about the pre-colonial history of the island. The reconstruction of the burial that follows draws on local oral traditions from the Lelepa region and beyond, ethnographic descriptions of chiefly burials in the region from the late-nineteenth century, the archaeological evidence uncovered by José Garanger, and a review of the skeletal evidence produced for the World Heritage Research Team (Van Dijk 2006).

On the death of Roi Mata, a particular yard enclosed by pre-existing stone walls was selected for his burial, though the grounds for this selection are not known. Important



Figure 2.28 Detail of Roi Mata's skeleton (above) and other burials within the deep burial pit

persons were commonly buried within their own residential yard but, in the case of Roi Mata, his power (*natkar*) was felt to be so great that it would pose a danger to anyone living at Mangaas, hence the decision to bury him on the small island of Artok, visible but safely distant from Mangaas. The yard selected at Artok Island may thus have been the residential yard of the chief of the landowning Alpat family, or of an immediate relative of Roi Mata resident on Artok Island.

The archaeological evidence suggests that the single symbolic event of this mass burial probably took place in at least two phases, and the ethnography of chiefly burial in Central Vanuatu strongly supports such a distinction. First, the dead chief was placed on his back in a deep burial pit, almost a metre below the present surface (right of centre in Figure 2.27). He was an old man by the time of his death, with just a single tooth left in his mouth. Relatively lightly decorated, with shell armbands, a large shell chest pendant, a single pig's tusk on his left wrist, and two on his right wrist, his legs were flexed outwards, a common feature of burials of important chiefs in Western Polynesia (see Section 3.C.iii). Between his legs was laid a packet of bones of another adult, possibly a favourite wife or close relative (gender cannot be determined from these particular remains). Four other people were buried with him at the same time, and we can presume that they were either killed or drugged or buried alive in order to be interred in the company of Roi Mata, soon after his death. On Roi Mata's right side was a large adult male, with his left leg flexed towards Roi Mata, and his right leg laid out straight (Figures 2.27 and 2.28). This figure had a full pig buried to his right, probably connected to his right wrist by a rope of twine; pigs or just the symbolic pig's rope were still common features of chiefly burials in the Efate region in the 19<sup>th</sup> century. To Roi Mata's left lay an adult couple, the man on his back and the woman turned in towards him. A final figure in the deep burial pit was that of a young woman, laid out perpendicular to the other figures and below their feet, her knees drawn tightly together, probably as a result of being bound, and her head raised up (Figures 2.27 and 2.28). On the basis of ethnographic analogues, and the interpretations of contemporary chiefs, it is likely that the central figure, Roi Mata, was accompanied in his grave by his magic man (*munuwai*) or assistant chief (*ataf* or *atavi*), holding a pig offering for the guardians of the underworld, his warrior (*mwau*) together with the warrior's wife, and his own youngest wife, yet to bear children, buried alive and conscious at his feet, her legs and arms bound with rope. This initial, deep burial pit was then filled in, and the ground stamped flat above it. The raised head of the young wife may indicate a desperate attempt to survive as the soil filled in around her. Above the heads of Roi Mata and of his warrior, two large slabs of prismatic basalt were erected to serve as head stones, and a small sapling of *Pisonia grandis* was planted behind them.

After a certain interval of time, probably similar in length to the 100-day period still used for chiefs in the 19<sup>th</sup> century and today, a large group of mourners returned to Roi Mata's grave on Artok Island. A ceremony was held, with fires lit around Roi Mata's grave, and pigs cooked and consumed. Then a mass of people was voluntarily laid down for live burial. Some or all may have been drugged with strong kava, or strangled. Two individuals were laid down, one on either side of Roi Mata's grave. Then a line of seven male-female couples, mostly young adults, was placed along the lower edge of the deep grave; the men were laid on their backs, while the women were turned in towards the men, often with an arm placed over the man's body. More individuals and couples were laid out around the deep grave, most to the north and west, inland from the deep burial. A total of at least 39 individuals went to their death in this second-phase burial, including a "faggot" of long bones and scattered fragments of broken bone from at



Figure 2.29 Detail of body decoration on an arm, Roi Mata's burial site

least six individuals that may possibly indicate the consumption of human victims as part of the ceremonial feast. To their number can be added three packet burials of bodies removed from other locations and buried at the same time as the second-phase burials. Many of the couples and individuals were very richly decorated, with whale's teeth pendants, shell armbands and bracelets (Figure 2.29), woven shell aprons and a carved bird's head necklace ornament. Some of those in the second-phase burial also had the locations of their bodies marked by standing headstones. As Garanger noted in his original analysis of the burial, all but two of the buried figures were oriented along a single axis, with their feet pointing towards the southwest. This is the direction of Tukutuku or Devil's Point, widely believed across north and west Efate to be the

entrance to the land of the dead. Once the second-phase burial was complete, the entire island was placed under customary *tapu* prohibition and declared *fanua tapu*, or a forbidden island. All of Artok's residents relocated to the settlement of Alpat on Lelepa Island, and a long 400-year silence fell on the island.

Garanger's excavation uncovered the remains of between 51 and 54 individuals, all but 3 of whom were buried in the two-phase event of Roi Mata's burial. However the limited extent of the excavation area and the presence of skeletons in the northern and western walls of the excavation suggest that the actual number of people buried with Roi Mata may be higher. Indeed, assuming an even density of burials per square metre, the size of the walled enclosure within which the gravesite is located is sufficient to accommodate the "300" people reported in local oral traditions to have accompanied Roi Mata in death (see Appendix 2).

Although Garanger's original bone collagen date, derived from Roi Mata's own femur, yielded a result of about 1265 AD, later AMS dates on marine shell ornaments in the grave have suggested that the burial is of a more recent age (Table 2.3). The wide range of AMS ages for these shell ornaments, from 1157 – 1910 AD, can be narrowed to the period between the late 15<sup>th</sup> and 17<sup>th</sup> centuries. As the shell ornaments were presumably produced well prior to the burial and may have been handed down over many years, the date of the burial itself probably falls towards the more recent end of this range. Matthew Spriggs (pers. comm. 2006) offers the assessment that the most plausible real age of the burial lies around 1600 AD. This more recent date would fit well with the fact that the residential yards marked by the stone walls, and the last phase of settlement at Mangaas before it was abandoned, are also dated to about 1600 AD, and certainly post-date the tephra layer associated with the massive Kuwae eruption in 1452 AD.

Table 2.3: Calibrated Dates (Calib. REV 5.0.2) for Roi Mata Burial Site, Artok Island

Code	Burial	Material dated	Calibrated dates (2sd)	Age range (AD)
OZC784	Burial 3	Marine shell	483 – 144	1467-1806 AD
OZC785	Burial 3	Marine shell	793 – 350	1157-1600 AD
ANU-10257	Burial 3	Marine shell	494 - 247	1456-1703 AD
NZA-14139	Burial 14	Marine shell	312 - 40	1638-1910 AD

### 2.B.iv.c Colonial History (1870 – 1980)

After being declared *fanua tapu*, Artok Island was not resettled by Lelepa islanders, and their reluctance to even visit the island may partially explain their willingness to offer Artok Island on lease to the earliest colonial settlers. Known to Europeans as "Retoka", Artok Island appears to have been leased for the first time in 1871 by Henry MacLeod from a "Chief William Brian" (unfortunately none of Chief William's customary names or titles were recorded). The island passed through numerous European hands before ending up in the hands of the Australian trading company Burns Philp. A long-term European resident of Efate, Ernest ("Ernie") Henry Reid, subsequently took a special lease from Burns Philp on Artok Island.

Ernie Reid built a small bungalow on the island during the 1960s, to the southwest of Roi Mata's burial site, and the concrete foundations of the kitchen for this bungalow, together with rows of beer bottles marking the entrance, are still visible. Reid and

his family visited the island occasionally, and hunted for goats let loose on the island (the goats still present on the island are apparently the result of another deliberate introduction), but made few further modifications to conditions. There was considerable anxiety amongst the Lelepa community over the construction of a permanent building on the island, and the bungalow site was deliberately sown with acacia seeds by one villager to indicate his displeasure. The bungalow was abandoned in about 1975, and the title to Artok Island reverted to customary ownership in 1980 at Independence.

Under the colonial Condominium Government, the Roi Mata burial site was gazetted as 'a site of historical interest' (Joint Decision No.48 of 1976, New Hebrides Condominium Gazette No. 361, April 1976) under the Joint Regulation 11 of 1965, which provided 'for the preservation of sites and objects of historical, ethnological or artistic interest', becoming the first and only site in the New Hebrides to be protected under this colonial era legislation.

#### **2.B.iv.d Post-Colonial History (1980 – Present)**

Ernie Reid's lease and bungalow and Garanger's 1967 excavation did serve to partly alter the *tapu* nature of Artok Island. People now overnight on the island, though not without some anxiety and usually only after formal consultation and an offering at Roi Mata's grave. No one in the community, however, has been prepared to contemplate building a permanent or semi-permanent structure or residence on Artok Island. Perhaps partly because of the community's unwillingness to reside on or extensively exploit Artok Island, the customary owners of the island were prepared, when approached by a foreign investor in 1994, to consider leasing the island.

Customary ownership of Artok Island was disputed after the title was returned to customary ownership at Vanuatu's Independence in 1980. The Alpat family, in particular, claimed that Artok Island had previously been theirs, but subsequently withdrew their claim when the current landowners, the Kalotiti family, pointed out that this would involve revoking the Alpat family's claim to garden land at Mangaas, the area originally exchanged for Artok Island at Roi Mata's death. Currently, ownership of Artok Island is not contested, and the ownership rights of Chief Meto Kalotiti have been formally acknowledged in a document witnessed by the chiefs of Lelepa on 12 April 1995.

In 1994, an Australian investor, Katrina Voyka (later Jamieson), signed an agreement for a Rural Commercial Lease for Artok Island. Despite widespread national opposition to the lease, from the Ministry of Justice, Culture and Women's Affairs, the President of the Malvatumauri (National Council of Chiefs), the Vaturisu (Efate Council of Chiefs), and the Vanuatu National Museum and Cultural Centre, a 75-year lease was approved by the Department of Lands, and ultimately registered in 1996. As no development took place over the ten-year period from 1994 to 2004, a new 75-year lease was signed on 26 August 2004, with a 12-month development period. By October 2005, there was still no evidence of development and the lease has been revoked.

Today, the island is used largely by Lelepa and Mangaliliu villagers on daytime fishing, reef-gathering or hunting expeditions. Other occasional users of the island include expatriate spear-fishermen, divers, and snorkelling tourists brought by boat from Port Vila or Lelepa Landing. Impact from these activities on the island is almost negligible, consisting at most of the occasional cooking-fire or erection of a lean-to shelter for lunch. No damage to Roi Mata's burial site has been observed since the 1967 excavation by Garanger.





# CHAPTER 3

## Justification for Inscription



### 3.A CRITERIA UNDER WHICH INSCRIPTION IS PROPOSED

#### Criterion (iii): Chief Roi Mata's Domain bears a unique testimony to a cultural tradition that is living

Chief Roi Mata's Domain, on the island of Efate in Central Vanuatu, is an exceptional example of a continuing cultural landscape organised around the principles of an ongoing chiefly title system. Chiefs, who play a major role in social life within the Domain, continue to derive their authority from the traditions relating to previous title-holders and from the material proofs of these ancestors that are still present in the landscape. The most dramatic material proof of the ongoing significance of chiefs is the landscape of Chief Roi Mata's Domain, where *tapu* prohibitions are still in force on the use of specific areas associated with the paramount chiefly title of Roi Mata, including his former residence at Mangaas and his burial site on the island of Artok. The mass burial on Artok Island, in which the body of the last Roi Mata is surrounded by more than fifty of his family and retainers, is exceptional on a global scale and unique in terms of the scale of the local polity and population. Amongst the limited number of societies around the world that continue to function under the authority of traditional chiefs, there are none in which the historical depth of the system is so spectacularly affirmed through the convergence of oral tradition and archaeological discovery, and confidently attested to by an entire landscape serving as evidence for the past, as Chief Roi Mata's Domain.

The *tapu* prohibitions on the use of Mangaas and Artok Island that were instated at Chief Roi Mata's death have been observed for 400 years. In a remarkable tribute to the power of tradition in Chief Roi Mata's Domain, the respect for the *tapu* prohibitions is attested to by the preservation in this landscape of exceptional micro-ecologies and remnant fauna and flora. This customary form of cultural heritage conservation persists into the present, with the entire area of the Domain remaining under the ownership of its traditional stewards. Knowledge of the corpus of legends told about Roi Mata, and of the locations associated with his deeds, is widespread throughout Central Vanuatu. The precedents established by Roi Mata, especially in the areas of kin group reckoning and conflict resolution, continue to be cited in contemporary negotiations over marriage and land, and in the resolution of disputes. The landscape of Chief Roi Mata's Domain thus bears witness to the celebrated historical deeds of Roi Mata, which continue to structure the local landscape and regional social practices to the present day.

#### Criterion (iv): Chief Roi Mata's Domain is an outstanding example of a technological ensemble and landscape which illustrates a significant stage in human history

The organization of small-scale societies of the Western Pacific under systems of chiefly titles illustrates a significant stage in human history, all the more remarkable for its continuous evolution and persistence into the present. The chiefly title system of Central Vanuatu possesses an unbroken tradition of more than 1000 years, an exceptional history captured in oral tradition and attested to most dramatically in the names, the features and the order of the landscape of Chief Roi Mata's Domain. Chief Roi Mata's Domain represents an outstanding example of a Western Pacific chiefly landscape, in which significance is vested not in monumental architecture but in a constellation of burial sites, coral walls, sacred stones, sacred or significant trees and other landscape features.

The landscape of Chief Roi Mata's Domain contains all of the major elements that pertain to the paramount status of the last holder of the chiefly title of Roi Mata, including his principal residence at Mangaas, the major rock-art site of Fels Cave,

where the chief drew his last breath, and the unique forbidden or *tapu* island of Artok, where Roi Mata was buried with members of his family and court. The landscape is still divided along the lines established by Roi Mata and other ancient chiefs, denoted by a field system of coral walls at Mangaas and on Artok Island. Roi Mata's residence, his cave and his burial site form the central points in a sacred geography of chiefly power which continues to exert its influence on the living community of the northwest Efate region. Much of the power of the chiefs resided in sacred *tapu* stones, including portable stones that are still present at Mangaas, together with limestone outcrops on the land and reef formations in the sea. In addition to these rock and reef manifestations of chiefly power, certain trees also bear witness to the stories of Roi Mata, including the giant banyan, canarium, and tamanu trees at Mangaas, and the chiefly cycads on Artok Island.

The respect still observed today for *tapu* prohibitions in Chief Roi Mata's Domain reflects the enduring power (*natkar*) associated with paramount chiefs, in death as in life. Roi Mata's particular chiefly power is still held to exist in the vicinity of his residence at Mangaas and his burial on Artok Island and through his association with Fels Cave. Movement towards and around these principal sites continues to be governed by respect for Roi Mata and prayers and offerings are made at these places to appeal for his favour. Members of the current community conceive of their own actions as being conducted "in the footsteps of Roi Mata" ("*nalfan Roi Mata*"). The immediate significance of Roi Mata's Domain and his influence on contemporary life extends far beyond the Lelepa region to encompass Vanuatu life more generally, as a central feature in narratives of national identity. The continuing integrity of community and landscape within Chief Roi Mata's Domain, the persistence of a chiefly system of social organization and of land tenure, and the unbroken connection that extends between the deep past and the present collectively provide a unique example of a landscape organised around a significant stage in the development of global social and technological complexity.

**Criterion (vi): Chief Roi Mata's Domain is directly and tangibly associated with events and living traditions, with ideas, and with beliefs of outstanding universal significance.**

The continuing and associative landscape of Chief Roi Mata's Domain bears unique witness to the historical events surrounding the life of Roi Mata, and to his revolutionary institution of *naflak* matrilineal clans as an explicit means of conflict resolution. The last Roi Mata is famous throughout Central Vanuatu for his creation through a formal ceremony of *naflak* matrilineal clans, a remarkable innovation that served to resolve a long era of conflict in the region. The *naflak* system presents an exceptional Western Pacific example of a global process of innovative conflict resolution that is of outstanding universal value.

The landscape of Chief Roi Mata's Domain serves to memorialise Roi Mata and his deeds for contemporary Vanuatu society, in which the *naflak* system continues powerfully to hold out the promise of harmony, particularly in the present context of the mediation of land disputes. The principal sites associated with Roi Mata's life, death and burial act as a tangible anchor for the stories about him, tying living people and their actions inextricably to the landscape, and grounding the spiritual and moral values with which Roi Mata is identified. Chief Roi Mata's Domain thus provides the material testimony to a significant social revolution in the region, a unique form of conflict resolution adapted to the challenges confronting small-scale Western Pacific societies.

## 3.B STATEMENT OF OUTSTANDING UNIVERSAL VALUE

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Chief Roi Mata's Domain is an outstanding illustration of the exceptional living connection between Pacific people, their landscapes and their traditions. The last holder of the paramount chiefly title of Roi Mata, who died in the late sixteenth or early seventeenth century, remains the central figure of a body of oral tradition still recounted today in Vanuatu. His innovative strategies for the resolution of widespread conflict on the island of Efate, including the institution of land-holding *naflak* matrilineal clans, continue to be observed and celebrated in contemporary Efate society. Narratives about Chief Roi Mata sustain the moral values that he instituted, and have guided archaeologists to key sites associated with his life and death. These sites, all of which lie within his former domain, include Roi Mata's chiefly residence at Mangaas, the site of his death at Fels Cave, and the mass burial at his grave on the island of Artok. The ongoing customary *tapu* prohibition on the further use of Mangaas or Artok Island following the death of Roi Mata is without parallel in the world, and has preserved the unique cultural and natural values of these places over the last four centuries.

Chief Roi Mata's Domain is an exceptional example of a continuing cultural landscape organised around the principles of a chiefly title system. Chiefs, who continue to play a major role in social life within the Domain, derive their authority from the traditions relating to previous title-holders and from the material proofs of these ancestors that are still present in the landscape. The most dramatic of these material proofs is the mass burial on the *tapu* or forbidden island of Artok, in which the body of Roi Mata is surrounded by more than fifty of his family and retainers, a site which is exceptional on a global scale and unique in terms of the scale of the local polity and population. Amongst the limited number of societies around the world that continue to function under the authority of traditional chiefs, there are none in which the historical depth of the institution is so dramatically affirmed through the convergence of oral tradition and archaeological discovery, and attested to by an entire landscape serving as evidence for the past, as Chief Roi Mata's Domain.

The Outstanding Universal Value of Chief Roi Mata's Domain is grounded firmly in the fundamental integrity of the continuing cultural landscape, and in the ongoing and evolving organic relationship between people and the land. The customary *tapu* prohibition on residence or intensive use of Roi Mata's residence at Mangaas and his gravesite on Artok Island continues to be respected, and constitutes a unique history of community-level conservation. The key sites associated with Roi Mata anchor a wider landscape of tradition that bears witness to and reinforces the continuing significance for living communities of Roi Mata's social revolution of the unique system of *naflak* matrilineal clans, indicating the exceptional importance in modern Vanuatu and the Western Pacific of the past and of custom in guiding community life in the present.

## 3.C COMPARATIVE ANALYSIS (INCLUDING STATE OF CONSERVATION OF SIMILAR PROPERTIES)

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### 3.C.i Preamble

This is the first World Heritage nomination of a cultural site or landscape from an independent Pacific Island state, an attempt to redress a situation whereby the Pacific has come to be regarded as 'undoubtedly the greatest lacunae in the implementation

of the World Heritage Convention' (World Heritage Committee 1998: 30). The first and only site from a Pacific Island state to be inscribed on the World Heritage List is the natural site of East Rennell in the Solomon Islands (854). The natural sites of the Galápagos Islands (1), the Hawaii Volcanoes National Park (409) and Henderson Island (487), Cocos Island National Park (820), and the cultural site of Rapa Nui National Park (715) lie within the jurisdictions of Ecuador, the United States of America, the United Kingdom, Costa Rica and Chile, respectively (sites in Australia and New Zealand are not considered here).

In his Introductory Address to UNESCO's 2<sup>nd</sup> Global Strategy Meeting on the Identification of World Heritage Properties, held at Suva, Fiji, in July 1997, Professor Atholl Anderson set out some of the defining characteristics of the potential contribution to be made by Pacific Island properties to World Heritage. In place of the valorisation of the monumental common elsewhere, Anderson drew attention to the likely importance in the Pacific of living traditions linking the past and present, and of the role of traditional systems of management of cultural heritage. Investment in the construction of large-scale monuments is a rare occurrence in the Pacific, 'where prehistory has a relatively shallow time depth, settlement patterns were rural and dispersed and most populations organized to no level beyond chiefdoms' (Anderson 1997: 1). The principal potential contribution of the Pacific to World Heritage, Anderson concluded, 'lies in the various ways in which [sites] exemplify the lives of people in small-scale communities and the varieties of interaction between people and environment on small, relatively isolated islands in the world's largest ocean' (1997: 10).

Global Strategy Meetings for the Pacific at Suva in 1997 and at Port Vila in 1999 have emphasized the presence in the Pacific of 'spectacular and highly powerful spiritually valued natural features and cultural places rather than an extensive range of monuments and human built permanent features' (World Heritage Centre 1997, 1999), as well as the importance of traditional forms of custodianship and interpretation of these sites. The World Heritage Centre's report on The State of World Heritage in the Asia-Pacific Region 2003 draws specific attention to the importance in Pacific Island Countries of 'customary land ownership and indigenous knowledge [as] the basis for heritage protection' (World Heritage Centre 2004:18).

The recent workshop on the Thematic Framework for World Cultural Heritage in the Pacific, held in Port Vila in 2005, has identified as one of three principal themes for the region a class of sites 'in which intangible associations are important and yet where remarkable monumental sites and cultural landscapes can help focus nomination and inscription on the World Heritage list' (World Heritage Centre 2005: 6). This is a theme that is well suited to the particular values expressed in Chief Roi Mata's Domain, which was explicitly identified at the meeting as an outstanding example of the theme (World Heritage Centre 2005: 8).

The comparisons offered here place particular emphasis on identifying sites that are associated with social formations of comparable scale and complexity, in the Pacific and elsewhere. In broad terms, and with only a few notable exceptions, most Pacific Island polities have traditionally consisted of unified communities no larger than several thousand in number; a level of complexity often categorized, grossly, as chiefly society, with fewer than 10,000 people organized by some form of central authority (Earle 1991). It is with communities of a similar size and of similar political complexity that comparisons with Chief Roi Mata's Domain are most productive.

As a continuing and associative cultural landscape, Chief Roi Mata's Domain brings together a number of different attributes, each of them independently of outstanding universal value. Four principal axes of comparison are addressed, each considered against features of comparable sites in Vanuatu, elsewhere in the Pacific, and then globally. Collectively, these attributes then contribute to the exceptional quality and integrity of the cultural landscape of Chief Roi Mata's Domain.

1. Chief Roi Mata's Domain is an exceptional example of a continuing cultural landscape organised around the principles of a chiefly title system.
2. The mass burial on the *tapu* or forbidden island of Artok, in which Roi Mata was accompanied in death by approximately 50 individuals, is exceptional on a global scale, and unique in terms of the scale of the local population.
3. The convergence of oral traditions of exceptional quality and depth and remarkable archaeological discoveries has thrown a unique light on the deeds of Chief Roi Mata and other chiefs of Central Vanuatu.
4. The customary *tapu* prohibition on residence or intensive use of Artok Island and Roi Mata's residence at Mangaas constitutes a unique history of community-level conservation of an extraordinary associative landscape, and bears witness to the continuing significance for living communities of Roi Mata's social revolution of *naflak* matrilineal clans, indicating the exceptional importance in Vanuatu and the Western Pacific of the past and of tradition in guiding community life in the present.

#### 3.C.ii The Chiefly Title System of Central Vanuatu

Chief Roi Mata's Domain is an exceptional example of a living cultural landscape organised around the principle of the chiefly title system. The chiefly title system of Central Vanuatu, as mapped and described by anthropologist Jean Guiart (1973a), consists of an internally coherent and hierarchically ordered series of titles around which the flow of duties and tributes, and the distribution of plots of land are organised. The continuing significance of this particular chiefly domain for the entire Central Vanuatu region is unique, both as a reminder of the moral precepts associated with Roi Mata, and as an instance of a *tapu* prohibition on the use of the chief's former residence and his burial island that has endured for almost 400 years.

Chiefly title systems are widespread throughout coastal and island environments of Melanesia. However, the Central Vanuatu system is unusual in that many of its elements appear to reflect most closely cognate systems and terms in use in Western Polynesian societies such as Uvea and Samoa, although almost all of the communities of Central Vanuatu speak Melanesian languages. Notions of a chiefly court, with subordinate titles corresponding to positions within a voyaging canoe, and titles such as Mariki and Ti Tongoa, resonate strongly with their Western Polynesian counterparts. And yet linguistically, physically and culturally, Central Vanuatu society is resolutely Melanesian in character. The chiefly title system of Central Vanuatu is also exceptional in terms of its temporal depth: genealogies recounted locally of 50 or more successive holders of individual titles are certainly unique in the Western Pacific and probably in the world for a chiefly system. As such, the Central Vanuatu chiefly title system bears exceptional witness to the extraordinary inter-island and inter-archipelagic links established and

often maintained over centuries if not millennia and across massive sea distances in the Pacific, and to the highly adaptable form of local Vanuatu society.

Hundreds of similar chiefly domains have been described by Guiart for Central Vanuatu, and are known for the Western Pacific more widely, but Chief Roi Mata's Domain is unique amongst them because its essential features have been preserved over four centuries since the death of the last holder of the Roi Mata title, indicating the exceptional respect accorded to the title and especially to the particular chiefly power of its last holder.

Even today, Chief Roi Mata's Domain retains many of the physical traces and structural principles of the 16<sup>th</sup>-century milieu of the last holder of the Roi Mata title. The sites associated with Roi Mata's life, including the specific walled compound in which he lived, the dancing ground used by his court and warriors, the location of his hollowed-log drums, and the sites of his death and of his burial, even trees that were present during his life, are all vital elements of the contemporary landscape. The boundaries of Roi Mata's personal fiefdom and of the wider domain under the control of his court persist to this day as land boundaries for contemporary chiefs, the current holders of the titles of his original court. Critical decisions about community affairs, ranging from the placing of *tapu* prohibitions on the use of certain reefs through to those relating to this nomination, continue to be made by chiefs in consultation with their communities.

Amongst the limited number of societies around the world that continue to function under the authority of traditional chiefs – and the Pacific is now the principal location for such societies – there are none in which the historical depth of the institution is so dramatically affirmed through oral traditions, archaeological discoveries and an entire landscape serving as evidence for the past, as Chief Roi Mata's Domain.

### 3.C.iii Mass Single-Event Burials

The spectacular mass single-event burial on Artok Island, in which the body of the last Roi Mata was interred along with those of approximately 50 other people, is unique in the world in terms of the numbers of apparently voluntary deaths in a single event, relative to the size of the local population. Within the Western Pacific, Roi Mata's burial on Artok Island is exceptional in terms of its scale, its integrity, and our knowledge of the burial through both oral tradition and archaeology.

Comparisons are made here between the Roi Mata burial and other well-documented mass or multiple burials deriving from a single event – elsewhere in Vanuatu, across the Western Pacific, and throughout the world (see Table 3.1).

José Garanger, the excavator of Roi Mata's grave, also excavated chiefly graves on Tongoa Island (1972a), including that of the one other Central Vanuatu chief with a historical profile comparable to that of Roi Mata: Chief Ti Tongoa Liseiriki, famed for having been the first chief to re-colonize the remains of the former island of Kuwae after its gigantic volcanic eruption in 1452 AD. Local oral traditions guided Garanger to the grave of Ti Tongoa Liseiriki at Panita, as they had on Artok Island, and predicted accurately the distribution of ornaments on the chief's arms. Significantly, however, even Ti Tongoa Liseiriki was accompanied in death by no more than five other individuals, and the grave goods consisted of no more than pig tusk bracelets on certain of the bodies. A second attempt was made by Garanger to excavate the

Table 3.1 Single-Event Mass Burials of the Pacific Islands Compared

Site	Island	Site type	Minimum number of individuals	Approx. date (AD)	Open-leg burial	Entwined couple	Decoration of bodies	Source
<i>Matogon Roi Mata</i>	Artok, Vanuatu	Residence	c.50	c.1600	Yes	Yes	Pig tusk bracelets, shell arm decorations, whale's teeth pendant, shell apron, necklaces, carved stone pendant, shell and stone adze blades, magic stones.	Garanger 1972a
Mangarisu (TO-29-1)	Tongoa, Vanuatu	Residence	5	1452-1550	No	Yes	Pig tusk bracelets, shell nose ornament.	Garanger 1972a
Panita (TO-51)	Tongoa, Vanuatu	Residence	6	1452-1550	No	No	Pig tusk bracelets.	Garanger 1972a
Anelcauhat	Aneityum, Vanuatu	Residence	6	1500-1600	No	Yes	Pig's teeth bead necklace, shell beads, two whale's tooth beads.	Spriggs 1997
Korolevu A	Wakaya, Fiji	Residence	3	c.1600	No	Yes	None.	Rechtman 1992
Delaini Mound 3	Wakaya, Fiji	Residence	2+	c.1600	No	Yes	None.	Rechtman 1992
Petania	Uvea	Mound with vault	150+	?1700-?1800	Yes	Not known	Very little per person: a total of 12 whale tooth pendants, two pearl shell discs, one <i>Ovula ovum</i> cowry shell, a perforated needle and some beads of bone or ivory.	Sand and Valentin 1991, Sand 1998
Atuvalu	Uvea	Mound	2	1300-1400	Yes	No	Coral bead necklace, pearl shell neck ornament, <i>Arca</i> shells, stone adze.	Frimigacci 1997
Houmafakalele III (NT-52)	Niuaotoputapu, Tonga	Mound	3	1600-1750	Yes	No	None.	Kirch 1988

grave of a historical figure on Tongoa: that of Chief Mwasoe Nua, a contemporary of Ti Tongoa Liseiriki, at the abandoned settlement of Mangarisu. The excavation uncovered a central figure attended by three women, one on either side and another above his head, and to his left by a man, his head turned to face the chief. None of these bodies was as richly decorated as those on Artok Island.

On the island of Aneityum, to the south of Efate, a chiefly burial at Anelcauhat consisted of at least six figures (Spriggs 1997, pers. comm. 2006), five of them organised around a central adult male with his skull absent (possibly conforming to ethnographic accounts of the removal of the skulls of chiefs for later veneration). A female figure lay beneath and entwined with that of the chief, and the remains of rich body decorations were identified.

Roi Mata's burial thus conforms to the cultural standard for chiefly burials in Central and Southern Vanuatu, which all consist of burials in former residences, with male figures in extended supine position and decorated with pig tusk bracelets, and female figures generally on their sides, facing the male figures. But the Roi Mata burial far surpasses any other burial known in Vanuatu on the basis either of oral tradition or of archaeological excavation, in terms of its scale, the finery of the body decoration, and its unique setting on the *tapu* island of Artok.

Across the entire Pacific region, there are few instances of mass burial as a single event (see Valentin 2005). Large cemeteries such as the Sigatoka sand dune (Marshall et al 2000) and the Navatanitawake mound (Parke 1998) in Fiji, or the burial mounds of Tongatapu, Tonga (McKern 1929, Davidson 1969), appear to represent the accumulation of skeletons over several events or even centuries. The principal Pacific sites available for comparison with the Roi Mata burial are the burial mounds of Wakaya in Fiji, of Petania and Atualu on Uvea (Wallis Island), and of Houmafakalele on Niuatoputapu in Tonga (see Table 3.1). Each of these sites contains multiple bodies buried in a single event.

Mounds on the small Fijian island of Wakaya have revealed two small single-event multiple burials (Rechtman 1992): at Korolevu A, where an adult man in supine position with bent legs placed laterally has been positioned on top of two similarly positioned women, both turned in to face the male figure; and at Delaini Mound 3, where a male and female figure lie turned towards each other, with a bundle of bones at their feet. No body decorations were identified at either site. Strong ethnographic and historical evidence is adduced to support the interpretation that the women in both burials were buried immediately after being strangled, to accompany a male figure that was most probably their husband.

At Petania, on the island of Uvea, a central stone-lined chamber, which is presumed to have contained the body of a chief, his wife and at least one other person, was surrounded by more than 150 individuals in a single burial event (Sand 1998, Sand and Valentin 1991). The bodies outside the central chamber were laid in six successive circles, one on top of the next. At the lowest level, and immediately adjacent to the chamber was a large single male figure, in supine position with legs apart and flexed, probably indicating both high status and a particular relationship to the figure in the central chamber. However, the Petania burial mound had been heavily disturbed and plundered for coral slabs during the 1920s and again in the 1960s, and the skeleton of the chief and others presumed to have lain within the central chamber were no longer present when the site was excavated. Later burials in the upper levels of the mound,



added after the initial inhumation, contribute to a total of more than 250 burials in the mound. Oral traditions indicated that the bodies represented Tongan warriors killed in a war along with their chief, identified by name as Kalafilia; an alternative oral tradition speaks of the sacrifice of 20-25 slaves at the burial. Some body decorations were found in association with the burials, though the numbers of these are very low relative to the number of individuals present.

Also on Uvea, excavation of the Atavalu mound (Frimigacci 1997, Sand 1998) revealed a male-female couple, laid on their backs, the man with his legs flexed open and joined at the heels, with a pearl shell neck ornament and a coral bead. The woman beside him appeared to have been bound, possibly indicating burial alive, with her legs tucked up and a pile of female-associated Arca shells at her feet.

Finally, the Houmafakalele III burial mound on Niuatoputapu, Tonga (Kirch 1988), contains three bodies buried simultaneously in extended supine position: a central adult male figure with his legs flexed slightly open, flanked on one side by a woman with her knees and ankles together, and on the other by the body of another man, also with knees and ankles together, suggestive of binding. Portions of two other skeletons, probably unrelated to the burial of the three central skeletons, were identified in the walls of the excavation. No grave goods or body ornaments were found.

Evidently, there are strong cultural similarities that extend between the burials on Artok Island and other mass single-event burials in the wider Pacific region. The similarities that can be identified amongst these burials of apparently high-status men include the voluntary or coerced death of wives, concubines and other men, possibly through live burial in some instances; and the organisation of the burials, with the central male figures laid out on their backs and, at least on Artok Island and in the Polynesian cases, with legs flexed open and heels together. All of the known single-event mass burials date to the period from about 1400 AD – 1800 AD; European descriptions of chiefly burials in the 18<sup>th</sup> and 19<sup>th</sup> centuries signalled the last phase of these practices, and allow us to account for many of the features witnessed in the archaeological sites.

Considered in this regional comparative context, Roi Mata's burial appears exceptional in terms of the scale of the accompanying voluntary burials (only Petania has a greater number of individuals but many of these are claimed to have fallen in battle), the remarkable richness of the decorations on the bodies, the firm registration in oral traditions of the burial and the identity of the chief, the integrity of the site and the unique form of removal of the grave site from public access through the selection of an island location and *tapu* restriction. The Roi Mata burial on Artok Island is unquestionably the pre-eminent example of this form of mass single-event burial in the Pacific.

On a global scale, mass single-event burials abound. For example, ethnographic and historical accounts testify to the funerary sacrifice of wives and concubines, retainers and slaves at the burial of chiefs or kings throughout West Africa and the Congo (Law 1985, Ekholm Friedman 1991: 48); of wives with deceased Dinka tribal rain makers in East Africa (Lienhardt 1976); of the concubines of rajahs in Bali (Geertz 1983); and of wives, children and serfs with Russian, Scythian and Viking chiefs (Grinsell 1975).

Well-documented archaeological sites containing evidence for single-event mass burials include the royal tombs of Lower Nubia at Kerma (Hoffman 1980), where queens,

retainers and slaves were buried with a dead king; the sacrifice of slaves in the dromos entranceways of high-status tombs in Geometric-period Cyprus (Steel 1995); the spectacular mass burials of retainers poisoned in chambers adjacent to the dead kings and queens of Sumerian Ur (Zettler and Horne eds 1998); the burials of wives, children and retainers with Inka rulers and, indeed, throughout the Andes (Verano 1995); the mass sacrifice of retainers or captives around the male figure in the central Beaded Burial at Mound 72 of the Cahokia Mound site (Fowler 1991); and the sacrificed Ch'iang captives buried with the imperial royalty and nobility of the Chinese Shang dynasty at An-yang (Chang 1980).

Despite the impressive scale of many of these ethno-historical or archaeological instances of mass single-event burial from around the world, there are significant differences between them and the Roi Mata burial on Artok Island. In most of the cases listed above, it is highly probable that the sacrifices accompanying the dead emperor, king or chief were almost all coerced. In West Africa, Shang China, Lower Nubia and Cahokia, the evidence for violent deaths or bound bodies suggests strongly that those selected for burial were war captives, criminals or slaves, elements in an almost competitive form of conspicuous mortuary consumption. In addition, although larger numbers of people were killed in some instances than the approximately 50 on Artok Island – 260 individuals over four stages of construction at Cahokia's Mound 72, up to 1500 for the funeral ceremonies of kings in 18<sup>th</sup> century Dahomey, and 73 retainers at the Great Death Pit of Ur – the populations from which these victims were drawn were substantially greater than the likely population of northwest Efate. The current population of the Lelepa-Mangaliliu region stands at fewer than 700, and it is unlikely that earlier populations in the immediate area were much higher than about 1000, implying that those buried on Artok Island may have constituted approximately 5% of the available population (and an even higher proportion of available adults).

In light of this comparative review, three factors combine to make the Roi Mata burial unique on a global scale. First, the vast majority of the people buried with Roi Mata appear to have gone willingly to their deaths, a testimony to the high regard in which this chief was held by his own community and contemporaries. Only one body – that of the young woman laid at Roi Mata's feet – shows possible evidence of having been bound. In most cases elsewhere in the world, the interment or sacrifice of anyone beyond immediate family was commonly coerced. Secondly, relative to the size of the contributing population, the approximately 50 people buried with Roi Mata represented a substantial fraction of his community, far exceeding the proportions of those buried at mass graves relative to the much greater polities of Shang Dynasty China, Sumerian Ur, or Cahokia, for example.

Finally, and most importantly, there is the exceptional unbroken oral tradition and the link that extends between the historical figure of Roi Mata and the living community of northwest Efate, which serves to render his burial significant to an unusual degree for the present population, and which has caused the *tapu* restriction on the island of Artok to be respected over four centuries. In many respects, the significance of the Artok Island burial as an archaeological site might be regarded as secondary to its enduring significance for contemporary Vanuatu society, and its capacity to demonstrate the intangible heritage of the surrounding landscape and its attendant beliefs, practices and customs. Roi Mata's grave on Artok Island is the centre of gravity for the continuing landscape of his former domain, and the foundation on which its persisting significance resides.

### 3.C.iv The Convergence of Archaeology and Oral History

*Science blong wait man i go join wetem kastom.*

**[Western science has united with tradition.]**

Ralph Regenvanu, Director, Vanuatu Cultural Centre, referring to the collaboration of archaeologists, Cultural Centre fieldworkers and local communities in research on Roi Mata.

The exceptional quality of oral tradition associated with Chief Roi Mata's Domain, and with Central Vanuatu more broadly, is unique in the Western Pacific in terms of its temporal depth, and possibly unique in the world as an exclusively oral tradition of great temporal depth, largely undocumented and entirely un-associated with the centralised institutions of a kingdom or state. There has also been a remarkable convergence between these oral traditions and archaeological investigations since the 1960s, which have uncovered material evidence substantially confirming the details recalled in the oral traditions.

The oral traditions of Efate and the Shepherd Islands in Central Vanuatu are amongst the most remarkable feats of historical memory in the Pacific, and perhaps in the world. Central Vanuatu oral history is qualitatively different from many mythologies that might incorporate events from the deep past, such as Australian Aboriginal Dreaming narratives, in its emphasis on named ancestors and their genealogical connections to the present, and in its assumption of an essentially linear form to history. Narratives relating first arrivals and settlements, the placement of chiefs and chiefly interactions, the events of wars, natural disasters, and group migrations are structured around lists of named holders of specific chiefly titles. This knowledge was formerly the preserve of the chiefs and their *manuvasa* (spokesmen), who were taught from a young age to memorise historical material in the form of lengthy narratives; the histories were supplemented by authenticating chants or songs entrusted to *aore* (songmasters).

The longest and most detailed of these narratives recount the histories of chiefly lineages for 50 or more successive holders of the title. Four such histories, recorded in the Shepherd Islands by David Luders (2001), describe migrations to Efate from islands to the south, and thence to the Shepherd Islands. All four narratives corroborate details present in the others, confirming the conclusion of Jean Guiart (1973a) that the chiefly title system of Central Vanuatu is fundamentally coherent and internally consistent. Crucially, all four histories identify those title-holders alive during the massive volcanic eruption of Kuwae in the Shepherd Islands in 1452 AD, and describe the sequence of flight to Efate ahead of the eruption, and eventual return and recolonisation of the remnant islands of Kuwae, such as Tongoa. In all four histories, the title-holder alive during the Kuwae eruption is about 22-23 generations prior to the current holder – less than halfway back through the full genealogical sequence. If the past 550 years since Kuwae are divided by 23 generations, the average duration of a “title-holder generation” (note that these are not always blood-line successions) is 24 years, suggesting that the potential chronological depth of a full 50-generation sequence might be as much as 1200 years, extending back to as early as 800 AD.

Of course, such genealogies and oral traditions are not to be read as precise, factual chronologies (Henige 1971), but the Central Vanuatu traditions are nevertheless valid accounts of an indigenous historicity that exerts a powerful influence on actions in the present. In addition, they are expressive of a profound indigenous engagement and fascination with the past, and help to account for the enduring importance of stories about individual chiefs such as Roi Mata. However, in addition to the chronological

marker of the Kuwae eruption, the presence of critical material evidence for the details of these genealogies, such as the basalt slabs marking the graves of individual chiefs, chiefly sacred stones and ancient settlement sites, suggests that there is also a significant element of historical truth in their content.

According to oral traditions, the last Roi Mata was held in such awe that his title has never been formally claimed since, though several descendants and pretenders to the title are still available. Although numerous oral narratives identify an early Roi Mata as a leading figure, if not the overall leader, of the first fleet of canoes bringing chiefly title-holders to Efate, the lack of chronological and genealogical structure to the narratives about Roi Mata has led to chronic conflation of accounts relating to different holders of the title. This is the source of the confusion that led Garanger initially to identify the burial of the last Roi Mata on Artok Island with the period before the eruption of Kuwae in 1452 AD, though subsequent re-dating of material from the burial has confirmed a post-Kuwae date of about 1600 AD (Spriggs 1997: 207; 2001: 367), which Garanger has since accepted (Matthew Spriggs, pers. comm., 2005).

There is nothing remotely comparable in Vanuatu to the oral traditions of Efate and the Shepherd Islands. Elsewhere in Melanesia, there are the legends of the "Time of Darkness" across a wide portion of Papua New Guinea, which relate fairly clearly to the Long Island eruption of 1665 AD (Blong 1982), though these legends are essentially restricted to a single momentous event, rather than narrating a sequential history. In those areas of Melanesia with unusually deep genealogical recall, as many as 15 generations and, in exceptional circumstances, 20 generations of ancestors are remembered and named. The Huli people of Southern Highlands Province have some of the longest genealogies in Papua New Guinea, ranging from 15 to 20 generations for most families, and providing a fairly reliable guide to archaeological features of the late 18<sup>th</sup> and early 19<sup>th</sup> centuries (Ballard 1995). Shark-callers of New Ireland can recall up to 15 "generations" of related nephews and uncles who have possessed and handed on the requisite knowledge for their dangerous task (Köhnke 1974: 11); communities of the Roviana area of New Georgia in the Solomon Islands can recite genealogies up to 15 generations in length (Sheppard et al 2004); and the inhabitants of the Polynesian outlier of Rennell claim 20-generation genealogies (Roberts 1958).

Polynesian royal and chiefly genealogies are generally held to be the richest oral historical records in the Pacific. Of these, the most famous is the Tongan dynastic genealogy (rather than personal or bloodline genealogy) of the Tu'i Tonga line, consisting of 39 title-holders and commonly calculated to have begun with the first holder of the title in about 950 AD (Herda 1988). In fact, the nine earliest generations in this sequence are regarded as mythical, but scholars are apt to treat Tongan royal traditions from about the 13<sup>th</sup> century as valuable guides to Tongan history and to Tongan ways of thinking about the past.

Within a Vanuatu national or Western Pacific regional context, the Central Vanuatu oral traditions from which narratives about Roi Mata are drawn thus appear to constitute a unique resource, in terms of chronological depth, the richness of their content, and the multiple lines of evidence formed by the various different chiefly title lineage histories.

In the case of Chief Roi Mata's Domain, we must also consider the claim of an exceptional degree of convergence between oral traditions and archaeological discoveries – both regionally, in relation to the Kuwae volcanic eruption of 1452 AD, which has been confirmed by archaeologists and volcanologists (Garanger 1972a,

Robin et al. 1994), and locally within Chief Roi Mata's Domain, where oral testimony led Garanger to the three major sites of Mangaas, Fels Cave and Artok Island, and subsequent archaeological dating has substantially confirmed the contemporaneity of activity at the three sites and promoted the likelihood that all three sites are related to the life of the last holder of the Roi Mata title.

These three sites are independently remarkable. In archaeological terms, Mangaas is one of the more substantial excavations of a settlement site in the Western Pacific, and offers possibly the longest sequence of settlement and use of a single location in the "remote Oceania" region, which consists of the Pacific region beyond the Solomon Islands; Fels Cave offers an exceptional sequence of rock art spanning almost the entire period of human presence in the region; and Roi Mata's burial site on Artok Island is the single most significant mass burial site in the Pacific.

These claims find support in statements in regional over-views of Pacific prehistory and world encyclopaedias of archaeology. Peter Bellwood's single-volume account of Pacific prehistory introduced Roi Mata's burial on Artok Island as 'one of the most astounding archaeological discoveries ever made in the Pacific' (1978: 270). More recently, Patrick Kirch, in his textbook on Pacific prehistory, describes Artok Island as 'one of the most remarkable archaeological sites anywhere in Oceania' (2000: 139). The Roi Mata sites also feature in numerous encyclopaedias (e.g. Murray (ed.) 2003, vol.III:1005-6) and cultural atlases (e.g. Nile and Clerk 1995: 57).

No obvious analogue or comparable suite of archaeological sites pertaining to an unbroken oral tradition over such a lengthy period of time has been identified in a preliminary search of sources on North American and African archaeology – the two principal areas in which oral history and archaeology have been most intensively employed together. The contention that Chief Roi Mata's Domain represents a unique convergence of exclusively oral traditions and archaeological results over a period of several centuries is thus sustained.

#### 3.C.v The Continuing Significance of Roi Mata

*Tapu ia i stap stil kastom tede.*

[This *tapu* restriction is still respected as custom today.]

Chief Meto Kalotiti, customary landowner of Artok Island, reflecting on the enduring power of the *tapu* restriction on inhabiting the island

Chief Roi Mata's Domain bears witness to an exceptional degree of continuing significance of the past for the present community. The *tapu* prohibition on living at or intensively using the sites of his former residence at Mangaas and of his burial on Artok Island has been maintained for four centuries by successive generations of the Lelepa-Mangaliliu community. The continuing observance of this *tapu* constitutes a unique history of community-level conservation – of the material evidence for the past as well as of the local ecology.

Few islands elsewhere in the world have been subject to a prohibition over such an extended period. The Maori population of the island of Aorangi in northern New Zealand was massacred by a raiding party in 1823, and the island was subsequently declared a sacred place (*wahi tapu*) and abandoned (Fraser 1925). Similarly, the cannibalism of survivors of a wreck on the island of Akpatok in northeast Canada in

about the 1860s led to a prohibition on occupation or use of the island (Cox 1933). Perhaps closest in spirit to Artok is the island of Ikishima in Japan's inland sea of Setonaikai, where the presence of burial mounds has contributed to a loosely-defined sense of awe and a widely-observed prohibition on felling timber on the island (Kondo 1991); however, no oral traditions have been recorded for Ikishima Island that might account for the burials or for the emergence of the prohibition.

Another category of sacred island is represented by Delos in Greece, sacred to Apollo (Rauh 1993); Mona or Anglesey in Wales, sacred to the Celts and the last refuge of the Druids during the Roman invasion (Green 1997); Chikubushima on Japan's Lake Biwa (Watsky 2004); and the sacred island of Ra'iatea in the Society Islands, French Polynesia (Huguenin 1987). In each of these cases, however, the island, while sacred, was also the focus of continued intensive habitation and ritual performance. Similarly, access to the sacred Island of the Sun in Lake Titicaca was restricted under the Inka, but the island was the scene of annual pilgrimages and ritual ceremonies associated with the June solstice (Dearborn et al. 1998). Motu Nui, a small islet off Rapa Nui (Easter Island) played a key role in the sacred birdman ceremonies, but was never permanently occupied and does not appear to have been the subject of *tapu* prohibitions (Lee 1992: 151-156). The World Heritage site of the Elephanta Caves (244) is located on a small island near Mumbai, India, but appears to be inscribed on the basis of the richness of its rock art, rather than the security of oral traditions and customary practices identifying the island as sacred.

Much of the power of the *tapu* prohibition on Artok Island and Mangaas derives from the deeds of the last Roi Mata, and especially his conflict-resolving institution of the *naflak* matrilineal clans, an innovation the success of which is taken to reflect the exceptional power (*natkar*) of this particular chief. The legacy of this peace-making initiative is evident even today in Vanuatu, where appeals to *naflak* principles carry considerable weight in the settlement of disputes over land. In this respect, Chief Roi Mata's Domain embodies an almost universal historical process of the development of conflict resolution strategies. These can be either imposed by an external power, such as King Edward's Welsh forts (including the World Heritage-listed castles of Harlech and Beaumaris and the other Castles and Town Halls of King Edward in Gwynedd (374)), or organically developed within a society, such as the prehistoric emergence of the calumet or "peace-pipe" ceremony in the Great Plains of North America (Blakeslee 1981), or the development by the highland Enga people of Papua New Guinea of a sequence of progressively less martial though still competitive forms of regional integration, culminating in the great *Tee* exchange system (Wiessner and Tumu 1998).

Roi Mata has also emerged as a symbol of cultural heritage for Vanuatu as a nation. Roi Mata's death and burial featured as the sole indigenous element of the exhibition on the nation's history held in Port Vila at Independence in 1980; his life and deeds have been retold as a central theme of the first theatre play on the nation's history; and he is commonly (if mistakenly) identified as the male figure at the centre of Vanuatu's national coat of arms. Roi Mata emerges as a Western Pacific instance of the global theme of culture hero – a hero whose historical presence and significance for his contemporaries appears to have been confirmed through archaeological excavations.

### 3.C.vi Summary

Individually, the attributes of Chief Roi Mata's Domain considered above are of exceptional significance by comparison with similar attributes at local, regional and

global scales. Brought together within a single continuing and associative landscape, they contribute to a property of outstanding universal value.

Chief Roi Mata's life and deeds, as memorialised in the physical sites of his Domain, are the most remarkable feature of the oral traditions and pre-colonial history of Vanuatu. The last holder of the title, held to be responsible for the social revolution of *naflak* matrilineal clans, was evidently an exceptional individual. This status is reflected in the continuing survival of the physical boundaries and features of his chiefly domain; the unique richness and complexity of his burial; the exceptional recall through oral traditions of his life and death, despite the dormant status of his title over the past four centuries; and the unique and enduring form of *tapu* prohibition on subsequent use of Artok Island and his residence at Mangaas. Burials that are culturally similar in many respects can be found elsewhere in eastern Melanesia and western Polynesia, and larger and grander mass single-event burials can be found elsewhere in the world. No other locations in the world, however, rival Roi Mata's burial on Artok Island in terms of the scale of apparently voluntary human death, relative to the local population and the complexity of 16<sup>th</sup>-century Efate society, the abandonment of an inhabited island to accommodate the burial, and the remarkable and unbroken oral traditional record linking these historical events to the present community.

The exceptional and continuing importance for contemporary Vanuatu people of Roi Mata's life and deeds is demonstrated through the ongoing observance of the *tapu* prohibitions on Artok Island and Mangaas, the persistence of reference to Roi Mata in the organisation of modern social structure and land tenure on Efate, and the central status of Roi Mata in narratives of national identity. The landscape of Chief Roi Mata's Domain remains entirely under the customary ownership of a traditional system of chiefly society, which has practiced a form of conservation of that landscape and of its significant features that is both testimony and tribute to the enduring influence of Chief Roi Mata in the present.

## 3.D INTEGRITY AND AUTHENTICITY

### 3.D.i Authenticity

The authenticity of the individual elements of Chief Roi Mata's Domain, and its status as a unified Cultural Landscape, rests on its credibility and recognition within both local cultural contexts and international scientific understandings. Local or internal tests for authenticity revolve around the interplay between oral traditions, place names and physical markers, which include features such as sacred stones, burial sites, trees and stone walls. The external or scientific forms of proof of the authenticity of the Domain draw upon extensive and intensive ethnographic, oral historical and archaeological research within the Domain and across Central Vanuatu. One of the principal indicators of the authenticity of Chief Roi Mata's Domain is the extent to which these multiple sources of information relating to the property intersect and confirm each other. The strength of the relationship between the physical components of the property and associated oral testimony provides a strong basis for evaluating the authenticity of the values of Chief Roi Mata's Domain.

The oral traditions of Central Vanuatu from which stories of Roi Mata are drawn constitute a remarkable if understudied historical resource. Detailed ethnographic research during the 1950s by Prof. Jean Guiart, later Director of the Musée de l'Homme,

established the fundamental coherence and authenticity of the chiefly title system of Vanuatu (Guiart 1973a); the internal coherence of this system was then confirmed through an early computer analysis of the logic of the title hierarchies, conducted at the CNRS Centre Documentaire pour l'Archéologie under Jean-Paul Gardin (Lagrange et al. 1973). Guiart was able to collect a substantial body of oral historical narratives from Efate and the Shepherd Islands, which has since been supplemented through work by Clark (1996), Facey (1988), Philibert (1976), Schütz (1969), Sherkin (1999), Sperlich and Masoeripu (2004), and Thieberger (2000), amongst others. Indigenous Vanuatu authors have also contributed substantially to the documentation of these traditions, though their writings have rarely been published (but see Huffman (ed.) 1984, Sope 1950, Thieberger (ed.) 1999).

The archaeological investigations led by José Garanger during the 1960s took these oral traditions at their word, and were largely guided by local knowledge of burial sites, and oral traditions about the identity of their occupants and details of their contents (Garanger 1976, 1997). Subsequent archaeological work by a joint team from the Vanuatu Cultural Centre and The Australian National University has expanded on Garanger's original work and, with the aid of refined dating techniques, revised elements of his chronology. Crucially, the more recent studies have profoundly strengthened Garanger's identification of Roi Mata as the central figure in the Artok Island burial and confirmed the contemporaneity of use of the three sites of Artok Island, Mangaas and Fels Cave (see Spriggs 2006).

The closeness of the fit between the archaeology and oral traditions in Chief Roi Mata's Domain might invite scepticism about the possible "re-invention" of oral traditions to suit the archaeological discoveries, were it not for the fact that the eventual leaseholder of Artok Island, Ernie Reid, had already documented the core elements of the Roi Mata legend thirty years before the excavations, as early as 1932 (Reid 1932, see Appendix 2). In any event, the remarkable range of communities throughout Efate and the Shepherd Islands in which Roi Mata legends have been told, each inflected with subtle variations by local perspectives, is sufficient proof that these legends, and the broader cultural context supplied by the oral traditions of Central Vanuatu, are truly authentic. The clinching argument, in the eyes of most indigenous communities, is the knowledge of specific chants that accompany these narratives, which are invariable in form and widely known (see below for a fragment of one such chant about Roi Mata and Eretoka or Artok Island). A widespread consensus thus exists across the broader cultural community of Central Vanuatu, which recognises and validates the connection between Roi Mata and the three principal sites of Mangaas, Fels Cave and Artok Island.

The following review of the three individual sites focuses upon the local physical markers of authenticity, as well as the scientific proofs that essentially confirm the credibility of the oral traditions.

### **Mangaas**

The former coastal settlement of Mangaas is identified throughout Central Vanuatu as Roi Mata's residence, either by name or through reference to the canoe landing at Mwalakoto (Mwalakot in Lelepa language). This identification is further strengthened through the presence at Mangaas of a series of distinctive named areas and features, all associated with Roi Mata. These features include Likanas, the massive coral heads flanking the reef passage to Roi Mata's personal landing at Mwalakot; Mwalakot, where three large tamanu trees said to date from Roi Mata's time still stand;



Mwalasayen, the former communal dancing ground represented by the large banyan tree; Sumwantuk, where a canarium tree now marks Roi Mata's former house location; the stone walls, particularly those laid out in a curvilinear formation that demarcate the boundaries of Roi Mata's residential area; and the various sacred stones associated with Roi Mata and his lesser chiefs (see Section 2 for more detailed descriptions of these features).

The degree of respect still shown by the Lelepa-Mangaliliu community towards Mangaas as the chiefly seat of Roi Mata is indicative of its authenticity from a local perspective. Mangaas remained un-gardened and un-settled for over 300 years after the death of Roi Mata. The process of opening up the wider Mangaas coastal plain for gardens was initiated by the senior chief, Masia Kalotiti, in 1927, on his return from bible college. But even this deliberate Christian challenge to the supposedly heathen power of Roi Mata effectively represents further confirmation of the power and authenticity of the site. Notably, gardening activity was restricted to the areas furthest from Mwalakot, Mwalasayen and Sumwantuk, which have remained un-cleared and un-gardened to the present day. The continued presence of the giant banyan, canarium and tamanu trees at Mangaas, all of which are said to have been living in the time of Roi Mata, is testimony to the enduring respect for the power of Roi Mata over a remarkable 400-year period.

An intimate knowledge of the Mangaas area has been maintained by the Lelepa-Mangaliliu community despite its abandonment. The small yards enclosed by the stone walls adjacent to Roi Mata's personal house yard or *natkon* at Sumwantuk are identified by name and associated with minor chiefly titles of Roi Mata's court that are still held by individuals of the Lelepa and Mangaliliu communities. The ongoing spiritual connection between the community and its original settlement is reflected in the observance of communal rules associated with the area, which include not touching the banyan, not talking loudly near it, not asking too many questions around it, and not visiting the site at sunset or sunrise.

External forms of verification of the authenticity of Mangaas include its identification and association with Roi Mata in ethnographic and oral historical materials collected and documented by Garanger (1972a), Guiart (1973a), Luders (2001) and the World Heritage Nomination research team. Archaeological excavations by Garanger in the 1960s, and by the joint Vanuatu Cultural Centre-Australian National University team from 1996 to 2002 have also established that the exceptionally long history of settlement of Mangaas ended with the complete abandonment of the site at about 1600 AD, broadly coinciding with the estimated date of the death of the last Roi Mata and his burial on Artok Island.

No reconstruction has been undertaken at Mangaas, beyond the placing of newly carved *tamtam* drums at the former dance ground location of Mwalasayen (Figure 3.1). However, the community wishes to celebrate the local importance and significance of Chief Roi Mata's Domain by opening the property to tourists. As part of this project the community would like to reconstruct sections of some of the relict features of the proposed World Heritage area, including the stone walls and gateway at Mangaas. The community is aware of the importance of ensuring that any reconstruction within the proposed World Heritage area be undertaken with the advice and authorisation of ICOMOS and the World Heritage Centre, and does not wish to threaten or undermine the values of the property. Some of the older members of the community will serve as crucial informants for any reconstruction process because they can recall the form of

these stone walls when they were still standing at Mangaas and elsewhere in Chief Roi Mata's Domain (Figure 3.2). Given the age of these more knowledgeable informants the reconstruction effort should not be delayed for too long.

The community is also seeking to reconstruct a traditional Lelepa region house (*farea*) at Mangaas, which will be used as part of the Roi Mata Cultural Tour. This traditional house will be located outside the perimeter of the proposed World Heritage area (but within the immediate buffer zone), and will be a surface structure only (it will therefore not affect any sub-surface cultural material). The design of this *farea* house will be based on local tradition, colonial photographs and modern constructions from around North Efate that are modelled on traditional houses.



Figure 3.1 Newly carved *tamtam* drum at Mangaas with the carver, Manearu

### Fels Cave

The authenticity of Fels Cave as a component of Chief Roi Mata's Domain draws on its repeated identification in oral traditions as the location to which the dying Roi Mata was carried after falling ill at a feast at the settlement of Lou Patrou, immediately below and adjacent to the cave. Roi Mata's death within the cave may be the inspiration for the current belief held by the Lelepa-Mangaliliu community that the cave is a site to which spirits of the recently dead retreat. The cave mouth looks directly across the sea to the island of Artok, where his body was later taken for burial, via his residence at Mangaas.

Fels Cave is still regarded with deep respect by the community, for its association with Roi Mata as well as its continuing identification as the place for spirits of the dead. The traditional practice of sweeping the floor of the cave entrance following someone's death and then returning to find their footprints on the following day is still occasionally observed, and visitors are requested not to speak loudly within the cave.

The remarkable range and chronological span of rock-art at Fels Cave includes a later suite of painted black linear symbols, including a large rendition of a male figure with a headdress and rayed hands, which community members identify as a portrait of Roi Mata (Figure 3.3). Archaeological dating actually provides some tentative support for this association, as the black linear art at Fels Cave has been AMS-dated to between

about 1440 and 1600 AD, coinciding or overlapping with the dates for the settlement of the last Roi Mata at Mangaas and for Roi Mata's burial on Artok Island at about 1600 AD.

The steep path leading up from the beach to the cave entrance is occasionally strengthened with wooden steps and supports, but no modification of the rock art or of any other feature of the cave has been attempted.

#### Artok Island

The authenticity of Artok Island as a credible component of Chief Roi Mata's Domain derives from its appearance in oral traditions and from the results of intensive ethnographic and archaeological research. Artok or Retoka Island is regarded throughout Efate and the Shepherd Islands as the site of Roi Mata's grave, and identified by name in historical narratives told everywhere in the region. Most famously, the island features in a chant, sung by four senior chiefs from Tongoa Island in the Shepherds and broadcast on Radio Vila in 1967, following the Garanger excavations on Artok Island. The refrain for this chant indicates the *tapu* or forbidden status of Artok Island following Roi Mata's burial:

*Retoka, fanua tapu eka eka, ee*  
Retoka, the forbidden island, [cry] "ee"

The headstones at Roi Mata's grave site (*Matogon Roi Mata*) have traditionally constituted the material proof of the authenticity of the site, and are still the focus of tributary offerings of fish and other items from local visitors. In this way, people seek the dead chief's blessing for their fishing expeditions to the island and for their safe return across the notoriously fickle stretch of sea that separates Artok Island from Lelepa and the mainland. Even today, the community insists that people speak quietly anywhere on the island and especially in the vicinity of the grave.



Figure 3.2 Stone wall, Lelepa Island



**Figure 3.3 Possible black linear rock-art depiction of Roi Mata, Fels Cave**

The spectacular results of José Garanger's excavation of Roi Mata's grave appear to have substantially confirmed the testimony of oral traditions, uncovering a central figure in a classic chiefly pose, surrounded by a multitude of simultaneously interred bodies. The recent re-dating of shell artefacts from the grave has further strengthened the case for the authenticity of the site as the grave of Roi Mata by yielding a date of about 1600 AD that coincides or overlaps with the dates for the abandonment of Roi Mata's settlement at Mangaas and for the production of the black linear images of male figures at Fels Cave.

The importance of Roi Mata's grave at a national level has been recognised by successive governments. Under the colonial Condominium Government of the New

Hebrides, Roi Mata's grave on Artok Island became the first and only cultural heritage site to be listed for preservation. As such it was also the first cultural heritage site in Vanuatu listed for protection at Independence, reflecting its pre-eminence as perhaps the most widely known and significant cultural heritage site in the country. The entire island of Artok is now in the process of being gazetted for protection.

Further proof of the 400-year efficacy of the traditional *tapu* prohibition on residence or intensive use of Artok Island can be found in the ecological composition of faunal and floral species on the island. The survival of animal and plant species such as the scrub duck (*Megapodius layardi*) and a rare endemic croton (*Croton levatii*), both of which species are now significantly reduced on the adjacent mainland, is strongly indicative of a long period of very low-intensity exploitation or use of the island.

No reconstruction has been attempted of the traditional sites on the island, beyond the attempt by excavation foreman, Johnson Napengau of Mangaliliu Village, to resurrect the fallen gravestones and mark the perimeter of the excavation with a line of coral rocks at the close of the Garanger excavation.

#### 3.D.ii Integrity

The Outstanding Universal Value of Chief Roi Mata's Domain is anchored firmly in the fundamental integrity of the living cultural landscape, and the continuing relationship between people and the land. Crucially, this relationship and the evolution of the landscape of the Domain have to be understood as organic. Though the relationships essential to the conservation of its character remain unbroken, the Domain is not an unchanging relict landscape, frozen in time.

Chief Roi Mata's Domain is appropriately titled and entirely adequate in scale to the task of representing those features and processes that convey its full significance. The three principal sites that can be firmly associated with the last Roi Mata – his residence at Mangaas, the place of his death at Fels Cave, and his burial site on Artok Island – constitute the core of the Domain as a Cultural Landscape. The Domain thus encompasses the full trajectory of the chief's life and preserves the important relationship between these three different places, linked together by the movement of Roi Mata, in life and in death, across the intervening sea passages.

The wider buffer zone extends over almost the entire area of Chief Roi Mata's original territory and that of his wider court of minor chiefs (certain areas along the margins of the original territory have been excised to reflect the practical realities of land ownership by non-indigenous residents, and so as not to entirely encompass the lands of the Lelepa and Mangaliliu communities). This unified cultural landscape can be regarded as an intact unit, exemplary of the wider political landscape of the chiefly title system that extends over the whole of Efate and the Shepherd Islands. Within the broader boundaries of the Domain, each of the three principal sites also possesses a fundamental integrity.

#### Mangaas

While the full extent of the settlement of Mangaas during the time of the last Roi Mata is not known, the area covered by the boundaries of the proposed World Heritage site includes all of the elements of the landscape explicitly associated with Roi Mata himself. These elements are contained within a corridor running from the reef up to

the base of the cliff behind Mangaas, and include the coral outcrops of Likanas at the opening of the Chief's passage through the reef to the beach at Mwalakot; the dancing ground and banyan tree of Mwalasayen; Chief Roi Mata's personal dancing ground at Mwalafaum and his residential yard at Sumwantuk (Figure 2.7).

The present condition of the physical fabric of Mangaas is what might be expected of a 400-year-old archaeological site exposed to tropical conditions. Vegetation regrowth over the original settlement has no doubt disturbed subsoil features, and cyclonic surges have altered the structure of the beach at certain points. The stone walls that marked individual yards have almost all collapsed, although their foundations are visible almost everywhere. The giant banyan at Mwalasayen is threatened by its very age and size. However, none of these actual or potential material losses poses a serious threat to the integrity of the site, or to its authenticity for the communities of the Lelepa region. The stone walls are essentially territorial markers, but the significance of the areas which they demarcate is not contingent upon the physical presence of the walls. Similarly, the ancient banyan at Mwalasayen is a powerful and physically imposing link to the time of Roi Mata, but its essential function as the symbol of chiefly presence and of the location of the Mwalasayen dancing ground could be served equally by a young tree; however, the Mwalasayen banyan now appears to be regenerating from within.

These conditions notwithstanding, traditional *tapu* prohibitions on settlement or gardening at Mangaas that were put in place following the death of the last Roi Mata in about 1600 AD have evidently created an exceptional environment of conservation. Huge trees that have survived within the proposed World Heritage site, such as the surviving banyan, two giant canarium trees, and the tamanu trees on the beach at Mwalakot are testimony to the power of this *tapu* prohibition. The individual sacred stones that dot the landscape at Mangaas remain in position and are never moved. Indeed, Mangaas remained entirely undisturbed from about 1600 until 1927, when Masia Kalotiti, the father of the current chief and custodian of Mangaas, renounced traditional ways on his return from bible college and sought to challenge the customary *tapu* prohibitions by clearing land around Mangaas for gardens and coconut groves. However, despite Masia's newfound convictions, he made only one attempt to interfere with Roi Mata's personal land holding, which is the area of the proposed World Heritage site: an unsuccessful attempt to fell the great banyan at Mwalasayen, an act which the community believes ultimately led to his death. Ironically, an accidental fire that took hold in the debris of a cyclone in 1976 consumed a second, smaller banyan tree at Roi Mata's dancing ground of Mwalafaum. Significantly, although gardens are still maintained in the Mangaas area, no one has attempted to settle there since Roi Mata's death.

The archaeological excavations of 1967 and 1996-2002, though extensive in their distribution, have left no visible trace on the surface, and have impacted on only a minute proportion of the overall sub-surface deposit relating to the Roi Mata period; in return, the information gleaned from these excavations has considerably enhanced both scientific understandings of the Roi Mata period, and the community's pride in its own cultural heritage.

### Fels Cave

Fels Cave is an impressive and unusual circular chamber that has stood the test of time (Figures 2.12, 2.13 and 2.14). It is substantially intact, in terms of its overall form, its floor deposits and its rock art. Within the context of Chief Roi Mata's Domain, its significance derives from its role as the location of Roi Mata's death, and the entire

cave is thus being nominated for inclusion in the proposed World Heritage site. Surrounded as it is by cliffs and steep slopes leading down to a rocky foreshore, there has been little threat to the cave from development either now or in the past. While there is a fundamental integrity to the material fabric of the property, a number of past and potential physical challenges can be identified. These include the impacts of past archaeological investigations, the colonial and post-colonial addition of graffiti to the cave walls, and the scope for earthquake damage to the structure of the cave.

Minor test pits were excavated in the cave floor in 1876 by British naval officers, in 1912 by the Swiss anthropologist, Felix Speiser, and later in the 1960s by José Garanger. A rock-art dating project undertaken in 2000 involved the removal of miniscule amounts of datable material from the rock-art at Fels Cave. However, the physical impact of this archaeological work has been negligible, given the scale of the cave and the quantity of rock-art. In addition, each of these research projects has led to an increased understanding of the cultural sequences at the site and, in the case of the dating project, resulted in the establishment of a chronological link between the rock-art and the period of the last Roi Mata.

A considerable quantity of graffiti is found on either side of the entrance to the cave, most of it engraved into the soft pumice. At the entrance, the density of graffiti obscures any prehistoric rock art that might once have been found there, although natural processes of attrition immediately outside the entrance erase even recent graffiti within a few years, suggesting that there would have been little visible prehistoric rock art in this zone. However, the graffiti process is itself part of the historical record of the cave, recording the visits from the 1870s of the first missionaries to north Efate, such as the famous Milne family, and of early ships' crews. A small number of individual graffiti are found deeper within the cave, in some cases intersecting with prehistoric rock art. Much of the more recent graffiti has been engraved by visitors to Lelepa from overseas or from other parts of Vanuatu, and a campaign of awareness has been initiated within the Lelepa community in an attempt to prevent further vandalism.

In January 2002, a major earthquake (magnitude 7.3 on the Richter scale) led to the collapse of a significant portion of the entrance of the cave. This event needs to be viewed as part of an ongoing natural process that cannot be prevented. Significantly, given the near-continuous distribution of art along the cave's walls, neither the 2002 event nor any of the events of the past 2600 years appear to have substantially impacted on or obscured the art, with the exception of a single panel that Garanger identified on the lower side of a fallen slab of wall surface.

Crucially, none of these factors (archaeological investigations, graffiti and structural stability) compromise the cultural values that justify the inclusion of Fels Cave within Chief Roi Mata's Domain. The most important attribute of Fels Cave is the role that it played in the final moments of Roi Mata's life, as the space where he drew his last breath. In its present condition, the cave admirably conveys a sense of the setting for this important event.

#### Artok Island

Artok Island enjoys an exceptional integrity due in part to its status as an offshore island and in part to the continued observance of the unique 400-year *tapu* prohibition on settlement or intensive use of the island (Figure 2.18). The entire island and its fringing

reef are included within the boundaries of the proposed World Heritage site, ensuring that all of the elements necessary to express its outstanding universal value are incorporated.

The long absence of habitation on Artok Island has enabled the development of a distinctive natural environment, supporting healthy numbers of endemic species of flora and fauna that have all but been obliterated in neighbouring areas. The cultural restrictions put in place following Roi Mata's burial have encouraged the natural protection of a range of endangered and endemic species, including the Coconut Crab (*Birgus latro*), the Incubator Bird (*Megapodius layardi*), two lizard species (*Cryptoblepharus novahebridicus* and *Emoia sanfordi*), a croton plant (*Croton levatii*) and a cycad tree (*Cycas weimannii*), in addition to a diverse and rich marine environment. There is thus a powerful mutual relationship that extends between the core cultural and natural values of the island.

The physical fabric of the property is in exceptional condition, tropical climatic conditions notwithstanding. Nowhere is this more evident than at the site of Roi Mata's grave, where Garanger found the two main headstones standing intact after almost four centuries. The stone wall enclosures that cover a large portion of the island date to the period before Roi Mata's burial, and through natural processes these have largely collapsed. However there has been no human removal of material from these walls, and they remain prominent and highly visible.

The respect felt for the island amongst the Lelepa-Mangaliliu community is so strong that, other than two footpaths that cross the island from northwest to southeast, the only adverse effects of development are those that relate to interventions by mostly European outsiders. The island appears to have been under lease by foreign planters and traders since 1875 (though the real identity of the ni-Vanuatu person originally granting the lease is uncertain). However outsiders made no use of the island until the 1960s, when the then-leaseholder, Ernie Reid of Port Vila, constructed a traditional-style bungalow for weekends, to the southwest of Roi Mata's grave. The bungalow was abandoned by the Reid family in about 1975, and all that remains of it are a low stone wall built in traditional style, two rows of bottles inserted upside down in the soil to mark the entrance to the house and three short concrete pillars on which the kitchen and food store were constructed behind the bungalow. Evidently, there was considerable unhappiness at the time within the Lelepa-Mangaliliu community about the presence of someone on Artok Island, and the surrounds of the Reid bungalow were deliberately seeded with the exotic cassis weed (*Leucaena leucocephala*); fortunately, even forty years later, this weed is still largely restricted to the former area of the bungalow.

Ernie Reid was responsible for introducing goats to the island, as game for hunting and as a ready supply of meat during his visits. However, this small herd appears to be restricted to the southwestern corner of the island and has had no obvious impact on the cultural sites; the goats are still occasionally hunted by members of the local community. In 1970, Ernie Reid also constructed a light tower on top of the island's plateau. The tower, which is no longer operable, was built to keep boats off the island's fringing reef and to alert planes to the presence and height of the island. In this instance, the issue of safety took precedence over the desire to retain Artok Island as an undisturbed environment. The light tower is locally considered to be an important addition to the island that does not undermine the cultural values associated with the place.



The second potential threat to the spiritual integrity of Artok Island was the excavation of Roi Mata's grave by José Garanger in 1967. This was conducted despite deep misgivings on the part of most of the Lelepa-Mangaliliu community, though resistance was muted due to the political realities of the colonial period and the involvement as excavation foreman of Mangaliliu villager Johnson Napengau. Garanger was aware of these misgivings and left all of the skeletons in place, with the sole exception of a femoral fragment from Roi Mata's skeleton, removed for bone collagen dating. The site was back-filled under the direction of Johnson, who restored the fallen headstones to a vertical position and marked the boundaries of the excavation with a line of coral rocks. The conch shells that had lain in front of the two principal headstones were returned to their original position. The body ornaments found on the buried skeletons were all removed by Garanger for analysis, but have since been returned to Vanuatu, where they are currently being held at the Vanuatu Cultural Centre, in trust for the Lelepa-Mangaliliu community. Importantly, some of these shell ornaments were available for re-dating using more sophisticated methods than those available to Garanger in the 1960s, and have supplied us with the crucial chronological evidence linking the three places of Mangaas, Fels Cave and the burial on Artok Island in time. Thus the excavation, while unfortunate in terms of the threat that it posed to the spiritual integrity of the burial and the island, has also added significantly to the value of the site by increasing our understanding of the circumstances of Roi Mata's burial through the unique correspondence between the material evidence and 400 years of associated oral narrative.

The third and final potential threat to the spiritual integrity of Artok Island was the leasing in 1994 of the entire island to an Australian developer, Katrina Jamieson, ostensibly for the construction of a tourist resort, celebrating the island's unique cultural and natural values. Crucially, this new lease of Artok Island was initiated by a single family and has in no way undermined the otherwise unified view of the community that Artok Island is a place of considerable spiritual significance which should remain undisturbed. News of the lease and the development plans was met with disbelief throughout Vanuatu and resulted in strong opposition from government officials and NGOs. The decision to lease the island must be considered within the context of the current boom in land sales on Efate, which has seen foreign developers eager for land (and for entire islands) directly approaching landowners and offering them amounts of money that far outstrip their usual income-earning capacity. In the end, no attempt was made by the leaseholder to develop Artok Island and her investment in the lease, appears to have been largely speculative in nature.

The landowners of Artok Island have recently revoked this lease and reclaimed their customary rights to the island, with the assistance of the Vanuatu Cultural Centre and the relevant government departments. A protection order will shortly be gazetted for the entire island of Artok, extending the existing protection for the site of Roi Mata's grave.

#### Summary

The condition of the three places that comprise the principal sites within Chief Roi Mata's Domain indicates that there have been few anthropogenic or natural impacts that have negatively affected the integrity of the property as a whole. Chief Roi Mata's Domain is largely intact and has not significantly transformed over the last 400 years. The three places are generally in exceptional condition, given that they exist in a

tropical environment that is susceptible to a range of natural hazards and that they are located close to a relatively dense population.

Together, Mangaas, Fels Cave and Artok Island capture the fullness of the stories associated with the life and death of the last Roi Mata. While his influence extended well beyond these places, there are no other specific locations that embody the physical experiences of this heroic figure. The local community identifies its own activities in relation to Mangaas, Fels Cave and Artok Island as being conducted “in the footsteps of Roi Mata” (“*nalfan Roi Mata*”). Chief Roi Mata’s Domain therefore encompasses all of the elements that express the outstanding universal values of the property.





## CHAPTER 4

State of Conservation and  
Factors Affecting the Property

## 4.A PRESENT STATE OF CONSERVATION

The heritage features of Chief Roi Mata's Domain (CRMD) that have been selected to generate base-line data for monitoring the state of conservation of the property are those that specifically embody its outstanding universal values.

### Mangaas

#### Stone walls and gateway

The stone walls and gateway at Mangaas (Figure 2.7) vary in the degree to which they remain intact, reflecting the extent to which they have succumbed to the effects of gardening activity, the encroachment of natural or exotic vegetation, natural disasters such as earthquakes, and other unknown historical factors. Most of the stone walls affected by cultivation are located outside the boundaries of the Mangaas site area that is being nominated for World Heritage, as gardening within Chief Roi Mata's former residence is strictly prohibited. However, given the expected increase in human activity within the proposed World Heritage area as a result of the 'Roi Mata Cultural Tour', the walled features of CRMD have been included in a conservation and monitoring program for the property (Section 6.A). Monitoring points have been established at the gateway to Roi Mata's residential precinct and at a section of stone wall that is embedded within and beneath the banyan at Mwalasayen (Figure 6.1). These monitoring points will help to determine not only the nature of human impact on the walls, but also the extent to which seismic activity and other natural hazards affect their preservation.

### Trees

The banyan tree at Mwalasayen, which is probably more than 400 years old, requires careful protection of its supportive ecosystem. The tree is currently at risk from the following impacts:

- 1) Human interference to the aerial roots that grow down from the upper canopy and eventually anchor themselves in the ground, providing support for the canopy branches.
- 2) Removal of some of the trees that encircle the banyan, which are relied upon by the aerial roots of the banyan as 'vertical posts' to latch on to as they make their descent to the ground.
- 3) Extreme environmental conditions, such as cyclones, and periods of drought.
- 4) Pedestrian traffic around the banyan which, if uncontrolled, could result in soil compaction and thus a restriction of the nutrients that the tree can access through a process of filtration (Bickford 2005).

Each of these actual or potential impacts has been addressed in the establishment of monitoring points for the banyan ecosystem (Section 6.A). To avoid undue damage to the tree through soil compaction and trampling of its root system as a result of tourist traffic, a fenced viewing area, located approximately 15m from the base of the banyan, currently serves to limit the spread of tourist traffic around the banyan (Greig 2006).

The canarium tree at Sumwantuk is currently in excellent condition, due partly to the presence of a relatively dense surrounding forest that acts as a windbreak, and also because there are few gardens within the immediate vicinity of the tree and thus people rarely pass by the site. The trunk of the tree is entwined by a creeper (*Epipremnum pinnatum*), which does not appear to be compromising its overall

health (Department of Forestry, pers. comm. 2006). Given that the canarium tree is the primary physical marker of the former residence of Roi Mata, and that it will eventually be incorporated into the Roi Mata Cultural Tour planned for the area, its ongoing condition is being assessed through the conservation and monitoring program established for CRMD.

The three large tamanu trees on the beach at Mwalakot are thought to be of considerable antiquity, with community elders suggesting that they were planted during Roi Mata's lifetime. While a recent botanical report suggests that these trees are in relatively good condition (Bickford 2005), given their connection to Roi Mata, the increased use of Mwalakot as the main thoroughfare for people accessing their gardens, and the expected increase in tourism, long-term impact on these trees is being monitored (Section 6.A).

### Sacred stones

There are eight known sacred stones in the wider Mangaas area, each of which is in good condition. Their preservation until now has been the result of several factors, including restricted knowledge about their locations and significance, and their reputed power to bring illness or death to anyone interfering with them. These stones are further protected by the chiefs and landowners of the Mangaas area, and are drawn upon during particular ceremonial occasions to access their ancestral past. During a December 2005 ceremony near the Mwalasayen banyan at Mangaas, the attendant chiefs spat the local narcotic kava (*Piper methysticum*) onto one of these sacred stones as an expression of respect for the *natkar* (power) of Chief Roi Mata.

The preferred long-term strategy for protecting the sacred stones of Mangaas is currently under discussion with the community. Joe Kalotiti, the son of the chief of Mangaliliu, recently had a dream in which he was told that all of the stones should be removed to a safe shelter. Other people, however, such as the sitting members of the World Heritage and Tourism Committee (WHTC, see 5.B below), believe that the stones should not be touched unless a situation arises in which there is no other alternative.

One stone (Stone 5), located close to the banyan at Mwalasayen, has been selected for regular monitoring in its immediate setting. This stone is referred to by some members of the local community as 'Roi Mata's stone' (Figure 2.11). It is embedded in soil next to a large banyan root and is therefore under threat of being dislodged from its existing location. Long-term monitoring of the stone will measure the rate and extent of movement, and thus assist the WHTC and the community in deciding how the stone should be preserved into the future.

### Fels Cave

#### Rock Art and Cave Stability

Fels Cave (Figure 6.2) was the location of Chief Roi Mata's death. Thus all of the features that provided the context for this event – including the cavern itself, and the rock-art which decorates the walls – are being considered in terms of their state of conservation.

At the request of the community, a recording and conservation monitoring program was initiated at Fels Cave in 2001. Australian heritage conservation consultants, Katharine Sale and Nicholas Hall, set up 11 monitoring points around the site that were

designed to provide information about the long-term impacts of identified threats to the rock-art and the stability of the cave (see Section 6.A below). Conservation issues were listed under two categories: 1) natural issues, and 2) visitor issues.

In 2005, the Roi Mata World Heritage research team revisited Fels Cave to assess the appropriateness of the base-line data produced by Sale and Hall (2002). Apart from some numerical re-coding to make the data compatible with other monitoring points within Chief Roi Mata's Domain, the monitoring points selected by Sale and Hall (2002) remain largely unchanged. The following discussion revises and updates the information presented in Sale and Hall (2002).

### Natural Issues

#### Micro-flora

Algae and/or lichens have been observed growing on some surfaces of the rock. While the distribution and extent of growth has not been recorded, a brief inspection suggests that they are associated with the damper, lighter areas of the cave (such as near the cave entrance, and on the left interior walls of cave where light falls during part of the day). Algae can cause the rock surface (including pigments on this surface) to break down. A panel of graffiti (Panel M) on the right hand entrance of the cave has been selected for assessing the long-term effects of algal growth on the surfaces of the cave (Section 6.A).

#### Dust

Dust is evident on many of the rock surfaces and covers some of the rock-art in the cave. In some areas, the floor of the cave consists of fine, dry soil particles that are probably being mobilised by wind, roof collapse, and pedestrian traffic and are subsequently settling onto rock surfaces. Once on the surface, dust can undergo a mineralisation process and become permanently bonded to the rock surface. One way of minimising dust mobility would be to construct a visitor path that is defined by an edging of stones, perhaps with a coral infill that stabilises the ground surface. This idea is currently being explored as part of the Cultural Tourism Strategy for CRMD (Greig 2006).

#### Salt/mineral deposits

Mineral deposition has been noted on rock surfaces throughout the cave. The composition of these deposits cannot be accurately determined without further mineralogical analysis, however the deposits could be a salt, contained within the rock, which has been re-deposited on the rock surface with the movement of water through the rock matrix. Such deposits can cover paintings and lead to a loss of pigment and rock surface. A charcoal figure in Panel E (Figure 49), on the eastern wall of the cave, has been selected for monitoring the long-term impacts of mineral deposition (Section 6.A).

#### Rock spalling

Rock spalling involves the loss of small or large sections of the rock surface. At least two types of rock spalling have been observed, both of which are commonly caused by salt action: 1) exfoliation, where the formation of salts behind the rock surface, and heating/cooling of the rock, can lead to sections of the rock falling off; and 2) granular disintegration, which is a similar process involving the loss of small grains of rock. Three charcoal figures located on Panel E (Figures 14, 15 and 17) and two sections of Panel G have been selected for studying the impact of rock spalling (Section 6).

### Structural instability

Structural instability can result in large block collapse of the cave roof or walls. Instability has been observed in various parts of the cave, and might be the result of earth movements, water and salt action causing sections of the rock to fall away, or other processes. A test of the structural stability of the cave is being sought through the monitoring of a separating bedding plane on Panel G (Section 6.A). While it is not practical to prevent such cracking occurring, it is worth monitoring whether such cracks are opening or changing, to determine whether there is an active stability issue and a risk of rock collapse.

## Visitor issues

### Graffiti

The graffiti at Fels Cave ranges from indiscriminate scribbles (sometimes made with white chalk), to carefully executed engravings of names and dates that provide a history of visitation to the site. The consolidated tuff in which the cave is formed is soft and easy to engrave or scratch, providing an enticing canvas for individuals interested in leaving a tangible memory of their visit. One of the most appealing surfaces, which currently displays the highest density of graffiti, is Panel M located on the right hand side of the cave's entrance. Some of the marks are a centimetre or more deep, while others are light scratches.

In 2001, the graffiti on Panel M extended along a stretch of wall that continued outside the cave, and included not just engravings but large text in blue acrylic spray paint. This blue graffiti was attributed to ni-Vanuatu guests from other islands who had visited the site in 2000. However, since the 2002 earthquake that led to the collapse of part of the entrance of the cave, all traces of this blue paint have disappeared, perhaps completely concealed by the plumes of dust that billowed out of the cave at the time of the collapse.

However, the presence of blue acrylic spray paint and other recent engravings around the cave does suggest that graffiti continues to be a problem at the site. Treatment or removal of some graffiti is possible, and would reduce its visual impact. Large-scale treatment or removal of either the engraved or painted graffiti is probably impractical, as it would involve major intervention at the site. Less intrusive methods are available and would be preferable. It is also important to consider the historic value of those engravings that were made in the late 1800s, some of which identify the missionary and settler families of the Lelepa region at the time. These early graffiti are now a source of some historical interest and pride for the community, as a tangible reminder of their own past.

There are no current plans to attempt removal of graffiti at Fels Cave. Future consultation with the community on this issue would need to consider a range of factors, such as whether the modern graffiti has obscured or damaged older art, and whether the graffiti itself might be considered significant local heritage, and thus worthy of long-term protection.

## Artok Island

### Roi Mata's Grave site

Two large and several smaller headstones mark Roi Mata's burial site on Artok Island (*Matogon Roi Mata*) (see Figures 2.19, 6.3). In front of the two larger stones, beneath



which lies the body of Chief Roi Mata, are several shell offerings and other goods, including two carved wooden clubs from Malakula (placed there by cast members of the US television series 'Survivor' in 2004) and a shell necklace (originally placed in the cavity of one of the conch shells by a Pacific Island representative of a World Heritage delegation visiting the site in 2005). A decision has yet to be made about whether modern items placed in front of the headstones should remain at the site or be removed and stored in an appropriate location – particularly the Malakulan clubs which are a large and visually intrusive addition to the grave area. Offerings are regarded amongst the community as an important component of the respect that should be accorded to Roi Mata. However, should the modern offerings increase to the extent that they impinge upon the aesthetic or cultural values of the site, strategies would need to be put in place to restrict the activity of gift giving. A recent count of the traditional shells and the modern offerings provides the necessary base-line data for determining how frequently items are being left at the site (Section 6.A).

Most of the twelve gravestones at the site have lichen and other microbes present on their surfaces. The climatic conditions that promote the growth of these organisms, and their effect on the structural stability of the gravestones, are currently unknown. These stones will be inspected regularly for changes in the degree of growth present on the gravestone and its impact on the structural stability of stone surfaces.

Other less common issues of conservation concerning the gravestones include exfoliation (most likely caused by salt re-deposition) and stone breakage. Gravestone 5 has at some point in the past broken into two sections.

In addition to the counting of grave offerings and the increase in lichen growth, exfoliation and stone breakage have been selected as key indicators of the state of conservation of the Roi Mata's burial site (Section 6.A).

## 4.B FACTORS AFFECTING THE PROPERTY

### 4.B.i Development Pressures

#### Land Leases

During the period 1994-2006, a development project associated with a 'Rural Commercial Lease' agreement (Title 12/0531/001) for the island of Artok posed a threat to the core area proposed for World Heritage Listing. The Australian investor who owned the lease had proposed building a tourism resort at the northeast end of the island, with additional designs for an aircraft runway at the southern side. However, no development of any kind took place on this island in association with this lease. An original agreement between the lessor (the landowner) and the lessee (the developer) came into effect on 7 December 1994. After several annual payments were not made and the lease was under threat of termination, the lessee and lessor negotiated a 'refreshment' of the lease for a term of 75 years, which came into effect on 26 August 2004. The lessee's development license, issued by Shefa Province, expired in June 2005 and was not renewed by the provincial authorities, preventing any development from proceeding on the island despite the continuation of the lease. In December 2005, the lessee exercised her right to sell the title to the island and placed an advertisement on the World Wide Web offering to sell the leasehold title to Artok Island for AUD 9,500,000 ([http://islands.glo-con.com/property.php?property\\_no=AD1\\_12145](http://islands.glo-con.com/property.php?property_no=AD1_12145)); however, no buyers could be found for the island. The landowners of Artok Island finally revoked

the lease in 2006 and reinstated their customary rights to the island, with the assistance of the Vanuatu Cultural Centre and the relevant government departments.

A related threat to other areas of Chief Roi Mata's Domain is the leasing to real estate developers of land within the proposed buffer zone. Efate is currently experiencing a real estate boom with rural subdivision for residential properties, and the communities of Lelepa and Mangaliliu are coming under intense pressure to release land for development. An explosion of residential development along this coastline would directly impact on the environmental and cultural values of Chief Roi Mata's Domain by diminishing and depleting ecological reserves, marine and terrestrial, and by alienating local communities from their cultural heritage.

However, partially in response to the Roi Mata World Heritage Project, which has become a national priority for Vanuatu, and also to impose limits on foreign investors wanting to purchase land on Efate, Shefa Provincial Council has drawn up a re-zoning plan for the Northwest Efate region that will largely protect the buffer zone of CRMD. The provincial re-zoning plans are due to be released during 2007.

#### **Agriculture (including logging, gardening and grazing)**

Agricultural impacts on Chief Roi Mata's Domain are minimal. Traditional small-scale shifting agriculture is restricted to the coastal plains around the village of Mangaliliu, outside the area being proposed for World Heritage. The chiefs and landowners of CRMD who own parcels of land at Mangaas all wish to leave Roi Mata's former residence un-gardened in perpetuity.

While there is no permanent gardening within the boundaries of the proposed World Heritage area at Mangaas, residents of Mangaliliu and Lelepa do pass through this area to access their gardens. In the past, there have been instances when people have removed particular hard wood trees around Mwalasayen for use in village construction projects. As part of the Roi Mata World Heritage Project, awareness workshops have been run (and will continue to be run as the need arises) to encourage people to harvest trees from outside the proposed World Heritage area (see Section 7.2 [E.3] of the *Plan of Management*).

A small herd of goats is currently kept on Artok Island as an alternative meat source for the communities of Mangaliliu and Lelepa. The *Plan of Management* (Section 7.2 [E.2]) stipulates that an assessment of the impact of this herd on the cultural and natural features of this island is required. However, during surveys undertaken for the Roi Mata World Heritage Project, it was established that the goats tend to inhabit the southwest end of the island, well clear of the main cultural sites that occupy the northeast side.

#### **4.B.ii Environmental pressures**

Chief Roi Mata's Domain is only marginally impacted by environmental pressures, which is one of its most appealing attributes given its relative proximity to Vanuatu's capital of Port Vila. The two principal impacts that have been identified are coral bleaching of the reefs and sea level rise caused by global climate change.

##### **Coral bleaching**

Coral bleaching of reefs is a response to higher seawater temperatures, causing environmental stress on the symbiotic algae living within and supporting growth of

reef building corals (Hickey 2005b). Coral bleaching is an ongoing yet fluctuating cause for concern in the Lelepa region. The incidence of coral bleaching is normally highest during 'El Niño' events when warmer sea surface temperatures are experienced in the Western Pacific. This contrasts with a 'La Nina' event when warmer surface temperatures affect the Central and Eastern Pacific. The year 2005 was classified as a 'neutral' year, indicating an absence of warm surface waters throughout the Pacific.

### Climate change and sea level rise

The effect of sea level rise on the coastal region of Vanuatu will depend partly on the response of governments worldwide to respond to global climate change. Sea level rise predictions for Vanuatu for the year 2100 range from between 30 and 100 cm, depending on the climate change simulations used (Casey 2006; Phillips n.d.). Sea level rise carries with it the risk of increased flooding of low-lying areas during storm surges, and increased erosion. Given that most of the archaeological features of CRMD are located in low-lying coastal areas, sea level rise will pose a significant threat to the property as a whole. The recommended course of action is for the Vanuatu Cultural Centre and the WHTC to continually assess sea level data for the area and to consult specialists on this issue to find practical solutions to the problem. As part of the Roi Mata World Heritage Project, the Department of Geology, Mines and Water Resources is in the process of establishing monitoring points on Artok Island to provide sea level change data for the property as a whole (Garae et al. 2006). These monitoring points will also measure tectonic uplift of the islands that may counter the effects of sea level rise at various points in time.

### 4.B.iii Natural disasters and risk preparedness

Chief Roi Mata's Domain has regularly been impacted by a range of natural disasters, the most common being cyclones, earthquakes, tsunamis and volcanic activity. There is also the potential for fire damage on the property. While in most cases little can be done to prepare and protect CRMD from a natural hazard, strategies have been developed to maximise the protection of the main cultural and natural features once a natural disaster has taken place. These strategies can be found in Section 7.2 [D] of the *Plan of Management* for Chief Roi Mata's Domain and Section 7.3 of the Cultural Tourism Strategy for Chief Roi Mata's Domain.

#### Cyclones

Cyclones are a regular occurrence during the wet season in Vanuatu (between December and March) and can be particularly devastating to the vegetation of Vanuatu. The three cyclones that are recalled by the local communities of the Lelepa region as the most destructive in the last 50 years are Cyclone Amanda (1959), Cyclone Uma (1987) and Cyclone Brima (1993). Cyclonic winds pose the greatest threat to the sacred trees of Chief Roi Mata's Domain, including the banyan, tamanu and canarium trees at Mangaas, and the casuarinas and cycads on Artok Island. There is little that can be done to prepare for cyclonic damage on the property. Post-cyclone assessments of the major cultural features, including the sacred trees, are recommended in Section 7.2 (D.3) of the *Plan of Management*.

#### Earthquakes, landslides and tsunamis

Lying on the boundary of the Indo-Australian and Pacific plates, Vanuatu forms part of the Pacific Ring of Fire. Numerous earthquakes are recorded in Vanuatu every year, the result of the Indo-Australian plate slipping beneath the Pacific plate. While loss

of life is usually minimal, the higher magnitude earthquakes can cause considerable material damage. Within the proposed World Heritage area, Fels Cave is the most susceptible to seismic activity. On 3 January 2002, at 4.22am, Vanuatu experienced a major earthquake (7.3 on the Richter scale) that resulted in the collapse of a substantial section of the cave's entrance. While the earthquake did not cause damage to any of the rock-art, it significantly altered the topography of the cave's ground surface. A large mound of boulders obstructing the left or western side of the entrance of the cave now needs to be negotiated by visitors to obtain a view of the rock-paintings on the eastern wall.

The clarity of the rock-art at Fels Cave was also affected by this earthquake activity. The collapse of the ceiling at the cave's entrance was so forceful that dust could be seen billowing out of the cave for hours after the main tremor. Based on a follow-up examination of the rock-art, this dust explosion appears to have concealed a large area of graffiti located just outside the entrance on the right hand side of the cave. It also affected the clarity of some of the charcoal designs located inside the cave on the eastern wall.

One consequence of earthquake activity can be landslide action. At the time of the January 2002 earthquake, the steep slope in front of Fels Cave was heavily eroded by rocks descending from above Fels Cave. This resulted in the destruction of the footpath leading up to the site and also the denuding of some of the vegetation that formerly acted to stabilise the ground-surface. A further consequence of earthquake activity can be the triggering of a tsunami. While most people living within the buffer zone of CRMD instinctively retreat to higher ground at the threat of a tsunami (i.e. after a major earthquake), little can be done to protect the cultural and natural features of the CRMD from damage caused by a tsunami.

Earthquakes, landslides and tsunamis which impact the CRMD will trigger field assessments conducted by the VCC and WHTC, in order to report on any visible damage or change to the monitoring points located throughout the property (see Part 8 of the *Plan of Management*).

### Volcanic activity

The cultural deposits at Mangaas bear witness to three major episodes of volcanic activity that have impacted upon the Lelepa region during the past 3100 years (see 2.B.ii.b). We know from oral historical accounts that eruptions during the period of human settlement have caused dramatic transformations in population distribution and the political fortunes of different groups across central Vanuatu. The CRMD may, at some future time, experience ash-falls that match the scale of those observed in the archaeological record for the property. These are unlikely to impact substantially on the stone features present in the area, but may cause spot fires that would need to be controlled to protect the sacred trees in Roi Mata's former residential precinct at Mangaas and on Artok Island.

### Fire

Fire has the potential to cause significant damage to the proposed World Heritage area, particularly around Mangaas where gardens are located in close proximity to Roi Mata's former residence. Gardeners rely heavily on fire clearance as part of traditional cultivation practice. In the second half of 2005, towards the end of an extended period of drought and on a day of especially high winds, a fire burnt out of control and came

close to crossing Mangaas creek into the area being proposed for World Heritage listing. Following this event, signs were promptly posted on the trees along the main path towards Mangaas instructing people to 'Use Fire Breaks'.

Fire poses relatively little threat to the abandoned island of Artok, where there are no gardens and therefore no regular use of fire. On one occasion fire was employed to clear the scrub around Chief Roi Mata's grave prior to a visit by a World Heritage delegation in 2005. This was a single controlled instance of burning that was undertaken at the discretion of the landowner.

Fels Cave is a large circular chamber devoid of vegetation and is therefore not under threat of fire damage. The vegetation immediately surrounding the cave is situated a considerable distance from the nearest garden and is therefore less likely than Mangaas to be impacted by fire.

A fire management plan for the protection of cultural sites located within the CRMD, and an evacuation strategy for tourists and residents, are outlined in the *Plan of Management* (Section 7.2, [D.2] and Appendix D) and Cultural Tourism Strategy (Section 7.3.1) for the property.

### 4.B.iv Visitor/tourism pressures

Two tourism workshops were conducted with the Lelepa and Mangaliliu communities in October and November 2005. Part of the program for these workshops was designed to ascertain the carrying capacity of Chief Roi Mata's Domain according to various cultural, financial and practical constraints. It would be desirable to have no more than about thirty visitors to the property at any one time, given the sacred nature of the three main sites and the local desire to maintain and promote respect for Roi Mata and his legacy. Logistically, the community cannot currently support more than fifteen tourists a day to the region. A lack of locally owned bus and boat transport is the principal limitation here, but there was also agreement amongst workshop participants that a maximum of fifteen tourists at one time, at Mangaas, Fels Cave or on Artok Island, would result in optimal visitor experience.

Should interest in the 'Roi Mata Cultural Tour' increase, a rotating system of visitation will be developed to ensure that while there will only ever be a maximum of fifteen tourists at a site, there might be up to thirty visitors within CRMD simultaneously. On rare occasions, it might be feasible to host larger numbers, as has occurred during 2005 with three visits each of about eighty to ninety tourists from National Geographic ships directly to Lelepa Island, but this required a high degree of commitment and preparedness on the part of the community, and external logistical assistance (in the form of National Geographic boats).

Apart from controlling numbers of tourists, other strategies developed for minimising visitor impact on the cultural integrity of the CRMD are outlined in the Cultural Tourism Strategy for the property (Greig 2006). Some of the principal strategies employed for the 'Roi Mata Cultural Tour', which currently operates at the sites of Mangaas and Fels Cave, are:

#### Mangaas

- Restrictions on movement at Mangaas, to prevent visitors from freely exploring the area and inadvertently disturbing cultural features, including:

- o a defined walking track;
- o a fenced viewing area around the banyan tree at Mwalasayen that prevents people from touching the tree, trampling over the root system, and causing compaction of the surrounding soil.
- Limiting the volume of speech at the site of the banyan, as a sign of respect for the power (*natkar*) of Roi Mata.

#### Fels Cave

- Guiding tourists along a pre-defined track within the cave to prevent the mobilisation of dust particles on the ground surface that may conceal the artwork and result in a mineralisation process occurring on the rock surfaces

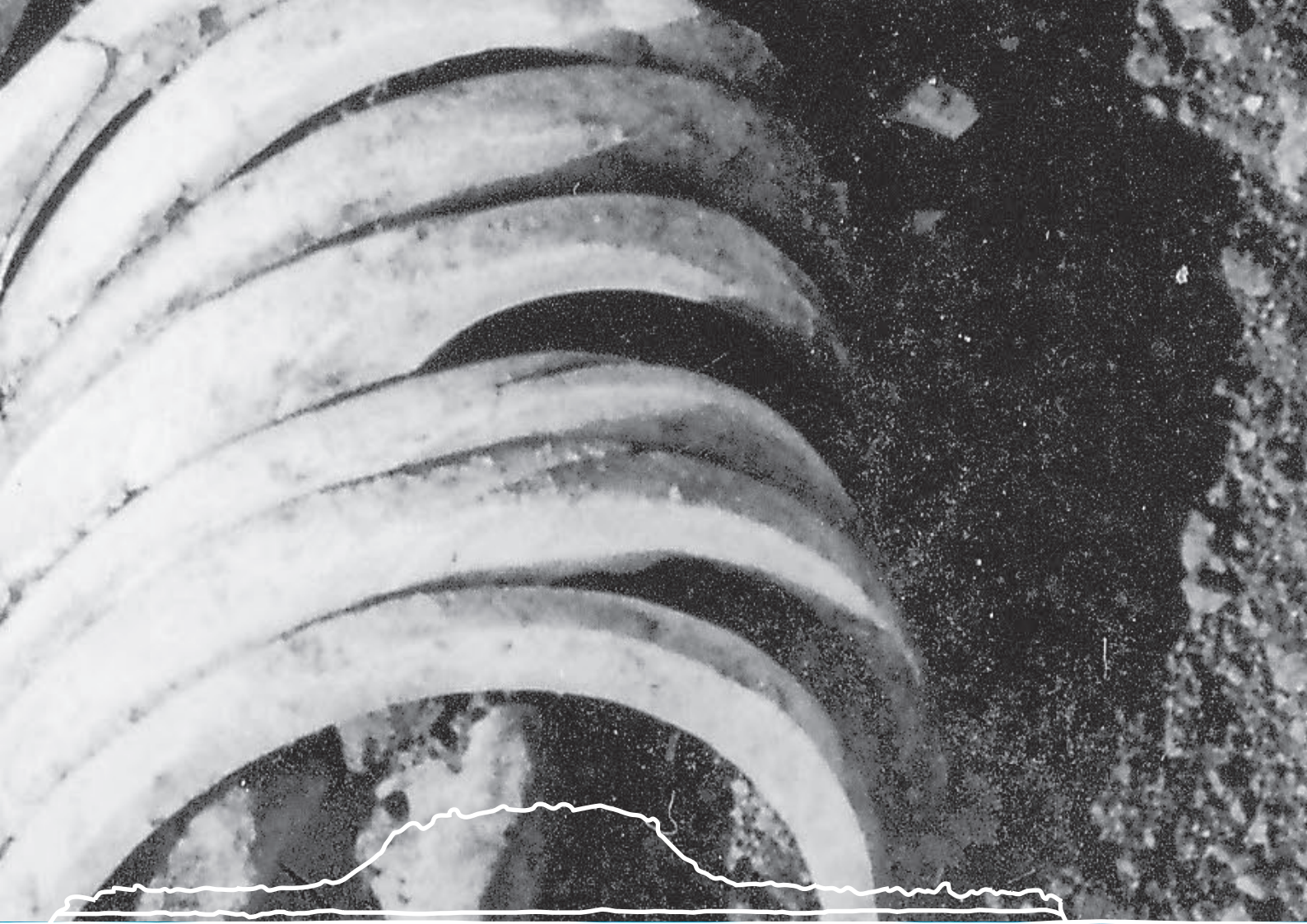
Guides currently accompany tourists for the duration of the tour, and can thus inform people if they are engaging in behaviour that is negatively impacting upon the property, such as touching the rock-art at Fels Cave. Tourists are also given brochures prior to their attendance on the tour, which provide further information about the important cultural and natural features encountered on the tour.

#### 4.B.v Number of inhabitants within the property and the buffer zone

Estimated population, as at March 2006, located within:

Area of nominated property	0 (there are no residences within the proposed World Heritage area)
Buffer zone	670
Total	670





# CHAPTER 5

Protection and Management  
of the Property



## 5.A OWNERSHIP

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There are currently two major categories of land ownership within Chief Roi Mata's Domain. Most of the land within Chief Roi Mata's Domain and the broader Lelepa region is under customary tenure, owned by individuals with chiefly titles connected to the three principal sites (Mangaas, Fels Cave and Artok Island), and by a local landowner who has been granted a parcel of land within the Mangaas area. The administration and management of all parts of the property, including Artok Island, are vested with the World Heritage and Tourism Committee (WHTC) for the Lelepa region, which was established in 2005.

## 5.B Protective Designation

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### Customary Tenure

Chief Roi Mata's Domain is governed by a chiefly system. There are two principal tiers of ownership: 'chiefs', who inherit land within the region according to their title; and 'landowners', who are granted plots of land at the discretion of the chiefs. Under this traditional system, chiefs reserve the right to place areas of land or sea under *tapu* protection, preventing the over-exploitation of specific natural resources. Due to their association with the legendary Chief Roi Mata, the sites of Mangaas and Artok Island have both been subject to *tapu* restrictions, which have had the effect of preserving much of the cultural and natural heritage of these places for the past 400 years. Over time, these *tapu* restrictions have been incorporated within unwritten local law, or *nafsan natoon* (see Section 5.C).

There are four chiefs and landowners of Chief Roi Mata's Domain who are consulted on all matters relating to the property: Chief Meto Kalotiti (Artok Island and Mangaas), Chief Pierre Fartepar (Fels Cave), Chief Kalkot Murmur (Mangaas) and Mr Kalfau Palinga (Mangaas). Each of these individuals has authorised the formation of the World Heritage and Tourism Committee (WHTC) for the Lelepa region, the role of which is to oversee the day-to-day management and protection of the proposed World Heritage property on behalf of the landowners.

### Legal Protection of Chief Roi Mata's Domain

The Vanuatu Cultural Centre is currently working with the Ministry of Internal Affairs to secure a preservation order for the property under the Preservation of Sites and Artefacts Act (Chapter 39 of the Laws of the Republic Vanuatu). The aim of this action is to provide an extra level of protection for CRMD that reinforces (rather than overrides) customary protection of the property. The Ministry is currently in possession of the application for protection of CRMD under this Act, and has assumed responsibility for its ratification.

The Vanuatu Cultural Centre, in consultation with the landowners of CRMD and the Director of Environment, is also considering registering CRMD as a 'Community Conservation Area' under the Environmental Management and Conservation Act No. 12 of 2002 (sections 35-40).

### World Heritage Property Buffer Zone

The buffer zone for the property area designated for World Heritage status possesses an undoubted cultural and historical integrity as the wider area of Chief Roi Mata's

former Domain. The boundaries of this buffer zone have been modified in various respects, to acknowledge the reality of alienated lands currently being developed along the margins of the Domain for residential properties or for agriculture, and so as not to encompass all of the lands of the Lelepa-Mangaliliu communities and thus constrain their development opportunities (see section 2.A.iii). The visual catchment of Artok Island embraces a substantial and meaningful proportion of the Domain, and preserves the essential values associated with Roi Mata and the principal sites of his Domain. Under the provisions of the Shefa Provincial Government re-zoning policy (see 5.C below), the CRMD buffer zone will offer significant protection to the values of the World Heritage property by controlling and restricting development within its boundaries, and by ensuring oversight of all planning processes by the World Heritage and Tourism Committee (WHTC).

## 5.C Means of Implementing Protective Measures.

### Traditional Forms of Protection

The management and protection of Chief Roi Mata's Domain is founded on a traditional system of chiefly control. The rules for CRMD are enforced according to local lore or *nafsan natoon*. *Nafsan natoon* relates to the socially prescribed behaviour that occurs within CRMD. For instance, people speak in low voices around the banyan at Mangaas to avoid offending the power (*natkar*) of the spirit of Roi Mata, held to still inhabit this area. They also avoid visiting the site at sunset and sunrise. The *Plan of Management* (see section 7.C) is a written version of the customary protection of the property prescribed under the concept of *nafsan natoon*.

There are also village rules that operate alongside *nafsan natoon*, such as the prohibition on fishing within a 'banned area'. These rules are enforced by the chiefs. If contravened, the offender is required to pay a financial or material penalty. The penalty is usually paid either directly to the chief who ordered the prohibition, or to the person directly affected by the offence (such as the landowner who has ownership rights to the sea area infringed upon).

### Protection for Roi Mata's Grave

As noted above (Section 2.B.iv.c), the Roi Mata burial site on Artok Island was gazetted under the colonial Condominium Government as 'a site of historical interest' (Joint Decision No.48 of 1976, New Hebrides Condominium Gazette No. 361, April 1976). This legal status provides 'for the preservation of sites and objects of historical, ethnological or artistic interest', and continues in force under the laws of the Republic of Vanuatu. Thus, Roi Mata's burial site remains legally protected under current national legislation.

### Legal Protection of Chief Roi Mata's Domain

As noted in Section 5.C above, legal protection of Chief Roi Mata's Domain is currently being sought under the Preservation of Sites and Artefacts Act (Chapter 39 of the Laws of the Republic Vanuatu). Discussions are also under way to have the property formally registered as a Community Conservation Area under the terms of the Environmental Management and Conservation Act No. 12 of 2002 (sections 35-40).

### Preservation of Sites and Artefacts Act (Chapter 39, Laws of the Republic of Vanuatu)

Once protection of Chief Roi Mata's Domain is enforced under this Act, the following conditions will apply to the property:

- According to Part II (Section 5) of the Preservation of Sites and Artefacts Act, 'Every person or body corporate in possession of a classified site shall be bound to prevent such site being modified or undergoing any deterioration and shall inform the Minister of any change that is likely to take place in the condition or the ownership of such site.'
- According to Part III (Section 6i), the Minister responsible for culture 'shall have a right of pre-emption on every sale of any site ... which is of historical, ethnological or artistic interest and which possesses a special value...'
- According to Part V (Section 9i), 'Any person who commits an offence against the provisions of Parts II and III of this Act shall be liable upon conviction to a fine not exceeding VT20,000.'

### Environmental Management and Conservation Act No. 12 (2002)

Vanuatu's obligations under the World Heritage Convention are reflected in the provisions of the Environmental Management and Conservation Act. According to Section 35 of this Act, the Director of the Department of Environment 'may negotiate with custom landowners for the protection and registration of any site as a Community Conservation Area where he or she is satisfied that the site:

- (a) possesses unique genetic, cultural, geological or biological resources; or
- (b) constitutes the habitat of species of wild fauna or flora of unique national or international importance; or
- (c) merits protection under the Convention Concerning the Protection of World Cultural and Natural Heritage'

A 'Community Conservation Area' is controlled by the rightful chiefs and landowners. The exact regulations governing a Community Conservation Area are defined by the chiefs and landowners in consultation with the Department of Environment. In the case of Chief Roi Mata's Domain, the *Plan of Management* for the property lists the regulations governing the property that would be accredited under this legislation.

### Re-zoning of the Northwest Efate Area

Since initial discussions concerning the Roi Mata World Heritage Project began in 2004, Shefa Provincial Government has been in the process of developing plans to re-zone 'sensitive' areas of Efate in order to ensure that future development on the island is sustainable and more appropriate to indigenous needs. The area of Chief Roi Mata's Domain and its buffer zone falls under the category of a sensitive area and will in future be protected from major development under provincial legislation.

## 5.D EXISTING PLANS RELATED TO REGION IN WHICH THE PROPOSED PROPERTY IS LOCATED

The sole current development plan for the region is that associated with the 'Roi Mata Cultural Tour', a community-run cultural tourism project that has been developed as part of the Roi Mata World Heritage Project. A few minor structural additions have been made to the property to adequately cater for tourist groups (see Section 7.B).

## 5.E PROPERTY MANAGEMENT PLAN

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The *Plan of Management* for Chief Roi Mata's Domain (WHTC 2006), prepared by the Roi Mata World Heritage Project team on behalf of the Vanuatu Cultural Centre and the World Heritage and Tourism Committee for the Lelepa region, is the result of a series of consultative workshops with the communities of Lelepa and Mangaliliu. The approach used for developing a management plan for the property derives from a number of sources, including the Protecting Heritage Places kit, published by the Australian Government Department for the Environment and Heritage (formerly the Australian Heritage Commission) in 2000 (see also [www.heritage.gov.au/protecting.html](http://www.heritage.gov.au/protecting.html)), the IUCN Guidelines for Management Planning of Protected Areas (Thomas and Middleton 2003), and *Conserving Pacific Places* (UNESCO 2004). Each of these documents provides useful strategies for protecting the natural and cultural significance of heritage places.

An essential component of the management planning process was the development of a tourism project that would promote the natural and cultural values of CRMD. Tourism development in the proposed World Heritage area was viewed by the Lelepa region community as a necessary income-generating activity that should be built into the World Heritage program for sustainable conservation. Tourism management issues for the property are defined in the Cultural Tourism Strategy for Chief Roi Mata's Domain (Greig 2006), which should be viewed as a companion document to the *Plan of Management*. This cultural tourism strategy document draws on the tourism planning process available in *Steps to Sustainable Tourism* (Australian Government Department of Environment and Heritage 2004), and its partner program *Stepping Stones* (Hall 2003), which have been designed specifically to enable the integration of cultural heritage management and cultural tourism practices within a single management planning process.

Valuable assistance for both the management planning and tourism planning aspects of the Roi Mata World Heritage Project has been provided by staff of the Australian Government Department for the Environment and Heritage, and by the cultural heritage management consultants named in Section 1.1 of the *Plan of Management*.

## 5.F SOURCES AND LEVELS OF FINANCE

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Financial benefits recently flowing to the chiefs and landowners of Chief Roi Mata's Domain for the use of the property by developers and commercial operators have included:

1. Former annual payments to Chief Meto Kalotiti and his family for the lease of Artok Island.
2. Annual access fees for the use of land and marine resources, paid by tourism operators such as 'Congoola' and 'Sailaway Cruises'.
3. A monthly rent paid by Sustainable Reef Supplies (SRS) to the appropriate Lelepa landowners and to the Mangaliliu Council of Chiefs to enable the operation of its aquarium supply trade in the Lelepa region.

Crucially, however, none of the financial benefits deriving from these activities have flowed back into CRMD to upgrade or manage the property.

The Roi Mata Cultural Tour, while still in its early operational stages, is the only current project aiming to invest a percentage of its profits back into the property, mostly to undertake structural improvements to improve visitor experience. There is currently no money available to the property for 'cultural heritage management'. All members of the World Heritage and Tourism Committee (WHTC) for the Lelepa region, which acts on behalf of the chiefs and landowners to oversee the management of CRMD, offer their time voluntarily. While this situation is set to change once the tourism business builds and profits enable small salaries to be paid to the management team, the committee will need regular financial assistance to support the ongoing management and monitoring of CRMD.

One of the goals of the chiefs and custodians of CRMD is to, "work towards completely autonomous community management of Chief Roi Mata's Domain within 12 months of the implementation of the [Management] plan (from March 2006)" (*Plan of Management*, Section 2.1). However, in order for there to be real autonomy and self-sufficiency in this process, both capacity building and income improvement need to be established as major priorities for the Lelepa region community. Selected members of the community would benefit from further training by heritage conservation specialists in the management of cultural sites and in the writing of applications for external funding. The WHTC will also require financial assistance to purchase equipment required for the ongoing monitoring and maintenance of the property (see Part 7 of the *Plan of Management* for a list of resources required).

'Roi Mata Tours', the community business being set up to run the 'Roi Mata Cultural Tour', will also require assistance in the form of funding and training to ensure its success and to maintain morale within the community. While some seed funding is being sought to assist in initiating the tourism operation, ongoing training in hospitality, business management, occupational health and safety, and other tourism-related fields will be necessary to ensure the sustainability of this community venture. Financial assistance will also be required for continuing infrastructure costs, including the upgrade of access roads, the construction of shelters and toilets, and the improvement of transport and communication services.

### 5.G SOURCES OF EXPERTISE AND TRAINING IN CONSERVATION AND MANAGEMENT TECHNIQUES

Currently, select members of the community are receiving on-site training from the Roi Mata World Heritage Project team in management and conservation practices. Both the Vanuatu Cultural Centre (VCC) and the Environment Unit have also offered to provide further training for the community to strengthen the protection of the cultural and natural resources contained within CRMD. The VCC is the national organisation responsible for ensuring that CRMD is effectively managed, in accordance with the Convention Concerning the Protection of the World Cultural and Natural Heritage and the *Plan of Management* for Chief Roi Mata's Domain.

At various national interest meetings during the preparation of this nomination document, a range of government departments expressed their desire to commit personnel to assist the Lelepa region community with the ongoing management and protection of CRMD. The Department of Fisheries, the Department of Forestry, the Environment Unit, the National Tourism and Development Office, Shefa Province,

the Vanuatu Investment Promotion Authority, and various sections of the Ministry of Lands have provided ongoing assistance to the Roi Mata World Heritage Project and have a stake in its future success. As with all national projects, however, a shortage of government funds will limit the scope of training projects unless funding from foreign aid agencies is regularly obtained. The Vanuatu Cultural Centre in consultation with the WHTC will be responsible for identifying funding priorities for CRMD and for applying to appropriate funding sources.

## 5.H VISITOR FACILITIES AND STATISTICS

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There are no official statistics available on visitor numbers to Chief Roi Mata's Domain. All information concerning local tourism has been obtained through discussions with members of the local community. Prior to the establishment of the 'Roi Mata Cultural Tour', commercial tourism rarely touched upon areas within CRMD. The local tourist operation 'Lelepa Island Day Tours' formerly made irregular visits to Fels Cave, but ceased after the January 2002 earthquake that destroyed the walking trail up to the site. People regularly visit Artok Island on weekends, but mainly to scuba dive the reef rather than visit cultural sites. Sailaway Cruises is the only company that advertises visits to the burial site of Chief Roi Mata, although these visits are rarely undertaken.

There is currently no on-site information available for visitors to CRMD. During the consultative workshops on tourism in 2005, it was decided that interpretative signs installed at the site would require too much funding to produce and maintain. Instead, the booking agency in Port Vila presents tourists with a brochure that can be referred to through the course of the tour. The brochure includes information about the locations and history of the three principal sites, the appropriate and culturally sensitive behaviour that tourists should observe throughout the tour, and safety issues (Greig 2006). The Vanuatu National Museum in Port Vila has a display area in its main exhibition hall that is dedicated to the story of Chief Roi Mata. This exhibition has currently been upgraded for the Roi Mata Cultural Tour, which departs from the Museum.

There are plans to expand the limited visitor facilities in and around CRMD to accommodate the expected increase in visitors to the property (see Section 7.B for development plans). These plans, which have been developed in consultation with the community and are therefore attentive to preserving the property's heritage features, include:

### Mangaas

- (i) upgrading and extending an existing walking track which will serve as a tourist trail around Roi Mata's village;
- (ii) constructing a traditional house near the gateway to Roi Mata's village. This house will be located outside the proposed World Heritage area;
- (iii) building a raised viewing platform near the Mwalasayen banyan tree; and
- (iv) installing seating (made of traditional materials) at Lou Mwalakot.

### Fels Cave

- (i) building a self-composting toilet at the southern end of Aupa beach;
- (ii) constructing a shelter at the southern end of Aupa beach which will serve as both an artefact stall and tourist eating area;
- (iii) constructing a bench seat at the top of the trail leading up to the cave;

- and
- (iv) defining a walking track within the cave to control the flow and activities of tourists.

## 5.I. POLICIES AND PROGRAMMES RELATED TO THE PRESENTATION AND PROMOTION OF THE PROPERTY

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The organization responsible for all policies and programmes related to the presentation and promotion of Chief Roi Mata's Domain is the Vanuatu Cultural Centre (VCC). The VCC has a comprehensive planning program and research policy that sponsors the recording and protection of cultural heritage in Vanuatu. The VCC will work closely with the WHTC to facilitate the following promotional strategies:

- i. developing exhibitions related to CRMD;
- ii. providing information concerning CRMD to the National Curriculum Centre for incorporation with school curricula;
- iii. training members of the Lelepa region community to ensure the transmission of information concerning the cultural and natural heritage of CRMD to future generations;
- iv. formulating research projects that increase awareness of, and protect, the natural and cultural values of CRMD;
- v. assisting VCC staff and WHTC members to attend national and international workshops and forums in order to raise awareness about programmes and policies associated with CRMD;
- vi. encouraging national and international school students and other organisations to attend on-site cultural heritage education programs;
- vii. advertising programs related to CRMD on the VCC and CRMD websites (see below).

During 2006, the VCC secured the assistance of an Australian IT specialist to develop a database to house information relating to the principal sites of Chief Roi Mata's Domain and the surrounding cultural landscape (see 8.D). The 'Roi Mata Cultural Site Management System' will initially be housed at the Vanuatu Cultural Centre and eventually extended to a site closer to the property. Computer training in the functioning and maintenance of the database will be provided to members of the Lelepa community and staff of the Vanuatu Cultural Centre. The database will be permanently web-linked so that any future problems with its operation can be resolved by its Australia-based designers. It will also be password-coded so that restricted information is accessible to its rightful custodians only. Portions of the database will be made available to the public, to enable students and other visitors to the museum to obtain a virtual experience of CRMD. A website for CRMD will be developed in conjunction with the database facility. Users will be able to browse an abridged version of the database, access information about the Roi Mata World Heritage Project, and obtain details about the Roi Mata Cultural Tour.

The Roi Mata Cultural Tour, which departs from the Vanuatu National Museum, provides an effective means of promoting CRMD and the various heritage protection projects that are underway on the property. During the tour, visitors are introduced to the property through an exhibition and video at the Vanuatu National Museum. People then travel to CRMD where they literally follow in Roi Mata's footsteps (*nalfan Roi*

*Mata*), experiencing aspects of his life at Mangaas, his death at Fels Cave, and his burial on Artok Island.

The *Plan of Management* addresses several methods for ensuring that the values associated with the natural and cultural elements of the property are transmitted to future generations (see Section 7.2, A). Several initiatives defined by the Lelepa region community should ensure that historical narratives (stories and songs) associated with Chief Roi Mata are learned by younger generations before elderly members of the community pass away.

## **5.J STAFFING LEVELS (PROFESSIONAL, TECHNICAL, MAINTENANCE)**

Individuals with experience in both cultural and natural heritage management reside within the buffer zone for Chief Roi Mata's Domain. The two Vanuatu Cultural Centre fieldworkers for the Lelepa region, who have been appointed Chair and Vice-Chair of the World Heritage and Tourism Committee, have extensive experience in cultural heritage matters in the Lelepa region. Douglas Kalotiti and Leisara Kalotiti have been members of the fieldworker programme since 1995 and 2003 respectively (Douglas Kalotiti has also been President of the VCC's men's fieldworker program since 1999). Each year, they attend a meeting in Port Vila with other volunteer fieldworkers from around the nation to discuss a cultural topic of interest, such as 'traditional marriage', 'language' or 'trade and exchange' (Tryon 1999). Douglas and Leisara are consolidating their role within the Lelepa region as experts in traditional *kastom* by leading the World Heritage and Tourism Committee in the protection and management of CRMD.

Also available to the property are local community 'environmental experts' who serve as volunteer advisors to Wan Smol Bag, a Port Vila-based theatre group that specialises in increasing national awareness of environmental issues. These advisors were formerly known as 'Turtle Monitors', but they have since expanded their role to include the monitoring and protection of both the land (Vanua) and the sea (Tai), and are thus now referred to as Vanua-Tai. There are currently two Vanua-Tai representatives in the Lelepa region: David Billy (Mangaliliu) and Pierre Makmar (Lelepa Island). The *Plan of Management* addresses ways of strengthening the capacity of Vanua-Tai to enable them to assist in the long-term protection of the natural values of CRMD.

Certain members of the Lelepa region, particularly chiefs with rights to land in CRMD and some of the elderly members of the community, possess specific knowledge about subtle connections between places and stories associated with this cultural landscape. These individuals are playing, and will continue to play, an important role in determining the nature of the information that is conveyed to future generations and to international audiences. Likewise, members of the community who are skilled in traditional forms of weaving and carving and who are helping to revive *kastom* in the Lelepa region, will be responsible for defining the means by which 'traditional' objects are to be manufactured in a contemporary context.







# CHAPTER 6

## Monitoring

## 6.A KEY INDICATORS FOR MEASURING STATE OF CONSERVATION

As part of the Roi Mata World Heritage Project, a formal conservation program was developed to ensure the long-term protection of the most outstanding cultural and natural values of Chief Roi Mata's Domain. A total of 37 monitoring points were established on the property (see 7.B for a complete copy of the CRMD Conservation Program). These monitoring points are associated with 23 cultural features located at the three principal sites of Mangaas, Fels Cave and Artok Island (Figures 6.1, 6.2, 6.3).

All monitoring records will be digitally stored on the 'Roi Mata Cultural Site Management System' (see Section 5.I). Duplicate hard copies will be held by the Vanuatu Cultural Centre, the Chair of the WHTC and at The Australian National University.

Site inspections will be undertaken by the Vanuatu Cultural Centre on an annual basis. The site inspection forms for the project can be found in Appendix K of the *Plan of Management*. During these inspections VCC staff will train members of the WHTC and other community representatives to become regular site inspection officers.

While official site inspections will take place annually, the monitoring points will be informally inspected on a more regular basis by tour guides and landowners. Any significant changes to cultural features that are observed outside of the normal site inspection times will be reported to the WHTC, which will arrange for an official site inspection report. The VCC and the WHTC will also visit CRMD after a natural disaster (such as an earthquake) or any other unforeseen event that may pose a threat to the property.

The baseline data for the monitoring points was completed in March 2006. The next official site inspection process will take place in March 2007. The following tables list each of the cultural features located at the 3 main sites located within CRMD that have been chosen for monitoring. The key indicators selected for assessing the long-term conservation of each of these features are also specified.

### Mangaas

Table 6.1. Monitoring Points (Mangaas)

No.	Code	Feature	Key Indicators
1	MS003/F01/MP01	Stone gateway	Increase in vegetation growth around the gateway
2	MS003/F01/MP02	Stone gateway	Movement of individual stones associated with the gateway
3	MS003/F02/MP01	Banyan tree	A reduction in the number of support trees located around the banyan; growth of new supporting trees; the presence of aerial roots attached to the supporting trees
4	MS003/F02/MP02	Banyan tree	A reduction in crown density of the banyan
5	MS003/F03/MP01	Stone wall	Movement or removal of individual stones associated with the stone wall
6	MS003/F04/MP01	Sacred stone	Overall movement of the stone; a change in the measurement between the stone and an abutting banyan root
7	MS020/F01/MP01	Tamanu trees	Change in the overall health of the tree; rotten branches that might fall down
8	MS030/F01/MP01	Canarium tree	Change in the overall health of the tree

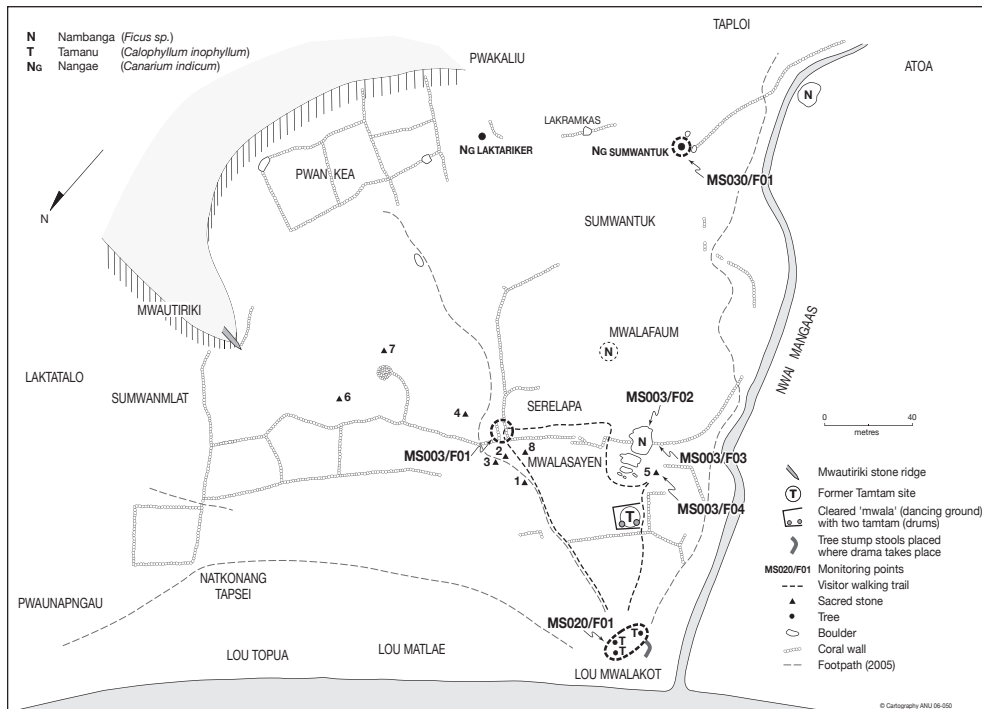


Figure 6.1 Map of Mangaas showing locations of monitoring points

### Fels Cave

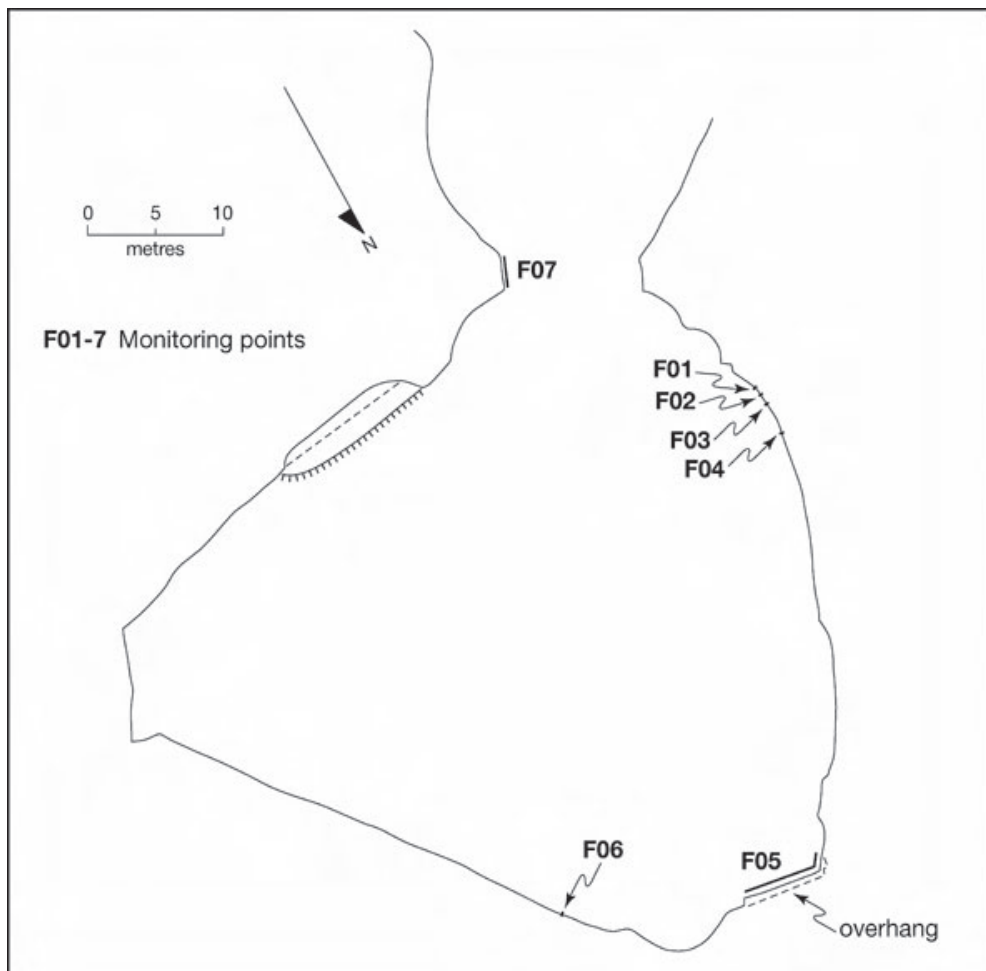


Figure 6.2 Fels Cave showing locations of monitoring points

Table 6.2. Monitoring Points (Fels Cave)

No.	Code	Feature	Key Indicators
1	LL004/F01/MP01	Black drawing – ‘fowl’	Loss of image clarity due to granular disintegration / small scale exfoliation of rock surface
2	LL004/F02/MP01	Black drawing – vertical lines	Loss of image clarity due to granular disintegration / small scale exfoliation of rock surface
3	LL004/F03/MP01	Black drawing – anthropomorph	Loss of image clarity due to granular disintegration / small scale exfoliation of rock surface
4	LL004/F04/MP01	Black drawing – ‘Roi Mata’	Increase in the size of the area affected by salt action / exfoliation
5	LL004/F04/MP02	Black drawing – ‘Roi Mata’	Increase in the size of the area affected by salt action / exfoliation
6	LL004/F05/MP01	Panel G	Detachment of rock surface due to weathering
7	LL004/F05/MP02	Panel G	Detachment of rock surface due to weathering
8	LL004/F05/MP03	Panel G	Widening of crack along the bedding plane
9	LL004/F06/MP01	Red stencil – hand	Increase in exfoliation due to salt action
10	LL004/F06/MP02	Red stencil – hand	Increase in exfoliation due to salt action
11	LL004/F07/MP01	Graffiti panel	The addition of new graffiti; a discoloration of old graffiti

## Artok Island

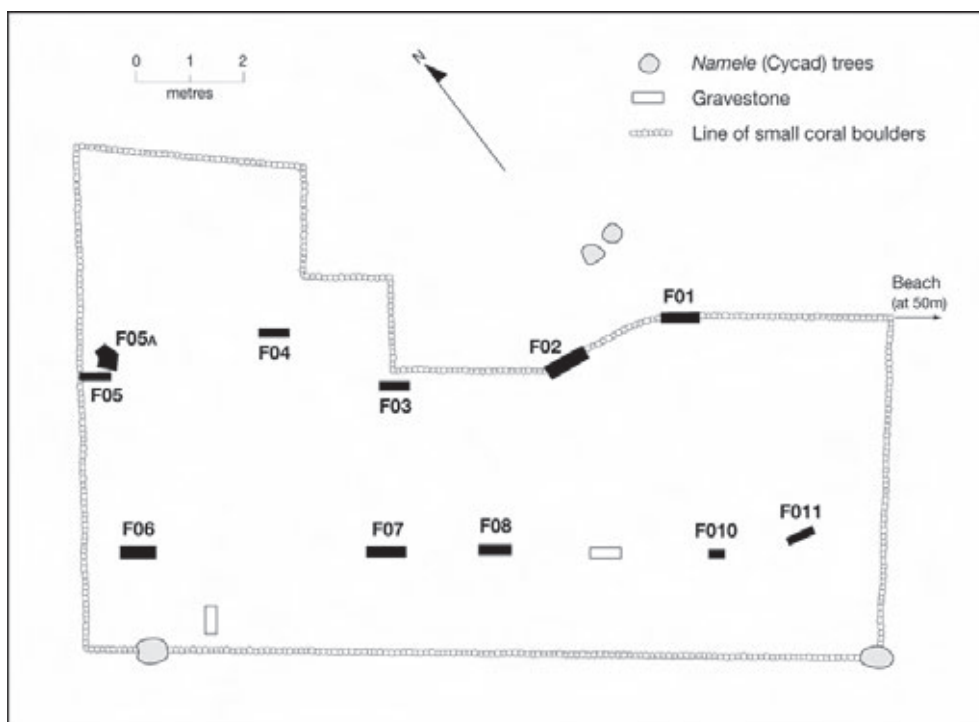


Figure 6.3 Roi Mata's burial site showing locations of monitoring points

Table 6.3. Monitoring Points (Roi Mata's burial site, Artok Island)

No.	Code	Feature	Key Indicators
1	AR005/F01/MP01	Gravestone #1	An increase or change in microbial (e.g. lichen) growth; an increase in cracks / exfoliation on the rock surface
2	AR005/F01/MP02	Gravestone #1	An increase in cracks / exfoliation on the rock surface
3	AR005/F01/MP03	Gravestone #1	Movement or removal of the 'support stone' for Gravestone #1
4	AR005/F01/MP04	Gravestone #1	Movement or removal of shell 'offering' on northwest side of gravestone
5	AR005/F01/MP05	Gravestone #1	Movement or removal of shell 'offerings' on southeast side of gravestone
6	AR005/F02/MP01	Gravestone #2	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
7	AR005/F02/MP02	Gravestone #2	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
8	AR005/F02/MP03	Gravestone #2	An increase in grave offerings; evidence that modern grave offerings are negatively impacting on older cultural material (e.g. shells; gravestone); movement or removal of grave offerings
9	AR005/F03/MP01	Gravestone #3	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
10	AR005/F03/MP02	Gravestone #3	An increase or change in mossy growth; structural changes on the rock surface
11	AR005/F04/MP01	Gravestone #4	An increase or change in algal growth; structural changes on the rock surface
12	AR005/F05/MP01	Gravestone #5	Movement or removal of broken horizontal slab
13	AR005/F06/MP01	Gravestone #6	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
14	AR005/F07/MP01	Gravestone #7	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
15	AR005/F08/MP01	Gravestone #8	An increase or change in the pattern of exfoliation occurring on the northwest face of the gravestone
16	AR005/F08/MP02	Gravestone #8	Movement or removal of tridacna shell lying near the gravestone
17	AR005/F010/MP01	Gravestone #10	An increase in cracks / exfoliation on the rock surface
18	AR005/F011/MP01	Gravestone #11	An increase or change in algal growth located on the northern face

## 6.B ADMINISTRATIVE ARRANGEMENTS FOR MONITORING PROPERTY

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Vanuatu National Museum and Cultural Centre  
PO Box 184  
Port Vila, Vanuatu

and

World Heritage and Tourism Committee (Lelepa region)  
C/- Vanuatu Cultural Centre  
PO Box 184  
Port Vila, Vanuatu

## 6.C RESULTS OF PREVIOUS REPORTING EXERCISES

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In 2001, Katharine Sale and Nicholas Hall, consultants with experience in cultural heritage management and rock-art conservation practices, undertook a visual survey of Fels Cave to identify any threats to the site and its cultural remains (Sale and Hall 2002). During this inspection they identified conservation issues related to three broad categories:

1. Structural stability problems in the rock
2. Dust
3. Graffiti

Based on their findings they established 11 monitoring points around the cave. These monitoring points were re-visited in 2005 to assess their appropriateness in relation to the objectives of the Roi Mata World Heritage Project. Few significant changes have been required to the baseline data developed by Sale and Hall; Nicholas Hall was an early advocate of the nomination of the Roi Mata sites and thus established a long-term monitoring program that would be suitable should Fels Cave eventually become part of a World Heritage property (Hall 2002).



Community dancers at the official acceptance by the chiefs and community of the CRMD nomination.







# CHAPTER 7

## Documentation

## 7.A IMAGE INVENTORY AND PHOTOGRAPH AND AUDIOVISUAL AUTHORIZATION FORM

---

Id. No **CRMD-01**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **The banyan tree at Mwalasayen (October 2005)**

Photographer **Chris Ballard**

Copyright owner (if different than photographer) **Vanuatu National Cultural Council**

Contact details of copyright owner (Name, address, tel/fax, and email)

**Vanuatu National Cultural Council**

**Vanuatu National Museum and Cultural Centre**

**PO Box 184, Port Vila, Vanuatu**

**(phone) 678-22129**

**(email) vks@vanuatu.com.vu**

Non exclusive cession of rights

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Id. No **CRMD-02**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **The tamanu trees at Mwalakot, Mangaas site (October 2005)**

Photographer **Meredith Wilson**

Copyright owner (if different than photographer) **Vanuatu National Cultural Council**

Contact details of copyright owner (Name, address, tel/fax, and email)

**Vanuatu National Cultural Council**

**Vanuatu National Museum and Cultural Centre**

**PO Box 184, Port Vila, Vanuatu**

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Non exclusive cession of rights

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Id. No **CRMD-03**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **Roi Mata's magic stone, Mangaas (October 2005)**

Photographer **Chris Ballard**

Copyright owner (if different than photographer) **Vanuatu National Cultural Council**

Contact details of copyright owner (Name, address, tel/fax, and email)

**Vanuatu National Cultural Council**

**Vanuatu National Museum and Cultural Centre**

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Non exclusive cession of rights

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Id. No **CRMD-04**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **Community dancers at the official acceptance by the chiefs and community of the CRMD nomination (March 2006)**

Photographer **Chris Ballard**

Copyright owner (if different than photographer) **Vanuatu National Cultural Council**

Contact details of copyright owner (Name, address, tel/fax, and email)

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**Id. No CRMD-05**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **Fels Cave (October 2001)**

Photographer **Chris Ballard**

Copyright owner (if different than photographer) **Vanuatu National Cultural Council**

Contact details of copyright owner (Name, address, tel/fax, and email)

**Vanuatu National Cultural Council**

**Vanuatu National Museum and Cultural Centre**

**PO Box 184, Port Vila, Vanuatu**

**(phone) 678-22129**

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Non exclusive cession of rights

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**Id. No CRMD-06**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **Rock-art at Fels Cave, possibly depicting Chief Roi Mata (November 2005)**

Photographer **Chris Ballard**

Copyright owner (if different than photographer) **Vanuatu National Cultural Council**

Contact details of copyright owner (Name, address, tel/fax, and email)

**Vanuatu National Cultural Council**

**Vanuatu National Museum and Cultural Centre**

**PO Box 184, Port Vila, Vanuatu**

**(phone) 678-22129**

**(email) vks@vanuatu.com.vu**

Non exclusive cession of rights

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**Id. No CRMD-07**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **Artok Island (August 2004)**

Photographer **Chris Ballard**

Copyright owner (if different than photographer) **Vanuatu National Cultural Council**

Contact details of copyright owner (Name, address, tel/fax, and email)

**Vanuatu National Cultural Council**

**Vanuatu National Museum and Cultural Centre**

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**Id. No CRMD-08**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **Artok Island (November 2005)**

Photographer **Chris Ballard**

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Id. No **CRMD-09**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **Roi Mata's gravestone, Artok Island (March 2006)**

Photographer **Meredith Wilson**

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Id. No **CRMD-10**

Format (slide/ print/ video) **Digital image**

Caption Date of Photo (mo/yr) **Cryptoblepharus novaehbridicus (December 2005)**

Photographer **Alison Jennings**

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- (i) Preservation of Sites and Artefacts Act (Chapter 39 of the Laws of the Republic Vanuatu) (attached)
- (ii) Environmental Management and Conservation Act No. 12 of 2002 (attached)
- (iii) Re-zoning of Northwest Efate (Provincial legislation) (forthcoming)
- (iv) *Plan of Management* for Chief Roi Mata's Domain (attached)
- (v) Cultural Tourism Strategy for Chief Roi Mata's Domain (attached)
- (vi) Development Plans for the Roi Mata Cultural Tour (Mangaas and Fels Cave) (contained in Cultural Tourism Strategy for Chief Roi Mata's Domain, (v) above)

## 7.C FORM AND DATE OF MOST RECENT RECORDS OR INVENTORY OF PROPERTY

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The following documents are held by the Vanuatu Cultural Centre and the Vanuatu National Library:

- (v) Artok Lease Title (1994)
- (vi) Flora reports (Wilson and Bickford 2005; Bickford 2005; Chanel 2006)
- (vii) Fauna report (Kalfatak 2005)
- (viii) Reptile fauna report (Jennings 2006)
- (ix) Marine reports (Hickey 2005a, 2005b)
- (x) Site inventory for the Lelepa region (Ballard 2006)
- (xi) Archaeology report (Spriggs 2006)
- (xii) Physical anthropology report (Van Dijk 2006)
- (xiii) Roi Mata artefact inventory (Greig 2006)
- (xiv) Rock-art records (Wilson and Ballard 2006)
- (xv) Geology report (Garae, Brooks and Tevi 2006)

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# CHAPTER 8

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## 8.B OFFICIAL LOCAL INSTITUTION

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## 8.D OFFICIAL WEB ADDRESS

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Contact name: Ralph Regenvanu  
E-mail: vks@vanuatu.com.vu  
Website: [http://www.vanuatuculture.org/vchss/20060915\\_roimata-tour.shtml](http://www.vanuatuculture.org/vchss/20060915_roimata-tour.shtml)

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E-mail: glen\_maclaren@essolutions.com.au, troy\_mallie@essolutions.com.au  
Website: <http://www.essolutions.com.au/vanuatu/default.asp> (Temporary access to this site for the purposes of assessment: Username: Guest; Password: Vanuatu)

## 9. SIGNATURE ON BEHALF OF THE STATE PARTY

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The Honourable Mr. George Wells  
Minister for Internal Affairs, Republic of Vanuatu

## APPENDIX 1: GLOSSARY OF COMMON, SCIENTIFIC, BISLAMA AND LELEPA LANGUAGE TERMS

Term	Language	Meaning / gloss
<i>Aore</i>	Nam	Songmaster
<i>Ataf</i>	L	Assistant (see <i>atavi</i> )
<i>Atavi</i>	N, Nam	Assistant (see <i>ataf</i> )
<i>Fanua</i>	L	Island, place (see also <i>vanua</i> )
<i>Farea</i>	L, N	Communal meeting house
<i>Fels</i>	L	Cave
<i>Kastom</i>	B	Custom, tradition
<i>Manuvasa</i>	Nam	Spokesman
<i>Matogon</i>	L	Burial, gravesite
<i>Munuwai</i>	L, N	Magic man
<i>Mutuama</i>	L	Spirit being
<i>Mwalala</i>	L, N	Dance ground
<i>Mwau</i>	L	Warrior, bodyguard
<i>Naflak</i>	SE	Matriline, maternal clan (see also <i>namatrao</i> )
<i>Nafsan</i>	L	Speech, talk, law
<i>Naleoana</i>	L, N	Competitive feast between chiefs
<i>Nalfan</i>	L	In the steps of
<i>Namatrao</i>	L, N	Matriline, maternal clan (see also <i>naflak</i> )
<i>Namrakin</i>	L	Chiefly domain
<i>Napwea</i>	L	Slit drum (see <i>tamtam</i> )
<i>Natamwate</i>	L, N	Peace feast
<i>Natkar</i>	L	Chiefly power
<i>Natkon</i>	L	House, residence
<i>Nwai</i>	L, N, SE	Stream, creek
<i>Sangalengale</i>	N	Spirit being
<i>Tamtam</i>	B	Slit drum
<i>Tapu</i>	L, N, B	Forbidden, sacred

### Languages

B = Bislama

L = Lelepa

N = Nakanamanga (north Efate, Shepherd Islands)

Nam = Namakir (Shepherd Islands)

SE = South Efate

### Terms for key tree species

Common	Scientific	Bislama	Lelepa
Banyan	<u><i>Ficus subcordata</i></u>	Nambanga	<i>Napanga</i>
Casuarina	<u><i>Casuarina equisetifolia</i></u>	Oak Tree	<i>Niar</i>
Cycad	<u><i>Cycas</i> spp.</u>	Namele	<i>Namwel</i>
Nangae	<u><i>Canarium indicum</i></u>	Nangai	<i>Nangae</i>
Tamanu	<u><i>Calophyllum inophyllum</i></u>	Tamanu; Nambakora	<i>Napkor</i>

## APPENDIX 2: AN EARLY VERSION OF THE ROI MATA LEGEND

This text is a translated extract from an original typed document in French, a copy of which is held by M. Paul Gardissat of Port Vila. The original narrator, identified here only as “Johnny”, was probably Chief Tongolemanu of Lelepa. This narrative, which lacks any great detail and appears to conflate several different narratives about different holders of the Roi Mata title, is of particular significance because it is currently the earliest documented version of the Roi Mata legend.

### The Legend of Roemata

**As told to Mister Ernie Reid by Johnny, an old native of Leleppa, in 1932.**

Long ago, an old native couple lived on the little islet called OTAS, located in the middle of Lake LUCKBUEL in the area of MANIURA point, near Forari. The man was named MASSUSUPU, the woman REWA. They tended their garden on the banks of the lake, and to cross from the islet to the mainland opposite they would call a great fish, which acted as a sort of foot-bridge for the couple, so that they could cross without getting themselves wet. The flying foxes brought them nuts and breadfruit, which they carried from far away and then dropped over the islet.

Rewa bore twins, two boys who lived on the islet until they were large enough to accompany their parents to the garden. In those days they had only stone axes and bowls and one day, MASSUSUPU asked the stronger of the children to help him to cut down a tree. With the father on one side and the son on the other, they began the task and when they succeeded in felling the tree, the whole island of Efate shook. The father then decided that the boys would return to the islet and stay there.

MASSUSUPE and REWA returned one evening, loaded down with fruits and vegetables intended for the preparation of a laplap which the boys would make themselves the following day while their parent went to work in the garden. The boys then began to prepare the laplap, the elder preparing the vegetables, the younger grating the coconut. When they had placed the vegetables on the laplap leaves, according to the custom of the day, the elder brother decided to use a lot of coconut milk, more than usual. The little brother argued against this but finally gave in to his older brother's demands and put all the remaining coconut milk in the laplap, though he warned that this would prevent the laplap from cooking properly.

In fact, when the parents returned and the time had come to eat the laplap, they found that it was insufficiently cooked. The younger brother burst out laughing and didn't stop laughing until his father spoke. Addressing the elder brother, he said: it's your fault that the laplap is not cooked and from now on you will be named ROEMATA and you, he said to the younger brother, because you laughed so much, you will be named ROEMURY. Until then the boys had not had names. ROEMATA became a very important person on Efate, he was large, strong, a sort of sorcerer (Tabu man) and he was the greatest chief on Efate. Until then there had been no real chiefs. In the villages around Efate there were sometimes several people who ruled at the same time.

ROEMATA and ROEMURY made large gardens and when they had a sufficient stock of food, they invited all the people living on Efate to gather at a place near Otas, which became the occasion for important meetings followed by numerous festivities. In the

# Plan of Management for Chief Roi Mata's Domain (CRMD)



Written by Meredith Wilson on behalf of the World Heritage  
and Tourism Committee (WHTC), Lelepa Region

June 2006

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## Part 1: Chief Roi Mata's Domain: the Project and the Place

### 1.1. Planning Process and Consultation

This Plan of Management has been developed in close association with the nomination file for the World Heritage listing of 'Chief Roi Mata's Domain' (CRMD), a property that includes the principal traditional or *kastom* places connected with the history of Chief Roi Mata, namely Mangaas (Roi Mata's residence), Fels Cave (where Roi Mata is said to have died) and Artok Island (where Roi Mata was buried). The aim of this plan is to provide management guidelines for the individuals responsible for looking after the proposed World Heritage area and its buffer zone.

In June 2005, the World Heritage Centre awarded Preparatory Assistance Funding of USD \$19,700 (VUV 2,127,600) to the Vanuatu Cultural Centre to assist in the nomination process. The fieldwork component of this project was completed in December 2005, and was a collaborative effort between the Roi Mata World Heritage Project Team and members of the two communities responsible for looking after CRMD. A total of 93 community members were present at three major consultative workshops held at Mangaliliu and Natapau (Lelepa Island) Villages. The three workshops focused upon the following three topics:

- 1) The cultural values of CRMD
- 2) The natural values of CRMD
- 3) Cultural heritage tourism in CRMD

The community members who participated in these workshops and who therefore made a substantial contribution to the content of this Plan of Management are listed in Appendix A.

In addition to the above workshops, a series of one-on-one interviews, field surveys and meetings with local chiefs were undertaken. These were intended to serve several purposes, ranging from drawing out community concerns and issues regarding the management of CRMD and the surrounding buffer zone, to determining the geographic extent of CRMD according to the locations of sites and stories associated with Chief Roi Mata.

Members and associates of the Roi Mata World Heritage Project who have contributed to the information in this Plan of Management include:

Mr Ralph Regenvanu	Director, Vanuatu Cultural Centre
Ms Martha Yamsiu Kaltal	Manager, VHCSS, Vanuatu Cultural Centre
Dr Meredith Wilson	Project Coordinator, Vanuatu Cultural Centre (Australian National University)
Dr Chris Ballard	Project Researcher, Vanuatu Cultural Centre (Australian National University)
Mr Douglas Kalotiti	Chair, World Heritage and Tourism Committee (Lelepa Region) and Fieldworker President, Vanuatu Cultural Centre
Ms Carly Greig	Cultural Tourism Adviser (Vanuatu Cultural Centre / Australian Youth Ambassador)
Mr Ted Miller	Business Development Adviser (Peace Corps Vanuatu)
Mr Glen MacLaren	Site Database Developer (Environmental Systems Solutions)
Mr Troy Mallie	Site Database Developer (Australian VIDA Volunteer)

Ms Donna Kalfatak	Zoology Consultant (Environment Unit, Port Vila)
Mr Sam Chanel	Botany Consultant (Forestry Department, Port Vila)
Dr Sophia Bickford	Botany Consultant (CSIRO, Australia)
Mr Robert Flood	Botany Consultant (Peace Corps, Forestry Department, Port Vila)
Mr Francis Hickey	Marine Consultant (Vanuatu Cultural Centre)
Mr Jason Raubani	Marine Consultant (Fisheries Department, Port Vila)
Ms Alison Jennings	Reptile Fauna Consultant (Louisiana State University Museum of Natural Sciences)
Prof Sharon Sullivan	Heritage Consultant (Sullivan, Blazejowski and Associates)
Ms Malin Blazejowski	Heritage Consultant (Sullivan, Blazejowski and Associates)
Mr Nicholas Hall	Heritage Tourism Consultant (Northern Territory Tourist Commission)
Ms Katharine Sale	Senior Heritage Officer (Australian Government Department for the Environment and Heritage)
Prof Matthew Spriggs	Archaeology Consultant (Australian National University)
Dr Nicola Van Dijk	Physical Anthropology Consultant (Auckland)
Prof Don Patterson	Legal Consultant (University of the South Pacific, Port Vila)

The main role of these individuals has been to assist the community in the development of the Plan of Management and nomination file for CRMD to ensure that the cultural and natural values of the property are protected in accordance with the *Convention Concerning the Protection of the World Cultural and Natural Heritage* (UNESCO 1972; see also the *Operational Guidelines for the Implementation of the World Heritage Convention*, World Heritage Centre 2005). Throughout this process the project team has supported the community in developing a Plan of Management that is based upon the reinforcement of existing customary systems of marine and land tenure. The engagement of local communities in the development of appropriate management regimes has been espoused on both a theoretical and practical level by Bridgewater and Bridgewater (2002) and Johannes and Hickey (UNESCO 2004a), amongst others. It is an approach that ensures that the local community remains in control of the management of its own resources.

## 1.2. Community-Based Concepts of Conservation

Most of the information presented in this document is based on primary research conducted in the Lelepa region during 2004 and 2005. In developing the Plan of Management, the project team drew on concepts of conservation that were pre-existing in Lelepa society and describable in local language. The communities of the Lelepa region speak of *nafsan natoon*. *Nafsan natoon* (the closest literal translation of which is – ‘the talk that is’) refers to a learned set of social rules that is recognised by everyone in the community. These rules guide the way in which people behave in their cultural landscape. The use of the notion of *nafsan natoon* for the CRMD resembles quite closely the role of the concept of *Tjukurpa* (Anangu law), which is employed at the World Heritage Uluru – Kata Tjuta area in Central Australia as the ‘fundamental value to guide its management’ (Uluru – Kata Tjuta Board of Management Parks Australia, 2000: xx).

During the period of community workshops for the Roi Mata World Heritage Project in 2005, members of the local community outlined the way in which *nafsan natoon*

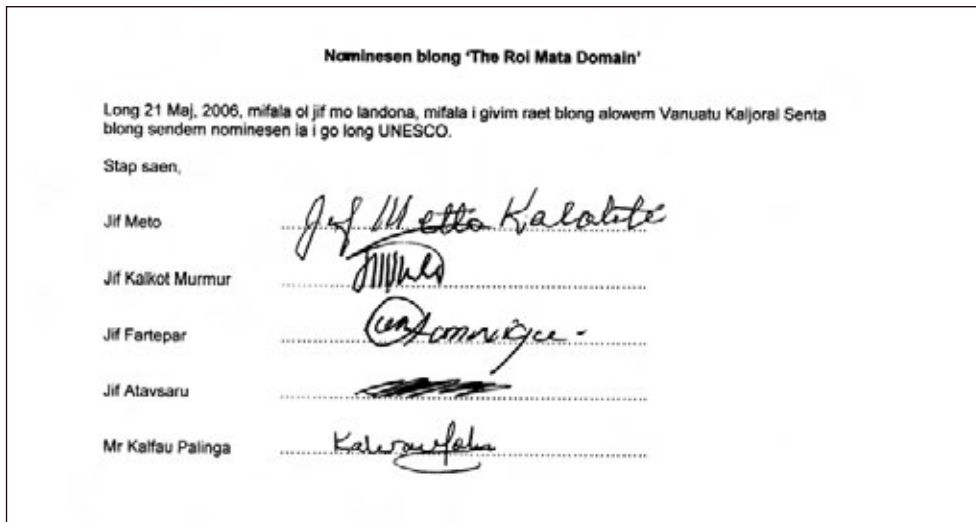


Figure 1: The signatures of the chiefs and landowners of CRMD, authorising the submission of the nomination to UNESCO in 2006.

applies to CRMD and surrounding regions; how people's behaviours are dictated by laws that are rarely spoken about but collectively obeyed. *Nafsan natoon* provides the basis for understanding the decisions that have been made by the community in relation to the management of CRMD and its buffer zone.

While *nafsan natoon* has provided the information and strategies fundamental to developing a management for CRMD, the framework for gathering such information was derived from other sources, including the *Protecting Heritage Places* kit, published by the Australian Government Department for the Environment and Heritage (formerly the Australian Heritage Commission) in 2000 (see also [www.heritage.gov.au/protecting.html](http://www.heritage.gov.au/protecting.html)), the IUCN Guidelines for Management Planning of Protected Areas (Thomas and Middleton 2003), and *Conserving Pacific Places* (UNESCO 2004b). Each of these sources provides useful approaches for protecting the natural and cultural significance of heritage places.

### 1.3. Heritage and Tourism Operating Together in CRMD

The frameworks for the consultative workshops held in the Lelepa region were largely derived from the *Stepping Stones for Tourism* framework (Hall 2003). *Stepping Stones* is a partner program for *Steps to Sustainable Tourism* (Australian Government Department of Environment and Heritage 2004), which has been designed for projects attempting to integrate cultural heritage management and cultural tourism within a single management planning process. Tourism development in the proposed World Heritage area was viewed by the Lelepa region community as a necessary income-generating activity that should be built into the World Heritage nomination project. Tourism management issues associated with CRMD are dealt with in a separate Cultural Tourism Strategy (Greig 2006), which should be regarded as a companion document to this Plan of Management.

Towards the later stages of the community consultation process (December 2005), the project team assisted the community in establishing the World Heritage and Tourism Committee (WHTC), a group consisting of nine individuals from the Mangaliliu and Lelepa Island communities and from the Vanuatu Cultural Centre. This committee has been appointed by the chiefs of the Lelepa region to be responsible for the day-to-day management of CRMD in accordance with the objectives set out in this Plan of Management.

In March 2006, draft versions of this Plan of Management and the accompanying nomination file were presented to appropriate members of the community for comment. Once all their comments and advice had been incorporated into the documents, the owners of the land that comprises CRMD gave their signed permission for the Roi Mata World Heritage Project Team to submit the nomination file to the World Heritage Centre.

The broader community has been kept informed of the progress of the nomination and management-planning process through a series of awareness workshops and through the distribution of newsletters (Appendix B).

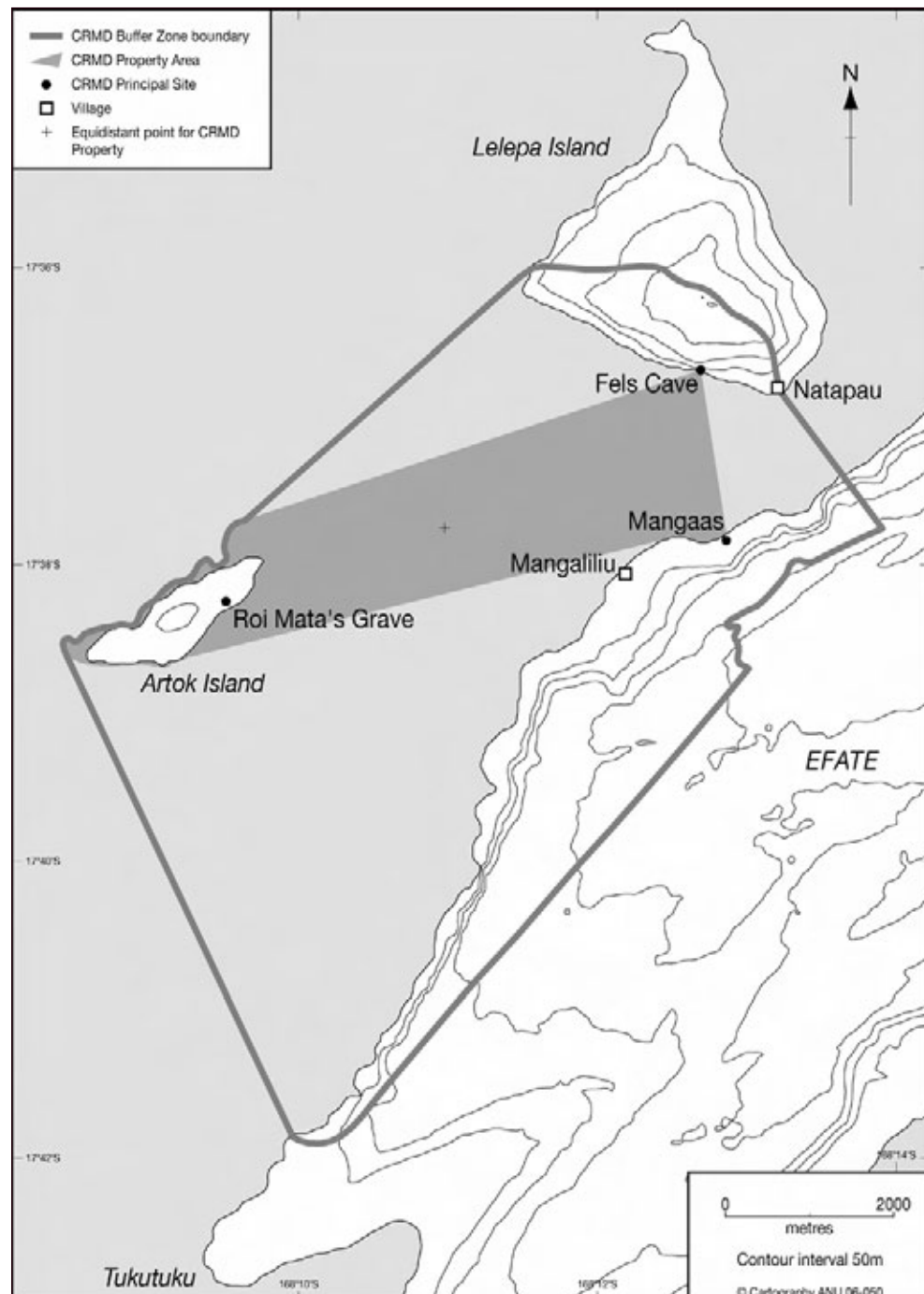


Figure 2: Boundaries of CRMD and the surrounding buffer zone

## 1.4. Plan Review

In March of each year, the WHTC will be responsible for formally reviewing the Action Plan presented in Part 7 of this Plan of Management. In March 2009, a workshop will be held with members of the WHTC, staff of the Vanuatu Cultural Centre, and appointed specialists in heritage management issues, to undertake a complete review of the Plan of Management with community input. At this workshop a schedule for the ongoing review of the Plan of Management will be established.

The team responsible for the preparation of the nomination file for CRMD is currently in the process of applying for funding to implement the strategies outlined in this Plan of Management (see Part 7). Pending funding, the proposed implementation project – The *Roi Mata Heritage and Tourism Project* (RMHTP) – will initially run over a period of three years, from 2007 to 2009.

## 1.5. The Physical Setting of Chief Roi Mata's Domain (CRMD)

CRMD is located in the Lelepa region, along the northwest coast of the main island of Efate in Central Vanuatu. Efate, centred at about 17°40'S / 168°20'E, is about 770km<sup>2</sup> in area, is the fourth largest island in the Vanuatu archipelago, and hosts the national capital, Port Vila, with a population of around 30,000. The smaller near-shore islands of Lelepa and Artok form the western margins of Havannah Harbour (Smith 1991).

A semi-humid climate prevails over the northwest coast of Efate, which lies in a rain shadow created by the island's central range. Rainfall is typically 1600 mm per annum in the Lelepa region, compared with 2500 mm per annum on the south coast of Efate, and up to 5000 mm per annum in the upland interior of the main island (Quantin 1992). Normal seasonality consists of a warm, humid period from November to April, followed by a cooler and drier period associated with the southeast trade winds, from May to October.

Rich soils along the narrow coastal plain of the Northwest Efate mainland have combined with an exceptionally rich and diverse marine environment in the Lelepa region to provide the subsistence basis for a long history of relatively dense settlement. Much of the natural vegetation of CRMD and its buffer zone is disturbed. Formerly, the landscape probably consisted of coastal strand vegetation flanked by littoral forest, grading inland to dry rainforest. However much of the region has now either been entirely replaced by cultivation or stands of invasive species (such as *Leucaena leucocephala*, *Cordia alliodora*). Some indigenous elements exist, particularly around *tapu* sites, the significance of which has ensured their persistence (Bickford 2005).

Precise information about faunal distribution in the Lelepa region is not available. There are 12 species of bat in Vanuatu (four *Pteropodid* and eight *Microchiroptera*) – the only native mammals known to the archipelago. Seven of these inhabit Efate and might be found in the Lelepa region (Flannery 1993). Land mammals are more rare, a result of the biogeographic sea-boundary that separates Vanuatu from the Solomon Islands. This boundary has acted as a filter to a vast range of animal species. There are three known introduced mammals in Vanuatu (two species of rat and one mouse), 79 species of land and freshwater birds (30 of which are endemic or near-endemic), two introduced amphibians, and 19 reptiles (17 lizards and 2 snakes) (Chambers and Bani 1988). Amongst the invertebrate wildlife are butterflies, land snails, earthworms, ants and termites.

The richest inshore fish diversity in the world, where some 2,500 species are found, is located just to the west of Vanuatu at the centre of the Indo-Malay archipelago (Myers

1999). It is currently estimated that the diversity of inshore fish in Vanuatu's waters is between 1700 and 1900 species (*op cit*), and that the finfish communities of Vanuatu are comparable to those of the Great Barrier Reef of Australia (Done and Navin 1990). However, to date, no comprehensive finfish surveys have been conducted to document the full species diversity or endemism found within Vanuatu's waters.

The marine waters of Havannah Harbour form a broad embayment with Artok Island at the entrance, and are framed by the uplifted terraces of Efate and Lelepa Islands. A number of small rivers, creeks and springs feed this embayment with freshwater and terrestrially-derived nutrients. During the rainy season, when nutrient enrichment is maximized, Havannah Harbour experiences significant plankton growth (as evidenced by large blooms of jellyfish) and an abundance of sardines, mackerels and scads (*B: mangru*). These species in turn attract skipjack and yellow-fin tuna inshore, which are occasionally pursued by large pods of bottlenose dolphins.

As a small offshore and uninhabited island, Artok represents a locally unique marine environment that has well developed fringe reefs. These fringe reefs drop to deepwater reefs that are abundant with tunas and other pelagic fish that feed on the productivity associated with the strong currents of this area. With no large rivers nearby on the adjacent mainland, the island's marine environment receives very little freshwater influence and therefore offers excellent visibility to recreational divers. For these reasons, it offers superlative scuba diving and has become a free-diving hotspot in the region for pelagic spearfishers. Artok Island, Lelepa Island and areas of the adjacent Efate coast also provide nesting, feeding and resting areas for endangered hawksbill and green turtles.

#### **1.1.1 Physical Characteristics of Mangaas, Fels Cave and Artok Island**

Mangaas, the former residence of Chief Roi Mata, is positioned on a very narrow but fertile coastal plain, hemmed in to the south by steep raised coral reef ridges and cliffs rising to 200 m. The ridges consist of tuffs and clays capped by Pleistocene and Plio-Pleistocene limestones, while the plains are also raised reef, representing the most recent phase of tectonic uplift.

The chamber cave of Fels, the scene of Chief Roi Mata's death, has developed 22m above sea level within the pumice breccias or tuffs of the Efate Pumice Formation. The pumice is overlain and protected by raised corals of the Reef Limestone Formation (Ash et al. 1978). The chamber has a maximum depth of 47m, a maximum width of 52m, and is approximately 35m high, with a large 2m-high mound of roof fall and other detritus close to the centre of the cave that slopes down to a rear wall which is approximately 2.5m lower than the entrance.

Artok Island, where Chief Roi Mata was buried, is located off the northwest coast of Efate, and is approximately 2.3 km in length and 600 m wide. The island consists of 'a cap of uplifted coral limestone on top of stratified pumice tuffs. Around the central peak a coastal platform corresponding to the last uplift (5m) is formed of sand and recent coral limestone' (Obellianne 1961: 49). The stratified pumice breccias or tuffs of the central peak, which correspond to the broader Efate Pumice Formation, are matched by the tuffs on Lelepa Island within which Fels Cave has developed. The protective coral cap on the central peak, which reaches a peak of about 90m, is composed of calcirudites of the Reef Limestone Formation (Ash et al 1978: 13).

## 1.6. The Boundaries of Chief Roi Mata's Domain (CRMD)

Over the course of five months' consultation with the community, it was agreed that the proposed World Heritage boundary should encompass the three principal sites – Mangaas, Fels Cave and Artok Island (also referred to as Eretoka or Hat Island) – and the seascape in between. This decision was made for both practical and political purposes. It was considered best to limit the property to the three key places within the Lelepa region that bear a close or tangible connection to Chief Roi Mata. Roi Mata's influence extends well beyond these three places, taking in the whole of Efate and much of the Shepherd Islands to the north, and there are many places within this broader landscape that contribute to the 'Roi Mata Story', but the three chosen sites are widely regarded as central to Roi Mata's life and death.

The boundaries of CRMD have also been defined to ensure the enduring protection of the property and its values in the face of local politics. The politics of individual land ownership within the Lelepa region is extremely complex, and therefore the boundary of the proposed World Heritage property has been limited to an area for which chiefly authority can guarantee long-term protection. Extending the boundaries of the World Heritage area to include the wider landscape would involve an endless process of negotiation with hundreds of individual landowners.

## 1.7. The Buffer Zone

The buffer zone has been defined on the basis that it serves both as a 'contextual landscape' and as a 'visual catchment' for CRMD. The 'visual catchment' for CRMD includes most of the visible areas seen from the top of the plateau on Artok Island. The chiefs of the Lelepa region have given their assurance that they will strive to protect this broader landscape according to the conditions laid out in this Plan of Management.

## 1.8. Key to Understanding Features of this Document

Certain terms found in this document are written in the local Lelepa language and / or in Bislama (a mostly English-based pidgin spoken throughout Vanuatu). Lelepa language terms are prefaced here by the letter 'L' and Bislama terms by the letter 'B'. Such terms are always italicised. Species names for both flora and fauna are always underlined.

There are some 189 cultural sites located within CRMD and the broader Lelepa region and registered at the Vanuatu Cultural Centre. Not all of these sites have been plotted on the maps prepared for this Plan of Management. For locational and descriptive information about the sites mentioned in the body of this document the reader is directed to the 'Roi Mata Cultural Site Management System' (forthcoming), where a site search can be undertaken.

The Plan of Management is divided into 8 parts. Part 2 outlines the current managerial arrangements for CRMD under the Chiefs, landowners and WHTC of the Lelepa Region. Part 3 summarises the types of protection that are available to CRMD, including customary forms of protection (through the concept of *nafsan natoon*) and national levels of protection (as provided by Vanuatu's legal system). Parts 4 and 5 provide an overview of the cultural and natural features of CRMD, bringing into focus the values of the property and potential threats to these values. Part 6 defines the local and international values of the CRMD as a whole, culminating in a Statement of Significance. Part 7 presents the Action Plan for addressing the long-term management



of both the cultural and natural values of CRMD. [Part 8](#) summarises the field-based conservation programme that has been initiated within CRMD to protect and manage the physical remains found on the property that embody its outstanding universal values.

### **1.9. Acknowledgements and Contact Information**

The World Heritage and Tourism Committee and the Vanuatu Cultural Centre wishes to thank UNESCO, the Australian Government Department for the Environment and Heritage, Asia-Pacific Focal Point for World Heritage, the Australian National University, AusAID, and Peace Corps for financial and in-kind contributions to this project. Antony Bright and Jenny Sheehan of the ANU Cartography Unit are thanked for preparing the maps that appear throughout this document. For further information about the contents of this Plan of Management please contact:

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## Part 2: Management of CRMD

### 2.1. Guiding Principles for the Management of CRMD

Over the course of the consultative workshops, during which the 'cultural and natural values' of CRMD were defined, members of the Lelepa region community produced a list of 'guiding principles' for managing CRMD. This is the community's statement, or vision, for ensuring that CRMD is looked after in a way that will satisfy the views of the broader Lelepa region community:

"The chiefs and custodians of Mangaas, Fels Cave and Artok Island, and the people of the Lelepa region, are responsible for 'looking after' (L: *pkalea*; B: *mas lukaotem gud*) CRMD. Our principles include the following:

1. protection of the cultural and natural values of Artok Island, Mangaas and Fels Cave according to (L) *nafsan natoon* (local lore; B: *wan toktok we hemi stap*);
2. recognition of the value and importance of customary systems of management of CRMD and utilisation of these systems wherever possible;
3. compliance with international standards for protection of CRMD, as specified in the *Operational Guidelines for the Implementation of the World Heritage Convention*;
4. co-management of CRMD as a (L) *tuvirou* (joint venture; B: *yumi evriwan*) by the people of Natapau and Mangaliliu;
5. promotion and protection of the values of CRMD through a community project of sustainable cultural heritage tourism;
6. maintenance of subsistence activities (e.g. gardening within the buffer zone at Mangaas) while simultaneously taking measures to ensure the protection of the cultural and natural heritage features located within CRMD;
7. achievement of autonomous community management of CRMD;
8. delivery of benefits from CRMD across the entire community."

This *Plan of Management for CRMD* has been designed around these guiding principles, which provide the necessary framework for protecting the cultural and natural values of the property.

### 2.2. Decision-Making within the Lelepa Region

Decision-making within the Lelepa region is vested in the power of the chiefs. Within this chiefly system, two 'paramount' chiefs – one from each of the two main communities – Lelepa Island and Mangaliliu – have the power to override the decisions of all other chiefs. The contemporary chiefly system is hereditary and generally founded on father-son succession. An alternative principle of succession refers to the *naflak* system whereby chiefly titles are assumed through the maternal line. This usually requires that a title pass from a male chief to his sister's first-born son (see Section 2.A.ii.c. of the nomination document for CRMD for an explanation of the *naflak* system and its relationship to Chief Roi Mata).

### 2.3. The Chiefs of the Lelepa Region

The twelve principal chiefs of the Lelepa region (with their traditional domains identified in brackets) are:

1. Chief Mwasoe Pongi (Tukutuku)
2. Chief Kalkot Murmur (Mangaliliu)
3. Chief Meto Kalotiti (Mangaas and Artok Island)
4. Chief Napengau (Fatekau)
5. Chief Arier (Creek Ai / Aluk)
6. Chief Tongolumanu (Faterana and Leosa)
7. Chief Ti Fate (Samoa Point)
8. Chief Patok (Sukulukul)
9. Acting Chief Atafsaru (Lelepa Island)
10. Chief Fartepar (Alpat)
11. Chief Mosongo (Mangaruariki)
12. Chief Mantae (Sifiri)

Together these individuals comprise the Lelema (Lelepa – Mangaliliu) Council of Chiefs, which meets regularly to discuss village issues.

### 2.4. The Chiefs and landowners of CRMD

Within the proposed World Heritage area (CRMD) the 2 'paramount' chiefs are currently Acting Chief Atafsaru (L: *ataf* of recently deceased Chief Natematesaru) and Chief Kalkot Murmur (Mangaliliu). The four landowners of CRMD are Chief Meto (Artok Island and Mangaas), Chief Kalkot Murmur (Mangaas), Chief Pierre Fartepar (Mangaas and Fels Cave), and Mr Kalfau Palinga (Mangaas). The research team for the Roi Mata World Heritage Project has worked closely with each of these landowners. In an expression of their long-term commitment to this project, the landowners have approved the formation of the World Heritage and Tourism Committee (see below)



a.



b.



c.



d.



e.

Figure 3: Chiefs and landowners of CRMD.  
a. Chief Kalkot Murmur b. Chief Atafsaru c. Chief Meto  
d. Kalfau Palinga e. Chief Fartepar

to look after their interests and to inform them of all decisions made in relation to CRMD. Continued consultation with these landowners in relation to all decision-making associated with CRMD is essential to maintain compliance with the second and fourth guiding principles for managing the property. These principles relate to the recognition of, and compliance with, customary systems of management, and the importance of co-management between the rightful custodians from the two governing villages of Mangaliliu and Natapau (see section 2.1.).

The landowners of CRMD are keen to use the property as a means of demonstrating that *kastom*-owned land can be used for sustainable development and can enhance self-reliance. As a gesture towards a more traditional system of land-use, the landowners are allowing the community to use CRMD for their locally-run tourism business in exchange for an annual payment of tribute (L: *nasaotonga*). The community-based tourism company 'Roi Mata Tours' will pay *nasaotonga* to the landowners of CRMD in exchange for taking tourists to Mangaas and Fels Cave (and potentially Artok Island) as part of the 'Roi Mata Cultural Tour' (see Greig 2006).

## 2.5. The World Heritage and Tourism Committee (WHTC) for the Lelepa Region

The World Heritage and Tourism Committee (WHTC) for the Lelepa region is composed of individuals whose role is to manage and protect the different components of CRMD (the proposed World Heritage area). The WHTC is a joint initiative between the residents of Lelepa Island and Mangaliliu, and therefore fulfills with the fourth guiding principle for the long-term management of CRMD which specifies that the property should be co-managed (see section 2.1.). In accordance with this principle each position within the committee (e.g. Tourism Manager) has a representative from both villages (Natapau on Lelepa Island and Mangaliliu on Efate). There are currently several external advisors to the committee – the Vanuatu Cultural Centre (currently represented by Martha Yamsiu Kaltal), and two volunteers (Ted Miller, Peace Corps; and an AusAid Youth Ambassador) who have been assisting with the process of nominating CRMD for World Heritage Listing. The Vanuatu Cultural Centre will play a permanent advisory and mediating role for the WHTC, while the volunteers shall serve on the committee only until the WHTC regards itself as an autonomous and well-established management body.

The committee serves two main functions: as a *heritage monitoring body* to ensure the protection of CRMD and its proposed buffer zone, and as a *tourism management team*, whose aim is to implement the action plan for a community-based tourism project within CRMD (Greig 2006). The structure of the committee (see diagram below) is such that both the *heritage* and *tourism* management requirements for CRMD are met. One of the principal selection criteria employed in selecting the members of the committee was that the two individuals chosen for the roles of Chair and Vice-Chair



must be experienced in cultural heritage-related matters, as the heritage protection of the property is the committee's main priority.

## 2.6. WHTC Members

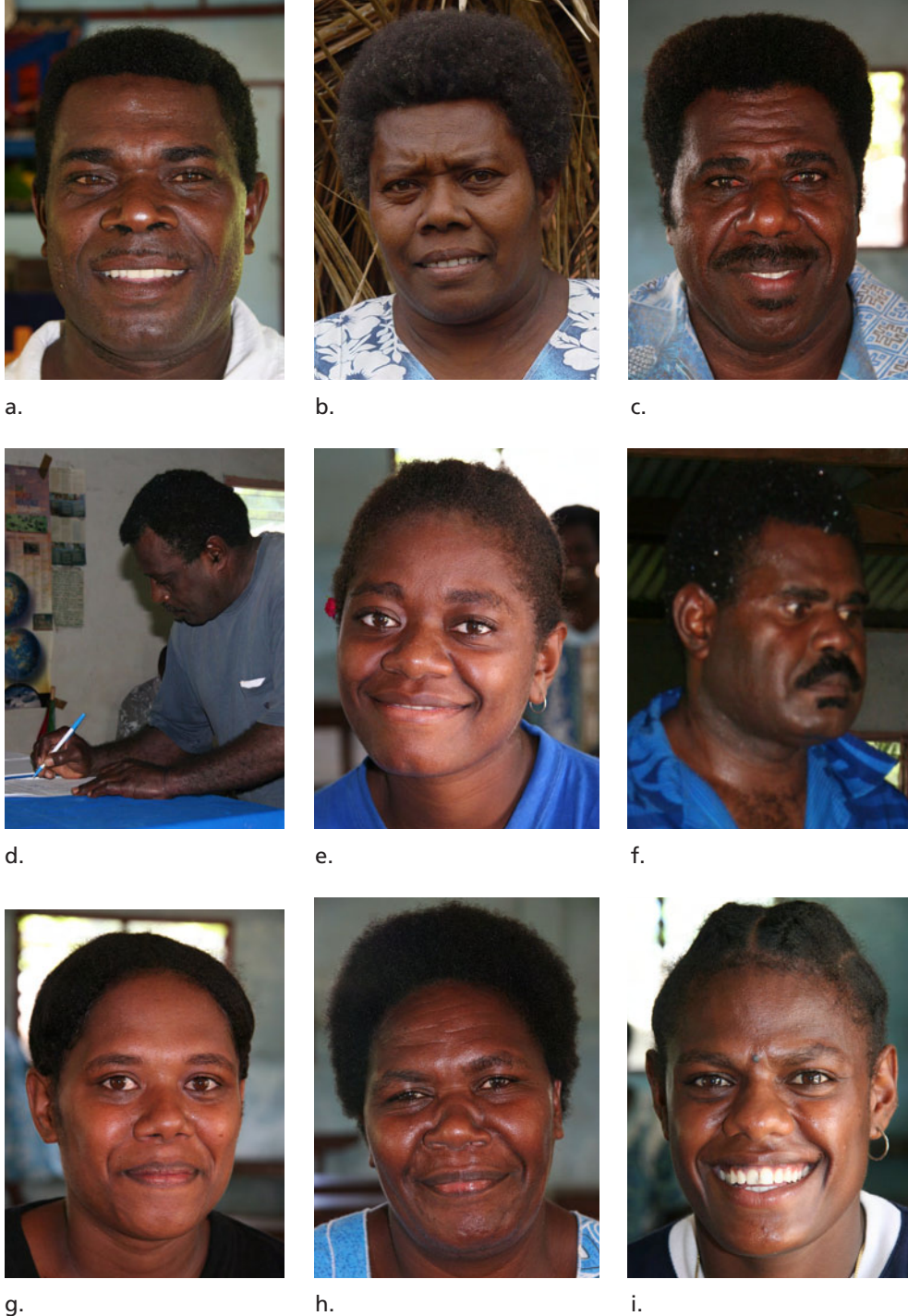


Figure 4: Members of the World Heritage and Tourism Committee

a. Douglas Kalotiti (Chair); b. Leisara Kalotiti (Chair); c. Richard Matanik (Tourism Manager, Lelepa Island); d. Pakoanaon Lore (Tourism Manager, Mangaliliu Village); e. Hellen Micah (Human Resource Manager, Lelepa Island); f. Warry Jimmy (Human Resource Manager, Mangaliliu Village); g. Salome Max (Finance Manager, Lelepa Island); h. Dolsi Sapua (Finance Manager, Mangaliliu Village); i. Ruth Roberts (Understudy for Hellen Micah)

The members of the WHTC appointed in December 2005 are:

Position	Lelepa representative	Mangaliliu representative
Chair/Vice-Chair	Douglas Kalotiti (Chair)	Leisara Kalotiti (Vice-Chair)
Tourism Managers	Richard Matanik	Pakoanaon Lore
Human Resources	Hellen Micah	Warry Jimmy
Finance	Salome Max	Dolsi Sapua

Unless a conflict of interest arises with a particular member of the committee, or the committee as a whole votes for a particular member to be removed from the committee, or a person dies, resigns or leaves the community to reside elsewhere, these appointments are ongoing. In conducting its work the committee shall strive to represent the various components of the community – chiefs, elders, men, women and youth.

Each member of the World Heritage and Tourism Committee is to elect an understudy from the community who can replace them when absent and eventually take-over their role. As of March 2006, only one member – Hellen Micah – had selected an understudy, Ruth Roberts.

## 2.7. By-Laws of the WHTC

The WHTC has established a set of By-Laws to ensure the effective operation of the committee (Appendix C). On the 21<sup>st</sup> of March 2006, Pastor Urtalo from the Presbyterian Church of Vanuatu presided over the swearing-in ceremony of the World Heritage and Tourism Committee, witnessed by the chiefs and landowners of CRMD and around 150 invited guests.

Each member of the committee spoke the following words before signing a copy of the By-Laws:

*Mifala blong WHTC i agri blong protektem CRMD long behalf blong ol jif mo ol landona. Mifala i agri blong folem ol bi-laws blong mifala. Mifala i agri blong folem drim blong komuniti blong meksua se projek blong turisem hemi gohed olsem yumi evriwan i wantem.*

Mifala i agri long ol by-laws ia:		
Jeaman	Nem: Douglas Kalotiti Saen: [Signature]	Det: 21. March 2006
Vaes-Jeaman	Nem: Leisara Kalotiti Saen: [Signature]	Det: 21 <sup>st</sup> March 2006
Turisem Maneja	Nem: Pakoanaon Lore Saen: [Signature]	Det: 21 <sup>st</sup> March 2006
Turisem Maneja	Nem: Richard Matanik Saen: [Signature]	Det: 21 <sup>st</sup> March 2006
Human Risos Maneja	Nem: Hellen Micah Saen: [Signature]	Det: 21 <sup>st</sup> MRH 2006
Human Risos Maneja	Nem: Warry Jimmy Saen: [Signature]	Det: 21 <sup>st</sup> MRH 2006
Faenans	Nem: Dolsi Sapua Saen: [Signature]	Det: 21 <sup>st</sup> MRS 2006
Faenans	Nem: Salome Max Saen: [Signature]	Det: 21 <sup>st</sup> MRS 2006
Kalijoral Senta Representativ	Nem: Ralph Regenvanu Saen: [Signature]	Det: 21 <sup>st</sup> March 2006

Figure 5: The signatures of current members of the WHTC in acceptance of the WHTC by-laws

We of the World Heritage and Tourism Committee agree to protect CRMD on behalf of the chiefs and landowners. We agree to follow our by-laws. We agree to follow the dream of the community to ensure that the tourism project proceeds in accordance with everyone's wishes.

## 2.8. The Roles of Individual Members of the WHTC

Each member of the WHTC has expressed a commitment to look after CRMD according to the terms and conditions set out in this Plan of Management, with the goal of ensuring that tourism development and heritage protection proceed in unison. Each member has been assigned a number of key responsibilities to ensure the smooth and coordinated management of CRMD:

### 1. Chair and Vice-Chair

- ❖ Represent the WHTC of the Lelepa region at local and international forums;
- ❖ Facilitate the long-term protection of the cultural and natural values of CRMD and its buffer zone;
- ❖ Oversee the annual assessment of the monitoring points of CRMD;
- ❖ Maintain communication with the Vanuatu Cultural Centre, Shefa Province and UNESCO about committee decisions;
- ❖ Sign documents on behalf of the committee;
- ❖ Organise committee meetings, write meeting agendas and record meeting minutes;
- ❖ Assign tasks to appropriate members of the committee;
- ❖ Inform chiefs, landowners and the community about committee decisions;
- ❖ Maintain soft and hard copy records of all activities associated with WHTC.

### 2. Tourism Managers

- ❖ Develop and implement a business plan for the tourism project that takes account of the cultural and natural values of CRMD;
- ❖ Develop and implement a marketing strategy for the tourism project that takes account of the cultural and natural values of CRMD;
- ❖ Regularly update and review the business plan and marketing strategy for CRMD;
- ❖ Keep records of all business and marketing related contact between the Lelepa region and Port Vila (e.g. tourist numbers visiting the region);
- ❖ Decide which individuals / organisations to involve in the tourism business (e.g. National Tourism Office, Shefa Tourism Office, tour operators). Once these individuals and organisations have been invited to join the project and all necessary legal contracts between the various parties have been arranged, it is the responsibility of the Tourism Manager to maintain regular communication with each party and retain records of all communication and transaction between them;
- ❖ Work closely with Human Resources and Finance to make decisions about what actions / finances are needed to implement the tour

product;

- ❖ Attend local (and where possible international) tourism conferences and stay informed about local market trends.

### 3. Human Resource Managers

- ❖ Decide which categories of employment are required for the tourism project (e.g. Tour Guides);
- ❖ Write job descriptions for potential employees, advertise positions, undertake interviews and make final recruitment decisions;
- ❖ Brief all potential employees about the importance of protecting the cultural and natural values of CRMD;
- ❖ Ensure that the tourism operation runs smoothly and that all employees of the tourism project are on time for work;
- ❖ Write employee evaluations once a year;
- ❖ Deal with employee concerns / complaints;
- ❖ Seek advice from the WHTC on work performance issues associated with existing employees. The decision to remove an individual from a paid position related to tourism or heritage work conducted within CRMD should be made by the WHTC as a whole. A termination letter should be signed by each member of the WHTC.

### 4. Financial Managers

- ❖ Decide upon expenses of the tourism operation and establish a financial plan
- ❖ Keep good records of all finances (incoming and out-going payments), both in relation to heritage-related funds (e.g. from the World Heritage Fund) and the tourism project.
- ❖ Present financial summaries to the committee each month and discuss budget problems. Seek signed consensus from the committee on any price changes (such as the percentage of profits paid to Tour Guides, for instance).
- ❖ Distribute wages
- ❖ Write applications to fund cultural heritage and cultural tourism projects

## 2.9. Other Stakeholders

Apart from members of the local community, various other individuals and organisations have a vested interest in the proposed World Heritage area, such as local and regional government agencies, private tourism companies, and leaseholders. In order to ensure that all interested parties are aware of the objectives of the Roi Mata World Heritage Project a series of stakeholder meetings were held during the 2005 field season. One of the most important outcomes of one of these meetings was a suggestion by Shefa Province to draw up a Memorandum of Understanding (MOU) between the Vanuatu Cultural Centre, the research team, landowners and key stakeholders. Appendix D is a copy of the MOU that was sent out to ten principal individuals / organisations in Vanuatu who have a vested interest in the Roi Mata World Heritage Project. Signatures were obtained from the chiefs and representatives of each of the above listed organisations and government departments. A copy of the MOU has been deposited with the Vanuatu Cultural Centre.

The key stakeholders named in the MOU are re-listed below, along with an explanation for their stakeholder status<sup>1</sup>:



- 1) Chief Meto Kalotiti (Natapau Village): representative of the chiefs and landowners of the CRMD based on Lelepa Island;
- 2) Chief Kalkot Murrur (Mangaliliu Village): representative of the chiefs and landowners of the CRMD based at Mangaliliu;
- 3) Shefa Province Council: Provincial Council responsible for the protection of CRMD in accordance with provincial legislation. The Council has recently (April 2006) made amendments to its provincial zoning legislation to take account of the need to protect the cultural and natural values of CRMD and its buffer zone;
- 4) Vanuatu Investment Promotion Authority (VIPA): responsible for decisions made in relation to foreign investment in Vanuatu, including within the CRMD and its buffer zone;
- 5) Environment Unit: responsible for the protection of the natural environment of Vanuatu and the enforcement of the Environment Act (EU). The Unit has played a key role in defining the natural values of CRMD and will be instrumental in facilitating future training programmes relating to the protection of these values;
- 6) Department of Fisheries (DOF): responsible for regulating commercial use of Vanuatu's marine resources and for enforcing national compliance with Fisheries Regulations (recognised by the State Law Office as a legal document) which places restrictions on the harvesting of endangered marine species. The DOF will contribute to the development of a marine management plan for CRMD.
- 7) Department of Geology, Mines and Water Resources: responsible for assessing the effects of natural hazards and for monitoring the effects of sea level rise and land subsidence. The Department has already undertaken work in CRMD area as part of the Roi Mata World Heritage project and, pending funding, will establish monitoring stations on the property to assess the ongoing effects of geological and hydrological transformations that might pose a threat to the main cultural sites;
- 8) Ministry of Lands, Geology and Mines: responsible for regulating land use practices in Vanuatu and for proposing changes to national legislation concerned with land. The Ministry is important to the Roi Mata World Heritage Project for ensuring that the property is protected from commercial development that might threaten the values for which it is being nominated for World Heritage Listing. The Ministry oversees the operations of the Department of Lands.
- 9) The National Tourism Development Office: responsible for the regulation and promotion of tourism in Vanuatu. The NTDO will be kept informed of all activities relating to Roi Mata Tours (see Cultural Tourism Strategy for CRMD)
- 10) Physical Planning Unit, Provincial Affairs: falling under the auspices of the Ministry of Lands, this unit is responsible for zoning and development in Vanuatu;
- 11) Vaturisu Council of Chiefs: the council of chiefs for the Efate region, each member of which has a vested interest in the future protection of the physical landscape of CRMD and the legacy of Chief Roi Mata.

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<sup>1</sup> This stakeholder list has expanded since the MOU was signed in 2005. For example, the Department of Forestry (DOF) has played a leading role in the identification of tree species in CRMD and will be commissioned to undertake any future botanical survey or monitoring on the property. Future heritage or tourism projects undertaken within CRMD should be accompanied by an updated MOU that includes the Department of Forestry and other stakeholders that were inadvertently omitted from the original list.

## Part 3: Nafsan Natoon and the Law

### 3.1. Customary Protection of CRMD

During the 2005 consultative workshops, the chiefs and other participants agreed that customary protection is best defined by the local Lelepa expression *nafsan natoon*, which in English is equivalent to a form of 'local lore' (or in Bislama, '*wan toktok we hemi stap*'). *Nafsan natoon* refers to socially prescribed behaviour in relation to certain people, places and things. An individual who acts in opposition to *nafsan natoon* can face a number of sanctions, in the form of a punishment or a fine issued by a chief, illness, or (traditionally) even death – the latter generally attributed to the wrath of an offended ancestor spirit.

This Plan of Management marks an unprecedented attempt to document *nafsan natoon* associated with CRMD. CRMD is a continuing cultural landscape in which people's lives are still strongly defined by *kastom*. They talk softly around the banyan tree at Mangaas to avoid offending the spirit (L: *natkar*) of Roi Mata, which inhabits this area. They never visit Mangaas at sunset or sunrise when the spirits are most active. They avoid making noise around Roi Mata's grave on Artok Island. These are conventions that are learned by members of the community at a young age.

### 3.2. National Protection of CRMD

#### 3.2.1. Preservation of Sites and Artefacts Act (Chapter 39, Laws of the Republic of Vanuatu)

The Vanuatu Cultural Centre is currently in the process of securing the listing of CRMD under the *Preservation of Sites and Artefacts Act* (Chapter 39 of the Laws of the Republic of Vanuatu) to provide statutory protection in recognition of the values of CRMD and to guard against any potential future threats to the property. In Part II (2.1) of this Act, under 'Classification of Sites', it is stated that '*The minister may, after consultation with the Board of Management of the Port Vila Cultural Centre, classify any site of historical, ethnological or artistic interest which is in the possession of any person or body corporate domiciled in Vanuatu.*' The submission of the necessary documentation has already been made to the Minister for Internal Affairs (responsible for culture) to secure this protection order.

Once protection of Chief Roi Mata's Domain is enforced under this Act, '(e)very person or body corporate in possession of a classified site shall be bound to prevent such site being modified or undergoing any deterioration and shall inform the Minister of any change that is likely to take place in the condition or the ownership of such site' (Part II, Section 5). The Minister for Internal Affairs, who is responsible for culture, 'shall have a right of pre-emption' on the sale of the site (Part III (Section 6i), and '(a)ny person who commits an offence against the provisions of Parts II and III of this Act shall be liable upon conviction to a fine not exceeding VT20,000' (Part V, Section 9i).

#### 3.2.2. Environmental Management and Conservation Act No. 12 (2002)

The Vanuatu Cultural Centre is also in consultation with the Director of Environment about the scope for having CRMD registered as a 'Community Conservation Area' under the *Environmental Management and Conservation Act No.12 of 2002* (sections 35-40). Under section 35 of this Act there is a provision for the registration of a Community Conservation Area where the site '*merits protection under the Convention Concerning the Protection of World Cultural and Natural Heritage*'.

A 'Community Conservation Area' (CCA) is controlled by the rightful chiefs and landowners who, in consultation with the Environment Unit, are responsible for defining the rules by which an area should be managed. This Plan of Management for CRMD should provide the framework for the legal protection of the property as a CCA under the *Environmental Management and Conservation Act*.

### 3.3. Provincial Protection of CRMD

#### 3.3.1. Re-Zoning of the Northwest Efate Area

Since initial discussions concerning the Roi Mata World Heritage Project began in 2004, Shefa Province has been in the process of developing plans to re-zone 'sensitive' areas of Efate to moderate the pace of land sales on the island and to restrict unsustainable forms of development. The area of Chief Roi Mata's Domain and its buffer zone falls into the category of a sensitive area and will thus be protected from major development under Provincial legislation.

### 3.4. National Policies and Legislation Protecting Specific Cultural and Natural Features located within CRMD

While each of the pieces of legislation described above facilitates the protection of the CRMD as a whole, other national policies and statutes offer protection against misuse or exploitation of specific cultural and natural features located within the property. For instance, the Vanuatu Cultural Research Policy protects the CRMD from unethical research being practiced in CRMD, and the Wild Bird (Protection) Act provides protection from unlawful hunting of rare and endangered endemic bird species found on the property. Policies and legislation considered most relevant to the ongoing management CRMD are briefly summarised here.

#### 3.4.1 Vanuatu Cultural Research Policy

As stated on the Vanuatu Cultural Centre website, 'The Vanuatu National Cultural Council is responsible for cultural research in Vanuatu under Chapter 186, 6(2)(e) of the Laws of the Republic of Vanuatu. It is the role of the National Cultural Council to define and implement national research policies ... to define national research priorities, and to sponsor, regulate and carry out programs of research. The Vanuatu Cultural Centre is the executing arm of the National Cultural Council, and is responsible for implementing this Policy. As part of its function to regulate research, the National Cultural Council will determine whether it is desirable that a foreign national undertake research on a cultural subject in Vanuatu.' (<http://www.vanuatuculture.org/research/index.shtml>)

A copy of Vanuatu's Cultural Research Policy and Research Agreement can be found in Appendices F and G. This document is an important resource for the management of CRMD as it stipulates the conditions for undertaking all forms of cultural research in Vanuatu.

#### 3.4.2 Vanuatu's National Biodiversity Conservation Strategy

The National Biodiversity Conservation Strategy (NBSAP) is managed by the Environment Unit in Port Vila. This national environment policy deals with the conservation and management of all endemic species in Vanuatu, and is therefore an important reference for the long-term protection of the natural environment of CRMD. According to the Environment Unit website, the NBSAP has six main objectives:

- Protection and wise use of biodiversity
- Application of policy, planning and legal mechanisms to enable sustainable management of biodiversity
- Research, assessment and monitoring of biodiversity
- Capacity building for Environmental Management
- Environmental education, awareness and information sharing
- Participation of local communities in the management of biodiversity

(<http://www.biodiversity.com.vu/nbsap.htm>)

The Code of Ethics and Research Agreement for individuals wishing to undertake research on the flora and fauna of Vanuatu can be found in Appendices H and I.

### 3.4.3. Wild Bird (Protection) Act

([http://www.paclii.org/vu/legis/consol\\_act/wba219/](http://www.paclii.org/vu/legis/consol_act/wba219/))

The Wild Bird (Protection) Act (Revised Edition 1988), which currently falls within the jurisdiction of the Minister responsible for agriculture, lists a number of native bird species that have been identified in CRMD. Certain species may only be hunted at particular months of the year or with a permit that can be obtained from the Director of Agriculture. One bird species protected under these laws is the Incubator Bird (*Megapodius freycinet layardi*), which inhabits the island of Artok within CRMD. The Incubator Bird is today rarely found on the adjacent Efate mainland where it has succumbed to land clearance and hunting activities. A prohibition on the killing, wounding, capturing or removal of eggs of the Incubator Bird extends between 1 July and 31 March each year. Between 31 March and 1 July, it is unlawful to kill more than 10 Incubator Birds in one day. Contravention of the provisions of the Act can lead to a fine of up to 10,000 vatu and /or imprisonment for up to 8 days. Community awareness and local enforcement of this Act is listed as a crucial strategy for the protection of rare and endangered fauna found within CRMD (see section E.1, Part 7).

### 3.4.4. Environmental Impact Assessment (EIA)

Part 3 / Division 1 and Division 2 of the *Environmental Management and Conservation Act No.12 of 2002* (Consolidated Edition 2004) describes the legal process for requesting and undertaking Environmental Impact Assessments (EIAs). An EIA is required for '[a]ll projects, proposals or development activities that:

- (a) cause or are likely to cause significant environmental, social and/or custom impacts; or
- (b) cause impacts relating to the matters listed in subsection (2), ... [including activities that]:
  - (a) affect coastal dynamics or result in coastal erosion;
  - (b) result in the pollution of water resources;
  - (c) affect any protected, rare, threatened or endangered species, its habitat or nesting grounds;
  - (d) result in the contamination of land;
  - (e) endanger public health;
  - (f) affect important custom resources;
  - (g) affect protected or proposed protected areas;
  - (h) affect air quality;
  - (i) result in the unsustainable use of renewable resources;

- (j) result in the introduction of foreign organisms and species;
- (k) result in any other activity prescribed by regulation'

[Division 1, Section 12 (1 & 2)]

EIA legislation is referred to in the Action Plan (Part 7) as a necessary legal strategy for minimising the risk to the cultural and natural values of CRMD. Given the national and international significance of CRMD, all Ministries, Departments and Government Agencies must call for a 'preliminary assessment' of projects and developments proposed for the property to determine whether a full EIA should be undertaken [see Section 14 (1) of the *Environmental Management and Conservation Act*]. The Director of Environment may also send written notice to the relevant Ministry, Department, or Government Agency that a project application be referred to him/her for assessment of the need for an EIA [Section 15 (1)]. If the Director of Environment determines under section 17 that an EIA is required then he/she, in consultation with the custom landowners, must develop the 'terms of reference' for the EIA work to be undertaken [Section 19(1)]. Given that this Plan of Management articulates the management wishes of the custom landowners of CRMD and the broader Lelepa region community, the terms of reference for an EIA should closely follow the recommendations laid out in this document (see especially those listed in Part 7.). The Director of Environment is to ensure that EIA assessments of the proposed World Heritage property are automatically sought for all project proposals that potentially threaten its cultural and natural values (see Part 7, section C1).

A person who (a) undertakes an activity that is subject to an EIA, or who (b) undertakes an activity where approval has been refused as a result of an EIA, 'is punishable on conviction to a fine of not more than 1,000,000 vatu or to imprisonment for a period of not more than 2 years, or both.' [Section 24(3)]

### 3.4.5 Vanuatu Fisheries Regulations

<http://www.spc.int/coastfish/Countries/Vanuatu/vanuatu.htm>

The Fisheries Regulations (2004) provides a list of the species found within Vanuatu's waters that are protected under the *Fisheries Act No. 37 of 1982*. All of the species named in the Regulations inhabit the marine areas of CRMD. One of the most endangered of these is the Coconut Crab (*Birgus latro*), which has almost been poached to extinction on the island of Efate. The Coconut Crab is found in unusually high numbers on Artok, where it is protected by virtue of the *tapu* prohibitions associated with Roi Mata's gravesite, which prevents human settlement on the island. The long term protection of this species will benefit from strict adherence to the hunting restrictions imposed under *Fisheries Act No. 37 of 1982* (Subsidiary Act Cap 158, Part 4, Section 15), which states that:

15.2 No person shall harm, take, have in his possession, sell or purchase:

- a. any coconut crab carrying eggs; or
- b. any coconut crab which is less than 9cm in length

15.3 No person shall remove the eggs from a coconut crab or have in his possession, sell or purchase a coconut crab from which the eggs have been removed.

In accordance with Section 24, '[a]ny person who contravenes any of the provisions of this Part shall be guilty of an offence and liable on conviction to a fine not exceeding VT 100,000.'

## Part 4: Cultural Heritage of Chief Roi Mata's Domain

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In this section the tangible and intangible cultural heritage features of CRMD are described, providing a background context to the cultural issues that are to be dealt with in the future management of the property. Crucially, the intangible and the tangible features associated with Roi Mata's Domain are inextricably linked, and thus both need to be preserved in order to retain the integrity of this cultural landscape.

A full description of the sites and stories associated with the property can be found in Section 2 of the nomination document for the property (Ballard and Wilson 2006).

### 4.1. Chief Roi Mata

The great Central Vanuatu chiefly title of Roi Mata features in many oral narratives still told in the region. Although the title of Roi Mata was probably held by many individuals over a long period, the actions of chiefs bearing this title are often conflated and attributed to a single individual. The scope for this historical confusion has been enhanced by the fact that no-one has claimed the title for the last 400 years, after the death of the last Roi Mata in about 1600 AD and his burial on the forbidden (*tapu*) island of Artok.

Roi Mata might be said to exist in three different registers or genres:

- as a mythical or historical figure in oral narratives;
- as an archaeological or material presence; and
- as a living entity in contemporary Vanuatu.

### 4.2. The Mythical / Historical Roi Mata

Roi Mata features in a common core of legends – narratives that appeared to combine historically specific events with mythic exploits – that are widely repeated over a wide area of what is now Central Vanuatu. The “earliest” group of legends relates the arrival of Roi Mata as the captain of a canoe that approaches Efate from the south and lands at Maniora, the easternmost tip of the island. There, Roi Mata confers titles on the crew of his ship, and embarks on the settlement and control of much of Efate, installing chiefs amongst the indigenous inhabitants of Efate and its outlying islands, before establishing himself in northwest Efate. A contrasting series of legends posits an indigenous Roi Mata as a child living at various sites along the northwestern coast of Efate – many of these appear designed for an audience of children, in their emphasis on simple “just-so” narratives that account for the origins of his title (and those of his brothers Roi Muru and Roi Mantae), or in their relation of Roi Mata's childhood in the context of stories about diminutive autochthonous *mutuama* or *sangalengale*<sup>2</sup> characters.

Legends that may relate to the last holder of the Roi Mata title converge around three key episodes during his adult life. The first is Roi Mata's institution of the matrilineal or *naflak* system and the *natamwate* peace feasts as a means of settling the ‘Great Efate War’. The second is a specific adventure in which Roi Mata is blown off-course in his canoe to the island of Emae, in the Shepherd Islands to the north; unrecognised, he is held as a slave by Chief Ti Vaitini, until he brings down illness upon his hosts. The

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<sup>2</sup> These small mythical beings, the original pre-human inhabitants of the land, have a reputation for being wild and aggressive.

third key episode is Roi Mata's death. In the Shepherd Islands, Roi Mata's death is often attributed to his murder at the hands of his brother Roi Muru, who shoots him with a poisoned arrow. But in the Lelepa region, a more detailed and probably more plausible account describes Roi Mata visiting the settlement of Lou Patrou on Lelepa Island for a competitive *naleoana* feast, at which chiefs and their magic specialists or *munuwai* sought to outdo each other in the production and consumption of food. By now an old man, Roi Mata's powers appear to have deserted him, and he fell mortally ill after over-consuming at the feast. Carried into the cave at Fels, he died, and was then carried by canoe back to his residence at Mangaas.

Roi Mata's family and court, fearful of his extraordinary chiefly powers (*natkar*) even in death, opted not to bury him within his residential yard at Mangaas, but sought instead to acquire the right to bury him on the small near-shore island of Artok (or Eretoka). After being buried with members of his court and family, many of them alive at their interment, Roi Mata was left undisturbed on Artok for almost four centuries, as the island was declared forbidden land (*fanua tapu*).

#### Threats to the Mythical Roi Mata

According to the older generation of the Lelepa Region, stories about Roi Mata are recounted less frequently today. The strong emphasis on Christian teaching in the region has also impeded the process of passing on historical and *kastom* information. The Lelema Council of Chiefs has voiced concern about this issue and discussed plans to revive the community's interest in their local history.

### 4.3. The Archaeological Roi Mata

Following the lead of anthropologist Jean Guiart, who had documented Roi Mata narratives in Central Vanuatu (then the New Hebrides) during the 1950s, archaeologist José Garanger returned to the Lelepa region in search of possible archaeological traces of Roi Mata and his deeds<sup>3</sup>. Garanger conducted excavations at the three principal locations associated with Roi Mata in the Lelepa region: his residence or *natkon* at Mangaas (or Mangaasi) on the northwest mainland coast of Efate, the site of his death in Fels Cave on Lelepa Island, and his burial site on Artok Island. Garanger's excavations, together with subsequent excavations by a joint team from the Vanuatu Cultural Centre and the Australian National University, identified a late layer of occupation at Mangaas dated to between about 1450 AD and 1600 AD. This corresponds with a distinct black linear phase of painted rock-art, depicting male figures holding clubs and various marine and terrestrial animals, dated to around 1600 AD. At the third site, the burial site on Artok Island reputed to contain Roi Mata's burial, Garanger found a mass grave containing over 50 bodies arranged around a central figure lying in a deeper pit, the skeleton of an old man laid out in a chiefly pose and with his head resting against the base of a large basalt headstone. Recent re-dating of this burial suggests a date of about 1600 AD (Spriggs 2006). Dates from all three of the sites associated with Roi Mata thus converge on the period at the end of the 16<sup>th</sup> century, and support the notion that a historical figure bearing the title Roi Mata can be linked with each of these sites.

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<sup>3</sup> See Guiart (1973) and Garanger (1972) for overviews of the major works of these authors. See also Spriggs (2006) for a summary of the 7 field seasons undertaken at Mangaas by the ANU-VCC research team between 1996 and 2003.

### Threats to the Archaeological Roi Mata

The archaeological excavation undertaken by Garanger on Artok Island caused considerable consternation among the Lelepa region community as there were some major physical changes that occurred at the gravesite once the excavations were completed. Prior to the excavation the gravesite on the island is said to have been clear of vegetation. Leaves did not fall on the site and grass did not grow. This state of natural conservation was maintained by virtue of the sanctity of the gravesite area. Even though the skeletal material at the site was left almost entirely undisturbed during the excavation, the removal of grave goods and general disturbance caused to the grave area is thought to have incited the wrath of Roi Mata and led to the subsequent growth of vegetation at the site. Today this vegetation is cleared on a regular basis by the custodians of the island.

### 4.4. The Living Roi Mata

Many of the stories about Roi Mata that were told to Jean Guiart in the 1950s are still recounted in Central Vanuatu today, but their significance and importance has been augmented by the archaeological findings and by the continuing relevance of Roi Mata for disputes over the ownership of land.

Garanger's excavation of Roi Mata's burial at Artok provoked great interest amongst the communities of Efate, the local colonial community, and archaeologists internationally, and his public presentations of his results in Port Vila drew large crowds. Roi Mata featured in radio shows that told the story of his life and death, and in plays by the national theatre group, Wan Smolbag (Dorras and Walker 1992):

Roymata, Roymata, Roymata!  
Your name falls down the years  
And is remembered with great pride.  
Roymata! The man who brought peace  
To these islands!



Figure 6: The Koh-lanta set at Mangaas



Many ni-Vanuatu now identify the male figure in Vanuatu's coat of arms as Roi Mata, in his new guise as a national culture hero.

Since Vanuatu's independence in 1980, there has been a gathering boom in the long-term lease or effective sale of land by indigenous communities to foreign investors. Over 55% of the land on Efate has now been alienated or leased. In this rush for property, chiefly titles have proved crucial to claims over land, and a critical element in much of this dispute has been the role of Roi Mata's matrilineal (*naflak*) systems. Many of those seeking to stem the flow of land sales have appealed to the more communal *naflak* system as a means of preventing sales by individuals.

Finally, Roi Mata has emerged as an international figure through his appearance in the US reality television show, "Survivor", in 2004, which featured tales of his exploits and visits to his grave on Artok Island, and the French reality television show "Koh-lanta", shot during January-February 2006, which based itself at Roi Mata's residence of Mangaas.

#### Threats to the Living Roi Mata

The main potential threats to the living Roi Mata and his continued influence throughout Vanuatu fall into three categories: a) land leases, b) tourism and c) local land clearance and logging. The long-term lease of land on Efate to foreign investors has reached critical levels and was the subject of a National Land Summit in September 2006. There is now in train a concerted national effort to curtail this trend by committing the remaining unleased land to the Efate Reserve Park. Two strips of coastal land on Efate not yet sold include the Mangaliliu coastline – forming part of the proposed World Heritage area and buffer zone – and the area around Epau on the east coast of the island. Artok Island, which is currently under lease to an Australian Investor, is in the process of being returned to its custodians. The owners, who live on the island of Lelepa, have recently sent a 'Notice Before Forfeiture' to the investor expressing their desire to have the lease terminated.

Prior to the Roi Mata World Heritage Project, tourism in the Lelepa region was infrequent and unregulated. In developing the Roi Mata Cultural Tour (as part of the community-owned business 'Roi Mata Tours'), the challenge for the community mostly concerns fiscal management; ensuring that commercial profits arising from CRMD are equitably shared amongst the community (see Guiding Principle 8, Section 2.1). The community also needs to ensure that 'tourism development' and 'heritage protection' are not competing factors. Instead they need to mutually enhance one another in the promotion of the cultural and natural values of CRMD and the protection of the memory and legacies of Chief Roi Mata.

Physical damage to the main sites through local land clearance and logging within CRMD has been minimal, but given that several remnant trees located within the proposed World Heritage area at Mangaas continue to play a central role in the veneration of Roi Mata (see below), physical disturbance of the botanical ecosystems of this area could pose a significant threat.

#### 4.5. Chief Roi Mata's Domain

Chief Roi Mata's Domain encompasses much of the Lelepa region, the entirety of which was formerly his chiefly domain. The property being nominated for World Heritage status as CRMD represents a marginal reduction of the total area of the Lelepa region. The three

principal sites associated, respectively, with the life, death and burial of Roi Mata form the core of the World Heritage-nominated property. These three principal sites are:

- the abandoned mainland settlement site of *Mangaas*, which was Roi Mata’s personal residence;
- the cave of *Fels*, on Lelepa Island, where the old Roi Mata drew his last breath; and
- the small nearshore island of *Artok*, where he was buried together with over 50 members of his family and court.

Around these three principal sites a buffer zone is defined on the basis of the “visual catchment” of Artok Island (see Figure 2).

#### 4.5.1 Mangaas – Roi Mata’s Residence

The site of Mangaas (or Mangaasi) is renowned as the former residence of the paramount Chief Roi Mata. It is also one of the most significant archaeological settlement sites in the Pacific region. Mangaas is located on the northwest coast of Efate, about 1.8 km to the east of Mangaliliu Village. Access to the site is by road, via Roao Primary School (near Mangaliliu), and then 100m by foot.

#### Visible Features of the Mangaas Site

This section reviews the most significant visible features of the Mangaas site (Figure 7) and assesses the extent to which these features might be under threat. For a detailed description of the history of development of Mangaas, reference should be made to the accompanying World Heritage nomination document for CRMD (Ballard and Wilson 2006).

#### Mwalakot – Roi Mata’s beach landing

Mwalakot is the beach landing area immediately in front of Roi Mata’s residential area at Mangaas. The name Mwalakot is so widely known through Central Vanuatu

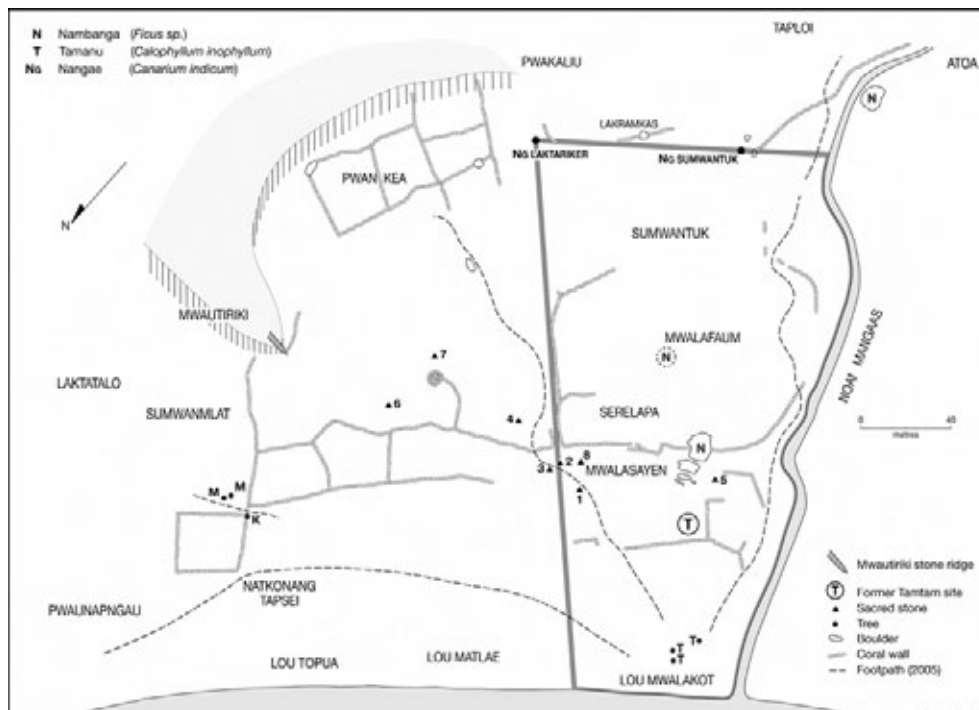


Figure 7: Mangaas, showing the locations of significant features at the site



**Figure 8: View of Mwalakot, with canoes in the foreground and the ancient tamanu trees in the background**

that it is often employed as a synonym for Mangaas in oral narratives. The entrance from the sea to the thin passage through the fringing reef is bordered on either side by massive coral heads, identified by name as Likanas (“the breasts of the shark”). Chiefs of Mangaas, from Roi Mata to the present day, have exercised right of way over this passage, and others landing at Mwalakot will pull their canoes to one side on the beach to allow direct access for the chief’s canoe. The landing area, Lou Mwalakot, is shaded by several massive trees, including three ancient tamanu (*Calophyllum inophyllum*) trees, said to have been planted by Roi Mata, two large casuarinas (*Casuarina equisetifolia*), a *Hernandia nymphaeifolia* and a *Pouteria costata*. Immediately to the west of Lou Mwalakot is the mouth of the small but energetic stream, Nwai Mangaas.

#### **Threats to Mwalakot**

According to various accounts from members of the Lelepa region community, Mwalakot was Chief Roi Mata’s resting place. Today the beach is considered sacred and is respected because of its historical connection to Roi Mata, but it is not characterised by the same restrictions or rules that apply to the banyan at Mwalasayen or the canarium tree at Sumwantuk (see below). For instance, it is permissible for local youths to clamber over the branches of the tamanu trees and play amongst them, which they do on a regular basis. There are, however, several unforeseen factors which may threaten the strength of the trees, such as cyclones and accidental fires (see Part 5 for more information on the impact of natural disasters on the sacred trees of CRMD).

Uncontrolled removal of sand at Mwalakot for inclusion within house constructions also poses a potential threat to the area, and may weaken the trees if the root structures are impacted upon, or expose them further to storm surges.

#### **Mwalasayen – the public dancing ground**

Mwalasayen is the area immediately inland from the beach landing of Mwalakot, and is dominated by an ancient and very large banyan (*Ficus subcordata*). Between the



Figure 9: View of the base of the banyan at Mwalasayen

banyan and Mwalakot is a level area identified as the *mwalala* or dancing ground of Mwalasayen, which includes the former location of the standing slit drums (L: *napwea*; B: *tamtam*) that were beaten to accompany dances. The banyan of Mwalasayen towers over the surrounding forest canopy and is clearly visible when approaching Mangaas from the sea. The banyan, which is commonly attributed to the time of Roi Mata, was planted on an even older stone wall, which now appears to be swallowed by the banyan's roots, only to emerge again on the far side of the tree. It is unlikely that the banyan would have been planted after the death of Roi Mata and the abandonment of the settlement in about 1600 AD. The banyan's age is thus probably in excess of 400 years.

#### Threats to Mwalasayen

During the cultural workshops and interviews conducted in the Lelepa region during 2005, people expressed their fears in relation to the banyan at Mwalasayen, which is believed to embody the chiefly power (L: *natkar*) of Chief Roi Mata. Intangible links to the spirit of Roi Mata still exist at the site of the banyan, such as the resident wild fowl (*Gallus gallus*) spirit which is said to crow from the centre of its extensive aerial root system. The connection between the *natkar* of Roi Mata and the banyan keeps many members of the local community away from the tree, which is believed to have the power to cause illness or death should an individual behave inappropriately within its vicinity. Those who venture near the tree speak softly, and many will not come within 15 metres of its base. Pregnant women are advised to avoid the place altogether.

There are two potential threats to the sacredness of the banyan: a) an attenuation of the respect accorded the site, which might occur if the youth of Lelepa and Mangaliliu are not informed by their elders of the social rules associated with the site; and b) a lack of sufficient regulation of tourists. Issues pertaining to potential natural threats to the tree (e.g. cyclone, fire) are canvassed in Part 5 (Natural Values).

#### Sumwantuk and Mwalafaum – Roi Mata's own residence and dancing ground

Immediately inland from Mwalasayen there formerly stood a second banyan, apparently of a similar antiquity though not as large as the banyan at Mwalasayen. This second banyan, which was destroyed by an accidental fire in about 1976, marked the

area known as Mwalafaum, which was Roi Mata's residential yard. The area between the site of the Mwalafaum banyan and the giant *nangae* tree, known as Roi Mata's Nangae or Nangae Sumwantuk, is identified as Sumwantuk. Sumwantuk is said to have been the precise location of Roi Mata's personal house.

The respect accorded Sumwantuk and Mwalafaum by the local community is evident in the continued reluctance to garden in these areas. A *tapu* on gardening within the residential precinct of Chief Roi Mata has been in effect since he was laid to rest on Artok Island.

#### Threats to Sumwantuk and Mwalafaum

There are no immediate cultural threats to Nangae Sumwantuk, which is the only existing physical reminder of Roi Mata's former residence that requires long-term management and protection. As for the tamanu trees and the banyan at Mangaas, the health of the nangae is potentially threatened by cyclonic winds and fire, issues covered in Part 5 below.



Figure 10: *Canarium* (*Nangae*) at Sumwantuk



Figure 11: View of the gateway at Mangaas

### Stone Walls

The remnants or foundations of a system of stone walls are still visible across much of the Mangaas area, on either side of the Mangaas Stream. Coral boulder material for the walls was probably provenanced in the immediate vicinity from the enclosed areas and from the stretches of reef debris along the adjacent foreshore. At Mangaas, as on Artok Island and elsewhere in the Pacific region, it may be possible to distinguish between the earliest stone walls, laid out on an irregular curvilinear plan, and later more rectilinear enclosures forming a more regular series of square or rectangular enclosures. At Mangaas, the walls in the immediate vicinity of the banyans of Mwalasayen and Mwalafaum form an irregular curved enclosure, while the walls on the perimeter of the residential areas become increasingly rectilinear. One exceptional feature of the stone walls at Mangaas is an apparent gateway or entrance, formed by two in-curving sections of wall, which serve to break the largest and longest of the straight beach-ridge walls (the same wall on which the banyan at Mwalasayen is growing). This entrance may have been the formal means of access to Roi Mata's residential area at Mwalafaum and Sumwantuk. Most of the yards enclosed by stone walls at Mangaas are identified by name, and linked historically to particular chiefly titles within the court of Roi Mata. Most but not all of the yard names listed by Guiart (1973) are regarded today as accurate, and Garanger's preliminary mapping of the yard names onto specific enclosed plots at Mangaas has been an invaluable basis for the production of the map in Figure 7.

### Threats to the stone walls at Mangaas

From an archaeological perspective the stone walls tell an intriguing tale of the history of Chief Roi Mata, in particular that his residential yard appears to be encircled by earlier curvilinear walls while those outside are based on a later rectilinear pattern. From the perspective of the local community, however, the walls are an incidental feature of the period of Roi Mata and, unlike the banyan at Mwalasayen and the nangae at Sumwantuk, bear little or no influence on the day-to-day lives of the people of the Lelepa region. In many cases it is the archaeological research conducted at Mangaas between 1996 and 2003 and the survey work of the Roi Mata World Heritage Project that has drawn the attention of local residents to the walls, which

have otherwise gone largely unnoticed for several decades. Therefore the main threat to the stone walls at Mangaas is a lack of knowledge amongst certain sectors of the community (particularly the younger generation) about their presence and location.

#### **Sacred (magic) stones**

Scattered throughout the Mangaas area are sacred stones, often of exotic geological provenance and portable in size, and commonly either spheroid or slab-like in shape. At least eight such stones have been identified in the area immediately surrounding Mwalasayen and Mwalafaoom at Mangaas (Figure 7). Although they have been lying in bushland for almost four centuries, these stones, which are associated with the period of Roi Mata's residence at Mangaas, are still regarded as extremely powerful and treated with profound respect by the community.

The local and historical meanings of the various sacred stones at Mangaas tend to be known by the chiefs and their closest associates, and by a select number of the elderly members of the Lelepa Island community. During the cultural workshops and one-on-one interviews held in 2005, some people gave the impression that it would be better if information about these stones is not widely shared because it may result in their physical disturbance. The memory of Mwautariu, a magic stone located on Lelepa Island that was stolen and exported overseas, is at the forefront of people's minds (see section 5.6 below).



**Figure 12: Sacred stone #5 at Mangaas**

Most of the stones are located in the buffer zone at Mangaas, but there is one stone (stone #5) located close to the banyan at Mwalasayen that is referred to by members of the local community as Roi Mata's personal magic stone. This stone has been selected for long-term monitoring (see Part 8).

#### **Threats to the sacred (magic) stones**

The main threat to the sacred stones at Mangaas is the opening up of the area to tourists. Until recently, the locations and meanings of the stones were unknown to most members of the local community, a situation which has partly facilitated their conservation.



Figure 13: View looking out of the entrance of the cave

#### 4.5.2 Fels Cave – Roi Mata's Death

Fels (or Feles) Cave is held to be the site at which Chief Roi Mata drew his last breath, having crossed to the island of Lelepa from his residence at Mangaas in order to attend a *naleoana* feast. Falling ill after the feast, he was taken to Fels Cave, where he died. From the mouth of the cave, one looks across directly to the island of Artok, where Roi Mata was subsequently buried. Myths from other areas of Central Vanuatu also identify Fels Cave as the primary residence of the first holder of the Roi Mata title and recount how he would open and close behind him the rock wall at the mouth of the cave by striking it with two enchanted sticks.

The Lelepa language term 'Fels' is related to the Nakanamanga term *falesa*, meaning simply 'cave'. Fels Cave is a massive circular chamber with inner walls covered in ancient paintings and engravings. While there is no contemporary knowledge of the significance of the art, some of the paintings have been AMS radiocarbon dated to the time of the last Roi Mata at about 1600 AD. Elders in the Lelepa community have voiced the opinion that one or more of the large painted figures of armed men, which are drawn in the same style and within the immediate vicinity of the dated paintings, may be depictions of Roi Mata himself.

Today, many members of the local community are reluctant to visit Fels Cave, for fear of the power of Roi Mata and also the spirit beings that are currently said to inhabit the place. One participant at the women's cultural values workshop at Mangaliliu Village, Lily Kalotiti, commented that she experiences a feeling of 'heaviness' when she is at Fels Cave, and physically shuddered at the recollection of the place. Other informants confirmed that Lily is not alone in her response.

#### Visible Features of the Fels Cave Site

The rock-art at Fels Cave consists of a diverse range of painted and engraved images. Several cases of superimposition have been recorded, offering some insight into the sequence of stylistic and technical changes at the site. The black painted motif range includes numerous figurative forms, including birds (resembling roosters), fish and various dynamic anthropomorphic figures with flexed limbs, as well as a range of





Figure 14: Black charcoal rock-art at Fels Cave

non-figurative designs, including chevrons and complex rectilinear motifs incorporating diamonds and triangles. The most common engraved motifs at the site include the 'cupules' (circular depressions, which are found in various configurations, including vertical and horizontal rows), semi-circles, straight lines and elaborate ovoid forms embellished with outer rays and internal spokes. Some engravings have been infilled with black pigment. There is also a small range of red painted rock-art at the site, including hand-stencils, 'blotches' (mostly

circular, and configured in either lines or groups), a zigzag, and a flexed-limbed anthropomorph.<sup>4</sup>

For a detailed description of the history of Fels Cave, including post-colonial visits to the site by missionaries and the crews of visiting ships in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries which are recorded in the engraved graffiti at the site, reference should be made to the accompanying World Heritage nomination document for CRMD (Ballard and Wilson 2006).



Figure 15: Engraved rock-art at Fels Cave

<sup>4</sup> More detailed information about the rock-art images at Fels Cave can be found in Wilson (2002)



Figure 16: View of Artok Island

### Threats to Fels Cave

The main threats to Fels Cave and the rock-art are being caused by a combination of visitor impacts and natural processes. Both foreign visitors and local residents have been responsible for the addition of graffiti to the walls of the site, although this is generally contained within an area close to the entrance of the cave and away from the traditional rock-art. The most significant natural threat to Fels Cave is seismic activity, the primary cause of large stone block collapse. A mound of rubble that partially obstructs the entrance of the cave is the result of a major earthquake that impacted the site in January 2002. Fortunately most of the rock-art is located on the stronger stone surfaces towards the middle and rear of the cave that are less susceptible to earthquake damage. Natural processes affecting the rock-art include gradual pigment loss as a result of natural surface exfoliation and a build up of salts.

### 4.5.3 Artok Island – Roi Mata’s Burial

The small coral island of Artok is renowned as the burial place of the last holder of the chiefly title of Roi Mata. Archaeologists now consider that this last Roi Mata was buried at about 1600 AD, some 400 years ago. Ever since the time of his burial, Artok has been *fanua tapu*, or a sacred island, and it has been forbidden to garden or sleep there. Known as Retoka, or Eretoka more widely through the Efate and Shepherd Islands region, the name Artok is characteristically contracted in the local language of Lelepa. The island’s distinctive shape has always attracted the attention of European voyagers, such as Captain Cook in 1774 (Beaglehole (ed.) 1969). Its European name, Hat Island, was given to the island by Captain Erskine of HMS *Havannah* in 1849 (Erskine 1853), and derives from its distinctive shape.

### Visible Features of Artok Island

#### Roi Mata’s Gravesite

The site of Roi Mata’s grave (referred to as *Matogon Roi Mata*) is marked on the surface by two large and several smaller headstones and several large shells. The grave is about 50 m from the southern coast of Artok Island, facing the mainland. A line of stones approximately marks the irregular perimeter of Garanger’s 1967 excavation. Most of these stones, together with the resurrected headstone, were set up by the excavation foreman, Johnson Napengau (now of Mangaliliu Village), once the excavation was completed.

### Threats to Roi Mata’s Grave

During the consultative workshops and interviews, there was a general consensus of opinion amongst the local community regarding threats to the gravesite. There



Figure 17: Southern side of Gravestone #2, beneath which lies the body of Chief Roi Mata

is widespread dissatisfaction about the excavations that took place at the site in the 1960s, as these are thought to have offended the spirit of Roi Mata and led to the re-growth of vegetation across the site. Prior to the excavations people recall the area as being clear of vegetation, reflecting the power of the site.

The community is also concerned about the possibility of people (such as tourists) failing to follow certain behavioural rules when visiting the island. People of the Lelepa region are always cautious about visiting Artok Island for fear that they might unwittingly offend Chief Roi Mata. On the rare occasions that people do visit, they abide by *nafsan natoon*. They speak softly on the island, and are particularly cautious not to use the name 'Roi' in a flippant or disrespectful manner. Offending Roi Mata while visiting Artok Island is said to incite the Chief's wrath, who as punishment will summon up huge seas to prevent the offender from returning to the mainland. The opposite, however, can also occur if an individual pays their respects to the chief at his burial site. Roi Mata has the power to quell rough seas, providing a smooth passage back to the mainland.

Two further activities that are viewed as potential threats to Artok are: increased tourism, which will occur once the island is returned to its custodians and incorporated into the Roi Mata Cultural Tour; and vandalism of the headstones and grave goods (either by local residents or tourists).

### Other Grave Sites

Several other grave sites or possible grave sites have been identified on Artok Island. The most obvious of these (Burial Site A) is located approximately 400m along the coast to the south and west of Roi Mata's grave site, and is marked by a series of stone slabs of identical material to that used at Roi Mata's grave. The 1996 VCHSS survey also identified unusual alignments of cycad trees to the north and east of Roi Mata's grave, under which stones aligned in rectangles may denote the presence of additional graves. The 1996 survey attempted a brief test excavation of Burial Site A, but the excavation was abandoned at a depth of 34cm when a large patch of charcoal was encountered (Batick 1996). No artefacts were recovered from the fill above this level.

### Stone Wall Field System

The stone wall field system on Artok Island covers most of the level areas of the island's surface above the 5m mark. This includes the low-lying coastal platform as well as the top of the island plateau. Strictly speaking, these walls are composed of corraline blocks, rather than stone, all of the material for the walls being found on the island's surface, within a few metres of the walls. The areas of smaller enclosures and more irregular, curvilinear walls probably represent the earliest elements of the field system. The larger enclosures, within straight, rectilinear walls, are probably more recent extensions. On Artok Island, these walls extend from the coast inland towards the central "spine" or ridge of the coastal lowland.

Most of the stone walls consist only of the wall foundations, with scatters of coral blocks on either side deriving from the collapsed walls. These stone walls are presumed to have marked off the holdings of different landowning individuals or families, and would have enclosed both residential yards, with houses, and garden areas. The presence of stone walls on top of the central plateau suggests that this area may also have been selected for defensive purposes, as access to the plateau is via very steep slopes. Along the coastal platform, one obvious benefit of piling stones up in large walls was to remove stone from the enclosed areas, "ponding" the thin soils and creating gardens. There also appears to have been a system of larger perimeter sea-walls, erected to ward off high seas. Beyond these perimeter walls, the absence of any surface soil is immediately apparent. A limited area of stone walling in the vicinity of Ernie Reid's bungalow site is visibly more modern than the other walls, and almost certainly represents walls built for Ernie Reid by his Mataso Island labourers.

### Rockshelters

At least four substantial rockshelters have been identified on Artok Island, each with evidence for use and occupation. None of the shelter deposits has yet been tested for depth of cultural deposit. These shelters are likely to have been used on a casual basis by gardeners, during the period when Artok was occupied, and by hunters or fishermen visiting the island after 1600 AD. However, they may be a useful means of establishing or confirming the presumed antiquity of use of the island.

### Threats to the graves, stone walls and rockshelters on Artok Island

There are no imminent threats to the main cultural features on Artok, particularly as

tourism has not yet commenced on the island. However, a pathway across the island that cross-cuts one of the ancient stone walls is a reminder to the community about the need for community awareness and careful management planning if activities such as tourism are to occur in the future.

### Significant Trees

Two categories of tree on Artok Island are particularly important: the sacred cycad trees (*Cycas seemannii*; B: *namele*), associated with Chiefs, which are thickly distributed throughout the northwestern coastal lowland area, and appear in some areas to be aligned with each other; and a casuarina tree situated on the southern tip of the central peak. This casuarina tree, which juts out from the edge of the central peak, is visible from Lelepa Island, and is known as Nafsing For. Particular individuals on Lelepa still possess the knowledge required to foretell the weather and, in particular, the ability to predict the occurrence of major cyclones, on the basis of the passage of the setting sun in relation to Nafsing For.

### Threats to the significant trees on Artok Island

Each of the trees on Artok is potentially threatened by fire and wind damage, issues dealt with in greater detail in Part 5 of this document.

### European Constructions

European constructions on Artok Island are limited to the remains of the foundation of a bungalow built by the late colonial leaseholder, Ernie Reid; some associated stone walls, and a light-tower. Ernie Reid's bungalow was built in the 1960s as a weekend retreat for its owner, who resided principally in Port Vila. He stocked the island of Artok with goats for sport hunting. All that remains now of the bungalow is a series of concrete foundation pillars, two parallel lines of beer bottles stuck top-down into the soil which mark the entrance to the house, and some stone walls which formerly surrounded the bungalow's yard. Ernie Reid also constructed a light-tower for shipping on the crest of the central peak. A cement plaque at the base of the tower gives his name and the date of May 1970, presumably indicating the date of construction. This metal and wood tower is now decaying, and the light fittings have long since perished.

## Part 5: Natural Heritage of Chief Roi Mata's Domain

This part describes the natural heritage of CRMD, and raises issues relating to the property's buffer zone. Descriptions are strongly focused on the ways in which the cultural history of the CRMD has impacted upon or has become intrinsic to local perceptions of the natural environment through time. Notably, the distinction in this Plan of Management between cultural and natural values is made for categorical purposes only, primarily (but not exclusively) to differentiate between those landscape features that have been constructed by people (such as the stone walls) and those that have not (such as the canarium tree at Mwalafaum). However, both human-made and non-human (natural) features of CRMD are imbued with cultural meaning and form part of a single historical narrative connected to Chief Roi Mata. In this sense this section focuses on natural features that are regarded as either scientifically significant (e.g. rare endemic species) or culturally significant (e.g. the canarium at Mwalafaum). Inevitably, there is some overlap between Parts 4 and 5 of this document.

### 5.1. Natural Values Workshops

In September 2005, the research team for the Roi Mata World Heritage Project coordinated two workshops (one on Lelepa and the other at Mangaliliu) to document the natural values of CRMD and its buffer zone. Workshop participants were selected from the community on the basis of their knowledge of three environmental categories: flora, fauna and marine life. Upon completion of these workshops, several follow-up field surveys were undertaken by specialists in the three environmental fields.

The research team, in consultation with the WHTC, is in the process of determining the most effective ways to address the protection of the natural heritage of the proposed World Heritage area. This process is in its infancy, having been initiated as part of the Roi Mata World Heritage Project in 2005, and further field survey and community consultation is required to determine the most appropriate means of implementation.

Much of the information detailing the flora, fauna and marine environments of the Lelepa region are derived from the following reports, copies of which are held in the National Library in Port Vila:

Flora: Bickford (2005); Wilson and Bickford (2005); Chanel (2006)

Fauna: Kalfatak (2005), Jennings (2006)

Marine: Hickey (2005a, 2005b)

### 5.2. Flora

#### Description of plant communities

A representation of the floristic environment of CRMD has been obtained through workshops with the local community and two separate field surveys undertaken by Dr Sophia Bickford (CSIRO, Australia) and Mr Sam Chanel (Forestry Department, Port Vila). Both Mungaas and Artok Island are said to support 'coastal strand, littoral and dry rainforest vegetation' typical of the northwest areas of Efate (Bickford 2005). On the lower limestone terraces, in the vicinity of Fels Cave, are forests of Psidium gouvaya or Leucaena leucocephala. At higher elevations are grasses (Themeda gigantea or Imperata cylindrica) and Heteropogon contortus (Quantin 1972-1979, cited in Bickford 2005).



Figure 18: *Croton levatii*, a rare species endemic to west Efate found in large numbers on the plateau of Artok Island (Photograph by Robert Flood)

#### Significant plant species

A significant feature of the floristic environment of CRMD is the presence of remnant vegetation, including a high number of species endemic to Vanuatu that occur around the sacred features of Mangaas and Artok Island. On the basis of these findings the Forestry Department of Vanuatu has recommended that both of these places (Mangaas and the island of Artok) be legally protected (Chanel 2006). The presence of a dense community of *Croton levatii* on the top of the plateau on Artok is particularly significant, as this species is endemic to west Efate and is close to extinction on the mainland. The *tapu* prohibitions associated with Artok Island have protected endemic species such as *Croton levatii* from the effects of agriculture and other coastal clearance, activities which have characterised the history of the adjacent Efate mainland. If the *tapu* prohibitions continue to be respected at Mangaas and on Artok Island, then these areas will remain refuges for the rare and endemic flora of northwest Efate.

#### Flora and tapu

A large variety of plants are embedded within the local cosmology of the Lelepa region and thus form an integral part of the local spiritual and cultural landscape. *Tapu* or sacred / forbidden species include the banyan (*Ficus subcordata*) at Mangaas where Roi Mata's spirit (L: *natgar*) is said to reside, the (B) *nakatambol* (*Dracontomelon vitiensis*) trees at Lakeopram that produce a fruit that is *tapu* to eat once it has fallen on the ground, and the older varieties of (L) *natit* or (B) *snek rop* (*Entarta phasuloides*) whose sap, if touched, can generate skin sores.

The areas of land throughout the Lelepa region in which it is *tapu* to garden include the area around the (B) *nambanga* (banyan) at Mangaas, Mangaruariki on Lelepa Island, and Artok Island. People who deliberately transgress these rules are commonly struck down by illness or even death.



Figure 19: Lily Kalotiti (Mangaliliu Village) demonstrating how a coconut frond stem is beaten on the ground to light up the chamber of Fels Cave

#### Flora and kastom

Certain plant and tree species are incorporated into customary songs. One song relates to the (B) *natapoa* (*Terminalia catapa*) tree. The narrative that accompanies this song relates to the parents of two young boys who told their children to play while they went to work in the garden. When the children got hungry, they were instructed to eat the food left for them in a locally woven basket suspended from the house. But when the children got hungry they realised they couldn't reach the basket, so decided to climb the *natapoa* tree to try and retrieve some nuts. The two boys climbed onto a branch of the *natapoa* that was too weak to carry their weight and it broke. The boys fell to their death. When the parents returned from their garden they held the two children in their arms and sang them a song. This song has become incorporated into local culture, having been remembered and taught to successive generations.

#### Functional plant species

A number of botanical species have functions that connect them to specific places or people:

- 1) The (L) *baba nanu* (stem of a coconut frond) is used to light up Fels Cave. A person positioned at the entrance to the cave beats the frond on the ground several times, generating a sound that reverberates throughout the chamber and ultimately fills it with light.
- 2) The cycad (*Cycas seemannii*) is specifically associated with chiefs. Numerous cycads encircle Roi Mata's grave area on Artok, and an unusually large number of these plants are found elsewhere on the island. There is also a cycad located beside a stone at Mangaliliu Village, marking the place where the present Chief – Kalkot Murmur – was invested.
- 3) Other species are connected with land ownership. Formerly, the cordyline (*Cordyline fruticosa*) was planted as a boundary marker. Today, however, as cordylines are increasingly grown over by invasive grasses and other species, coconuts (*Cocos nucifera*) tend to be used instead to delineate boundaries.



As is the case throughout Vanuatu, numerous tree and plant species are used in the construction of traditional forms of housing, such as cassia (*Leucaena leucocephala*), acacia (*Acacia sporobolis*), coconut (*Cocos nucifera*), bamboo (*Bambusa vulgaris*), and sago palm (*Metroxylon warborghii*). Others are used in the more specialised and regionally specific craft of canoe-building, such as the (B) *kenutri* (*Gyrocarpus americanus*), breadfruit (*Artocarpus altilis*), (L) *namiro* (*Thespesia populnea*) and (L) *nangir* (*Murraya paniculata*).

#### Wild and domesticated plants

A number of wild plant species are still foraged today, particularly when people are far from their gardens or out hunting. The young shoots of the (L) *natit* (*Entarta phasulooides*) are picked for their thirst-quenching juice. The fruit of a wild fig (*Ficus wassa*), and the nuts of the (B) *wael naveli* (*Barringtonia edulis*) and (B) *wael pandanus* (*Pandanus tectorius*) are also harvested.

Numerous plant species, wild and domesticated, are harvested for their medicinal properties. Information about plant remedies tends to be passed on by word of mouth to particular individuals and carefully guarded. It is *tapu* to request a recipe for *kastom* medicine, and doing so may lead to the production of a 'medicine' that will actually worsen a sick person's condition. The use of certain plants, such as lantana (*Lantana camara*) and (B) *wael bin* (*Cassia orientalis*), as remedies for common ailments is widely practiced. However, many others plants, used to treat specific illnesses, may only be administered by the individuals who have the specific right.

Gardening is the main subsistence activity of the villagers in the Lelepa region. Most gardens are located on the Efate mainland where sufficient water is available. Almost all species of garden crop are sold at the local market as an extra source of income. A list of the main garden and cash crops, with their language names, can be found in Wilson and Bickford (2005).



Figure 20: Chief Kalkot Murmur at Roi Mata's gravesite, which is surrounded by the 'chiefly tree' – *Cycas seemannii*



Figure 21: An area of young cassia (*Leucaena leucocephala*) growing around the 'gateway' at Mangaas

#### Threats to local flora

The main natural threats to the local flora of the Lelepa region are wild pigs, which wreak havoc on gardens; the African snail, which destroys the local cabbage; and rats, which consume manioc and sweet potato. The most problematic plant disease identified by the community is 'ringworm', which is said to affect garden crops such as breadfruit and manioc. However, given that there are no cultivated gardens located within the proposed World Heritage area these pests are not of immediate concern for managing CRMD. In the proposed World Heritage area, where natural vegetation predominates, invasive weeds pose one of the greatest problems. Examples include "mile-a-minute" (*Milcrania micrantha*), convolvulus (*Merremia beltana*) and cassia (*Leucaena leucocephala*).

Other issues that pose a potential threat to the flora of CRMD are fire and other natural hazards, such as cyclonic winds. Members of the local community have also been known to occasionally remove some of the hard wood trees from CRMD for construction purposes.

#### Conservation of local flora

Few plant or tree species are subject to local methods of conservation, exceptions being the (B) *kenutri* (*Gyrocarpus americanus*) and most fruit trees. Particular management

techniques practiced in the buffer zone of CRMD include cutting the tops off the invasive cassis and burning their stumps; planting fruit trees rather than timber trees (in gardens); and crop-rotation (replanting gardens every 3 to 5 years).

Elders of the community recall the local extinction of certain tree species, such as the native (L) *nato* (*Exocaria agallocha*) and the introduced species (L) *aoremakmak* (*Acyranthus velutine*). Other species have been over-harvested and are therefore under threat of extinction, such as the (L) *namos* (*Macaranga dioica*), (L) *namalkiki*, (L) *seru* (a yellow fruiting plant that lives close to the water) and (L) *makoos* (*Santalum austrocaledonicum*).

### 5.3. Terrestrial Fauna

#### Faunal distributions

The natural values workshops held in September 2005 revealed the need for further survey work to identify the full range of faunal species present in CRMD and the broader Lelepa region (Kalfatak 2005). In the absence of complete inventories of species (and therefore information about faunal distributions), this section focuses on significant rare or endemic fauna known to exist in the Lelepa region, and the role that particular animals and birds play in the socio-cultural life of the local community.

#### Significant species

A reptile fauna survey conducted on Artok in 2005 provides strong evidence for the influence of cultural *tapu* prohibitions on the development and preservation of the environment, as the current reptile fauna results form a unique interaction between culture and nature. Three species of lizard were visually identified on Artok Island: *Cryptoblepharus novahebridicus* (Scincidae), *Emoia impar* (Scincidae) and *Gehyra oceanica* (Gekkonidae). *Cryptoblepharus novahebridicus* is endemic to the Vanuatu archipelago. Recent analyses of unpublished molecular data suggest that there is previously unrecognised genetic diversity within this species, and that some populations in Vanuatu may represent an additional endemic species (Jennings 2006). A large population of *C. novahebridicus* was identified on Artok Island. Preliminary data suggest that this population is genetically distinct from other islands (Jennings 2006) and possesses its own unique lineage, perhaps warranting designation as a previously unrecognised endemic species deserving of conservation attention (Moritz and Faith 1998; Pearman 2001). The other two species, *Emoia impar* (Scincidae) and *Gehyra oceanica* (Gekkonidae), are endemic to the Austral-Pacific region, with distributions extending outside the Vanuatu archipelago (Jennings 2006). There have also been local reports that a fourth species, *Emoia sanfordi*, which was not observed on the day of survey, also occurs on the island. This species is also endemic to Vanuatu. While lizard diversity on Artok appears to be low, the variety of species present on the island is regarded as 'unique'. Three species of introduced lizards – *Lipinia noctua*, *Lepidodactylus lugubris*, and *Hermidactylus frenatus* – all of which have extremely widespread distributions on mainland Efate and most other islands in Vanuatu, are absent from the island (Jennings 2006: 1). At some sites surveyed on mainland Efate these three introduced species were the most abundant lizards observed. The 'isolation' of the island, which is a culturally imposed isolation rather than a physical one, has protected it from species' introductions that have been occurring elsewhere in Vanuatu for centuries.

A number of other rare animal species thrive within CRMD because their habitats remain intact and undisturbed. The Coconut Crab (*Birgus latro*), which has become



Figure 22: Emoia sanfordi, a green skink endemic to Vanuatu which has been spotted on Artok Island by local residents. Photograph by Alison Jennings.



Figure 23: Cryptoblepharus novaehbridicus. Genetic data suggests that this lizard may be endemic to Artok Island. Photograph by Alison Jennings.

extinct or endangered throughout Efate due to over harvesting, is abundant on Artok Island (Kalfatak 2005). Four large coconut crabs were caught on the island and displayed at the Agriculture and Trade Show in Port Vila in 2005. The survival of this species can be attributed to the absence of habitation on Artok Island, a legacy of the *tapu* placed on the island at the time of Roi Mata's death.

An endemic species (at the sub-species level) that seeks refuge in the abandoned landscape of Artok is the (B) *namelau* or Incubator Bird (Megapodius freycinet layardi). The same species also once nested at a place known as Afreia, a site on the adjacent mainland, but the recent encroachment of coconut plantations in this area has led them to relocate. While the Incubator Bird is still found on most islands of central and northern Vanuatu, increased agriculture and other forms of development on Efate are rapidly depleting their forest habitats and nesting sites.

Other less endangered species also take advantage of the lack of human habitation in CRMD. The Flying Fox (Pteropus tonganus) is said to roost in the roots of the banyan (Ficus subcordata) at Mangaas and then relocate to Artok Island to feed in the fruiting

season. A *kastom* song from the Lelepa region describes a flying fox that stops to feast on (B) *nakatambol* (Dragon Plum; *Dracontomelon vitiense*) but is afraid that people might come. Once he is full and satisfied he flies away.

Endemic species known to occur in CRMD and the Lelepa Region that are accorded national protection under the NBSC and the *Wild Bird Protected Act* (see section 3.3) include the Vanuatu Mountain Pidgeon (*Ducula bakeri*), the Vanuatu Fruit Dove (*Ptilinopus tannensis*), the White Flying Fox (*Pteropus anetianus*), and a freshwater goby *Sicyopterus aiensis*.

### Fauna and tapu

As for the plant species of CRMD and its surrounding buffer zone, a large number of terrestrial fauna is imbued with social and spiritual meaning. Many animals that inhabit this landscape are spirits that possess transformative powers. Especially *tapu* are (B) *namarae*, or eel fish (*Anguillidae* spp.), which can transform into snakes on land. At many sacred sites in the Lelepa region, such as Srar, Mwautiriki, and anywhere on Artok Island, it is *tapu* to touch or kill a snake.<sup>5</sup>

Another 'spirit' creature is the (B) *wael fowl* (*Gallus gallus*). From the roots of the banyan (*Ficus subcordata*) at Mangaas or the two sacred hills – Mautulapa and Mwautiriki – (B) *wael fowl* (wild chickens) are said to crow. These spirit creatures have never been seen, and it is *tapu* to deliberately disturb them.

### Functions of particular terrestrial animals

Certain animals are socially important because of the functional role they play in daily life:

- 1) The kingfisher because of its fortune-telling abilities. When a kingfisher calls out on a person's left side it is a sign of impending bad luck. When it calls out on a person's right side it is a sign of good luck.
- 2) Roosters because they have the ability to foretell the future. If they crow at unusual times it is taken as an indication that something bad will happen.
- 3) The Red Bellied Fruit Dove (*Ptilinopus greyii*) because they possess super-sensory powers. If one calls out in the village at night it can indicate that a girl located within its vicinity is pregnant. If two call to one another, it can be a sign of an impending death. The latter event is recounted in a local *kastom* song.

Terrestrial animals consumed by members of the local community are listed in a species table compiled by Kalfatak (2005). Some animals are *tapu* for consumption, including the White-collared Kingfisher (B: *nasiko*; *Halycon chloris*) which is believed to be a 'spirit bird', and the Barn Owl (B: *hok naet*; *Tyto alba*), because it feeds on rats and is thought to be associated with (B) *nakaimas* (black magic).

Animals used in *kastom* ceremonies include the pig, which is the primary animal used in mortuary, marriage and peace-making ceremonies (a Vanuatu-wide trend); the cow, which tends to be consumed in the event of a death or marriage; and the domestic chicken, which is often used to pay penalties when village rules are broken.

<sup>5</sup> Although not observed during the reptile fauna survey conducted on Artok Island, two species of non-venomous snakes, *Candoia bibroni* and *Candoia carinata* occur within Vanuatu. Both of these species are arboreal and secretive and are therefore likely to be present on the island.

### Threats to local fauna

Existing and potential threats to the habitats of terrestrial animals in CRMD and its buffer zone include: a general lack of knowledge about species habitats (Kalfatak 2005; and see below); the use of unsustainable hunting techniques; the possibility of land leases in the Lelepa region which might result in the destruction of biodiversity; expanding settlement areas encroaching on remnant forests; logging; cattle farming; immigrants hunting illegally in the uninhabited areas of the Lelepa region, such as Creek Ai; introduced Mynah birds, which feed on the eggs of native birds and domesticated chickens and can result in the displacement of native bird species; the over-harvesting of both undersized Coconut Crabs and the eggs of the Incubator bird.

If the two snake species *Candoia bibroni* and *Candoia carinata* are present on Artok Island, which is likely given their secretive nature, then any increase in visitation to the island could pose a threat to their survival. Both species are listed as CITES II by the Convention on International Trade in Endangered Species, indicating that the status of their populations must be carefully monitored so as to prevent extinction in the wild (Jennings 2006). If future surveys identify these snakes on Artok Island or anywhere else within CRMD then existing cultural *tapus* associated with snakes would need to be reinforced. Visitation to areas inhabited by these snakes would also need to be restricted.

### Conservation of local fauna

According to Kalfatak (2005), members of the local community do not possess a strong conservation ethic in relation to their terrestrial fauna, and yet it was clear from the questions and follow-up surveys that current overall impacts on local faunal populations within CRMD are minimal. The relationship between people and their natural environment – guided by *nafsan natoon* – is currently sustainable. This is due to the continued respect for *tapu* places, which protects faunal habitats from the threat of human encroachment and poaching. Artok Island offers the clearest evidence of this, where prohibitions associated with the island have resulted in the natural protection of rare and endangered species (e.g. Coconut Crabs). The island has also experienced few introductions of exotic fauna, resulting in a relatively stable environment in which endemic species have been left to thrive.

## 5.4. Marine

### Background

As noted in section 1.3 above, no comprehensive finfish surveys have been undertaken in Vanuatu. It is therefore not yet possible to fully document the full species range or endemism found within the marine environment of CRMD. Marine surveys undertaken in 2004 and 2005 (the latter as part of the Roi Mata World Heritage Project), have provided a general snapshot of species diversity and reef health at specific locations throughout the proposed World Heritage area and have highlighted a range of issues that need to be considered in future planning and survey work.

### Tapu marine areas

The marine environment of the Lelepa region (which includes CRMD and its buffer zone) is replete with traditionally *tapu* areas that local people never visit due to their symbolic importance. Some inland waterholes and creeks, such as Lukumra at Srar and Morwota behind Mangaliliu, also have resident spirit creatures that can cause a person to become ill or die. The seascape around the proposed World Heritage area

also contains several *tapu* sites, including Bafoon (also known as Paul's Rock), Namuru Fiteriki Leosa (a short stretch of water off the coast of Lelepa where it is *tapu* to swim), Koriwa (a reef off Lelepa, where a mythical shark resides), the Three Mast area (south of Mangaliliu), and Lukpoa (a raised reef near Creek Ai). These ancient *tapu* areas continue to provide a refuge for marine biodiversity and thus maintain the richness of Havannah Harbour through larval export and adult spillover benefits to adjacent areas.

Some specific marine species are also *tapu* for certain individuals following local cosmologies. For example, pregnant women are restricted from eating turtles and their eggs, octopus and cuttlefish. They are, however, permitted to eat sharks, which are said to ensure that the head of the woman's offspring will be flat (a culturally desirable physical trait). It is also *tapu* to eat turtle or their eggs and then visit the yam gardens. As yams are grown during turtle nesting season, this *tapu* has historically provided protection to these endangered species.

### Marine and kastom

Certain cultural sites are associated with fishing magic. Mwautariu, a highly respected *tapu* stone that once stood on an area of raised reef off Lelepa Island (and was recently stolen and sold overseas, was formerly used to guarantee success in fishing. People would 'feed' the stone a piece of littorine shrub (*Pemphis acidula*) to enhance their fishing success.

A number of marine species feature in local *kastom* stories. The migration of whales past Artok Island coincides with the yam-planting season in the Lelepa region and is thus viewed as a form of calendrical measurement. The death of a whale is regarded in the area as a bad omen, indicating that the yam season will be unproductive.

Dolphins are commonly seen in the Lelepa region around the same time as the whales (August / September), with a local *kastom* song and dance to accompany their arrival called *Naika ka sive* (B: *Fish we i glad*; Fish that are glad). As people sing this song they dance in a line, hands joined, and then the person at the end of the line passes between the others under their hands, everyone following and looping through and around.



Figure 24: Mwautariu

### Marine tenure

Marine tenure for the Lelepa region extends along the Efate coast, from Tukutuku (in the south) to the boundary with Tanoliu Village (near Samoa Point), and includes the islands of Lelepa and Artok. Apart from the *tapu* areas mentioned above and two permanent 'banned areas' that were established to enable the regeneration of species, villagers are permitted to harvest marine resources anywhere in this region for subsistence purposes (but not for commercial gain). The two banned areas in the Lelepa region, both established in 1993, include a stretch of reef in front of Mangaliliu Village extending from Mangaas beach to the second river west of the village, and an area in front of Natapau Village (Lelepa Island) that stretches from Fels Cave to Nangus N'rumta. Deliberate flouting of these restrictions can result in the issuing of a fine, to be paid to the appropriate chief (for the Mangaliliu banned area, this fine is currently set at 6000 VT, one pig and some kava; on Lelepa it is 2000 VT, kava and mats). It is unfortunate that outsiders, including commercial operations associated with the aquarium trade and other visitors to the region, are known to utilise some of the banned areas within the Lelepa region, ultimately diminishing the value of such places. Likewise, evidence indicates that some of the *tapu* areas are also targeted on occasion by outsiders.

Traditional fishing methods found in this area included reef gleaning for a broad range of invertebrates and fish and the use of bow and arrow, spear, fish traps (L: *kor*) made from a vine (L: *na'ula* ; 'loyaken' / lawyer cane), and the occasional use of fish poisons (*Derris trifoliata* and *Barringtonia asiatica*). These have largely (but not entirely) been replaced by modern fishing techniques, including hook and line, gill, seine, parachute nets and spearfishing.

### Local consumption of marine species

The people of Lelepa and Mangaliliu have long relied on a variety of marine resources as a source of nutritious sustenance. For local consumption, people primarily harvest the diverse array of reef fish available, the smaller deepwater Etiline snappers, as well as a variety of crab and shellfish species, giant clams and octopus. A combination of reef and deepwater fish, barracuda and tuna, trochus, beche-de-mer and shellfish are harvested for sale at the market. One of the best places to catch pelagic species is around the relatively isolated offshore island of Artok where wahoo, yellow fin and dogtooth tuna and billfish may be found. A comprehensive description and list of the types of marine species found throughout the Lelepa region, including those harvested for sale and consumption, can be found in Hickey 2005b.

### Threats to the marine environment

The marine environment of CRMD and its buffer zone provides significant resources for individuals and organisations both within and outside the Lelepa region. It provides an important source of high quality protein for the local Lelepa communities, as well as a regular source of income through the market sale of reef, deepwater and pelagic fish and other specific species (such as beche-de-mer [sea cucumbers] or trochus). It offers an adventure sport destination for local and overseas scuba and snorkelling enthusiasts, and for the fishers who charter boats from Port Vila and Lelepa. It is also an area targeted by the aquarium trade (AT), which harvests the anemone and other ornamental fish that abound in the reefs around Artok Island. The AT operates in the region in exchange for a small monthly access fee that is paid to the appropriate reef owners and chiefs. The challenge for the Lelepa Island community is to balance each of these marine interests and the threats posed by them (Hickey 2005a, 2005b).



Natural and anthropogenic pressures on the marine environment of CRMD and its buffer zone are present, and long-term management strategies are required to mitigate their effects. Locals and outsiders (including the AT) sometimes use destructive fishing practices, such as the breaking open of octopus lairs and the use of hammers and chisels to extract giant clams from the reef. Threatened marine species include the locally extirpated green snail (*Turbo marmoratus*) that was overharvested in the 1990s and the commercially harvested trochus (*Trochus niloticus*). Certain reef species, particularly anemone fish (Clownfish) and the Flame Angel (*Centropyge loricula*) have been severely impacted through unmonitored harvesting by the AT. Land sales and development along coastal Efate threaten turtle nesting areas on the mainland. Hawksbill turtle (L: *foon teman*) is the most common species found in the Havannah Harbour area with a smaller population of green turtles. Their resting and breeding habitats tend to be the *tapu* areas of the Lelepa region, such as Bafoon and Artok Island, as well as the isolated areas towards Devils Point, a connection that provides strong grounds for ensuring the long-term protection of these places. Natural impacts on the marine environment include cyclones (especially at the Mangaliliu banned area and Nangus Ntamas), crown-of-thorns starfish (found within the Lelepa banned area) and, in the El Niño years when warmer surface waters are experienced, coral bleaching (not strongly evident in 2005).

The most significant (and in turn the most threatened) feature of the marine environment of CRMD is the reef system around Artok Island. The major natural threat to Artok's reef is cyclone damage and, unfortunately, the reef breakage sustained through such action is impossible to control. The major human threat to Artok's reef is the damage being caused by the activities of the AT, and specifically the company known as Sustainable Reef Supplies (SRS) which has been operating intensively around the southern coast of the island since 2003 (Sykes 2004).

#### Conservation of the marine environment

Over the course of the World Heritage Project there have been several moves to secure greater protection of Artok's reef by monitoring AT activities. Fortuitously, Artok was selected by Reef Check in July-August 2004 for a 'rapid assessment' to obtain a snapshot of reef health (Hill 2004). One of the recommendations made by Reef Check at the time included the following:

Due to the cultural and economic importance of Hat Island, we recommend regular monitoring of key sites around the island to ensure reef characteristics are maintained at the current status, which has inspired its submission for World Heritage Listing.

Promisingly, at the time of Reef Check's assessment, the number of ornamental fish found on Artok's reefs, even those species specifically targeted by the AT such as the flame angelfish, far exceeded numbers in nearby collection areas (e.g. Pele Island and Devils Point) (Hill 2004: 35). However, regular follow-ups of the base-line data collected by Reef Check are now required, in addition to carefully regulated impact studies. A recording of transects both on and off the SRS collection sites is also needed so that some assessment of AT impact can be ascertained. The annual report produced by SRS indicated that nearly 19,000 Flame Angels were harvested in 2005. These fish came mainly from Artok with the remainder from nearby Devils point as these are the main areas on Efate Island where this species are found in abundance. Anecdotal

information indicates that this species is now severely depleted from Artok by the AT and they are now looking for alternative islands to harvest them. The economic return (relative to that realized by the AT operator) to the community from the AT is also an important socio-economic issue that requires further enquiry.

A representative of the Department of Fisheries, who attended a stakeholder meeting for the Roi Mata World Heritage Project in March 2006, invited the World Heritage and Tourism Committee to participate in the planning and review of AT activities in the Lelepa region. Douglas Kalotiti (Chair of the WHTC), Chief Kalkot Murmur (Chief of Mangaliliu Village) and Francis Hickey (Marine Consultant for the Roi Mata World Heritage Project) attended a management planning meeting for the AT in April 2006 to flag their concerns and preferences for the Lelepa region and to promote this Plan of Management for CRMD to both the Department of Fisheries and SRS.

Detailed suggestions for minimising negative impacts on the marine environment of the Lelepa region can be found in Hill (2004) and Hickey (2005a and 2005b). Some of Hill and Hickey's strategies are already being implemented and are listed in Part 7 of this Plan of Management under section D ('anthropogenic impacts'). Other recommendations are still in the process of being negotiated with reef custodians, fishers and members of the local community. In Part 7 of this Plan of Management for CRMD it is advised that a separate more detailed and comprehensive 'marine management plan' for CRMD be developed. In accordance with the community's second Guiding Principle for the management of the CRMD (section 2.1.), this future marine management plan for CRMD should be based on existing local systems of marine tenure and management while further supporting traditional leadership so that the communities of Lelepa remain in control of the management of the resources under their custodianship (see also UNESCO 2004a). According to Hickey (pers. comm. 2006), the marine management system for CRMD should:

- a) be based upon annual resource abundance and the local traditional calendar, but minimising impacts to spawning migration and aggregation periods;
- b) document and mobilise the Traditional Environmental Knowledge (TEK) available within the communities to optimise management strategies while incorporating the cooperative management approach (i.e. integrating relevant scientific knowledge at the same time);
- c) facilitate the transmission from elders to youths of management-related (including linguistic knowledge) and other TEK (like canoe cutting and traditional fish harvesting methods) to avoid the loss of this knowledge.

## Part 6: Statement of Significance

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There are two levels of significance associated with CRMD that are relevant to the development of appropriate strategies for protecting the site: local (including national) and international. The reasons cited by the local community as to why CRMD is significant are generally distinct from the reasons argued in the nomination file as to why the property is of 'outstanding universal value', although there is also some overlap between them.

### 6.1. Local Values of CRMD

The values of CRMD for the local community are associated with both the tangible and intangible legacies of Chief Roi Mata's reign. CRMD is a living and continuing cultural landscape. Local residents consider the area to be important because of the physical and historical references throughout this cultural landscape to the last Chief Roi Mata. As such, when they are visiting the property they are cautious and respectful in their behaviour around the sacred sites that pertain to Chief Roi Mata's chiefly status and memory, such as the giant banyan tree and canarium tree at Sumwantuk, Fels Cave on Lelepa Island and the gravesite on Artok Island. *Tapu* restrictions associated with these cultural features are still observed after 400 years of implementation. Within CRMD, members of the local community consider themselves to be walking in the footsteps of Roi Mata (*nalfan Roi Mata*). Outside CRMD, in community life, the deeds of Chief Roi Mata continue to impact upon decision-making at various social levels. The last Roi Mata is thought to have defined the framework for the *naflak* system, which continues to control marriage relations, title inheritance, and rights to land (see section 2.A.ii.c in the nomination for further details of the *naflak* system).

### 6.2. International Value of CRMD

As described in section 3.c of the nomination document (Ballard and Wilson 2006), the outstanding universal value of CRMD is grounded on the following claims:

- 1) CRMD is an exceptional example of a living cultural landscape organised around the principles of a chiefly title system.
- 2) The mass sacrificial burial on Artok Island, in which Roi Mata was accompanied in death by more than 50 voluntarily sacrificed individuals, is exceptional on a global scale, and unique in terms of the scale of the local population.
- 3) The remarkable convergence of oral traditions of exceptional quality and depth and archaeological discoveries has thrown unique light on the deeds of Chief Roi Mata and other chiefs of Central Vanuatu.

There is also a range of internationally (and scientifically) significant natural values that pertain to the property. While the natural values of CRMD are not in themselves sufficient to argue for the 'outstanding universal values' of the property, they certainly support the case. A relatively high number of endemic and/or rare species occur within CRMD because the sites are *tapu* (forbidden ground) and are thus protected from human encroachment. Amongst the more exceptional endemic flora protected within CRMD are *Croton levatii*, distributed in large numbers on the top of the plateau on Artok Island, and *Cycas Seemannii* (formerly *Weimannii*), occurring in large numbers

on the northern side of the island and occasionally seen in dense groves. The total number of endemic flora located within the boundaries of CRMD far exceeds that occurring in other parts of northwest Efate where intensive shifting agricultural practices have severely reduced their numbers (Chanel 2006, pers. comm).

Amongst the faunal communities of CRMD, the Coconut Crab (*Birgus latro*), the Incubator Bird (*Megapodius freycinet layardi*), and the lizard *Cryptoblepharus novahebridicus* are known to occur on the island of Artok. Each of these species, classified as endemic or endangered on Efate or throughout Vanuatu, thrives on Artok Island because of the lack of human encroachment on their various habitats.

### 6.3. World Heritage Criteria Appropriate to CRMD

CRMD meets three of the cultural criteria for assessing the outstanding universal value of a property nominated for World Heritage. These criteria are listed in paragraph 77 of the *Operational Guidelines for the Implementation of the World Heritage Convention* (WHC 05/2):

- (iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- (iv) be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- (vi) be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic or literary works of outstanding universal significance.

Reference should be made to Section 3.a of the nomination document for CRMD for further demonstration of the ways in which the property fulfils each of these criteria.

CRMD also qualifies as a cultural landscape, satisfying the definition of an 'organically evolved and continuing landscape' (Annex 3, *Operational Guidelines for the Implementation of the World Heritage Convention* (WHC 05/2)).

### 6.4. Statement of Significance

The following statement of significance is a revised version of the Statement of Outstanding Universal Value described in Section 3.b of the nomination document for CRMD (Ballard and Wilson 2006), incorporating not just the major cultural values of the property but also its local and natural values.

CRMD bears witness to an exceptional living connection between people, place and history. Local residents and custodians consider this cultural landscape to be important because it embodies the physical memories of Chief Roi Mata and his reign. The stories still told about the great Chief Roi Mata sustain the moral values that he instituted throughout the central islands of Vanuatu, and have guided archaeologists to key sites associated with his life and death. These sites

include Roi Mata's chiefly residence at Mangaas, the site of his death at Fels Cave, and the mass burial at his grave on the island of Artok – all revered locations protected by strong customary sanctions. The grave on Artok Island, in which the body of Roi Mata is surrounded by more than fifty of his family and retainers, is an outstanding example of a mass single-event chiefly burial. The customary *tapu* prohibition on the further use of Artok Island or Mangaas is without parallel in the world, and has preserved the exceptional cultural and natural values of these places over the last four centuries. The presence of several endangered and endemic species on Artok Island, such as the plant *Croton levatii* and the lizard *Cryptoblepharus novahebridicus*, are testimony to the lasting strength of these cultural prohibitions. The outstanding universal value of this CRMD rests on the power of oral tradition and archaeological investigation to summon forth the past and breath life into the landscape of Roi Mata.

## Part 7: Issues, Objectives and Strategies for Management

### 7.1. The Action Plan

The following tables provide an Action Plan for the management of the local, international and 'outstanding universal' values of the proposed World Heritage area, as captured in the statement of significance in Section 6.4 above. The 'issues' and 'objectives' identified in each section have been defined by members of the local community in the context of the consultative workshops and interviews for the Roi Mata World Heritage Project. The solutions or strategies ('actions') were defined by the WHTC during one of its official meetings in December 2005.

The tables are divided into 2 sections. The first section lists strategies for the long-term protection of the tangible and intangible cultural heritage associated with CRMD and its buffer zone. The second section is site-focused, providing strategies for protecting each of the three main cultural places *within* CRMD – Mangaas, Fels Cave, and Artok Island.

Certain strategies have already been implemented, as indicated in the last column of each table. Implemented strategies are actions that have been achieved since the inauguration of the plan in December 2005, and many of them require no further action. These milestones have initially been retained in the document to demonstrate the progress that is being made in the protection of the cultural heritage of the Lelepa region. However, it is likely that these milestones will be converted into text (see Appendix E on the outcomes and implementation of this Plan), or deleted altogether, as information pertaining to each category is further refined and developed.

Entries in the tables that appear in **bold** text are actions that require immediate or urgent attention (priority strategies). This system has been introduced to enable the reader to quickly review the action plan and establish what needs to be addressed in the immediate future.

There are several cells under the column 'what resources are needed?' which remain unfilled as resources are not required to undertake the stated action. Likewise, there are blank cells in the final column 'Status of Strategy?' as either the strategy has not been implemented or the status of the strategy has not yet been addressed. In some cases, even if the strategy has not been implemented, notes pertaining to that strategy may have been inserted. A formal evaluation and review of this action plan will take place in March of each year, beginning in March 2007 (see Section 8.1). The status of most of the strategies proposed in this action plan will be commented upon by the end of the first evaluation meeting.

Applications for funding to enable the implementation of strategies listed in the following table will be submitted after March 2006 (once the Plan has been commented upon and authorised by the chiefs and the broader community of the Lelepa region). Applying for funding to implement the recommendations of this Plan of Management will be under the joint responsibility of the WHTC, the Vanuatu Cultural Centre, and the Roi Mata World Heritage Project team. To establish funding requirements, particular reference should be made to the column 'What resources are needed?'

## 7.2. Action plan for CRMD and the surrounding buffer zone

### A. INTANGIBLE AND TANGIBLE HERITAGE

#### A.1. Oral history (kastom stories and songs)

##### Issues:

- ❖ Only a few elders in the community can still relate *kastom* stories in detail.
  - ❖ There is a general perception amongst the adult members of the community that the younger generation is not interested in learning about *kastom*. However, it might also be the case that the younger generation lacks exposure to *kastom* knowledge. On a fieldtrip conducted as part of the tourism workshops held in October and November 2005, some of the younger participants expressed surprise and interest at the richness of the cultural remains of the Lelepa region and declared that no one had ever told them about them.
  - ❖ The younger generation are speaking more Bislama and less of their traditional language, which inhibits their ability to learn and relate *kastom* songs and stories.
  - ❖ One of the reasons why less emphasis is being paid to the passing on of oral knowledge is that parents are spending much of their time teaching. Christian values to their children. Despite widespread respect for local *kastom* through *nafsan natoon*, many people find it hard to combine Christian and *kastom* teachings.
- Objectives:**
- ❖ To ensure that spoken *kastom* knowledge is recorded, maintained and passed on to younger generations.

##### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Record <i>kastom</i> songs, stories and dances associated with CRMD using digital voice and video equipment (NB: the use of video is said to be important to ensure that knowledge is correctly passed on to future generations, as many of the songs and stories have accompanying actions that need to be seen).	Chair and Vice Chair of WHTC – the two VCC fieldworkers for the Lelepa region. Foreign researchers. Local research groups (e.g. SIL).	As soon as possible, before the elderly men and women of the Lelepa region pass away.	Digital voice recorder. Access to video cameras (VCC). A computer to download material (VCC).	

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has strategy been implemented? What was the outcome?)
Copies of all cultural material recorded in the Lelepa region must be deposited with both the Vanuatu Cultural Centre (VCHSS and National Library) and the two VCC fieldworkers (Chair and Vice-Chair of the WHTC) for the Lelepa region.	All researchers (e.g. VCC fieldworkers, foreign researchers, local).	Effective today (6/12/05).	CDs for making copies.	
Publically available recordings of cultural material will be downloaded onto the cultural sites database for CRMD. All digital formats are acceptable, including image and video files.	All local and foreign researchers.	Effective today (6/12/05).	A staff member at the Vanuatu Cultural Centre who is trained in downloading material onto the cultural sites database for CRMD.	
Encourage education in oral history by scheduling regular meetings between the youth of Mangaliliu and Lelepa and elderly members of the community who still retain knowledge of <i>kastom</i> stories, songs and dances.	<p>Lelema Council of Chiefs in collaboration with WHTC. The Roi Mata World Heritage Project is also currently writing an application to help fund the first of these events.</p> <p>Vanuatu Cultural Centre responsible for recording.</p>	<p>The first meeting will take place in the village nakamal in the first half of 2006 (NB: the timing of the meeting on Lelepa might be determined by the 5-year plan of the Lelepa Council of Chiefs, who also have a goal to encourage <i>kastom</i> teaching of the community's youth). Pending funding, the second meeting will take place as part of the proposed 'Roi Mata Heritage and Tourism Project (2007-2009)'.</p> <p>Between 2007 and 2009.</p>	Recording equipment.	
Digitally record the stories told at the above meetings and deposit copies with the Vanuatu Cultural Centre and with the Chair of the WHTC.	Vanuatu Cultural Centre responsible for recording.	Between 2007 and 2009.	Recording equipment.	



What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? What was the outcome?)
Based on the outcomes of the planned meetings described above, devise a long-term program of <i>kastom</i> teaching within the Lelepa Region (see strategy below as a possible avenue for achieving this aim).	WHTC and VCC to develop this program.	By July 2009.		
Consult with the teachers of the local primary schools about a 'vernacular' course to be introduced nationally in 2006. The aim will be to establish whether the goal to pass on <i>kastom</i> knowledge to youth, as expressed in this Plan of Management, can be incorporated into the vernacular course.	WHTC and VCC.	By December 2008 all schools should have been approached in relation to this issue. It is hoped that the oral history workshops described above will provide an incentive for teachers and those responsible for developing school curricula to implement a regular oral history and <i>kastom</i> teaching program.		A teacher based at Mangaliliu has recently (2006) opened a private primary school where lessons are given in local language.  A Masters student from the University of the South Pacific who is studying the language of Lelepa is currently working with the local schools.  Other primary schools in the area are yet to be approached about this issue.

## A.2. Kastom objects

### Issues:

- ❖ Many women in the region put their efforts into sewing, using modern methods, rather than traditional weaving.
- ❖ Some men have lost the art of carving, particularly the younger ones, many of whom are not interested in carving canoes anymore.
- ❖ Some women, including some of the older women in the community, do not know how to weave.
- ❖ Some of the younger members of the community are not interested in learning traditional forms of weaving and carving.
- ❖ There is concern that people are becoming increasingly dependent upon imported / supermarket foods rather than relying on their own local garden produce.

### Objectives:

- ❖ Information (and examples of) traditional methods of carving and weaving is recorded, maintained and passed on to younger generations.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Promote the education of youth in the Lelepa region by encouraging them to watch the carving (and beating) of tamtams commissioned by Koh-lanta – a French film company that will work in the region between December 2005 and March 2006.	Richard Matanik, Manearu Steven and Wilson Billy were commissioned to shape the tamtams for Koh-lanta. Richard (member of the WHTC) agreed to encourage the youth of the Lelepa region to witness their carving.	Between December 2005 and March 2006		<b>Strategy implemented.</b> Richard Matanik reported that many youth of the Lelepa region watched the carving of the tamtams with great interest, a number of them also learning how to play the instruments. Two tamtams have been permanently erected at Mwalafaum (Mangaas) and have been incorporated into the tourist trail at the site. This is a clear example of the revival of local <i>kastom</i> .

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
<p>Develop a picture book of traditional objects from the Lelepa region to assist people in their reconstruction of these objects. This book should include: carved objects (canoes, nalnals/clubs and tamtams) and woven objects (mats, baskets, fans – including feather mats which are traditional valuables that few people can now weave, and a <i>naipf</i>, a <i>kastom</i> mat used for carrying the child of a chief). A section on <i>kastom</i> kakae might also be added.</p>	<p>Kylie Moloney, former Australian Youth Ambassador assisting with the Roi Mata World Heritage Project</p> <p>Meredith Wilson to work with Leisara Kalotiti to add information about <i>kastom</i> cooking</p>	<p>Complete by December 2006</p>		<p>Kylie Moloney will report her progress to the Coordinator of The Roi Mata World Heritage Project</p>
<p>A copy of the above picture book will be deposited with the Vanuatu Cultural Centre, local schools, and each household of the Lelepa region.</p>	<p>The Roi Mata World Heritage Project team is writing an application to fund the production and distribution of this book</p>		<p>Funding for printing</p>	
<p>Through the tourism project, which promotes the manufacture and sale of <i>kastom</i> items from the Lelepa region, develop a long-term strategy for educating the community about the preservation of traditional objects.</p>	<p>The WHTC, the Presbyterian Women's Missionary Union (PWMU) for the Lelepa region, and the local women responsible for the production of artefacts sold during the Roi Mata Cultural Tour</p> <p>The Roi Mata World Heritage Project team is also currently applying for funding to hold an 'artefact workshop' in 2008, which will involve the revival and manufacture of the Lelepa items collated by Kylie Moloney (see above).</p>	<p>The 2008 workshop is designed to stimulate a program of revival and manufacture of <i>kastom</i> objects in the Lelepa region.</p>	<p>The purchase of some items for carving and weaving undertaken during the artefact workshop (e.g. chisels).</p>	

### A.3. Recording and storage of cultural information

**Issues:**

- ❖ Cassettes and tapes are not an efficient way of recording and storing information.
- ❖ Information that is transmitted verbally is protected. Written information can be shared with many others. How can we ensure the privacy of select information?
- ❖ Information about Roi Mata is currently held in too many different locations.
- ❖ The vast majority of the community do not have access to computers.

**Objectives:**

- ❖ Create a centralised and computerised data management system that is accessible but respects individual rights to privacy. Provide updated hard copy versions of this information to the community.

**Strategies:**

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Generate a computerised cultural site management system for CRMD for the community that is password dependent.	Troy Mallie (VIDA volunteer who commenced his post as the developer of the cultural site database at VCC in December 2005). Troy will be assisted by database developer Glen MaLaren, based in Melbourne.	Between December 2005 and September 2006.		Strategy Implemented.
Develop a training manual for the use of the cultural site management system.	Troy Mallie and Glen MaLaren.	Between March and September 2006.		Strategy Implemented.

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Train VCC staff, the WHTC and interested community members in the general operation of the site management system. The aim of this training is to transfer sufficient skills to enable the database to be managed by VCC staff and the WHTC.	Troy Mallie and a recently appointed IT specialist at the Vanuatu Cultural Centre.	Between March and September 2006.	The Roi Mata World Heritage Project team is currently applying for funding to provide computer training to members of the WHTC.	An evaluation of training needs and proficiency in database use will be determined by Troy Mallie before the end of September 2006.  Douglas Kalotiti, the Chair of the WHTC, has undertaken a computer training course. This course now needs to be extended to other members of the WHTC and VCC staff.
Consult with the VCC regarding the placement of a publically accessible computer within the exhibition space of the National Museum.	Troy Mallie (VIDA volunteer) with Ralph Regenvanu.	March 2006.		<b>Strategy implemented.</b> The VCC has agreed that it would be a good idea to have a publically accessible database in the Museum.
Purchase a server and terminal to be installed at the Vanuatu Cultural Centre which will house the CRMD cultural site management system.  Include a selection of Roi Mata stories collected for the Roi Mata World Heritage project (published and unpublished) in a booklet to be presented to the community and the VCC. Some of these stories might also be included on the CRMD cultural site management system.	The Roi Mata World Heritage Project team is currently applying for funding to make this purchase.  WHTC, Chris Ballard (Principal Researcher, Roi Mata World Heritage Project).  An oral history project scheduled for 2008 will provide the final material necessary for compiling a booklet of Roi Mata stories.	It is hoped that this purchase can be made by July 2007.	Printing costs. The Roi Mata World Heritage Project team is currently applying for funding to cover production and printing costs.	<b>Strategy partially implemented.</b> A server has been set up.

## A.4. Intellectual property

### Issues:

- ❖ Members of the local community have expressed concern about tourists taking photographs within CRMD (e.g. the rock-art at Fels cave) and selling them for commercial purposes.
- ❖ There is no community consensus on the 'value' of cultural knowledge, with some members of the community insisting on payment for information.

### Objectives:

- ❖ To ensure that cultural knowledge is used and stored in ways that provide for the protection of cultural and intellectual property rights.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Develop a strategy for protecting World Heritage and intellectual property for CRMD, taking into account community views, the VCC research policy, Vanuatu's copyright law (not yet gazetted), related laws (Australia) associated with photography and filming of cultural objects and events.	Carly Greig (Australian Youth Ambassador) to undertake background research and discussed her findings with the WHTC.	Report on management strategy for local copyright completed by May 2006.		<b>Strategy implemented.</b> Information pertaining to copyright regulations have been incorporated into the Cultural Tourism Strategy for CRMD (Greig 2006). An overview of this information is provided in Appendix E.

What needs to be done (proposed action or strategy?)	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
The appropriateness of information collected for the purposes of this Plan of Management and for the nomination file for CRMD is to be checked by the WHTC and selected members of the community.	Coordinator, Roi Mata World Heritage Project	The draft MP and nomination document was formally submitted to the community in March 2006 for comment.		<b>Strategy implemented.</b> This was evaluated by Meredith Wilson and the WHTC in March 2006 when draft versions of the nomination document and appended MP were submitted to appropriate members of the community. Comments were obtained and incorporated into the documents submitted to the World Heritage Centre in June 2006.
Consult with the VCC and the WHTC for the Lelepa region and agree on a standardised payment for the recording of local <i>kastom</i> knowledge (NB: the local fieldworkers usually pay their informants in local value goods – such as mats or food.).	The Chair and Vice-Chair of the WHTC will raise this issue with the Vanuatu Cultural Centre and then meet with WHTC to establish a standard payment.	Before June 2006.	Information concerning particular species of bush medicine was deemed appropriate for inclusion in public documentation. Information about methods of preparation and associated remedies must be withheld.	<b>Strategy Implemented</b> The VCC's response is that this issue needs to be dealt with by the community and that the VCC cannot intervene (see Appendix E for follow-up strategy).
<b>Based on the outcome of the previous strategy, the WHTC will meet with the Lelema Council fo Chiefs to decide upon a standardised payment for the recording of local kastom knowledge.</b>	<b>WHTC and the Lelema Council of Chiefs.</b>	<b>By December 2006.</b>		

## A.5. Repatriation

### Issues:

- ❖ When José Garanger excavated Roi Mata's burial on Artok Island he removed the grave goods from the site. These artefacts have since been returned to Vanuatu and are being held by the VCC on behalf of the community. The community would prefer to see these artefacts returned to the Lelepa region.
- ❖ There are other objects (not related to Roi Mata) that come from the Lelepa region that the community would like returned.

### Objective:

- ❖ Cultural items from CRMD are returned to the Lelepa region and appropriately stored and managed.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Put together a list of the objects removed from the Roi Mata grave area that are held by the Vanuatu Cultural Centre.	Carly Greig (Australian Youth Ambassador) and Marcelin Ambong (Assistant Director of the Vanuatu Cultural Centre).	December 2005.		<b>Strategy implemented</b> (January 2006). Copy to be appended to the nomination file for CRMD, as part of an inventory of property records.
Consult with the VCC to establish its requirements for the return of the Roi Mata artefacts to the Lelepa region.	Chair and Vice-Chair of the WHTC.	By December 2006.		
Seek advice from the Department of Anthropology at the Australian Museum, on the construction of an appropriate keeping place for artefacts removed from Roi Mata's gravesite.	Coordinator, Roi Mata World Heritage Project	By December 2006.		



What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Consult with the community about the design details of a keeping place.	To be determined by the WHTC once advice from the Australian Museum has been sought.	To be determined by the WHTC.	Funding for the consultation process.	
Make inquiries about the location of Roi Mata's walking stick, reported to be on the island of Emae, and the possibility of its return to the VCC or the Lelepa region.	Chair of the WHTC to consult with Pakoanaon Lore (Tourism Manager, WHTC) about this issue.	By December 2006.		
<b>Make efforts to have stolen objects returned to the community, such as the tapu stone Mwautariu.</b>	<b>Sefo Kalotiti (Lelepa Island) was first assigned this investigation, which has now been taken over by the police.</b>	<b>Ongoing.</b>		
Compile a list of objects from the Lelepa region (with photos where possible) that are held by museums around the world. Append to the picture book of traditional <i>kastom</i> objects to be used by the community for reconstruction and local education.	Kylie Moloney.	April/May 2007.	Funding to employ Ms Moloney for the purposes of undertaking this work.	This work is in progress and is being funded by The Australian National University.

## A.6. Training and capacity-building in Cultural Resource Management

### Issues:

- ❖ The challenges of cultural resource management in CRMD seem to exceed present community capacity.
- ❖ The community lacks training in non-traditional heritage management practices.

### Objectives:

- ❖ Provide the community with cultural resource management experience to enable the ongoing monitoring and long-term protection of the cultural and natural values of CRMD.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Contact universities in Australia or New Zealand that offer courses in CRM (e.g. Charles Sturt, University of Qld and the University of Canberra), DEH and private consultants to help identify CRM training needs and to develop a training package.	The Roi Mata World Heritage Project team.	By the end of 2006.		
Run a 2 week workshop in cultural heritage management (with a tourism component) for select members of the Lelepa region community.	Pending funding, the Coordinator of the CRMD Heritage and Tourism Project will be responsible for organising this workshop. An expert in CRM will be responsible for facilitating the workshop.	Workshop to be held in July 2007.	The Roi Mata World Heritage Project team is currently applying for funding to cover the cost of this workshop.	
Purchase equipment to assist with long-term monitoring of cultural features located within CRMD.	WHTC, the VCC and the Roi Mata World Heritage Project team.	It is hoped that funding will be secured by July 2007.	The Roi Mata World Heritage Project team is currently applying for funding to cover the cost of the long-term monitoring of cultural features within CRMD.	

## B. RESEARCH

### B.1. Research approvals

#### Issues:

- ❖ The community is satisfied with the VCC's research policy and research agreement (Appendices F and G) and the Environment Unit's Code of Ethics and research agreement (Appendices H and I) but would like more input on the type of research to be carried out in CRMD so that there is not a repeat of the effects of the archaeological excavations on Artok Island in the 1960s.

#### Objectives:

- ❖ Research contributes to the protection and management of CRMDs natural and cultural values and is undertaken in consultation with the WHTC and the community.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
A digital and hard copy of this MP will be housed at the VCC and the Environment Unit. Both of these organisations will be responsible for issuing digital versions of this plan to potential researchers before they commence their field research.	VCC and WHTC.	Draft copies of the MP will be submitted to the VCC and EU in June 2006 (for approval by both organisations) and final copies will be presented in February 2007.	Printing costs for hard copy versions. CD costs for digital versions.	
All proposals for research within CRMD or its buffer zone must be approved and signed-off by the WHTC and the appropriate chiefs/landowners prior to commencing fieldwork.	WHTC.	Effective today (6/12/05).		

## C. COMMERCIAL ACTIVITIES

### C.1. Commercial activities undertaken by outside interest groups

#### Issues:

- ❖ There is a general feeling amongst the community that it is difficult to place limits on commercial enterprise in the Lelepa region because it might mean that investors will take their business elsewhere.
- ❖ There is currently a commercial lease on Artok Island that the local custodians wish to have revoked.
- ❖ The proposed World Heritage area is at the frontier of a development boom on Efate, and land speculators are making extremely tempting offers to landowners to lease their land.
- ❖ Expansion of settlement through the leasing of land in the Lelepa region may impact upon remnant forests and animal habitats located in the CRMD.

#### Objectives:

- ❖ All proposals for new activities and developments by outside interest groups are subject to environmental impact assessments to ensure that impacts on the cultural and natural values of CRMD are minimised.
- ❖ Leasing of land within CRMD is prevented and current leases on the property are revoked. To the extent possible, the leasing of land within the buffer zone of the proposed World Heritage area is minimised.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Discuss with the Director of Environment a strategy for ensuring that all work proposals for the CRMD are preceded by an Environmental Impact Assessment. For this to occur there needs to be a coordinated effort by all Government Ministries, Departments and Agencies to refer all project proposals to the Director of Environment.	Meredith Wilson (Coordinator, Roi Mata World Heritage Project).	Before February 2007.		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
All Environmental Impact Assessments should be reviewed by the Director of Environment, the custom owners of CRMD, the WHTC and the VCC (See Section 3.4.4 above).	Director of Environment.	Effective immediately (March 2006).		
Draw up a set of conditions for work proposed to be undertaken by outsiders within CRMD and the proposed buffer zone to ensure that the cultural and natural values of these areas are not negatively affected. This contract will include a clause that insists on compliance with the conditions set out in this MP.	WHTC	By July 2007.		The National Tourism Organisation has been informed by letter to direct all film makers to the VCC to arrange permits before proceeding to the Lelepa Region.
Schedule a meeting with the relevant chiefs and landowners to discuss, edit and approve the proposed work conditions.	WHTC.	July 2007.		
Revival of the Lands Committee.	The WHTC to raise this possibility with the chiefs of the Lelepa region.	By the end of 2006.		
National legal protection of CRMD and its buffer zone (see Part 3 of this Plan of Management).	The Vanuatu Cultural Centre; the Ministry for Internal Affairs; the Ministry for Lands, Mines and Water Resources; the Department of Lands; the landowners of the proposed protected areas.	By the end of 2006.		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
All work proposals for CRMD must be authorised by both the WHTC and appropriate chiefs and landowners.	WHTC.	Effective today (6/12/05).		
Local monitoring and recording of prospective land leases.	WHTC and the chiefs of the Lelepa region.	Effective today (6/12/05).		
Undertake community awareness meetings advising the community on the importance of protecting the CRMD and its buffer zone from unsustainable commercial ventures.	WHTC, the Vanuatu Cultural Centre.	Effective today (6/12/05).		

## C.2. Commercial activities undertaken by the Lelepa region community

### Issues:

- ❖ The community vision for CRMD is that any benefits deriving from the property are to be shared amongst all of the households of the Lelepa region.

### Objectives:

- ❖ That the conservation of CRMD is developed alongside a community managed cultural heritage tourism project that brings benefit to the entire community

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Define the meaning of 'benefits' – which might be in the form of employment, the advancement of community projects or training.	WHTC	By July 2007		
Devise a business model/strategy (taking account of tourism and other local commercial ventures) to deliver 'benefits' deriving from CRMD equally amongst the households of the Lelepa region	WHTC	In place by July 2007	Training in business management and human resource management	
The business model for CRMD will include a clause concerning the requirement to pay annual nasaotonga (a monetary tribute) to the landowners of CRMD	WHTC	By July 2007		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Any paid position that becomes available for work undertaken within CRMD should be advertised throughout the entire community.	Human Resources (WHTC) to write job descriptions and advertise. All advertisements to be checked by the WHTC.	Effective today (6/12/05).		



### C.3. Tourism in CRMD

#### Issues:

- ❖ Tourism within the CRMD needs to be managed on a long-term basis.

#### Objectives:

- ❖ Ensure that the long-term management of tourism within CRMD is developed to protect the cultural and natural values of the property.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Complete a Cultural Tourism Strategy (CTS) for CRMD that covers all issues relating to visitation of the property. The CTS should be suitable for tourism development within a potential World Heritage area.	Australian Youth Ambassador Carly Greig.	Draft version due June 2006. Final version to be completed by February 2007.		Strategy partially implemented A draft version of this CTS was submitted to the World Heritage Centre with the nomination file for CRMD in June 2006.
Future Australian Youth Ambassador (AYAD) to update the Cultural Tourism Strategy during his / her placement at the Vanuatu Cultural Centre.	Australian Youth Ambassador due to take up a position at the Vanuatu Cultural Centre in March 2007.	Revised CTS to be completed by March 2008.	The Roi Mata World Heritage Project is in the process of applying for extra funding to assist the AYAD in the revision of the CTS.	

## C.4. Training and capacity-building within the community to support 'Roi Mata Tours' and other local commercial ventures

### Issues:

- ❖ The community lacks training in tourism management, financial and business management, first aid and other fields necessary to run a successful commercial enterprise.

### Objective:

- ❖ Community members working in CRMD are suitably skilled, work safely and effectively, and are provided further opportunities to develop their experience in managing a commercial enterprise.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Provide First Aid Training for tour guides (which includes a component in safe work practices).	Specialists in Emergency Response training based in Port Vila.	According to the 3yr plan for the CRMD Heritage and Tourism Project, this training will take place by August 2007.		Strategy partially implemented. Funding for this training was obtained from the NZ High Commission in October 2006.
Provide Small Business and Financial Management tuition to the financial managers of the WHTC.	The Roi Mata World Heritage Project team is currently applying for funding to cover the costs of this course.	According to the 3yr plan for the CRMD Heritage and Tourism Project, this training will take place in September 2007.		
Provide Tourism Management experience to the WHTC (which includes components in cross-cultural awareness, food handling and hygiene, and public relations).	The Roi Mata World Heritage Project team is currently applying for funding to cover the costs of this course. The Vanuatu Tourism Education and Training (VATET) Office has expressed an interest in running this course.	According to the 3yr plan for the CRMD Heritage and Tourism Project, this training will take place in September 2007.		

## D. ENVIRONMENTAL RESOURCES AND IMPACTS

### D.1. Fresh water

#### Issues:

- ❖ If CRMD is designated as a World Heritage area, the current water supply in the Lelepa region will not accommodate the predicted increase in tourist visitation, especially on Lelepa where people rely on rain water to fill their water tanks. To supplement the current lack of water, women paddle to obtain water from river sources located on Efate.
- ❖ There is also an issue associated with the quality of the water at Mangaliliu. Particular individuals are relied upon by the community to clean the main water tank on a regular basis, especially during times of drought when supplies get very low.

#### Objectives:

- ❖ Provide a clean and constant source of freshwater to the communities responsible for the protection of CRMD and to people visiting the area.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Estimate fresh water requirements on Lelepa for the next 10 years, factoring in predicted increases in tourism.	Ted Miller and Chief Mwasoepongi.	Before the end of 2006.		
One the basis of the above estimates, write an application for funds to improve water access on Lelepa, which might include the installation of water tanks and floating and removable water pipes connecting Lelepa to a water source on the mainland.	Ted Miller and Chief Mwasoepongi.	By July 2007.		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
<p>Organise a meeting with the Mangaliliu 'water committee' to discuss the protection and capacity of the main water tank which supplies water to the whole of Mangaliliu. Discuss the possibility of constructing a fence around the tank and instituting a system of regular cleaning to ensure a safe and drinkable water supply.</p>	<p>WHTC.</p>	<p>Before the end 2006.</p>		
<p>Apply for funding (perhaps together with the application for Lelepa) for an extra water tank at Mangaliliu.</p>	<p>WHTC and the 'water committee'.</p>	<p>Before the end of 2006.</p>		<p>Evaluation of this strategy is dependent upon the outcome of the meeting with the water committee (see above).</p>

## D.2. Fire management

### Issues:

- ❖ Many of the more important cultural features within CRMD are susceptible to fire damage (the banyan, tamanu and canarium trees at Mangaas and the cycads on Artok Island).

### Objectives:

- ❖ To protect the natural and cultural values of CRMD from wildfire in a feasible and practical way.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Develop a fire plan for CRMD that includes: <ul style="list-style-type: none"> <li>- a map of fire-sensitive areas</li> <li>- a set of policies to protect all places located within CRMD and its buffer zone, such as: a) preventing fires being lit in strong winds, b) enforcing smoke-free areas, c) the installation of sea-water pumps, d) periodic cleaning of dead leaves, d) the development of fire breaks, e) the development of evacuation plans and safe areas.</li> </ul>	Carly Greig (Youth Ambassador working on tourism with experience in fire-management procedures and fire-fighting at Uluru in central Australia) in collaboration with the WHTC.	By the end of January 2006.	To be determined.	Strategy partially implemented. Carly Greig and the WHTC developed a preliminary fire management strategy at one of their regular meetings. The sections of this strategy that are relevant to tourists can be found in the Cultural Tourism Strategy for CRMD. The sections that are appropriate to the heritage management of CRMD are described in Appendix E of this Plan of Management. <p>Some of the suggested strategies (e.g. the development of fire breaks) have not yet been implemented because there is no money for maintenance. These issues will be addressed at future community meetings (see strategy below).</p>

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Revisit the fire management plan when re-assessing the Cultural Tourism Strategy for CRMD	Australian Youth Ambassador to be placed at the VCC in March 2007	By March 2008		
Educate the community in fire management procedures, as defined by the fire plan.	WHTC with assistance from Youth Ambassador to be placed at the VCC in March 2007	By March 2008		

### D.3. Natural hazards and their implications for visitor safety

#### Issues:

- ❖ The community is concerned about the negative effects that earthquakes, cyclones and other natural hazards might have on important cultural features located within CRMD.
- ❖ The community is concerned about the safety of visitors to the area in the event of a natural hazard, particularly if there is an increase in tourism through the development of the Roi Mata Cultural Tour.

#### Objectives:

- ❖ While the effects of most natural hazards cannot be prevented, it is in the interests of the community to promote patterns of visitor use that minimise risk and optimise visitor comfort and safety.
- ❖ To respond to incidents and emergencies associated with natural disasters in an efficient, strategic way that places community members at minimal risk.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Undertake general research for the development of contingency plans, evacuation plans and monitoring programs for foreseeable natural disasters within CRMD: earthquakes, cyclones, land-slides, tsunamis and storm surges, and rising sea-levels.	Carly Greig (Australian Youth Ambassador).	December 2005-January 10 2006.		<b>Strategy implemented.</b>
Undertake research within the local community to determine how the community prepares for natural hazards and ensures community health and safety is maximised during and after a natural hazard.	Carly Greig with assistance from the WHTC.	January 10 <sup>th</sup> – January 24.		<b>Strategy implemented.</b>

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Develop contingency plans, evacuation plans and monitoring programs for foreseeable natural hazards.	Carly Greig with assistance from the WHTC.	January 24th 2006 (the development of the plan).		Strategy implemented. Plans completed and information incorporated into the Cultural Tourism Strategy for CRMD (see also Appendix E).
Provide Emergency Response training to members of the community and Tour Guides responsible for and visitor safety within CRMD (see also section C.4. above).	Specialists in Emergency Response training based in Port Vila.	According to the 3yr plan for the CRMD Heritage and Tourism Project, this training will take place in August 2007.		Strategy partially implemented. Funding for this training was obtained from the NZ High Commission in October 2006.
Include information about safety issues and Emergency Response procedures in visitor brochures for CRMD.	Australian Youth Ambassador to be placed at the VCC in March 2007.	By the end of 2007.	Funding for design and production of brochures (the Roi Mata World Heritage Project team is currently applying for funding to cover brochure costs).	
Apply for funding for First Aid kits, two-way radios and other safety equipment that will increase the safety of tourists.	Ted Miller, Carly Greig and the WHTC.			Strategy implemented. Funding for these items was obtained from the NZ High Commission in October 2006.



#### D.4. Native and introduced vegetation in CRMID

##### Issues:

- ❖ There are a number of introduced species (weeds) impinging upon native vegetation within the proposed World Heritage area and threatening a reduction in rare and / or endemic species.

##### Objectives:

- ❖ To maintain the biodiversity of CRMID by reducing or eradicating invasive or non-native species of plants.

##### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Commission the Department of Forestry (DoF), Port Vila to provide a preliminary report on the health of native plant communities located within the proposed World Heritage area.	Carly Greig (Australian Youth Ambassador) and Ted Miller (Pece Corps).	March 2006.		Strategy implemented. Sam Chanel concluded that the remanant vegetation at Mangaas should be protected and the local community should be encouraged to re-plant traditional species around tapu sites.
Establish monitoring points around CRMID that enable ongoing assessment of the health of the sacred trees, including the effects of cyclonic winds and anthropogenic interference.	Meredith Wilson (Coordinator, Roi Mata World Heritage Project).	March 2006.		Strategy implemented. See sections on individual sites and Part 8 of this Plan of Management.

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
<p>Based on DoF's recommendations (above), carefully map the flora of CRMD to enable the development of an action plan for the regeneration and replanting of former vegetation. The plan should include a weed control strategy that includes:</p> <ul style="list-style-type: none"> <li>- identifying and mapping of existing invasive / non-native species and their growth patterns</li> <li>- developing methods for the control or removal of each weed species</li> <li>- monitoring requirements</li> </ul> <p>The plan should also provide methods for preserving native species located within CRMD, particularly the rare and endemic species such as Croton Levatii, namos (L) (Macaranga dioica), namalkiki (L), seru (L) (yellow fruit that grows close to the sea) and makooos (L) (Sandalwood).</p> <p>Reference sites should be established around the CRMD which are continually monitored and which reflect the various vegetation communities of the region.</p>	<p>The Roi Mata World Heritage Project is currently applying for funding to undertake this work.</p> <p>The work should be undertaken by a professional botanist from DoF and members of the community selected by the WHTC.</p>	<p>The objective of the 3yr plan for CRMD is to commence this survey work in May 2008.</p>		

## E. HUMAN IMPACTS

### E.1. Fauna and hunting

#### Issues:

- ❖ Members of the local community are hunting protected faunal species. Under-sized Coconut Crabs and the eggs of the Incubator Bird are currently being harvested in the region.
- ❖ There is a lack of information available on the distribution of local fauna making it difficult to assess the potential impacts of hunting in CRMD.
- ❖ Certain invasive fauna, such as the Mynah bird (found throughout CRMD) and the goat (introduced to Artok Island), pose a potential threat to the property.
- ❖ During the natural values workshop (2005), a representative from the Environment Unit noted that local respondents were unaware of national legislation pertaining to the poaching of rare and endangered species. The Environment Unit also indicated that people in the region do not possess a 'conservation ethic' in relation to the protection of species' habitats.

#### Objectives:

- ❖ To ensure that community hunting practices minimise negative impacts on the native fauna, including rare and endangered species, of CRMD.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Conduct a full-scale faunal survey of the 3 sites within CRMD to determine species diversity and to identify the full range of species that are rare and endangered. Develop a conservation action plan to protect rare or endangered and endemic species of CRMD and thus protect the natural and scientific values of the property.	Environment Unit to undertake work (Vanuatu Cultural Centre, WHTC, with assistance from the ANU, to write funding proposal to pursue this work).	Obtain funding for this work by June 2007.		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
<p>Upon completion of the survey work and the establishment of a plan of management for the fauna of CRMD, the community will be informed of the recommendations of the plan at a community awareness meeting. At the same time they will be reminded of nationally enforced restrictions on the hunting of particular endangered species.</p>	<p>The Environment Unit and community members involved in the survey and planning work.</p>	<p>By the end of June 2008.</p>	<p>This strategy is dependent upon obtaining funding to undertake the survey work described above.</p>	
<p>Visit Artok Island to establish the size of the goat herd and, with permission from the kastom chief, allow occasional recreational hunting of goats as a means of controlling their number.</p>	<p>Vanua-Tai (with assistance from Peace Corps volunteer Ted Miller).</p>	<p>Between June and December 2006.</p>	<p>Some funding may need to be made available to set up Vanua-Tai monitoring activities (see section on 'natural values' below).</p>	

## E.2. Grazing

### Issues:

- ❖ It is possible that the cattle and goat populations in the region might be damaging, or have the potential to damage, some of the cultural features within CRMD and its buffer zone.

### Objectives:

- ❖ Minimise the negative impacts of grazing activities on the natural and cultural values of CRMD.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Assess the impacts of cattle grazing on and adjacent to Robert Monvoisin's property, particularly in terms of the effect on Mangailiiu's water source.	WHTC.	December 2005.		Strategy implemented. Community informants say that the cattle are not currently impacting on the water quality at Mangailiiu.
Assess the impacts of goat grazing on Artok Island, particularly in relation to the effect on culturally important sites and rare or endangered flora and fauna.	Peace Corps volunteer Ted Miller and Vanua-Tai (see above in relation to 'hunting'), with possible assistance from the Environment Unit.	Between June and December 2006.	Funding for survey and report writing.	

### E.3. Gardening and logging

#### Issues:

- ❖ It is *tapu* to garden in sacred areas associated with Chief Roi Mata.
- ❖ It is *tapu* to remove sacred or traditional trees within the proposed World Heritage property.

#### Objectives:

- ❖ To ensure that gardening and logging activities do not have a negative impact upon the natural and cultural values of CRMD.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Conduct a meeting with landowners to discuss the boundaries of the proposed World Heritage area and associated gardening and logging restrictions.	Meredith Wilson (Coordinator, Roi Mata World Heritage Project), and the Chair (Douglas Kalotiti) and Vice Chair (Leisara Kalotiti) of the WHTC are responsible for organising the meeting.	March 2006.		Strategy implemented. The landowners and chiefs support the prohibition of gardening within the boundaries of the proposed World Heritage area.
Conduct community awareness meetings that discuss the boundaries of the proposed World Heritage area and associated gardening restrictions.	Meredith Wilson (Coordinator, Roi Mata World Heritage Project), and the Chair (Douglas Kalotiti) and Vice Chair (Leisara Kalotiti) of the WHTC.	Two meetings, December 2005 and March 2006.		Strategy implemented. Meetings completed at times indicated. In March 2006 a newsletter was distributed amongst the community that provides a Bislama version of the main restrictions that have been enforced for CRMD.

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
<p>Develop a monitoring program for gardening and logging within CRMD that:</p> <ul style="list-style-type: none"> <li>- Prohibits gardening and logging within the boundaries of the proposed World Heritage property</li> <li>- Permits the continuation of normal gardening practices within the buffer zone</li> <li>- Prevents removal of traditional trees within the Mangaas area</li> <li>- Prevents removal of the cycad and pandanus trees on Artok Island</li> </ul> <p>This monitoring program should be developed as part of the botanical survey described in Section D.4. above.</p>	<p>The Roi Mata World Heritage Project is currently applying for funding to undertake this work (see section C.4 above).</p> <p>The work should be undertaken by a professional botanist from DoF and members of the community selected by the WHTC.</p>	<p>The objective of the 3yr plan for CRMD is to commence this work in May 2008.</p>		

## E.4. Marine use

### Issues:

- ❖ The Aquarium Trade (AT) is depleting the CRMD of its ornamental fish. There are no local community observers on AT vessels and therefore no official catch statistics available for the harvesting undertaken in the Lelepa region. It is also understood that the AT is poaching tapu and 'banned' areas.
- ❖ The Lelepa region community is largely unaware of the ecological and social impacts of the Aquarium Trade.
- ❖ There is no regular monitoring of the main reefs located in the CRMD.
- ❖ There is currently a proliferation of Crown-of-Thorns in the Lelepa Banned Area.
- ❖ The prohibitions on fishing within the 'banned areas' around Mangaililiu are not being observed.
- ❖ Local fishing charters and other outsiders are poaching the marine resources of the Lelepa region without authorisation from local custodians.
- ❖ There is currently over-harvesting in the Lelepa region of beche-de-Mer (sea cucumbers, which may lead to increased incidence of ciguatera), giant clams (harvested with a hammer and chisel resulting in reef breakage and other destructive methods), trochus, green snails, hawkbill and green turtles, octopus (breaking of their lairs), and land crabs. Some of these species are protected under Fisheries Regulations but are only nominally enforced by government agencies.
- ❖ Current fishing practices employed in the Lelepa region (nets, spear-guns) lead to overharvesting, especially during the hot season when fish are spawning.
- ❖ According to Reef Check (Hill 2004: 31), there is evidence of rubbish disposal and *Drupella* spp. scars on Artok Island.
- ❖ Certain boating practices (anchorage) and reef trampling are destructive to the inshore reefs of CRMD.
- ❖ There is a growing lack of self-sufficiency amongst the community as people are selling fish that could be locally consumed.

### Objectives:

- ❖ Working cooperatively between the community and industry, to protect the marine values of CRMD from unsustainable practices such as destructive fishing techniques and the harvesting of undersized and oversized species.
- ❖ To reinforce the role of the local Vanua-Tai (land-sea) monitors who have been reporting to the local theatre company 'Wan Smol Bag' on conservation issues that feature in their theatre productions.
- ❖ Where possible, to protect the marine environment of CRMD from natural hazards.



Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
<p>Seek funding to develop a marine management plan for CRMD. This marine management plan should provide a careful review of the activities of the aquarium trade (see Appendix 4, Hill 2004) and other unsustainable practices associated with the marine environment of CRMD. It should also set out guidelines for a long-term monitoring program of the marine resources of the area.</p>	<p>Meredith Wilson (Coordinator, Roi Mata World Heritage Project), in collaboration with the VCC and WHTC.</p>	<p>The aim is to obtain funding for this project July 2007. A 'marine management plan' would then be in place by early 2009.</p>		
<p>Establish a group of community-based marine monitors that extends the current role of Vanua-Tai.</p>	<p>Chiefs of the Lelepa region and the WHTC should be jointly responsible for the selection of individuals to become marine monitors.</p>	<p>Between July 2007 and early 2009.</p>		<p>The implementation of this strategy is dependent upon obtaining funding for the establishment of the marine management plan.</p>
<p>Once the management plan has been developed, conduct awareness raising amongst the community, dive operators, charter boats, tourist operators and SRS regarding the recommendations of the plan.</p>	<p>The marine monitors and the WHTC.</p>	<p>Early 2009.</p>		<p>The implementation of this strategy is dependent upon obtaining funding for the establishment of the marine management plan.</p>

## E.5. Waste, discharge and contaminants

### Issues:

- ❖ There is concern that with an increase in visitors to CRMD there will be an increase in waste (rubbish). Many foreign visitors carry consumables that are encased in plastic wrappings or containers. The dumping ground (holes in the ground) behind Mangaliu village would be quickly filled with this material if there is a substantial increase in visitation to the area.

### Objectives:

- ❖ Waste from visitation is strategically managed to minimise adverse impacts on the environment and local community and in a way that enhances visitor experience.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
<p>Ensure that all toilets constructed for visitors to the CRMD are:</p> <ul style="list-style-type: none"> <li>-self-composting and where possible made of high grade local materials;</li> <li>-built at least 50 metres inland so that they are not visible from the coastline and away from cultural sites (but within walking distance for visitors of variable fitness) (see Cultural Tourism Strategy for CRMD for proposed actions in relation to this strategy);</li> <li>-able to accommodate an increase in visitation to the area.</li> </ul>	Chair and Vice-Chair of the WHTC to monitor toilet construction in CRMD.	Effective as of 6/12/05.		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Assess the capacity of the flush toilet at Mangaliliu that has been targeted for use by tourists and other visitors to the village.	Ted Miller (Peace Corps volunteer) to contact Evergreen who were responsible for the construction of the toilet at Mangaliliu.	December 2006.		
Encourage a 'take your rubbish with you' policy for CRMD, to be advertised by Tour Guides and tour brochures.	Youth Ambassador to commence his / her placement at the VCC in March 2006.	Between March 2007 and March 2008.		
Recycle plastic bottles in Port Vila and insert profits back into the tourism project for the proposed World Heritage area.	Cleaners / individuals who prepare food for the tourism project (Human Resources to decide).	From the start of the proposed pilot tour in May 2006.		

## E.6. Prospecting

### Issues:

- ❖ CRMD is a sacred area and should be subject to minimal disturbance.
- ❖ Some members of the local community have been harvesting sand from Mwalakot.

### Objectives:

- ❖ To ensure that prospecting within CRMD does not negatively impact the cultural and natural values of the property.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Discourage members of the local community and industry from prospecting for commercial purposes anywhere within CRMD.	WHTC.	Effective as of today (6/12/05).		
Advise the community that there will be fines issued to anyone who removes sand from Mwalakot.	WHTC, at a church meeting.	By June 2006.		
Discuss with the landowners the possibility of phasing out Aquarium Trade operations within the boundaries of CRMD (see also section E.4.).	To be determined on the basis of who eventually sets up a marine management system for CRMD.	2007.	Finances to commence community consultation about marine management for CRMD.	

## F. DEVELOPMENT AND INFRASTRUCTURE

### F.1. Communication

#### Issues:

- ❖ There are currently no effective methods of communication within CRMD that might be used in the event of an emergency.
  - ❖ Telecom Vanuatu has expressed an interest in constructing communication towers within the Lelepa region.
- Objectives:**
- ❖ Limit communication-related infrastructure to that which is necessary for safety purposes (within CRMD).
  - ❖ To the extent possible, ensure that communication towers and related infrastructure are not located within the 'visual catchment' of CRMD.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Purchase 4 portable radios for use within CRMD, to be stationed at Fels, Mangaas and Artok.	Ted Miller (Peace Corps) and Carly Greig (Australian Youth Ambassador) have applied to the Australian High Commission (Port Vila), the New Zealand High Commission (Port Vila), and Shefa REDI for funding.	Dependent on funding.		Strategy Implemented. The New Zealand High Commission has funded the purchase of 4 portable radios.
Ensure that any decision-making in regards to the construction of communication infrastructure takes account of the proposed World Heritage area and the need to limit 'visual pollution' from all vantage points.	The WHTC is responsible for advising decision-makers on the importance of protecting and maintaining the visual catchment of CRMD.	Effective today (6/12/05).		This strategy will be reviewed by the WHTC as the opportunity to have access to electricity in the Lelepa region increases.

## F.2. Power

### Issues:

- ❖ Currently power sources are limited in the Lelepa region and may not be sufficient to support a tourism business.
- ❖ According to *nafsan natoon*, it is forbidden to make too much noise at the three main sites within CRMD. It is therefore not desirable to install powered generators on the property.
- ❖ UNELCO has expressed an interest in installing power lines within the Lelepa region.

### Objectives:

- ❖ To rely on power sources that maintain a quiet atmosphere within CRMD – in accordance with *nafsan natoon*.
- ❖ To the extent possible, ensure that power lines and related infrastructure are not located within the ‘visual catchment’ of CRMD.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Battery and solar sources of power should be used within CRMD (e.g. for lighting up the drawings in Fels cave or for recharging batteries).	The WHTC is responsible for advising prospective developers, and the decision-makers within the community, of the importance of protecting and maintaining the visual catchment of CRMD.	Effective today (6/12/05).		This strategy will be reviewed by the WHTC as the opportunity to access electricity in the Lelepa region increases.
Apply for funding to pay for solar powered and battery powered equipment to be used for the cultural tourism project (see Cultural Tourism Strategy for CRMD).	Ted Miller (Peace Corps volunteer) and Carly Greig (Australian Youth Ambassador), as this equipment is needed for the pilot tour.	By June 2007.		Power requirements for CRMD and the tourism project will be evaluated at the end of the ‘pilot’ phase of the community tourism operation.

### F.3. Roads and powered vehicles

#### Issues:

- ❖ The construction of roads and other infrastructure (runways) that might support high-powered vehicles (planes, trucks, powered bikes, construction machinery) may negatively impact upon the cultural values of CRMD.

#### Objectives:

- ❖ To ensure that roads, runways and other infrastructure are managed in a way that avoids negative impacts on the cultural and natural values of CRMD.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Ensure that the construction of roads, runways and other forms of vehicle access is prohibited within CRMD. Walking tracks only will be permitted on the property.	The WHTC.	Effective today (6/12/05).		
Ensure that any decision-making in regards to the construction of roads within the buffer zone takes account of the need to limit visual pollution around CRMD. For instance, it should be advised that roads are built inland rather than along the coast and that they are concealed by coastal trees.	The WHTC is responsible for advising prospective developers, and the decision-makers within the community, of the importance of protecting and maintaining the visual catchment of CRMD.	Effective today (6/12/05).		This strategy will be reviewed by the WHTC as the opportunity to build roads within the Lelepa region increases.

## F.4. Habitation

### Issues:

- ❖ When Roi Mata was buried on Artok approximately 400 years ago, the Alpat family that was living on the Island was compensated for loss of land and granted a plot at Mangaas. Since then, no one within the local community has been allowed to reside there.
- ❖ Out of respect for Chief Roi Mata, Mangaas was also abandoned after his death and has not been re-settled since.

### Objectives:

- ❖ To ensure that no permanent human habitation occurs within CRMD.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Prevent the building of permanent habitation structures within the proposed World Heritage area, except those used for the purposes of tourism. If an individual or organisation expresses an interest in constructing residential structures within CRMD the WHTC will call a meeting to decide how best to intervene.	WHTC, supported by the chiefs and landowners of CRMD.	Effective as of 6/12/05.		



## F.5. Construction

### Issues:

- ❖ During the past 400 years there have been no above-ground structures built within CRMD (with the exception of Ernie Reid's bungalow on Artok Island, 1960s – 1975). Any future construction (or re-construction) for temporary use (not permanent habitation) would need to be undertaken with respect to the cultural significance of the place.

### Objectives:

- ❖ To ensure that all above-ground structures built within CRMD preserve the cultural and natural values of the property.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Collect historical photographs of traditional building structures and former tamtams of the Lelepa region to enable accurate reconstructions to be made.	Chris Ballard (Principal Researcher for the Roi Mata World Heritage Project).	By December 2007.		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
<p>Develop parameters / guidelines for the building of above-ground structures within CRMD and the buffer zone that:</p> <ul style="list-style-type: none"> <li>- limit the number of 'unsightly' buildings located within the visual catchment of CRMD;</li> <li>- undertake an Environmental Impact Assessment (see Section 3.4.4 above);</li> <li>- ensure that construction efforts do not affect or result in the removal or disturbance of existing above-ground archaeological remains or other cultural features (e.g. the banyan at Mangaas);</li> <li>- ensure that construction work within CRMD does not involve excavation or disturbance of archaeological substrates;</li> <li>- ensure that all structures built within CRMD can be removed (if required) without damage to any existing archaeological or other cultural features in the area.</li> </ul>	<p>WHTC with assistance from CRMD landowners and the Lelema Council of Chiefs.</p>	<p>Guidelines to be developed during the heritage and tourism workshop scheduled for July 2007.</p>	<p>The Roi Mata World Heritage Project is in the process of applying for funding to cover the costs of this workshop.</p>	

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented? what was the outcome?)
Conduct community workshops to inform people of building guidelines within the proposed World Heritage area and its buffer zone.	WHTC.	July 2007.		
Employ the best carpenters in the Lelepa region to undertake all building projects within the proposed World Heritage area to promote the highest standards of construction.	WHTC.	As needed.		
Monitor all building projects in the proposed World Heritage area, and submit all plans for above-ground structures to the World Heritage Centre for approval.	WHTC.	The WHTC is currently monitoring all building projects within CRMD to ensure that the cultural and natural values of CRMD are retained. After July 2007 they will ensure that all construction adheres to the 'building guidelines' (see strategy above).		

## G. ADMINISTRATION

### G.1. Penalties for breaching conditions of the Plan of Management

#### Issues:

- ❖ The WHTC needs to have the respect of the community so that it can carry out its tasks effectively, including issuing fines to people who are in breach of the conditions set out in this Plan of Management.
- ❖ The Plan of Management is written in English and is therefore not accessible to everyone who is affected by it.

#### Objectives:

- ❖ The WHTC is recognised and respected by the community for its role in implementing the Plan of Management and for protecting the CRMD.
- ❖ To translate the Plan of Management into Bislama so that it reaches the broadest possible readership, particularly within the Lelepa region.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Appropriate chiefs and landowners to officially authorise the role of the WHTC as a monitoring body for cultural heritage and tourism in the proposed WH area.	The chiefs and landowners of CRMD.	In December 2005 the chiefs were made aware of the need to officiate the role of the WHTC.		Strategy implemented. This action was completed in March 2006, at an official swearing-in of the WHTC held at Mangaas and Mangaliliu.
Develop guidelines for issuing notices to members of the community in breach of the Plan of Management (including the form in which the breach notice shall take [verbal, written], the penalty rate, who the penalty shall be paid to, how penalties / payment of penalties are recorded, and actions to be taken in the case of multiple offences).	WHTC in consultation with the chiefs and landowners of CRMD.	By June 2006 or in response to the first offence.		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
The WHTC is to enforce the conditions set out in this MP and the Chair of the WHTC is to deliver penalty notices.	WHTC.	Once an appropriate penalty has been set.		
Apply for funding to have this Plan of Management translated into Bislama and then employ an individual within Vanuatu to undertake the translation.	Meredith Wilson (Coordinator of the CRMD Heritage and Tourism Project) in collaboration with the VCC and WHTC.	Apply for funding by November 2006 and commence translation by July 2007.	Approximately 300,000 vatu (c. US\$3000) is required to undertake the translation of this document.	

### 7.3. Action plan for Mangaas, Fels Cave and Artok Island

#### A. MANGAAS

##### A.1. Tapu (magic) stones

###### Issues:

- Joe Kalotiti (son of Chief Kalkot Murmur) had a dream in which a man came to him and said that the tapu stones of Mangaas should be moved to one place and protected. However, there have been instances when people have moved the tapu stones at Mangaas and died shortly after. At a meeting of the WHTC in December 2005, the general feeling was that the tapu stones should be left alone until such time when there is cause for moving them.
- Many local people do not know of the location or meaning of the tapu stones. Some believe this lack of knowledge is an important reason why these stones have been protected for so long.

###### Objectives:

- To protect the tapu stones in situ.

###### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Record Joe Kalotiti's dream so that it can be referred to in future decision making regarding the stones.	Chris Ballard (Principal Researcher, Roi Mata World Heritage Project)	March 2006.		Strategy implemented. Recorded on 15/3/06.
Set up a monitoring station for at least one of the stones at Mangaas to record the long-term effects of natural and human impacts.	Meredith Wilson.	March 2006.	Community training in conservation and monitoring (see A.6. above).	Strategy implemented Stone #5 at Mangaas – also known as 'Roi Mata's stone' has been selected for monitoring (See Part 8).  NB: 8 stones at Mangaas and Arapus have been mapped.

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
<p>Conduct awareness workshops for the landowners of CRMD and the community to discuss the importance of these stones (NB: this applies to all cultural features listed for Mangaas).</p>	<p>WHTC.</p>	<p>Ongoing, as needed.</p>		<p>At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.</p>

## A.2. Stone walls and gateway

### Issues:

- The stone walls at Mangaas demarcate the boundaries of the former (L) sumwa (household yards) within and outside Roi Mata's village precinct. Some local gardeners are unaware of the presence and historical importance of these walls. Outside the curvilinear walls at Mangaas a combination of gardening and natural processes has most likely led to the deterioration of some of the stone walls. Within the more sacred enclosures of Mangaas associated directly with Roi Mata, inside the curvilinear walls, natural processes are most likely to have caused the walls to decay over time. There are some original walls located close to the first cliffline at the rear of Mangaas that are still largely intact, providing a better impression of how the landscape might have looked up to 400 years ago.
- Many members of the local community are interested in reconstructing a section of stone wall and the gateway at Mangaas as part of the tourism project.

### Objectives:

- To protect the stone walls through awareness and monitoring.
- To undertake reconstruction of a section of stone wall at Mangaas if such an action promotes and enhances the values of the site.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Set up a monitoring station for the stone walls at Mangaas to enable proper assessment of the causes of structural changes / deterioration they experience.	Meredith Wilson (Coordinator, Roi Mata World Heritage Project).	March 2006.	Community training in conservation and monitoring (see A.6. above).	Strategy implemented. The stone walls have been plotted and labelled on a map of the cultural features of the Mangaas area. An area of stone wall that passes beneath the nambanga at Mwalasayen has been selected for monitoring (See Part 8).
Contact UNESCO and/or ICOMOS to advise the community about the possibility of reconstructing a segment of stone wall for their cultural tourism project.	Meredith Wilson to report to Douglas Kalotiti (Chair of the WHTC).	December 2005.		Strategy implemented. The World Heritage Centre has recommended that the community wait for the advice of the advisory bodies after their field-evaluation of the property. This evaluation will take place between February 2007 and February 2008.



What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
<p>Conduct awareness workshops for the landowners and the community about the importance of protecting the stone walls at Mangaas.</p>	<p>WHTC.</p>	<p>Ongoing, as needed.</p>		<p>At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.</p>

### A.3. Mwaitiriki

#### Issues:

- This is a sacred place at Mangaas, located outside the proposed World Heritage area but within the buffer zone, that is currently not gardenised and should not be visited. There are snakes located in this area that shouldn't be touched by tourists.

#### Objectives:

- To protect the tapu associated with Mwaitiriki and minimise the risk of inappropriate visitor behaviour.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Incorporate information about the sacredness of Mwaitiriki and appropriate behaviour at this place into the Cultural Tourism Strategy for CRMD (NB: local people are reluctant to make tourists aware of the snakes at Mwaitiriki because people may become more interested in them and want to touch them. The snakes should be left alone.).	Carly Greig (Australian Youth Ambassador, VCC).	By June 2006.		Strategy implemented. The tourism track has been designed so that visitors to Mangaas can only see Mwaitiriki from a distance. There is therefore very little possibility of tourists disturbing or impacting upon the sacred snakes of Mwaitiriki.

#### A.4. Banyan (Nambanga) at Mwalasayen

##### Issues:

- This nambanga is said to have been alive since Roi Mata's time and to have been part of Mwalasayen (the former communal dancing ground). It experiences periodic loss of rotten branches (largely the result of cyclone damage) and some of the supporting roots have been cut out by local people with bush knives. It would be very sensitive to any further disturbance.
- The banyan periodically loses some of its upper canopy branches. This is a safety issue.
- According to local tradition people cannot make noise around the tree or go close to it.

##### Objectives:

- To protect and manage the banyan and the cultural restrictions associated with it.

##### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Explore options for protecting the tree in consultation with Sam Chanel (Forestry Department, Port Vila).	Carly Greig (Australian Youth Ambassador, VCC) and Ted Miller (Peace Corps volunteer, Mangaliliu Village).	By March 2006.		Strategy implemented. This report (Chanel 2006) suggests several ways of protecting the tree at Mangaas, including a regeneration program to encourage the growth of the roots of the nambanga and to restore the surrounding vegetation to how it was formerly (see below).
Implement recommendations of the above report, including the commencement of a nambanga regeneration program. This would be undertaken as part of the botanical survey discussed in section D.4. above.	The Roi Mata World Heritage Project is currently applying for funding to undertake this work.  The work should be undertaken by a professional botanist from DoF and members of the community selected by the WHTC.	The objective of the 3yr plan for CRMD is to commence this work in May 2008.		

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Commence monitoring around the tree to determine the long-term impacts of natural hazards and anthropogenic impacts on the health and safety of the tree.	Meredith Wilson (Coordinator, Roi Mata World Heritage Project).	By March 2006.	Community training in conservation and monitoring (see A.6. above).	Strategy implemented. Several monitoring stations have been set up around the tree, details of which can be found in Part 8 of this Plan of Management.
Undertake awareness workshops for landowners, the community and visitors to the site about the importance of: not cutting out the supporting roots of the nambanga; not standing on the main roots; not standing beneath rotten branches or trampling and compacting the soil which surrounds the tree (see Bickford 2005) (see also the Cultural Tourism Strategy for CRMD).	Meredith Wilson (Coordinator, Roi Mata World Heritage Project) and the WHTC.	Ongoing, as needed.		At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.  The Cultural Tourism Strategy for CRMD addresses the strategies that have been put in place to educate tourists about personal safety, the age and sensitivity of the banyan, and the cultural restrictions associated with the tree.

## A.5. Canarium (Nangae) at Sumwantuk

### Issues:

- This tree forms part of Sumwantuk (Roi Mata's residence) and therefore needs to be protected. It is believed to have been there since Roi Mata's time.

### Objectives:

- To protect and manage the nangae (Canarium) at Sumwantuk.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Contact Sam Chanel (Department of Forestry, Port Vila) for a full report on the health of the canarium.	Carly Greig (Australian Youth Ambassador, VCC) and Ted Miller (Peace Corps volunteer, Mangaliliu Village).	By March 2006.		Strategy implemented. Sam Chanel (pers.comm. 2006) recommends that the tree be regularly monitored by a qualified botanist (see monitoring program, Part 8). The tree is said to currently be in very good health.
Awareness workshops for landowners and community on the importance of preserving the canarium.	WHTC.	Ongoing, as needed.		At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.

## A.6. Tamanu (Napakora) at Mwalakot

### Issues:

- There are three large tamanu trees at Mwalakot, Roi Mata's landing place. They have reportedly been there since Roi Mata's time.

### Objectives:

- To protect and manage the tamanu trees at Mwalakot.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Contact Sam Chanel (Department of Forestry, Port Vila) for a full report on the health of the tamanu trees.	Carly Greig (Australian Youth Ambassador, VCC) and Ted Miller (Peace Corps volunteer, Mangaliliu Village).	By March 2006.		Strategy implemented. Sam Chanel (pers.comm. 2006) recommends that the trees be regularly monitored by a qualified botanist (see monitoring program, Part 8). The trees are currently said to be in good health (Bickford 2005). One of the aims of this monitoring program is to ensure that rotting branches are identified and removed to ensure the safety of the community and visitors to the site.
Awareness workshops for landowners and the community on the importance of preserving the tamanu trees.	WHTC.	Ongoing, as needed.		At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.

## B. FELS CAVE

### B.1. The rock-art

#### Issues:

- There is concern about the amount of graffiti in the cave and the prospect of people throwing stones at or touching the walls and adversely affecting the rock-art.
- Dust, kicked up by visitors to the cave or (occasionally) moved by wind, settles on the rock-walls and obscures the rock-art.

#### Objectives:

- To protect and conserve the rock-art at Fels Cave from visitor impacts, vandalism, natural elements and weathering.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Set up a monitoring program to assess anthropogenic impacts on the rock art.	Meredith Wilson (following Sale and Hall, 2002).	By March 2006.	Community training in conservation and monitoring (see section A.6. above).  Camera and other monitoring equipment (recording kit).	Strategy implemented. See Part 8 of this Plan of Management.
Conduct awareness workshops for landowners and the community about the importance of not disturbing the drawings in the cave (see also the Cultural Tourism Strategy for CRMD for strategies for protecting the art from tourism impacts).	WHTC.	Ongoing, as needed.		At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Ask experts in cultural heritage management and rock-art conservation to advise the community on the type of walkway which might best reduce the amount of dust settling on rock-surfaces.	Meredith Wilson (Coordinator, Roi Mata World Heritage Project).	By July 2007.		



## B.2. The cave structure

### Issues:

- There is concern about the stability and safety of the cave.
- Earthquakes which may result in large-scale block collapse or small-scale spalling of the rock-surface and lead to the loss of rock-art.

### Objectives:

- To investigate the effects of earthquakes on the stability and safety of Fels Cave.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Request a geological assessment of the cave from the Department of Geology, Mines and Water Resources (Port Vila).	Carly Greig to ask the advice of Toney Tevi at the Department of Geology and Mines.	Before the end of 2005.		Strategy partially implemented. A geological field assessment of the cave has been made. The monitoring and evaluation methods used to assess of the stability of the cave will be developed by the Department of Geology, Mines and Water Resources once further funding has been obtained. The Department has recommended that tourists wear hard hats while visiting the site.
Set up a monitoring program to assess the impact of natural processes on the rock art	Meredith Wilson (following Sale and Hall, 2002)	By March 2006	Community training in conservation and monitoring (see section A.6. above). Camera and other monitoring equipment (recording kit)	Strategy implemented. See Part 8 of this Plan of Management

## C. ARTOK ISLAND

### C.1. Roi Mata's grave area

#### Issues:

- The main grave area, the headstones, and the grave offerings need to be protected
- It is *tapu* to make too much noise on Artok Island, especially within the immediate vicinity of Roi Mata's grave

#### Objectives:

- To protect and manage the values of Roi Mata's grave area and associated cultural restrictions

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Set up a monitoring program to assess natural and anthropogenic impacts on the gravesite.	Meredith Wilson and Carly Greig.	By March 2006.	Community training in conservation and monitoring (see section A.6. above).  Camera and other monitoring equipment (recording kit).	Strategy implemented. See Part 8 of this Plan of Management.
Awareness workshops for landowners and community to ensure that people do not disturb the grave area (see also Cultural Tourism Strategy for suggested ways of reducing the impact of visitation at the gravesite).	WHTC.	Ongoing, as needed.		At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.

## C.2. Stone walls and other cultural heritage features (e.g. graves, caves)

### Issues:

- The community is unhappy about the fact that the present path across the island cuts through some of the ancient stone walls (which pre-date the period of Roi Mata) and other historic features.

### Objectives:

- To protect and manage the stone walls and other cultural heritage features on Artok Island.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Prepare a scaled map of the walled structures and other historic features of Artok Island to enable the community to protect these features.	Chris Ballard (Principal Researcher, Roi Mata World Heritage Project).	July 2007.	The Roi Mata World Heritage Project team is currently applying for funding to undertake this survey work.	Strategy partially implemented The stone walls in the immediate area of the gravesite were surveyed in November / December 2005 and a scaled map of these features was included in the draft version of the nomination document submitted to the World Heritage Centre in June 2006. A complete survey of the island is still required.
Discuss options for how best to preserve the stone walls and other cultural features of Artok Island.	WHTC.	Once the commercial lease on the island has been revoked (by February 2007).		

### C.3. Napsin For (Casuarina)

#### Issues:

- This casuarina, which stands on the highest plateau on Artok, is used to predict cyclones by measuring its location in relation to the setting sun. It is therefore an important cultural feature and needs to be protected.

#### Objectives:

- To protect and manage the casuarina and enable its continuing use to predict cyclones.

#### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Install an appropriate (immovable) plaque or marker at the base of napsin for so that the location of the tree is permanently recorded.	Chair of the WHTC.	As soon as possible.	An appropriate marker.	

## C.4. Cycads (Namele)

### Issues:

- The cycads (*namele*) on Artok Island are associated with chiefs and are therefore extremely important to the local community.

### Objectives:

- To protect and manage the cycads on the island and their association with chiefs.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Undertake a survey to map cycad distribution and document their present condition.	Chris Ballard (Principal Researcher, Roi Mata World Heritage Project).	July 2007 (at the same time as the stone walls on the island are to be mapped; see C.2. above).	The Roi Mata World Heritage Project team is currently applying for funding to undertake this survey work.	
Awareness workshops for landowners and community to ensure that people do not disturb the cycads on Artok Island.	WHTC.	Ongoing, as needed.		At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.

## C.5. Pandanus

### Issues:

- The pandanus trees are important because they stabilise the coastal ground surface on Artok Island.

### Objectives:

- Protect the pandanus trees and their function of stabilising the coastal areas of the island.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Awareness workshops for landowners and the community to ensure that people do not remove the pandanus trees on Artok Island.	WHTC.	Ongoing, as needed.		At community meetings held in December 2005 the importance of preserving the cultural features of CRMD was stressed. In March 2006, a newsletter was distributed amongst the community listing the behavioural rules to be followed when visiting CRMD. Further awareness workshops will be conducted by the WHTC on a 'need to' basis.

## C.6. Snakes and lizards

### Issues:

- People are allowed to look at the snakes on Artok but they must not touch or kill them.
- An increase in boat traffic to Artok Island may lead to the introduction of non-native lizards from mainland Efate (e.g. *Lipinia noctua*, *Lepidodactylus lugubris*, and *Hemidactylus frenatus*). These might threaten the survival of several rare species found on the island (such as *Cryptoblepharus novaehbridicus*, which may prove to be endemic to Artok Island).

### Objectives:

- To ensure that visitors to the island respect and abide by the tapus associated with snakes on Artok Island.
- To prevent the introduction of non-native lizards found on mainland Efate to Artok Island.

### Strategies:

What needs to be done (proposed action or strategy)?	Who should be responsible?	What is the sequence and timing?	What resources are needed?	Status of strategy? (has the strategy been implemented?; what was the outcome?)
Decide how to communicate the tapu restrictions associated with snakes to tourists.	WHTC.	Once the lease on Artok has been terminated and the community tourism project can be extended to include the island (after February 2007).		
Routinely check all boats travelling from Efate and Lelepa to Artok Island for lizards.	WHTC and the custodians of Artok Island (Chief Meto and his family).	Effective from September 2006.		
Avoid the introduction of artificial lights to Artok Island. Two species of non-native gecko ( <i>Lepidodactylus</i> and <i>Hemidactylus</i> ) found on mainland Efate feed on insects that are attracted to night lights found around human settlements. If these species were accidentally introduced to Artok Island the absence of lights would prevent them from thriving.	WHTC and the custodians of Artok Island (Chief Meto and his family).	Effective from September 2006.		

## Part 8: Monitoring and Review

### 8.1. Plan Evaluation

In March of each year, the World Heritage and Tourism Committee (WHTC) will prepare a summary report which evaluates the effectiveness of the action plan in Part 7. This report will comment upon whether each of the strategies listed was:

- a) completed (within the stated timeframe)
- b) successful in their outcome (describe and measure the success of the outcome on a scale of 1 through to 5, where 1 indicates 'not successful' and 5 indicates 'extremely successful')

Once each of the strategies has been evaluated, the summary report will be submitted to the Vanuatu Cultural Centre. The WHTC will then use the results of this report to update the Master Copy of the Plan of Management (which will be housed on the 'Cultural Site Management System' for CRMD). Each of the new recommendations shall accord with the *Operational Guidelines for the Implementation of the World Heritage Convention*.

Annual evaluation reports will be formally incorporated into the next printed edition of the Plan of Management for CRMD, after the Plan of Management Review Workshop scheduled for March 2009 (see section 1.2).

### 8.2. Monitoring of Intangible and Tangible Heritage

This Plan of Management is intended to provide strategies for the long-term protection of both the *intangible* and *tangible* heritage of the proposed World Heritage area. The Roi Mata World Heritage Project represents the first time that an attempt has been made to:

- a) determine the tangible and intangible elements of CRMD that define its values as a cultural landscape to both locals and outsiders;
- b) define the state of conservation of the tangible and intangible values of the property; and,
- c) design ways of monitoring the state of conservation to enable appropriate management decisions to be made for the protection of the tangible and intangible values of the property

The intangible heritage of CRMD includes the ways in which people behave, on a daily basis, in relation to their physical landscape. Such behaviour reflects how Chief Roi Mata has become a part of social consciousness, and how individuals have come to incorporate this historic figure into their own worldview. Intangible heritage also concerns the stories, chants and songs, language and other forms of knowledge associated with CRMD.

One of the conservation challenges for the people responsible for looking after CRMD is finding ways to encourage the regeneration of these various expressions of intangible knowledge. In the action plan for the management of CRMD (Part 7), this challenge is dealt with in sections A.1. and A.3., under the headings 'Oral history' (*kastom* stories and songs) and 'Recording of cultural information'.

The tangible heritage of CRMD, which are the physical features that embody the cultural values of the property, includes the archaeological remains of Mangaas, Fels Cave and



Artok Island. Certain tangible features, such as the stone walls and the gateway at Mangaas, have been re-discovered as a part of the Roi Mata World Heritage Project and have not been subject to preservation for many years. Other features however, such as the *nambanga* (banyan) at Mangaas, and the grave stones and conch shells at the burial site on Artok Island, inspire fear and awe amongst all members of the local community and are therefore afforded some protection by virtue of their *tapu* nature.

### 8.3. Monitoring Points

Regardless of the degree of preservation associated with each of the physical remains of CRMD, all features that contribute in a substantial way to the 'outstanding universal value' of the property have been selected for long-term monitoring. Each of the three main sites within CRMD was visited between December 2005 and March 2006 and a total of 37 monitoring points were established. Blank forms for recording monitoring point details can be found in Appendix J. Completed forms have been downloaded onto the 'Roi Mata Cultural Site Management System' (forthcoming).

The following maps and tables locate and describe the cultural features within CRMD that have been selected for monitoring. The key indicators for assessing the long-term conservation of each of these features are also specified.

## Mangaas

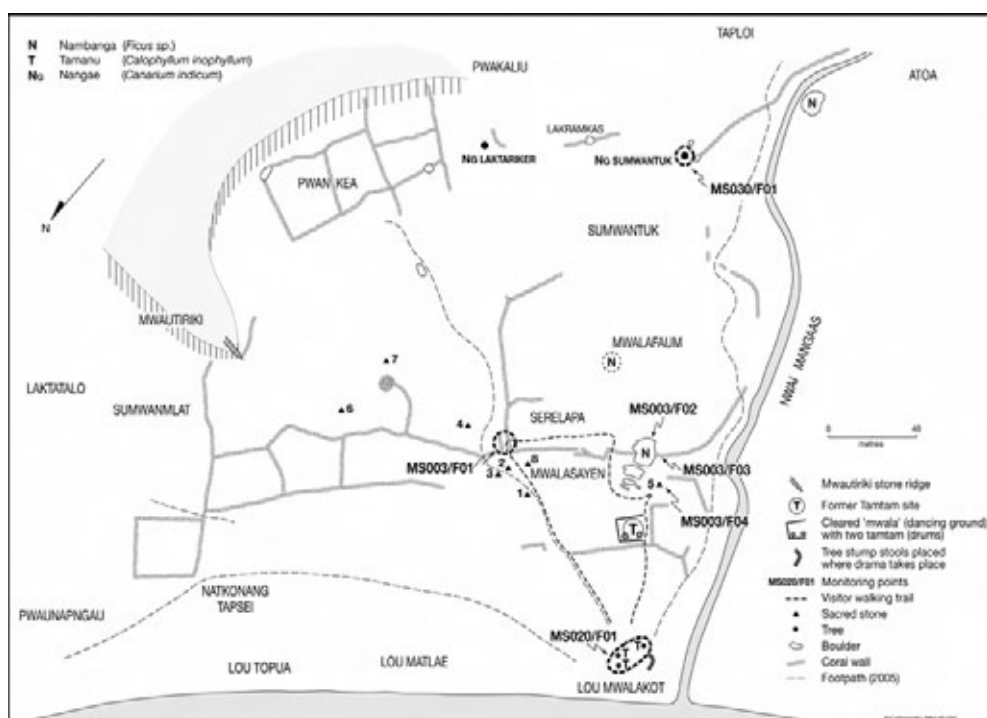


Figure 25: Mangaas, showing the locations of features selected for monitoring

No.	Code	Feature	Key Indicators
1	MS003/F01/MP01	Stone gateway	Increase in vegetation growth around the gateway
2	MS003/F01/MP02	Stone gateway	Movement of individual stones associated with the gateway
3	MS003/F02/MP01	Banyan tree	A reduction in the number of support trees located around the banyan; growth of new supporting trees; the presence of aerial roots attached to the supporting trees
4	MS003/F02/MP02	Banyan tree	A reduction in crown density of the banyan
5	MS003/F03/MP01	Stone wall	Movement or removal of individual stones associated with the stone wall
6	MS003/F04/MP01	Sacred stone	Overall movement of the stone; a change in the measurement between the stone and an abutting banyan root
7	MS020/F01/MP01	Tamanu trees	Change in the overall health of the tree; rotten branches that might fall down
8	MS030/F01/MP01	Canarium tree	Change in the overall health of the tree

## Fels Cave

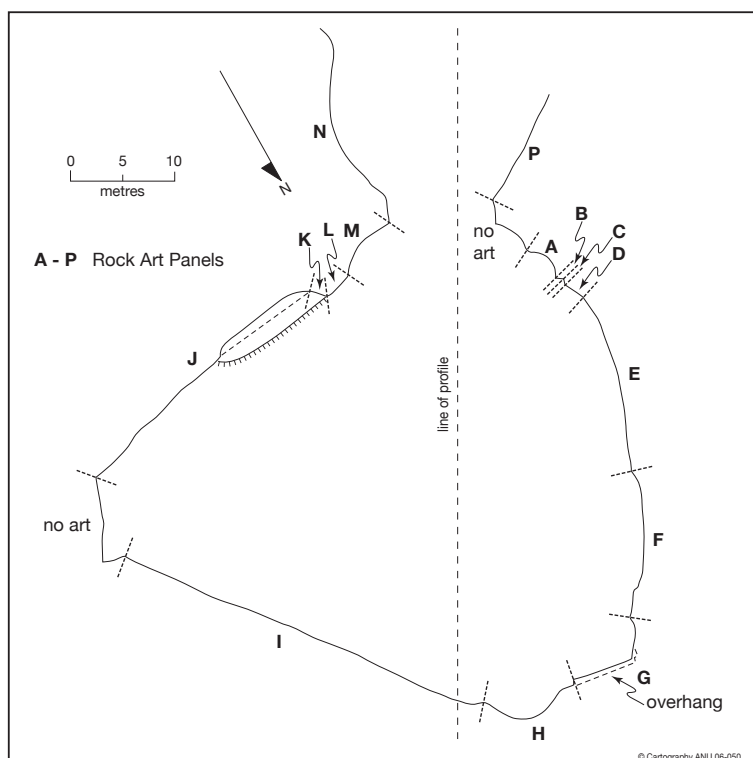


Figure 26: Fels Cave, showing the locations of features selected for monitoring

No.	Code	Feature	Key Indicators
1	LL004/F01/MP01	Black drawing – ‘fowl’	Loss of image clarity due to granular disintegration / small scale exfoliation of rock surface
2	LL004/F02/MP01	Black drawing – vertical lines	Loss of image clarity due to granular disintegration / small scale exfoliation of rock surface
3	LL004/F03/MP01	Black drawing – anthropomorph	Loss of image clarity due to granular disintegration / small scale exfoliation of rock surface
4	LL004/F04/MP01	Black drawing – ‘Roi Mata’	Increase in the size of the area affected by salt action / exfoliation
5	LL004/F04/MP02	Black drawing – ‘Roi Mata’	Increase in the size of the area affected by salt action / exfoliation
6	LL004/F05/MP01	Panel G	Detachment of rock surface due to weathering
7	LL004/F05/MP02	Panel G	Detachment of rock surface due to weathering
8	LL004/F05/MP03	Panel G	Widening of crack along the bedding plane
9	LL004/F06/MP01	Red stencil – hand	Increase in exfoliation due to salt action
10	LL004/F06/MP02	Red stencil – hand	Increase in exfoliation due to salt action
11	LL004/F07/MP01	Graffiti panel	The addition of new graffiti; a discoloration of old graffiti

## Artok Island

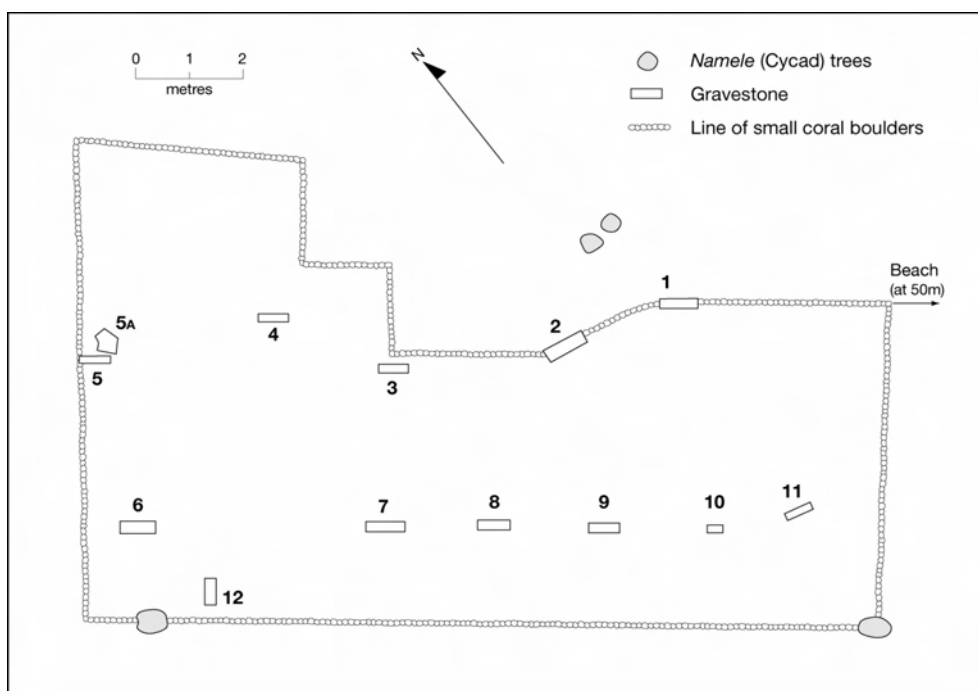


Figure 27: Gravesite (Artok Island), showing locations of features selected for monitoring

No.	Code	Feature	Key Indicators
1	AR005/F01/MP01	Gravestone #1	An increase or change in microbial (e.g. lichen) growth; an increase in cracks / exfoliation on the rock surface
2	AR005/F01/MP02	Gravestone #1	An increase in cracks / exfoliation on the rock surface
3	AR005/F01/MP03	Gravestone #1	Movement or removal of the 'support stone' for Gravestone #1
4	AR005/F01/MP04	Gravestone #1	Movement or removal of shell 'offering' on northwest side of gravestone
5	AR005/F01/MP05	Gravestone #1	Movement or removal of shell 'offerings' on southeast side of gravestone
6	AR005/F02/MP01	Gravestone #2	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
7	AR005/F02/MP02	Gravestone #2	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
8	AR005/F02/MP03	Gravestone #2	An increase in grave offerings; evidence that grave offerings are negatively impacting on older cultural material (e.g. shells; gravestone); movement or removal of grave offerings

9	AR005/F03/MP01	Gravestone #3	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
10	AR005/F03/MP02	Gravestone #3	An increase or change in mossy growth; structural changes on the rock surface
11	AR005/F04/MP01	Gravestone #4	An increase or change in algal growth; structural changes on the rock surface
12	AR005/F05/MP01	Gravestone #5	Movement or removal of broken horizontal slab
13	AR005/F06/MP01	Gravestone #6	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
14	AR005/F07/MP01	Gravestone #7	An increase or change in microbial (e.g. lichen) growth; structural changes on the rock surface
15	AR005/F08/MP01	Gravestone #8	An increase or change in the pattern of exfoliation occurring on the northwest face of the gravestone
16	AR005/F08/MP02	Gravestone #8	Movement or removal of tridacna shell lying near the gravestone
17	AR005/F010/ MP01	Gravestone #10	An increase in cracks / exfoliation on the rock surface
18	AR005/F011/ MP01	Gravestone #11	An increase or change in algal growth located on the northern face

#### 8.4. Future Site Inspections

Each of the features listed in the above tables will be formally inspected by the Vanuatu Cultural Centre (VCC) on an annual basis (initial inspection to take place in March 2007). Separate site inspection forms have been designed for this purpose (see Appendix K). During these inspections VCC staff will train members of the WHTC and other community representatives to become regular site inspection officers.

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## Appendices

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### Appendix A: Community Members who were Consulted for The Roi Mata World Heritage Project

NB: Individuals are listed more than once if they attended multiple workshops or were consulted independently.

#### Mangaliliu Village – Women’s Cultural Workshop

NB: Most of the women who attended the cultural workshops at Mangaliliu and Lelepa were elderly women who have more than one name. The first name is usually the one they were born with (followed by the first or last name of their husband) and the second name is usually a *kastom* name that has been assigned to her after a significant event in her life (such as at the death of her mother, father or husband).

Lisiel Timi / Lopa  
Asnat Nafra / Tanunu  
Towatman Tongolemanu / Trowia  
Leitap Kaltok / Malup Sngolpa  
Leisara Kalotiti / Tosafrao  
Lily Kalotiti / Topkas  
Touskau Saliak

#### Lelepa Island – Women’s Cultural Workshop

Eniah Billy / Suatamate  
Jini Malesu / Toumele Leitapang  
Fina Nakor / Leitotmal Malopmutia  
Emma Naolol / Malopvatu  
Toumanu Malopsongi / Leiwia  
Leisnei Kalsokar / Maloprongoetalo  
Marlin Tareinua / Leitang

#### Mangaliliu Village – Botany Group (Natural Values Workshop)

Boikiki Billy  
Leipon Lingman  
Mananu Kalsau

#### Lelepa Island – Botany Group (Natural Values Workshop)

Tualu Fred  
Tavituel Lore  
Salome Max  
Namuan Many  
Taoman Marango

#### Mangaliliu Village – Fauna Group (Natural Values Workshop)

William Kalotiti  
Douglas Meto  
Fara Kalsopa  
Krissy Kalotiti  
Tarawi Towotman  
Liewia Leiepumanu

**Lelepa Island – Fauna Group (Natural Values Workshop)**

Billy Tafman  
Sophia Wilson  
Morrison Turi  
Mainofu Stephen

**Mangaliliu Village – Marine Group (Natural Values Workshop)**

Billy David  
Nirua Saramomo  
Leitap Kaltok  
Lakaka Sapua  
Ricky Tutu

**Lelepa Island – Marine Group (Natural Values Workshop)**

George Kaltaua Munalapa  
Pierre Makmar  
Kalulu Tafman  
Mary Sumaire  
Rongoi Leisnei Kalsokar / Maloprongoetalo

**Lelepa Island – Tourism Workshop**

Thomson Namuan  
Salome Max  
Lewai Kalsatak  
Chief Mwasoepongi  
Richard Matanik  
Tarinua Malon  
Poilapa Kalter  
Ben Aluk  
Leiwita Harrison  
Lilian Kalmas  
Lynne Knox  
Tautong Gibson  
Leitang Tarinua  
Hellen Micah  
Gideon George  
Anna Alfred  
Maureen Simon  
Thelma Taura  
Leisere Billy  
Joel Meto  
Pierre Makmar

**Mangaliliu Village – Tourism Workshop**

Jinneth Manutai / Palinga  
Molly Kalotiti  
Sethaida Kaloroa  
Tourave Kalsau  
Asnath Kaltuk  
Esther Kalsau  
Rosita Lore / Topen

Susan Jimmy  
Rose Kaloroa  
Christila Talang  
Mansa Brown  
Wendy Brown  
Serei Kalotiti  
Merelyn Kaloroa  
Leipon Daniel  
Toupong Kaloroa  
Leimara Billy  
Warry Jimmy  
Hilton Kalsau  
Chrissy Kalotiti  
Supua Kalsauma  
Dolsie Supua  
Pakoanaon Lore  
Thelma Jimmy  
Tousakau Sauak  
Ishmael Kaltuk  
Isobel Nimisa  
Flex Morsen  
William Kalotiti  
Kalz Kaltuk

#### **Individuals Consulted Independently**

Chief Meto Kalotiti  
Chief Kalkot Murmur  
Chief Pierre Fartepar  
Chief Arier Kaltang  
Chief Mwasoefia  
Chief Mwasoepongi  
Donald Kalpokas (Ataf Seru)  
George Kaltaua Munalpa  
Leisara Kalotiti  
Gideon Munalpa  
William Kalsong Kalotiti  
Kalsuak Nareo  
John Nafiti  
Billy Tafman  
Douglas Meto  
Sefo Meto  
Joel Meto  
Joe Kalotiti  
Pastor Kalsakau  
Kaltaua Turman  
Peter Taurakoto  
Johnson Napengau  
Richard Matanik  
John Kalaroa  
Thomson Namuan  
Kalsaf Malesu

## Roimata Wol Heratij Projek

## Neusleta 1 - Ogis 2005

*to reach any anchorage we had to lay to all night a little to the  
... Hat island (named last year by the Pranta of the Shoemah) is the  
is the harbor.*

*- N° 32 -*

*Hat island . New Hebrides  
N. distant 2 miles*



(Fes droing blong Hat Aelan [Retoka], blong wan Yuropean)

(Philip D. Vigors 1850)

### Fes toktok

Neusleta ia hemi blong introdusem wan projek we hemi stap gohed long Lelepa mo Mangaliliu eria. Nem blong projek ia hemi 'Roimata Wol Heratij Projek'. Projek ia hemi kamaot long Vanuatu Kaljoral Senta.

### Wanem ia Wol Heratij?

Long 2002, Nasonal Gavman blong Vanuatu hemi bin joenem wan intenasonal convensen. Nem blong convensen ia hemi 'Wol Heratij Convensen', mo hemi pat blong 'Yunaeted Nesens'. Long taem Vanuatu hemi joenem convensen ia, hemi minim se Gavman blong Vanuatu hemi mas helpem olgeta jif mo landona blong protektem ol kastom ples we ol pipol blong Vanuatu oli ting se oli impoten tumas. Long eria blong yufala i gat samfala spesel ples we plante pipol, raon long Vanuatu mo long wol, oli ting se oli impoten i winim plante narafala ples long wol. Ol ples ia oli inkludem Eretoka (Hat Aelan), Feles Kev (long Lelepa), mo Mangaas – trifala ples we oli stap joenem ol storian mo histri blong Roi Mata.

Mifala i hop se long fuija, trifala ples ia - Eretoka, Feles Kev mo Mangaas – we mifala i kolem 'Roi Mata Saet Complex', bae oli stap long intenasonal lis blong 'Wol Heratij'. Sipos oli stap long lis ia, bambae ol pipol raon long wol

bae oli luksave se ol ples blong yufala oli spesel tumas, mo hemi impoten blong protektem ol ples ia blong oltaem. Klosap long 800 ples long wol oli stap long lis blong Wol Heratij finis. Long wes Pasifik eria, wan ples nomo hemi stap long lis blong 'Wol Heratij' - 'East Rennell Aelan' long Solomon Aelan.

### Wanem benefit bae i kam long eria?

Mifala i ting se projek ia hemi impoten from:

- Long Efate, 50% long lan hemi 'leasehold', mo hemi stap long han blong ol foren investa. Sipos olgeta jif mo landona oli gohed blong salem graon blong olgeta i go long ol foren investa, ol fuija generesen blong yufala bae oli no gat kontrol long Efate. Mifala i ting se hemi impoten tumas sipos bambae yufala manples nomo i lukaotem mo benefit long ol spesel ples we oli stap long rijon blong yufala.
- Sipos eria blong yufala bae i stap long lis blong 'Wol Heratij', bambae namba blong ol turis bae oli antap. Plante ples we oli stap long lis blong Wol Heratij finis oli gat fulap turis we oli stap go long olgeta. Long projek ia, mifala blong Vanuatu Kaljoral Senta i wantem givhan long yufala long saed blong hao blong lukaotem ol turis we bae oli kam long 'Roi Mata Site Complex'. Mifala i

save halpem yufala blong trenem samfala gaed blong karem olgeta turis long ol oifala ples blong Roi Mata, mo lenem yufala long hao blong lukaotem olgeta turis long taem oli stap (wanem kaen reshaus bae oli nidim, wanem kaen kakae). Hemi wan komuniti projek we ol manples nomo bae oli save benefit long hem.

- c) Sipos ol jif mo manples bae oli kontrolem wanem bae i hapen long saed blong developmen long eria blong yufala, yufala i save protektem olgeta samting long eria we oli impoten tumas blong oltaem (olsem ol kastom ples, ol rif). Hemia wan gudfala wae blong mekem sua se ol ples blong yufala we oli impoten tumas, oli stap gud blong ol fuja jeneresen.

#### **Hao bae 'Roimata Saet Complex' i stap long lis blong Wol Heratij?**

Samfala speselis blong Ostrelia oli stap long Vanuatu naocia blong traem registarem 'Roimata Saet Complex' long lis blong Wol Heratij. Bambaie ol speselis ia i stap long kantri long manis blong Ogis kasem Disemba 2005, mo long taem ia bae olgeta i mekem 8 woksop. Long ol woksop ia, bae oli raetem wan 'plan blong manejman', mo wan 'plan blong ol turis'. Afta, bae oli sanem tufala plan ia i go long 'Senta blong Wol Heratij' long Paris (Franis). Afta, olgeta blong Senta blong Wol Heratij bae oli disaed sipos se Roi Mata Saet Complex hemi save stap long lis blong Wol Heratij o no.

Ol woksop we bae oli gohed oli inkludem:

1. **'Komuniti Awenes Woksop'**. Woksop ia bae hemi eksplenem 'Wol Heratij' long ol pipol blong Lelepa mo Mangaliliu (Ogis)
2. **'Woksop blong sevei'**. Woksop ia hemi blong tokabaot baondri blong Wol Heratij eria, mo long sem taem bae mifala i wantem wokem wan map (Ogis)
3. **'Woksop blong Wol Heratij'**. Long woksop ia wan speselis blong Ostrelia (nem blong hem 'Sharon') bae hemi givim samfala aedea long saed blong hao bae yumi save rejisterem eria blong yufala long lis blong 'wol heratij'. (Ogis)

**Saet visit.** Long Septemba, sam memba blong Senta blong Wol Heratij long Paris, mo sam narafala kantri long

wol, bae oli kam blong atendem wan miting long Port Vila. Long taem blong miting ia, olgeta delegesen ia oli wantem lukluk long Roi Mata Site Complex. Hemi wan janis blong sam blong olgeta long delegesen ia i kam luk ol spesel ples blong yufala. Olgeta bae i kam blong visitem ples long namba 6 Septemba.

4. **'Woksop long saed blong ol kaljoral mo natural samting blong eria'**. Woksop ia hemi blong faenamaot se wanem nao olgeta kaljoral mo natural samting, we oli stap long eria blong yufala, mo we oli impoten tumas, espeseli ol samting we olgeta oli stap joen wetem ol storian blong Roi Mata (Septemba).
5. **'Woksop long saed blong ol landona, mo hao yufala i stap yusem mo lukaotem graon'**. Woksop ia hemi blong faenemaot se huia i stap lukaotem graon blong yufala. Mo tu, hemi blong faenemaot wanem olgeta samting we yufala i stap mekem long graon blong yufala (olsem wokem garen, hokum fis, bildim kenu, lukaotem ol buluk) (Oktoba)
6. **'Woksop long saed blong ol turis'**. Woksop ia hemi blong wokem wan plan blong ol turis, mo disaed long wanem nao olgeta samting we bae i hapen long 'Tour blong Roi Mata'. (Oktoba)
7. **'Woksop long saed blong wanem olgeta samting blong lukaotem long eria'**. Hemia wan woksop blong tokabaot ol defren kaen samting we oli stap long eria we bambaie ol landona oli mas protektem blong ol fuja jeneresen. (Novemba)
8. **'Woksop long saed blong ol aksen we yumi nidim blong lukaotem gud eria blong yufala'**. Woksop ia hemi blong developem wan plan blong aksen, blong helpem yufala blong lukataotem gud eria blong yufala. (Novemba)

#### **Huia bae i kam long ol woksop?**

Long Ogis, ol jif mo landona blong eria blong yufala, mo ol speselis blong Ostrelia, bae oli gat wan miting we bae oli save disaed hu bae i kam long wanwan woksop. Long las yia (2004), mifala i bin formem wan grup we mifala i kolek

Grup blong 'Wol Heratij Advaes'. Ol pipol we oli stap long grup ia finis oli inkludem:

1. Ralph Regenvanu (Daarekta, Nasonal Museum blong Vanuatu)
2. Martha Yamsiu Kaltal (Maneja, Vanuatu Kaljoral mo Historik Saet Sevei, Nasonal Museum blong Vanuatu)
3. Richard Shing (Arkaeolojis, Vanuatu Kaljoral mo Historik Saet Sevei, Nasonal Museum blong Vanuatu)
4. Douglas Meto Kalotiti (Filwoka blong Lelepa, Nasonal Museum blong Vanuatu)
5. Meredith Wilson (Kordineita blong Projek, Nasonal Museum blong Vanuatu/Nasonal Universiti blong Ostrelia, Canberra)
6. Chris Ballard (Riseja blong Projek, Nasonal Museum blong Vanuatu/Nasonal Universiti blong Ostrelia, Canberra)
7. Sefo Kalotiti (Lelepa)
8. Pierre Dominic/Colin Dominic (Lelepa) Jif Gilleon William (Lelepa)

9. Joel Kalkot Mormor (Jeaman blong Vaturisu Kaonsel blong ol Jif, mo Jif blong Mangaliliu Vilej)
10. Donna Kalfatak (Environmen Unit)

#### **Las toktok**

Mifala i luk forward long mitim yufala long tufala komuniti woksop we bae i gohed long Ogis. Sipos yu gat eni kaen kwestin long saed blong projek ia, o long saed blong eni infomesen we hemi stap long neusleta ia, plis bae yu kontaktem mifala long Kaljoral Senta.

Stap saen,

Meredith Wilson mo Chris Ballard

(telefon: 54767)

### ***Tufala Komuniti Awenes Woksop***

Mangaliliu Vilej:- Tusde 16 Ogis  
9.30am

\*\*\*\*\*

Lelepa Aelan:- Tosde 18 Ogis  
9.30am

to reach any anchorage we had to lay to alongside a little to the  
... Hat Island (named last year by the Swedes of the *Shoanna*) 43.40  
N. distant 2 miles.

-N° 32-

Hat Island . New Hebrides  
N. distant 2 miles



(Fes droing blong Hat Aelan [Artok], blong wan Yuropean)

(Philip D. Vigors 1850)

#### Fes toktok

Neusleta ia hemi blong talemaat long komuniti blong Lelepa rijon wanem olgeta samting i stap hapen long Roi Mata Wol Heratij Projek. Be festaem, mifala we i stap wok long tim long projek ia i wantem talem bigfala sori i go long famili mo komuniti blong Jif Natamatesaru. Jif Natamatesaru hemi bin wan gudfala lida blong Lelepa mo wan bigfala sapota long projek ia. Mifala i stap sori from we bae hemi no save luk long taem we projek ia hemi kamtru. Mifala i wantem dediketem projek ia long memori blong Jif Natamatesaru.

#### Wanem i bin hapen long 2005?

Long 2005, mifala i bin gat fulap defren kaen woksop mo miting blong rekodem ol infomesen we oli gat koneksen long eria we mifala i hop se bae hemi stap long lis blong Wol Heratij. Nem blong eria ia hemi 'The Roi Mata Domain'. 'The Roi Mata Domain' hemi inkludem Artok (Hat Aelan), Fels Kev (long Lelepa), mo Mangaas – trifala ples we oli gat koneksen long histry blong Jif Roi Mata. Ol woksop mo ol narafala miting we oli bin hapen oli inkludem:

1. **'Komuniti Awenes Woksop'**. Woksop ia hemi bin eksplenem 'Wol Heratij' long ol pipol blong Lelepa Aelan mo Mangaliliu. Sipos eniwan long komuniti i gat sam kwestin yet long mining blong

Wol Heratij, plis bae yu kontaktem olgeta long telefon namba we i stap long en blong neusleta ia.

2. **'Saet sevei blong Lelepa'**. Blong rekodem ol impoten ples long Lelepa rijon. Mifala i bin rekodem klosap long 200 defren kastom mo tabu ples finis.
3. **'Woksop blong Wol Heratij'**. Wan speselis blong Ostrelia (nem blong hem 'Sharon') hemi bin givim samfala aeeda long yumi long saed blong hao bae yumi save rejisterem 'The Roi Mata Domain' long lis blong 'Wol Heratij'.
4. **Wol Heratij saet visit**. Long namba 6 Septemba, sam memba blong Senta blong Wol Heratij (long Franis), mo sam narafala kantri long Pasifik, oli bin visitim 'The Roi Mata Domain'. Long moning blong visit ia solwota hemi raf lelebet, be Jif Murmur mo Douglas Kalotiti i bin paem respek long Jif Roi Mata long Artok blong mekem se solwota hemi oraet bakagen. Olgeta blong Wol Heratij oli save finis se powa blong Roi Mata i stap yet!
5. **'Woksop mo intaveu blong rekodem ol kaljoral samting blong eria'**. Fulap man mo woman oli bin provaedem sam kastom infomesen blong wanwan



impoten ples long Lelepa rijon –  
 espeseli ol storian we oli gat koneksen  
 long Jif Roi Mata.

6. **'Woksop blong rekodem ol najoral samting'.** Long 2 woksop, wan long Mangaliliu mo wan long Lelepa, ol patisepen oli bin provaedem informesen long saed blong ol najoral samting we oli stap long Lelepa rijon – espeseli long saed blong ol fis blong solwota, ol animol, mo ol tri.
7. **'Woksop long saed blong ol turis'.** I bin gat tufala woksop long Oktoba mo Novemba long Lelepa mo Mangaliliu. Olgeta patisepen oli bin helpem mifala long disaed wan kaen tua i sud hapen long Lelepa rijon. Tu, evriwan long komuniti oli bin anserem wan sevei long saed blong turisem. Long April o Mae, wan 'Roi Mata Kaljoral Tua' bae hemi stat long 'The Roi Mata Domain'.

***Ol informesen we mifala i bin givim bae hemi go wea?***

Evriwan we oli bin givim informesen long wanwan woksop oli bin helpem mifala blong raetem wan **'plan blong manejmen'** blong lukaotem 'The Roi Mata Domain'. Naoia, eniwan we oli ridim plan ia bae oli save ol rul blong eria ia. Olsem, bae oli save se hemi tabu blong mekem noes klosap long Mwalasayen, mo hemi tapu blong visitim Mangaas long taem we sun i stap draon. Plan blong manejmen ia bae hemi helpem komuniti blong Lelepa blong mekamsua se kastom blong 'The Roi Mata Domain' bae hemi stap strong blong oltaem. Tu, hemi wan dokumen we yufala i save yusem blong skulem ol pikinini blong yufala long saed blong histri mo kastom blong yufala.

Tu, ol memba blong komuniti we oli bin givim informesen long wanwan woksop oli bin helpem mifala long traem pruv se 'The Roi Mata Domain' bae hemi sud stap long lis blong Wol Heratij. Long Jun 2006, bae mifala i redi blong sendem wan aplikesen o **'nominesen'** i go long Wol Heratij Senta blong traem rejisterem 'The Roi Mata Domain' long lis ia.

Mifala i wantem talem tankyu tumas long ol patisepen long wanwan woksop. Yufala nomo i bin raetem 'plan blong manejmen' blong 'The Roi Mata Domain'.

***Wol Heratij mo Turisem Komiti (WHTC)***

Long Disemba 2006, mifala i bin askem ol jif mo landona blong The Roi Mata Domain sipos komuniti hemi save gat wan komiti blong helpem olgeta jif mo landona blong protektem 'The Roi Mata Domain', mo helpem tufala voluntee (Kalsale Miller mo Tausale Greig) blong statem tua blong Roi Mata.

Ol memba blong WHTC, we oli bin stat long Disemba 2005, oli inkludem

Position	Lelepa representative	Mangaliliu representative
Chair/Vice-Chair	Douglas Kalotiti (Chair)	Leisara Kalotiti (Vice-Chair)
Tourism Managers	Richard Matanik	Pakoanaon Lore
Human Resources	Hellen Micah	?
Finance	Salome Max	Dolsi Sapua

***Ofisol saening blong 'plan blong manejmen' mo 'nominesen dokumen'***

Long 21 Maj, ol bigfala jif blong Lelepa rijon, ol ona blong graon insaed long 'The Roi Mata Domain', sam representativ blong gavman mo turisem, bae oli kam blong witenesem wan ofisol saening blong 'plan blong manejmen' mo 'nominesen'. Ofisol saening ia bae hemi tekples long **Mwalakot long namba 21 Maj**.

Sipos eniwan long komuniti oli wantem lukluk long tufala dokumen (plan blong manejmen o nominesen) bifo long ofisol saening ia, plis bae yu kontaktem Douglas Kalotiti o Leisara Kalotiti. Sipos yu gat eni wari long saed blong eni samting we i stap insaed long tufala dokumen ia plis bae yu kontaktem mifala long 46513.

Mifala i wantem wisem yufala gud luk long turisem projek blong yufala mo Wol Heratij nominesen blong yufala. Bae mifala i raetem wan neusleta bakagen afta long June 2006 blong explenem se hao bae wok blong Wol Heratij bae i gohed.

Stap saen,

Douglas Kalotiti, Meredith Wilson, Chris Ballard  
 Kalsale Miller, Tausale Greig, Troy Mallie

**Eni kwestin? Plis telefon: 46513**

## Appendix C: By-Laws of the WHTC

### By-Laws of the World Heritage and Tourism Committee (WHTC) of the Lelepa Region

#### 1. Members

1.1 The Committee has 9 permanent positions:

1 x Chair

1 x Vice Chair

2 x Tourism Managers

2 x Human Resource Managers

2 x Financial Managers

1x Vanuatu Cultural Centre Representative;

1.2 The committee must always be represented by 4 men and 4 women;

1.3 The Chair and Vice-Chair must share their positions, one of which must be represented by an individual from Mangaliliu and the other from Lelepa Island;

1.4 The Chair and Vice-Chair must swap their positions every 6 months (in June and December every year);

1.5 In the two positions of Tourism Manager, one must be represented by an individual from Mangaliliu and the other from Lelepa Island;

1.6 In the two positions of Human Resource Manager, one must be represented by an individual from Mangaliliu and the other from Lelepa Island;

1.7 In the two positions of Financial Manager, one must be represented by an individual from Mangaliliu and the other from Lelepa Island;

1.8 Martha Yamsiu Kaltal is temporarily representing the Vanuatu Kaljoral Senta on the committee. The Vanuatu Cultural Centre representative should attend 4 committee meetings a year;

1.9 A Peace Corps volunteer (Ted Miller), an Australian Youth Ambassador (Carly Greig), and an Australian VIDA volunteer (Troy Mallie), will serve on the committee until no later than August 2007.

#### 2. Understudies

1.1 Each member of the committee must chose a male or female understudy to train in the work that they are undertaking with the committee;

1.2 The entire committee must approve of each member's choice of understudy;

1.3 The total number of understudies must be 8, and must comprise 4 men and 4 women;

1.4 The total number of understudies must include 4 representatives from Mangaliliu and 4 representatives from Lelepa Island.

### 3. Conflict resolution

- 3.1 If a committee member has a problem with their work they must approach the Chair or Vice-Chair first. If the Chair or Vice-Chair is unable to solve the problem then a meeting of the entire committee must be arranged in an attempt to find a resolution;
- 3.2 If there is a dispute or problem within the committee that the committee is unable to solve then members must ask a chief from the 'Lelema Council of Chiefs' to assist. Acting Chief Atafsaru and Chief Kalkot Murmur are authorised to make the last decision on an issue;
- 3.3 If a member has a problem that is not connected to their work, they should not bring this problem to the committee, and they cannot use this problem as a reason to no longer serve on the committee.

### 4. Committee meetings

- 1.1 The committee will meet on the last Tuesday of every month, at 8.00am;
- 1.2 The committee will meet at Mangalilu and on Lelepa Island on alternative months;
- 1.3 If a member of the committee is unable to attend a meeting then they must send their understudy to represent them. The understudy must deliver a report from the meeting to their mentor;
- 1.4 At the end of each committee meeting, the committee must confirm the place and time of the next meeting;
- 1.5 At each meeting the committee must check whether it has completed all of its stated objectives since the previous meeting;
- 1.6 If a member is unable to attend a meeting then they must write an apology letter to the committee. The reason for their lack of attendance must be acceptable.

### 5. Plan of Management

- 5.1 The committee must follow the conditions laid out in the Plan of Management for CRMD;
- 5.2 The committee is responsible for checking whether the conditions in the Plan of Management are current and appropriate;
- 5.3 During the first three years of the committee's operation (2006-2008), members must evaluate the Action Plan for CRMD each March (see section 8.1 of Plan of Management);
- 5.4 If the committee wishes to make a change to the Plan of Management, they must check with the Vanuatu Cultural Centre first to ensure that the proposed change is not in disagreement with World Heritage guidelines. This change can then be made by the Chair of the Committee on the Master copy of the Plan of Management which is held on the CRMD database;

2.5 If a member of the committee cannot find an answer to a problem in the Plan of Management, the committee must hold an extra-ordinary meeting to a) solve the problem and b) decide whether a new condition needs to be added to the Plan of Management;

2.6 If a member of the committee acts in opposition to the by-laws of the committee or the conditions of the Plan of Management, the remaining members of the committee must make a decision as to whether this member should be removed from the committee.

## 6. Record keeping

1.1 The Vice-Chair of the committee is responsible for recording the minutes at each meeting. If the Vice-Chair is not present at the meeting then his / her understudy must record the minutes;

1.2 The Chair and Vice-Chair must hold copies of all records of the committee. In the future, the committee will decide whether it requires a secretary.

## 7. Committee decisions

7.1 Every member of the committee must agree on each decision relating to finance;

7.3 The Chair, or if the Chair is not available then the Vice-Chair, must sign off on all decisions made by the entire committee. The entire committee must be present to witness the signature of the Chair or Vice-Chair;

4.4 A bank account for the committee must require two signatures to be accessible;

4.5 The committee will decide how much *nasaotonga* must be paid to *kastom* owners and landowners according to the profits of any tourism project which occurs in CRMD. Once a decision has been made, the Chair and Vice-Chair must arrange a meeting with the *kastom* owners and landowners to communicate this decision.

## 8. Communication

1.1 The two Human Resource Managers are responsible for writing an annual report about all decisions that the committee has made, especially in relation to employment. A copy of this report should be submitted to the Chair of the WHTC and deposited with the Vanuatu Cultural Centre;

1.2 The Chair and the Vice-Chair are responsible for informing chiefs (Lelema Council of Chiefs) and landowners with ground in the area proposed for World Heritage of all the decisions that have been made by the committee;

1.3 The Chair and the Vice-Chair are responsible for informing the community about important decisions that have been made by the committee. Identifying which decisions are important enough to discuss with the community are to be determined by the committee as a whole. These decisions will be communicated either at church or at community meetings held at Mangaliliu and Natapau on Sunday afternoons.

## Appendix D: Memorandum of Understanding

### Between the Vanuatu Cultural Centre and the stakeholders of the Roi Mata World Heritage Project

12th of September 2005

This is a research agreement between the Vanuatu Cultural Centre and the following identified stakeholders of the Roi Mata World Heritage Project:

(Chief Meto Kalotiti) Natapau, Lelepa Island  
(Chief Kalkot Murmur) Mangaliliu Village  
(Michel Kalworai and Emile Mael) Shefa Province Council  
(Joe Ligo, CEO) Vanuatu Investment Promotion Authority  
(Ernest Bani, Director) Environment Unit  
(Moses Amos, Director) The Department of Fisheries  
(Ericson Sammy, Acting Director) Department of Geology, Mines and Water Resources  
(Russell Ngari, Director General) The Ministry of Lands, Geology and Mines  
(Robert Avio, Acting Director) The National Tourism Development Office  
(Samson Jerry) Physical Planning Unit, Provincial Affairs  
(Chief Kalkot Murmur and Chief Meameadola) Vaturisu Council of Chiefs

This agreement shall enable Dr Meredith Wilson and Dr Christopher Ballard, working on behalf of the Vanuatu Cultural Centre, to undertake a research project in collaboration with the people of the Lelepa region and the above named Government departments and organisations, between September 2005 and June 2006. This project will result in the preparation of a World Heritage nomination for the 'Roi Mata Site Complex', to be submitted to the World Heritage Centre in June 2006. The precise boundaries of the proposed World Heritage property are yet to be defined by the Lelepa community but shall not extend beyond the boundaries of the Lelepa language area. Between September 2005 and December 2005, the research team shall undertake a series of workshops that will lead to the preparation of the nomination file. In December 2005, the Vanuatu Cultural Centre will invite each of the above-named stakeholders to attend a progress meeting at which the research team will present their findings and invite stakeholders to respond. In March 2006, a draft Plan of Management and nomination file for the Roi Mata Site Complex will be presented by the Vanuatu Cultural Centre to each of the above-named stakeholders for comment and approval. Subject to stakeholder approval, the completed nomination file will then be submitted to the World Heritage Centre in June 2006.

If you agree with the terms and conditions set out in this Memorandum of Understanding, we request that you please sign and print your name beside the appropriate affiliation, named above, and then return this letter to Meredith Wilson, C/- Vanuatu Cultural Centre, PO Box 184, Port Vila by the 10<sup>th</sup> of October 2005. The Vanuatu Cultural Centre looks forward to a productive and rewarding collaboration between the stakeholders of the Roi Mata World Heritage Project.

Yours Sincerely,

Ralph Regenvanu  
(Director, Vanuatu National Museum)

## Appendix E: Implementation and Outcomes of the Plan of Management

In Part 7, various strategies were defined to address the objectives relating to the management of CRMD. In some cases these strategies have been implemented and require no further immediate course of action. These strategies are reported in full below:

### Traditional Copyright

According to the Vanuatu Cultural Centre Research Policy, “traditional copyright” is the:

traditional right of individuals to control the ways the information they provide is used and accessed. The issue of traditional copyright arises when individuals either own or are the custodians of specialised (and especially *tapu*) knowledge and its communication. This knowledge can include names, designs or forms, oral traditions, practices and skills (<http://www.vanuatuculture.org/>)

Due to the absence of applied legislation regarding the use of Intellectual Property in Vanuatu, the Lelepa region community will be responsible for monitoring film, photography and the use of Intellectual Property (IP) according to their traditional rights. A detailed summary of the decisions that have thus far been made by the community in relation to IP can be found in the *Cultural Tourism Strategy for CRMD* (Greig 2006). In brief, the following protocols have been ratified by the World Heritage and Tourism Committee for the Lelepa region:

- 1) Tour Guides will be responsible for ensuring that all visitors are aware of culturally sensitive sites and activities that are not to be photographed or filmed
- 2) In the future, a permit system and fee might be introduced to control commercial photography and filming that takes place within CRMD
- 3) All filming will be regulated by the Vanuatu Cultural Centre’s National Film Policy (see [www.vanuatuculture/film-policy/index.shtml](http://www.vanuatuculture/film-policy/index.shtml))

### Fire Management Procedures

Given that there are no residential areas within CRMD, the main concern is that fire management procedures are in place to protect the cultural and natural values of the property. The key to protecting the values of CRMD is the *prevention* of fire. The following strategies for the prevention of fire within CRMD are provided in the *Cultural Tourism Strategy for CRMD* (Greig 2006):

- \* The community will need to ensure that the road to Mangaas and visitor tracks are kept clear of vegetation. This will not only be an important part of track maintenance but will also contribute towards reducing fire hazard within CRMD.
- \* The WHTC has selected three areas where smoking cigarettes is permitted, a rule which applies to local residents as well as tourists:
  - o The parking area near Mangaas;
  - o Mangaas beach, and
  - o Aupa Landing near Fels Cave.

Shells or containers filled with sand will be provided for smokers to dispose of cigarettes. The WHTC anticipate that this will reduce the potential for wild fire to result from discarded cigarette stubs.

- \* Burning off of garden waste to reduce the fuel load of garden areas around Mangaas. This is a regular and routine practice, already performed by garden owners. The continuation of this activity is an important measure to avoid wild fire within CRMD, although extreme caution should be exercised during periods of drought or high wind.

In future community awareness workshops concerning the long-term protection of CRMD, the importance of maintaining fire-breaks and fire-break signs at Mangaas should be stressed.

### Strategies for Dealing with Unforeseen Natural Hazards

#### Earthquakes and structural collapse

In the event that people are present within CRMD at the time of an earthquake, a comprehensive safety plan is outlined in section 7.3.2 in the Cultural Tourism Strategy (CTS) for the property (Greig 2006). In terms of the heritage values of CRMD, it is the stone features of the region are most at risk of earthquake damage – particularly Fels Cave which already bears the scars of structural collapse after an earthquake in January 2002 (Ballard and Wilson 2006). While there is little in the way of preventative action that can be undertaken to protect Fels Cave and other stone features from earthquake damage, the VCC and WHTC, with assistance from the Department of Geology, Mines and Water Resources, should undertake detailed site assessments after substantial earthquakes in the region. There is always the possibility that stone features that have shifted during an earthquake are in danger of more substantial movement or collapse in the event of an aftershock or as a result of continued weakening of the rock substrate. In some cases it may be possible to repair or reinforce vulnerable parts of the property to prevent the possibility of further damage. The post-earthquake site assessments should include a re-inspection of each of the monitoring points listed in Part 8 of this Plan of Management.

#### Landslides

Most of the main cultural features in CRMD are not under threat of landslide damage as they are located on flat land. However, care does need to be taken – especially in the aftermath of an earthquake or flood – that the access route to Fels Cave, from Aupa Beach along the coast and the track leading up the steep slope to the cave, is not under threat of landslide. Section 7.3.6 of the CTS for CRMD (Greig 2006) lists the main warning signs of an impending landslide:

- \* New cracks appearing in plaster, tiles, bricks, or built foundations.
- \* Bulging ground developing at the base of sloping ground.
- \* Water breaking through the earth's surface in new places.
- \* Tilting or unusual movement of fences, walls, utility posts, or trees.
- \* A faint rumbling sound, that increases in volume, can be heard. This is the sound made as a landslide nears. The ground then slopes downward in a specific direction and starts to move in that direction under your feet.

(Details derived from the FIMA Fact Sheet: Landslide and Mudflows, <http://www.weather.com/safeside.html>)

Tourists and local people associated with the tourism industry are most at risk of being affected by landslide along the Fels Cave access route. Safety measures for individuals caught in the midst of a slide are provided in section 7.3.6 of the CTS (Greig 2006).

### Tsunamis

As for earthquakes, little can be done to protect the cultural and natural features of CRMD from a tsunami. Tsunamis which impact CRMD should be followed by a field assessment conducted by the VCC and WHTC, to report damage and inspect the monitoring points located throughout the property (see Part 8 of this Plan of Management).

The CTS (section 7.3.3) outlines the safety measures to be followed should tourists be present in the region at the time of tsunami. In most cases warning bulletins issued over radio should provide sufficient time for tourist groups to be safely evacuated from the property.

The following signs are likely to indicate an impending tsunami:

- \* Earthquake or underwater disturbance
- \* Loud rumbling sound emerging from the ground
- \* Rapid rise or fall in coastal waters

(Greig 2006)

### Cyclones

The cyclone season in Vanuatu extends from November through to April, but occasionally a cyclone will strike outside this period. In the unlikely event that tourists are present in CRMD during a cyclone, strategies for maximising their protection are provided in section 7.3.4 of the Cultural Tourism Strategy for the property (Greig 2006). The main threat posed by cyclones is to the sacred trees of the area, in particular the banyan, canarium and tamanu trees at Mangaas that are thought to date to the period of the last Chief Roi Mata and the cycads on Artok Island. A severe cyclone in the Lelepa region should immediately be followed by a field visit and assessment of the sacred trees of CRMD, including a re-inspection of the monitoring points associated with these trees. A member of the Department of Forestry should accompany the VCC and WHTC representatives to clarify the extent of the damage and to warn of branches that have become destabilised and which may pose a safety risk to visitors at the sites.

### Storm surges or floods

Both Artok Island and Mangaas are at risk of storm surge or flooding, particularly during cyclone activity. Fels Cave, being located at higher altitude, is much less at risk of being affected by these natural disasters. Mangaas is perhaps the most susceptible because of the water courses that are already present at the site.

In the event of a major storm surge or flood, the same post-hazard measures should be undertaken as for a tsunami. The VCC and WHTC, in the company of appropriate specialists, should undertake a thorough assessment of the sites within CRMD and re-visit the monitoring points listed in Part 8 of this Plan of Management.

### Rising sea levels

Sea level rise predictions for Vanuatu for the year 2100 range from between 30 and 100 cm, depending on the climate change simulations used (Casey 2006; Phillips n.d.). Sea



level rise carries with it the risk of increased flooding of low-lying areas during storm surges, and increased erosion. Given that most of the archaeological features of CRMD are located in low-lying coastal areas, sea level rise will pose a significant threat to the property as a whole. The recommended course of action is for the VCC and the WHTC to continually assess sea level data for the area and to consult specialists on this issue to find practical solutions to the problem. As part of the Roi Mata World Heritage Project, the Department of Geology, Mines and Water Resources is in the process of establishing monitoring pegs on Artok Island to provide sea level data for the property as a whole.

## Appendix F: The Vanuatu Cultural Research Policy

<http://www.vanuatuculture.org/documents/ResearchPolicysansAgreement.doc>

### 1. Definitions

“*Kastom*” : indigenous knowledge and practice and the ways it is expressed and manifested.

“Local community” : the group(s) of people that are the subject of the research effort and/or live in the area in which research is being undertaken.

“Ni-Vanuatu” : a citizen of the Republic of Vanuatu as defined by the Constitution of the Republic of Vanuatu.

“Products of research” : written and printed materials, illustrations, audio and audiovisual recordings, photographs, computer databases and CDs, artifacts, specimens.

“Cultural research” : any endeavour, by means of critical investigation and study of a subject, to discover new or collate old facts or hypotheses on a cultural subject; the latter being defined as any anthropological, linguistic, archaeological, historical or related social study, including basic data collection, studies of or incorporating traditional knowledge or classification systems (eg. studies of the medicinal properties of plants, land and marine tenure systems), documentary films and studies of introduced knowledge and practice.

“Tapu” : a subject to which access is restricted to any degree. Such subjects can include places, names, knowledge, oral traditions, objects and practices.

“Traditional copyright” : the traditional right of individuals and communities to control the ways the information they provide is used and accessed. The issue of traditional copyright arises when individuals or communities either own or are the custodians of specialised (and usually tapu) knowledge and its communication. This knowledge can include names, designs or forms, oral traditions, practices and skills.

“Fieldworker” : fieldworkers are permanent voluntary extension workers of the Vanuatu Cultural Centre whose responsibility is to document, maintain and develop *kastom* in their respective communities. Fieldworkers receive training in cultural heritage management techniques at annual workshops. These workshops have taken place for over 20 years.

### 2. Guiding principles

2.1 *Kastom* embodies and expresses the knowledge, practices and relationships of the people of Vanuatu and encompasses and distinguishes the many different cultures of Vanuatu.

2.2 The people of Vanuatu recognise the importance of knowing, preserving and developing their *kastom* and history.

2.3 *Kastom* belongs to individuals, families, lineages and communities in Vanuatu. Any research on *kastom* must, in the first instance, respond to and respect the needs and

desires of those people to whom the kastom belongs.

2.4 Research is the documentation and creation of knowledge. As such, research results incorporate the particular viewpoints of researchers.

2.5 Research in practice is a collaborative venture involving researchers, individual and groups of informants, local communities, chiefs and community leaders, cultural fieldworkers, cultural administrative bodies and local and national governments, and must be approached as such.

### 3. Policy statements

#### 3.1 Objectives :

- 3.1.1 To ensure that cultural research projects are consistent with Vanuatu's own research priorities, and to make researchers aware of these priorities.
- 3.1.2 To establish a clear process by which applications from foreign nationals to undertake research in Vanuatu can be evaluated. This Policy is not intended to apply to research undertaken by ni-Vanuatu, by Government officers in the execution of their duty or at the request of the Government of the Republic of Vanuatu.
- 3.1.3 To ensure that the number of researchers working in Vanuatu at any one time is manageable, and that researchers are adequately prepared for collaborative fieldwork. For this reason, this Policy distinguishes between researchers new to Vanuatu, and those with previous experience in the country.

#### 3.2 Responsibility for research in Vanuatu

- 3.2.1 The Vanuatu National Cultural Council is responsible for research in Vanuatu under chapter 186, 6(2)(e) of the Laws of the Republic of Vanuatu. It is the role of the National Cultural Council to define and implement national research policies (including those outlined in this document), to define national research priorities, and to sponsor, regulate and carry out programs of research. The Vanuatu Cultural Centre is the executing arm of the National Cultural Council, and is responsible for implementing this Policy.
- 3.2.2 As part of its function to regulate research, the National Cultural Council will determine whether it is desirable that a foreign national undertake research on a cultural subject in Vanuatu.
- 3.2.3 Individuals who undertake research without authorisation from the National Cultural Council (for example, on a tourist/visitor visa) risk confiscation of research materials, deportation and refusal of all further entry visas.

#### 3.3 Priorities for research

- 3.3.1 Through the Vanuatu Cultural Centre, the National Cultural Council sponsors an active program of research involving Centre staff and fieldworkers, local communities and foreign researchers. New research proposals should participate in and extend these existing and ongoing research projects. Priority will be given to projects which involve active collaboration with counterpart ni-Vanuatu researchers.
- 3.3.2 Priority subjects for Cultural Centre research in the period 2001-2005 are:
  - Language description and documentation (orthographies);
  - Cultural and historic site documentation;
  - Documentation of indigenous histories;
  - Case studies of contemporary social change.

#### 4. Process for application submission and evaluation

##### 4.1 Application categories and quotas

4.1.1 The Cultural Council can only support a limited number of researchers at any one time due to its infrastructural capacity and has therefore established a quota system for the number of research permits that will be granted in any given year. The categories in which new research proposals will be considered, and their quotas, are:

- a. proposals from new researchers for short-term research (fieldwork for less than 2 months): up to 8 per annum
- b. proposals from new researchers for long-term research (fieldwork for longer than 2 months): up to 4 per annum
- c. new proposals (short or long-term) from individuals with previous long-term field research experience in Vanuatu: up to 6 per annum
- d. projects being undertaken for and on behalf of museums: up to 4 per annum
- e. filming projects: no quota at present

4.1.2 In research ventures that involve more than one researcher, a separate agreement is required for each researcher stating exactly what the research topic and capacity of each individual is to be, and which may carry its own unique obligations.

4.1.3 In the case of projects being undertaken by researchers for and on behalf of museums, it is expected that a relationship between the two institutions will be established to facilitate the exchange of information, and that the researcher will then work as part of this institution to institution relationship.

4.1.4 Scientific research projects are the responsibility of the National Environment Unit, and proposals for such research should be forwarded to:

##### 4.2 Deadlines for applications

4.2.1 Applications to undertake research will be assessed and research permissions granted twice a year.

4.2.2 The deadlines for submission are the 30<sup>th</sup> of September and the 30<sup>th</sup> of March. Decisions will generally be communicated to applicants within 8 weeks of the submission deadlines.

##### 4.3 Evaluation of applications

4.3.1 The following criteria will be considered in assessing applications:

- a. New researchers who can demonstrate that they have previous fieldwork experience elsewhere or that they have undertaken a fieldwork methods training course will be given priority in the application rating process.
- b. New researchers must also attach a letter from their supervisor, head of department or from a Vanuatu specialist confirming that the applicant has a good working knowledge of the ethnography of Vanuatu as available in existing published literature.
- c. New researchers must also include a declaration of willingness to study Bislama prior to commencing fieldwork
- d. Researchers who have previously worked in Vanuatu, must demonstrate that they have fulfilled all obligations under their last research permit before they will be granted a new research permission.
- e. The National Cultural Council may refer proposals for assessment to suitable advisers such as fieldworkers, chiefs or academic referees. All researchers must provide to the Council the name and address of a referee of professional standing to assist in its evaluation of the proposal.

## **5. Process for approval and fees**

5.1 The research proposal must receive the approval of the local community. The Cultural Centre is able to discuss the proposed research proposal with the local community to facilitate this process.

### **5.2 Fees / Guarantees**

5.2.1 An authorisation fee of 25 000 vatu must be provided by the researcher before the research proposal can be approved. Where research involves more than one visit, and this is clearly stated in the Research Agreement, a fee of 5000 vatu is to be paid on each subsequent visit after the first.

5.2.2 Researchers not affiliated with a recognised research institution will be required to provide a deposit of 40 000 vatu to ensure compliance with the conditions for the deposit of products of research as stipulated in section 9 of this document. This fee is retrievable once such deposits are made.

5.2.3 For researchers affiliated with a recognised research institution, a letter from the institution guaranteeing the deposit of products of research by the researcher is required before the research proposal can be approved.

5.2.4 In cases where it is necessary for Cultural Centre personnel to travel to the proposed research location to help facilitate the research venture (either prior to, during or after the period of research), the researcher will cover any costs incurred in such travel.

5.3 All funds received from the researcher will be used by the National Cultural Council to cover administrative and logistical costs incurred in the setting up and implementation of the research venture.

5.3.1 The National Cultural Council may waive any or all of the above fees.

5.4 The approval of a research proposal is signified by the signing of the Research Agreement [Appendix 1] by the researcher and the National Cultural Council, the latter signing on behalf of the local community and the national government.

5.5 As a foreign national, the researcher will be registered as working for the Vanuatu Cultural Centre under the Immigration Act category of a "person seconded to the Government of Vanuatu" (Cap.66, 9(b) of the Laws of Vanuatu).

5.6 Should the National Cultural Council decide to terminate a research venture (see section 10 of this document), the Research Agreement will be annulled and the researcher's visa withdrawn.

## **6. Traditional copyright considerations**

Researchers are obliged to observe and respect traditional copyright protocols.

Traditional copyright is protected under the Copyright Act (chapter of the Laws of Vanuatu), and breaches will be dealt with under the appropriate provisions of this legislation (sections 37 and 38).

## **7. Ni-Vanuatu participation in research and training**

There must be maximum involvement of indigenous scholars, students and members of the community in research, full recognition of their collaboration, and training to enable their further contribution to country and community. In most cases, researchers will be attached to a Cultural Centre fieldworker who will direct and advise the researcher. Training will be provided by the researcher in specific areas determined in collaboration with the fieldworker or community leaders, but should be generally concerned with cultural research and documentation skills, and have the aim of facilitating the continuation of research once the foreign researcher leaves the country. The National Cultural Council may nominate individuals to be involved in research and/or trained.

## 8. Benefits

### 8.1 Community-based projects

Where research is undertaken with a local community, the research will include a product of immediate benefit and use to that community. This product will be decided upon by the researcher, the local community and the Cultural Centre in the early part of the fieldwork, and the Cultural Centre may have a role in assisting the researcher in its provision. Such products could include booklets of kastom information, photo albums of visual records, simple educational booklets for use in schools (the provision of all products for use in schools should be coordinated by the Curriculum Development Centre), programs for the revitalisation of particular kastom skills in the community, training workshops in cultural documentation, etc. This product will be provided no later than 6 months after termination of the research period.

### 8.2 Projects not undertaken with communities

Where research does not involve a local community, the research will only include a product of benefit to the nation (see section below).

### 8.3 Benefit to the nation

The National Cultural Council, the Cultural Centre or the national government may request any researcher to provide certain products or perform certain services additional to their research work. For instance, researchers could provide assistance to government by providing information from their community research perspective, such as health surveys, information on the viability of certain development projects, etc. They could also provide free consultancies to the Cultural Centre or other national bodies, such as initiating educational projects in their host community. Foreign researchers can also provide for the Cultural Centre invaluable access to materials on Vanuatu held overseas, contacts overseas, and might be able to facilitate scholarships for ni-Vanuatu students in overseas educational institutions. Any such undertaking(s) expected of the researcher will be stipulated in the Research Agreement.

## 9. Deposit and accessibility of products of research

Copies of all products of research are to be deposited without charge with the Cultural Centre under the provisions of chapter 88 of the Laws of Vanuatu. Where feasible, research results should be made accessible to the local community through such means as audio or video cassettes or copies of publications, preferably in the vernacular.

Materials to be deposited comprise:

9.1 Interim report. Researchers must submit an interim report of not less than 2000 words no later than 6 months after the research period has ended giving a reasonable precis of their work. This should be in one of the national languages and in 'layman's terms' so as to be of general use to all citizens.

9.2 Written materials (manuscripts, theses, publications, maps and diagrams). Published materials including theses must be deposited upon completion or publication. Where publications are in a language not spoken in Vanuatu the researcher must provide a translation of an appropriate selection of their publications, preferably in the language of education in the local community. Copies of field notes, including unpublished maps and diagrams, must be deposited upon completion of the project. The Cultural Centre will not make copies of field notes available to other expatriate researchers until after the original researchers death.

9.3 Film and video. Copies of all footage taken, including unedited portions (RUSH) and edited final products in broadcast-quality, must be deposited with the National Film and Sound Unit of the Vanuatu Cultural Centre. Unedited footage must be accompanied by information about the subject matter, the film-maker and the filming.

Two copies of edited final copies of films and videos are to be provided, one for public screening and the other for deposit in the archives.

9.4 **Photographs.** Copies of all photographs of documentary significance accompanied by explanatory information must be deposited (photographs of key individuals, ceremonies, manufacturing processes, important places, etc).

9.5 **Artefacts.** The removal of any artefacts or specimens from the country is prohibited under chapter 39 of the Laws of Vanuatu. Any artefacts collected must be submitted to the Cultural Centre and may be retained. Artefacts and specimens may be taken out of the country for overseas study and analysis under the provisions of chapter 39(7), with conditions for their return being stipulated in the Research Agreement.

9.6 **Sites.** The Vanuatu Cultural and Historic Sites Survey is to be consulted about the provision of information on any sites of cultural or historic significance recorded.

## 10. Termination of a research project

The National Cultural Council may revoke its approval of and terminate a research venture should the researcher fail to comply with any of the conditions agreed to in the Research Agreement. Should a research project be terminated before its completion, copies of all products of research made prior to termination are to be deposited with the Cultural Centre as outlined in section 9 of this document. In the case of termination by the local community, the National Cultural Council may reconsider the research project for another locality.

## 11. Role of the Vanuatu Cultural Centre

The Cultural Centre is responsible for facilitating, coordinating, and administering all research projects in the country and for ensuring feedback on these projects to national government and non-government bodies. In this capacity the Cultural Centre will:

11.1 Identify potential subjects and areas of research, formulate research proposals and invite foreign and ni-Vanuatu researchers to undertake certain projects.

11.2 Facilitate and assist the undertaking of research by ni-Vanuatu.

11.3 Identify and facilitate opportunities for local communities to request trained researchers to assist them with research of their *kastom* and history.

11.4 Provide advice on obtaining permission to conduct research and on conditions of work and living in potential areas of research to interested parties.

11.5 Assist in the formulation of research proposals to involve input by ni-Vanuatu, and nominate persons for involvement.

11.6 Provide advice to the National Cultural Council.

11.7 Facilitate and ensure awareness of the research proposal in the local community and assist the members of the community in making a decision as to their involvement.

11.8 Educate local community members and the researcher(s) as to their rights under the Research Agreement.

11.9 Assist the local community and the researcher in determining the product of immediate benefit and use to be provided by the researcher and assist in its provision.

11.10 Inform the local government, area council of chiefs and any other relevant regional and national bodies of the undertaking of a research project.

11.11 Monitor the research venture with a view to ensuring compliance with the Research Agreement and providing feedback to relevant national bodies.

11.12 Assist the researcher.

11.13 Receive and caretake deposited products of research.

11.14 Facilitate the provision of products of research to schools and assist the National Curriculum Centre in their preparation.

11.15 Publicise this policy within Vanuatu and to overseas research institutions, universities, etc.

## **12. Commercial ventures**

Where any of the products of research are to be used for commercial purposes, a separate agreement between the National Cultural Council and the researcher will be made specifying the basis on which sales are to be made and the proceeds of sales are to be distributed. The details of this agreement will be recorded in section 12 of the Research Agreement. The National Cultural Council will be responsible for distributing the funds received to the designated individuals, communities and institutions within Vanuatu. Where research is engaged in for commercial purposes, it is the responsibility of the researcher to make all informants and suppliers of information aware of this fact, and to come to an agreement with them on the amount of royalty to be paid on received data. The National Cultural Council has to approve any such agreements relating to commercial outcomes from research. Copies of all commercial products of research are to be deposited with the Cultural Centre as specified in section 9 of this document.



## Appendix G: Research Agreement for Cultural Research undertaken in Vanuatu

<http://www.vanuatuculture.org/documents/ResearchAgreement.doc>

NB: This document is Appendix 1 of the Vanuatu Cultural Research Policy

### Research Agreement

AN AGREEMENT made the ..... day of ....., 200..... .

BETWEEN : THE NATIONAL CULTURAL COUNCIL, representing the Government of the Republic of Vanuatu and the local community, (hereinafter called "the Council") of the one part.

AND :

of (institution)

(hereinafter called "the Researcher") of the other part.

WHEREAS :

(1) The Researcher has applied to the Council to do research work in the Republic of Vanuatu, and agrees to the conditions placed upon her/him in this document and to compliance with the intent of the ethics described in the Vanuatu Cultural Research Policy.

(2) The Council has agreed to allow the Researcher to do such research, and has agreed to the obligations placed upon it by this document and by the Vanuatu Cultural Research Policy.

AND THEREFORE THE PARTIES AGREED AS FOLLOWS :

(1) The Council hereby authorises the Researcher to undertake research work in Vanuatu on the subject of

with the communit(y/ies) of

on the island/s of

in the capacity of (if more than one researcher is involved)

for the period up until (Specify if research will involve more than one visit)

(2) The Researcher has paid an authorisation fee of 25,000 vatu to cover all administrative costs incurred in the setting up and implementation of the research venture, or this fee has been waived by the Council.

(3) The right to the products of research shall belong to the Researcher who shall be entitled to reproduce them for educational, academic or scientific purposes, provided that traditional copyrights are not compromised and the permission to use material has been obtained from copyright holders with their prior informed consent. The products of research shall not be reproduced or offered for sale or otherwise used for commercial purposes, unless specified under section 12 of this agreement.

(4) Copies of all non-artefact products of research are to be deposited without charge with the Cultural Centre and, where feasible, with the local community. Two copies of films and videos are to be provided, one for public screening and the other for deposit in the archives. In the case of films, a copy on video is also required. Any artefacts collected become the property of the Cultural Centre unless the traditional owners specify otherwise. The carrying of any artefacts or specimens outside the country is prohibited as stipulated under cap.39 of the Laws of Vanuatu. Artefacts and specimens may be taken out of the country for overseas study and analysis under cap.39(7). The conditions for the return of the following materials are:

(Specify artefacts/specimens/other materials and conditions for return)

The Researcher has either

- (a) provided a letter from the institution to which they are affiliated guaranteeing the researcher's compliance with the above conditions, or
- (b) provided a retrievable deposit of 40 000 vatu to ensure their compliance with these conditions.

(5) The Researcher will be responsible for the translation of a publication in a language other than a vernacular language or one of the three national languages of Vanuatu into a vernacular or one of the national languages, preferably the one used in education in the local community. They will also make the information in all products of research, subject to copyright restrictions, accessible to the local community through such means as audio cassettes or copies of recorded information, preferably in the vernacular. The Researcher will also submit an interim report of not less than 2000 words no later than 6 months after the research period has ended giving a reasonable precis of their work. This will be in one of the national languages and in 'layman's terms' so as to be of general use to all citizens.

(6) There will be maximum involvement of indigenous scholars, students and members of the community in research, full recognition of their collaboration, and training to enable their further contribution to country and community. The Council nominates the following individuals to be involved in research and/or trained, in the following capacities:

(7) A product of immediate benefit and use to the local community will be provided by the Researcher no later than 6 months after termination of the research period. This product is:

(8) In addition to their research work, the Researcher will, as a service to the nation of Vanuatu, undertake to : (section 8.3 of the Cultural Research Policy suggests possible services of benefit to the nation)

(9) In undertaking research the Researcher will:

- a) recognise the rights of people being studied, including the right not to be studied, to privacy, to anonymity, and to confidentiality;
- b) recognise the primary right of informants and suppliers of data and materials to the knowledge and use of that information and material, and respect traditional copyrights, which always remain with the local community;
- c) assume a responsibility to make the subjects in research fully aware of their rights and the nature of the research and their involvement in it;
- d) respect local customs and values and carry out research in a manner consistent with these;
- e) contribute to the interests of the local community in whatever ways possible so as to maximise the return to the community for their cooperation in the research work;
- f) recognise their continuing obligations to the local community after the completion of field work, including returning materials as desired and providing support and continuing concern.

(10) In all cases where information or material data is obtained by the Researcher, the Researcher has the responsibility to make his/her informant(s) fully aware of their rights and obligations, and those of the Researcher, in the transmission of this information.

In particular, it is the obligation of the Researcher to:

- a) ensure the informant(s) have given their Prior Informed Consent to provide this information for the purposes of the research project ;
- b) record full details as to the extent to which this information can be transmitted to other people and to publish or otherwise disseminate this information only in accordance with these disclosure details given by the informant(s) ;
- c) properly acknowledge and attribute this information to the informant(s) in all cases where it is recorded, published and/or cited.

(11) A breach of any part of this agreement by the Researcher or a decision by the local community that it no longer wishes to be involved in the research venture will result in the termination of the research project.

(12) (Additional clauses/conditions) (This section will detail commercial ventures, extra costs incurred by the Cultural Centre, etc.)

Signed :

.....  
The Researcher

.....  
On behalf of the National Cultural Council.

## Appendix H: Code of Ethics Agreement for Foreign Researchers Undertaking Research on the Flora and Fauna of Vanuatu

[http://www.biodiversity.com.vu/co\\_ethics.doc](http://www.biodiversity.com.vu/co_ethics.doc)

Description: The document outlined the terms and conditions for agreement between any Researcher (s)<sup>6</sup> and the Vanuatu Government prior to undertake any related researches for scientific purposes within Vanuatu.

I (Name) \_\_\_\_\_ of

(Institution/Company) \_\_\_\_\_

Agree to the following terms and conditions while collecting and working in Vanuatu:

1. Arrange to work with a local recognised researcher/organisation in Vanuatu.
2. Respect regulations of Vanuatu, e.g., enter on a research visitor visa; obtain permit from Director of Agriculture where necessary required for birds especially closing season for capturing and killing of birds; observe regulations for export of plants and animals/parts of plants and animals-Quarantine, CITES etc.
3. Obtain permission from National and Provincial authorities and landowners in the areas you want to research.
4. When apply for a travel/study grant, include additional amount to cover the cost of research permit of 50,000 Vatu or an equivalent of US\$350.00; of processing your specimens or other costs of your visit to the collaborating organisation may incur and equal travel expenses and per diems for your local counterpart.
5. Leave a good and complete set of duplicates, most preferably with labels with the curator of the Herbarium or museum / in the care of your collaborators.
6. Ensure that types of species you describe are deposited for Vanuatu in the department of Forest Herbarium/museum/in the care of your collaborators.
7. Inform local herbarium and museum curators/your collaborators where the other duplicates are to be deposited.
8. Where outside of Vanuatu, the duplicates be deposited, they will remain properties of Vanuatu.
9. Do not exploit Vanuatu's natural resources by removing large quantities of wild plants and/or animals that have cultural, medicinal, horticultural, and other economic values.
10. Obtained a list of Vanuatu rare and endangered species - plants from the Department of Forest or animals from the Environment Unit. Rare and endangered species shall not be collected without permission.

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<sup>6</sup> Researchers may mean foreign individual or company or an academic institute and others. It may also refer to local researcher or researchers that affiliates with foreign institution(s) or organisation(s).

11. Life endemic species or propagated part of the species shall not be collected for any means, at all, otherwise shall be subject to further agreements with the Vanuatu Government.
12. Collect no more specimens than is strictly necessary.
13. Leave copies of photographs/slides from the research for Vanuatu in the care of your collaborators.
14. Inform the Department of Forest, Department of Fisheries, Department of Agriculture and Rural Development, Quarantine and Inspection Services, Environment Unit of new locality of rare species/ endangered species/ species of economical potential/ species of potential threats to the Vanuatu flora and fauna you find.
15. Provide a report of preliminary findings to collaborator(s) prior to leaving Vanuatu.
16. Ensure that collaborator(s) are consulted with the draft of the research reports prior to publishing of the actual document.
17. Your collaborator (s) Department of Forests/ Department of Fisheries/ Department of Agriculture and Rural Development, Quarantine and Inspection Services/ Environment Unit must have copies of the reprints research reports.
18. Acknowledge collaborators in reports, publications, etc.  
 Dates working in Vanuatu: \_\_\_\_\_
19. Any breaching of the agreement may result in the following conditions:
  - i) The Environment Unit and other concerned government departments will investigate the whole process involved in the organisation and arrangement of the research.
  - ii) The Environment Unit and other concerned government departments may cease all data and information collected in any form.

Name of External Organization: \_\_\_\_\_

Address (overseas): \_\_\_\_\_

\_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Name of individual represented: \_\_\_\_\_

Signed \_\_\_\_\_ Date: \_\_\_\_\_

Witnessed and approved by: Name: \_\_\_\_\_

Signed \_\_\_\_\_ Date: \_\_\_\_\_

HEAD of Environment Unit



**(B) (I) Research Details**

1. Purpose of research .....

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2. Reasons to undertake the research in Vanuatu .....

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3. The benefits of the research to the person/Institution/company undertaking the research .....

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4. The benefits of the research to Vanuatu. ....

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5. Other research team members:

Name	Title/Profession	Contact Address	Phone/fax/email

6. List of equipment and materials to be used

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.....  
.....

7. Length of time to conduct the research while in Vanuatu .....

.....

8. Island (s) intended to conduct the research on .....

.....

9. Describe arrangements made with your collaborators to undertake the research...

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.....  
.....  
.....  
.....

If the research is supported by donor funding: specify funding support to the research and attached to this application the research proposal for funding.

.....  
.....

I agree that:

- \* This work shall take place in accord with the laws, policies and procedures of the Republic of Vanuatu.
- \* A copy of all reports and publications stemming from this work will be lodged in Vanuatu with:.....
- \* No samples will be collected without full informed consent of the owners or providers of the resource from which samples are collected.
- \* If samples or collections from this work are to be used for any purpose other than specified in B1 above, the Department will be advised in advance, and full effort made to obtain prior informed consent from the owners or providers of the samples.

Signature of Applicant:..... Date:.....

For official use only

Approval for the above statement:.....

Date.....


(HEAD of Department)

Department.....


Address:.....



## Appendix J: Site Monitoring Forms

		<b>Chief Roi Mata's Domain</b>
<b>MONITORING POINT</b>		
<hr/>		
Form description/number		
Date recorded		
<hr/>		
<b>What is to be monitored?</b>		
What is to be monitored?		
Answer: <ul style="list-style-type: none"> <li>• Why does it need to be monitored?</li> <li>• Why was this point selected?</li> </ul>		
<hr/>		
<b>Key Indicators</b>		
What are we watching for?		
<hr/>		
<b>Instructions for future inspections</b>		
How often or when should inspections be made?		
Instructions for future inspections		
<hr/>		
<b>Other Details</b>		
Who mapped the monitoring point details?		
When was the site inspected?		
When does the site need to be revisited?		
<b>Images</b>		
Photograph of feature showing monitoring point (*.jpg.png.gif.tif)		
Detailed photograph of monitoring point (*.jpg.png.gif.tif)		

## Appendix K: Site Inspection Forms

 <b>Chief Roi Mata's Domain - Vanuatu</b> <b>SITE INSPECTION</b>	
Form description/number	
Date MP mapped	
When was the site inspected?	
Supporting documentation (* .doc)	
<b>Key indicators measured</b>	
Describe the condition of the MP according to key indicators. (See MP form)	
<b>Impacts</b>	
Are there any environmental or human impacts that need to be noted?	
<b>Management recommendations</b>	
How might the above impacts be managed?	
<b>Photographs</b>	
Updated photograph of feature showing monitoring point (* .jpg, .png, .gif, .tif)	
Updated detailed photograph of monitoring point (* .jpg, .png, .gif, .tif)	

course of the meetings, ROEMATA chose from amongst those present the man whom he would name as chiefs. Dipping his hand in the water of the lake and then placing it on the head of the chosen men, he ordered each one to go and rule as chief in the various villages of Efate but also in the neighbouring islands as far as Tongoa.

Later, ROEMATA left the area of Otas and settled at TUKUTUK, bringing with him almost the entire population of the Otas area except ROEMURY who remained but developed a terrible hatred for his brother. One day, arming himself with his bow and some poisoned arrows, he left in search of ROEMATA, found him at Tukutuk, and fired an arrow that struck him in the arm, as a result of which ROEMATA died shortly afterwards. Before dying, ROEMATA ordered that he should be buried at RETOKA (Hat Island).

The news of his death was sent out to all the people of the region and they came from as far as Otas for the funeral ceremonies. His body, following custom, was wrapped in leaves and then placed on and tied to a sort of bier, and then carried down to the beach. Those present began to sing a sort of lament and then to pray to their gods. The sea withdrew, allowing the funeral party to walk on foot from Tukutuk to Hat Island where ROEMATA was buried with his five wives and numerous subjects (about 300 according to the legend).

# Cultural Tourism Strategy for Chief Roi Mata's Domain (Northwest Efate, Vanuatu)



June 2006

A document prepared for the World Heritage and Tourism  
Committee (WHTC) and the Lelepa region community

by Carly Greig (Australian Youth Ambassador for Development,  
AusAID volunteer, Vanuatu Cultural Centre, Port Vila)

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# 1. INTRODUCTION

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## 1.1 BACKGROUND

The Cultural Tourism Strategy detailed in this document has been prepared for the World Heritage and Tourism Committee (WHTC) of the Lelepa region, which is responsible for the day-to-day management of Chief Roi Mata's Domain (CRMD). Chief Roi Mata's Domain is a cultural landscape located in Northwest Efate, Vanuatu, and is currently being nominated for World Heritage Listing. This Strategy is designed to assist the WHTC with the opening and on-going development of a small-scale community tourism business that will operate within the proposed World Heritage area.

Most of the information in this document is derived from two Tourism Consultation Workshops that were held in the villages of Mangaliliu and Natapao (Lelepa Island) in October and November 2005. During the consultative workshops the community decided that the proposed 'Tourism Project' should be jointly managed by the residents of both the Mangaliliu and Lelepa Island settlements, as these settlements form part of a single community (the 'Lelepa region community') whose members share a contemporary and historic association with CRMD.

Several different tours were developed by the Lelepa region community during the consultative workshops. However, for the purposes of starting a successful and profitable local community business, one tour has been selected for initial development. Commencing with a single tour will also ensure that tourism is introduced to the Lelepa region in a gradual and controlled manner. Other tour ideas designed by the community have been included in Appendix G of this report, as a record for future reference. The community may wish to develop some of these ideas at a later date.

The World Heritage and Tourism Committee (WHTC) for the Lelepa region is a management committee that has been appointed to oversee the development of the Mangaliliu-Lelepa Island Tourism Project and ensure that in its operation the project protects and promotes the 'outstanding universal values' of Chief Roi Mata's Domain.

The WHTC comprises eight representatives: four from Mangaliliu and four from Lelepa Island. Both Mangaliliu and Lelepa Island have two male and two female committee members. Each position within the committee has one representative from each village:

- 1) Chair and Vice-Chair (shared positions)
- 2) Tourism Managers
- 3) Human Resources Managers
- 4) Finance Managers

There is also a Vanuatu Cultural Centre (VCC) representative who will serve as a liaison between local and international interests in the tour and the proposed World Heritage area. The WHTC meets once a month to plan for, and oversee the development of, the community tourism project.

In the initial stages of developing a tourism business in the Lelepa region, five or six pilot tours will be run to test the tourism product. An evaluation period will ensue, to examine the success of the pilot tour and provide community members with an opportunity to voice their concerns about the project. The WHTC will address all suggested amendments before formally registering the project as a community business.

The process that has been applied to develop this tourism project follows the *Stepping Stones for Tourism* framework (Hall 2003). *Stepping Stones* is a partner program for *Steps to Sustainable Tourism* (Australian Government Department of Environment and Heritage 2004). Combined elements of these two programs have assisted in the consultative and capacity building processes undertaken with the Lelepa region community.

Environment Australia's *Tourism and Heritage: A framework for planning and assessment* (Environment Australia, 2003), has also facilitated the production of this document.

A Bislama version of this Cultural Tourism Strategy (CTS) is due for completion in October 2006. This will allow the information contained in the CTS to be accessible to the broader Lelepa region community.

The Cultural Tourism Strategy should be reviewed at the end of the first operational year of the tourism business, in June 2007. There is likely to be a number of modifications to the tour product during the first year as new ideas are embraced. Reassessing the Strategy after 12 months will enable the WHTC to refocus and redirect its efforts more productively. It will also provide an opportunity to reflect on the progress that has been made by the community during the first 12 months of their tourism operation.



Traditional Canoe at Mwalakot. Photo by Pia Courtis



## 1.2 OBJECTIVES OF TOURISM OPERATIONS

During the 2005 consultative workshops, members of each settlement developed a 'vision statement', outlining their aims for a prospective community tourism project. The following paragraphs provide both the Mangaliliu and Lelepa Island vision statements in Bislama and English. These vision statements have also been translated into the local language spoken by community members.

### Mangaliliu Tourism Vision Statement:

*English:*

*It [the tourism project] is a dream that each person gathered here shares, just like we share our Church, our school and much more.*

*It will make us have more respect for our own cultural strengths.*

*This gathering brings every household in the community together, and we will make sure that we pass this dream on to the upcoming generations.*

*Bislama:*

*Emi wan trim, we body ia bae mekem mifala wanwan olsem, Church Haos, Education, mo narafala more. Mo bae i save mekem mifala i rispektem mifala. Body ia emi door blong wanwan haos mo bae i go kasem olgeta we oli stap kam bihaen".*

*Local Language:*

*"Epi napere skei,*

*Npatko na ego welua narei go kinem skeskei.*

*Taos nasuma tap, nataen, narogtemwian go te ptae tete.*

*Go etae welua kinem lag ur ga kolkol nlaken nawiannaur agnem.*

*Npatko na epi namta skei na nawian ego urus pak tagona go tagona urgo rak panei".*

### Lelepa Island Tourism Vision Statement:

*English:*

*"The Tourism project that goes ahead in the Lelepa region must benefit the community and each household within the community. It must be a sustainable (long-term) project. We want to make sure that we look after all of our cultural and natural places, as well as all of our sacred (tabu) places".*

*Bislama:*

*"Turism projek we bae hemi gohed long Lelepa rijon, bae hemi mas benefitem komuniti mo wanwan haoshold; hemi mas bi wan long-term projek (sustenabol); mo mifala i wantem lukaotem gud ol kaljoral mo najural ples, mo ol tabu ples, blong mifala."*

*Local Language:*

*"Naosin eto pak ling mur alapa pan, evi taluan eskei nasuma skeiskei uruga wis ntapen\_as. Naosin na tug lopar kat wi kinia ne ega to prau. Kinta telap tug tuman psa sok kintas lang tug do loparkat nalitap eginta".*

Essentially each of these vision statements outlines the importance of ensuring that this is a community project, designed to benefit the community at large rather than a select few individuals. Emphasis on the importance of preserving natural and cultural values is a significant theme. Also of importance is the need for sustainability, to ensure that the benefits of the project can indeed meet the community's needs, such as improved health and education services.

The vision statements illustrate that both the Mangaliliu and Lelepa Island communities aim to strengthen local pride in cultural heritage places, protect the recognised values of the region, and provide a source of income for the people living in the region. Another important objective for the project is ensuring its sustainability through widespread community participation.

The tourism project for the Lelepa region is being developed in conjunction with the nomination of 'Chief Roi Mata's Domain' (CRMD) for inscription on the World Heritage list. Two of the main sites to be visited during the proposed tour are located within the boundaries of the proposed World Heritage property. The objectives of this Tourism Strategy must therefore coincide with the conditions set out in the Management Plan for CRMD (World Heritage and Tourism Committee 2006), including the following:

- To ensure that projects undertaken within CRMD or within the immediate buffer zone are not to the detriment of the cultural and natural values denoting CRMD
- To support ventures which protect and promote the cultural and natural values of CRMD

This Tourism Strategy for CRMD has been developed to ensure that natural and cultural values of the property will not be disturbed through the introduction of tourism. The overall objective of the Tourism Strategy is to build the community's capacity to run a sustainable, small-scale tourism business, while also ensuring that the historical, cultural and natural aspects of the site are maintained and managed by the community.



View of coconut palms towering above Chief Roi Mata's Domain. Photo by Pia Courtis

## 2. DESCRIPTION OF PROPOSED TOUR ACTIVITIES

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The community has chosen to develop a half-day tour which focuses on the story of Chief Roi Mata (the 'Roi Mata Cultural Tour'). The tour is primarily a historical cultural tour with an educational focus. Interpretative material will feature aspects of the local flora, fauna, geology, archaeology and contemporary culture.

There are three main locations that are significant to the story of Roi Mata:

- Mangaas (Roi Mata's historical village),
- Fels Cave (where Roi Mata is said to have drawn his last breath), and
- Artok or 'Hat' Island (Roi Matas' burial site)<sup>1</sup>

The map provided on the following page pinpoints these three sites, which are located in the Lelepa region of North West Efate. These sites are what now constitute Chief Roi Mata's Domain (CRMD) which is being nominated for inscription on the World Heritage List.

As previously mentioned (in section 1.2), visitors will only be taken to two sites within the CRMD – Mangaas and Fels Cave. Artok Island is currently omitted from the tour itinerary because a foreign investor holds the lease title to the land.<sup>2</sup>

The residents of Mangaliliu and Lelepa Island agree that initially, the tourism operation should be a small-scale enterprise that hosts a maximum of 14 people per tour. This tour size has been selected on the basis of the limited boat and vehicle resources currently available and also the local desire to minimise visitor impact and overcrowding at tour sites.

The community has decided that tours will operate a maximum of 6 days a week (Sunday will not be an operational day due to Church commitments). In the early stages of implementation the WHTC is considering running the tours three or four days a week instead of 6. This will allow the Lelepa region residents to adjust gradually to the new venture and thus ensure that a more sustainable product is developed. It will also avoid the potential for discouragement of locals and oversupplying to the tourism industry in the early stages of business. The company will take time to build demand within the tourist market, and operating only a few days a week will conserve the efforts of the community and condense the number of visitors attending each tour (hence resulting in a more profitable operation).

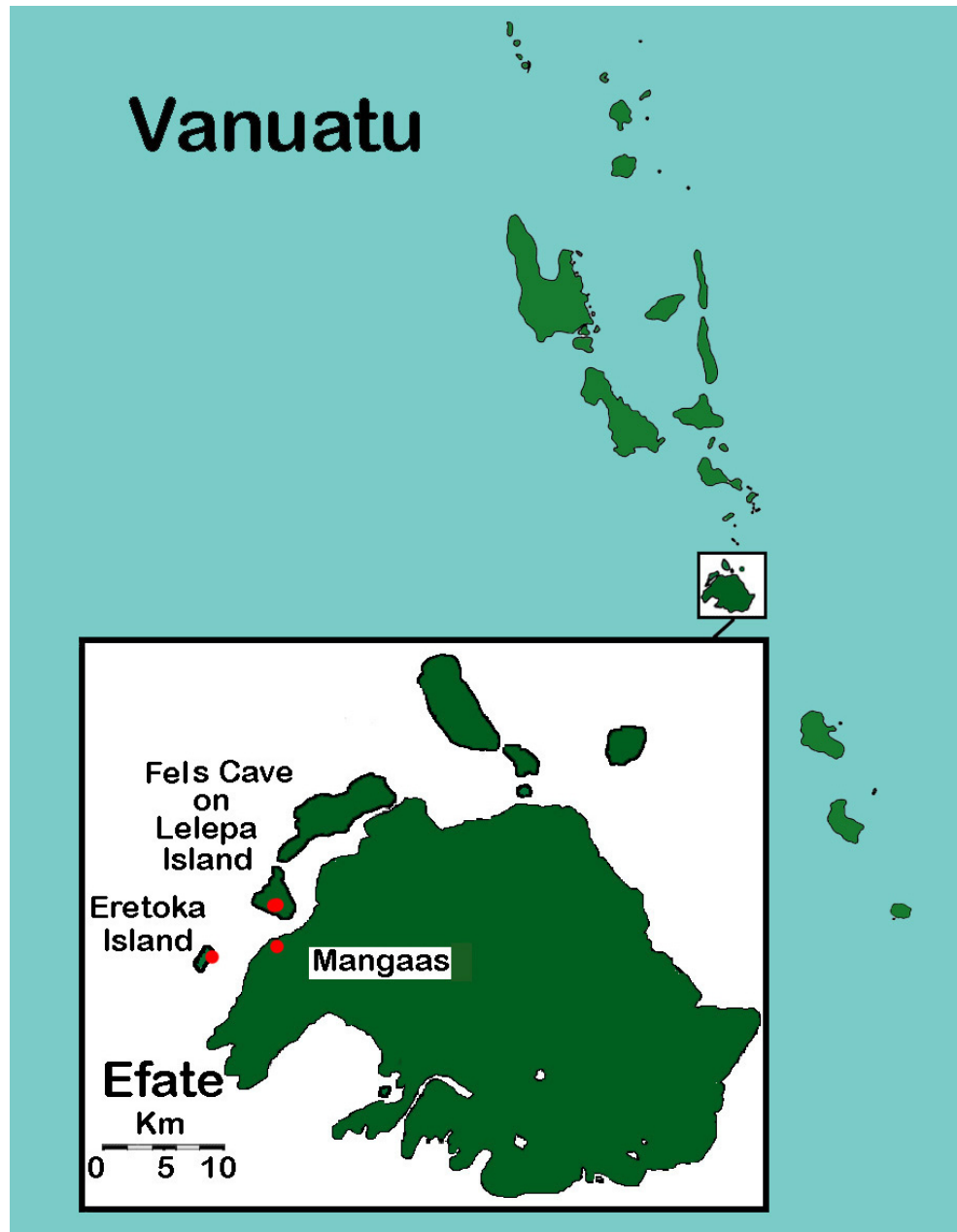
In keeping with the community vision, the tour has been designed to involve as many family groups as possible. Members of the community will be involved with the Tourism Project in various ways, such as:

- tour guiding
- preparation of food and refreshments for tourists

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<sup>1</sup> In existing published literature, 'Artok Island' is often referred to as 'Eretoka Island' or 'Hat Island'. The community's wish is that, consistent with Lelepa language orthography, 'Artok' becomes the standard name for the island. However, the community has also requested that reference still be made, in all public documents, to 'Eretoka' and 'Hat' so that readers are aware that each of these names connect to the same place.

<sup>2</sup> This situation is expected to change by the end of 2006 with the return of Artok Island to its kastom owners. Once this occurs the WHTC will be able to review the tour itinerary and build a visit to Artok Island into the tour experience.



The three locations of CRMD are pinpointed above. Only two of these sites (Mangaas and Fels Cave) are to be included in the Roi Mata Tour at this stage.

Map provided by Rebecca Johns (Australian Youth Ambassador for Development), AusAID volunteer, Vanuatu Cultural Centre

- driving and maintenance of vehicles and boats
- acting in the Naflak dramatisation
- performing kastom dance
- building and maintaining visitor facilities
- making handicrafts for sale
- taking tourists for canoe rides
- carving canoes and tamtams (slit drums) for the tour
- keeping tour areas tidy and clear of rubbish
- gardening to produce extra food for tourism activities
- production of interpretative materials
- project planning
- human resource management

- financial management and administration

As previously stated the tour will initially undergo a pilot phase, to trial the Roi Mata Cultural Tour. Following this a re-evaluation of financial viability will be conducted to ensure that operational costs and tour capacity arrangements are appropriately scaled. Once the required adjustments have been made, the tourism business will be registered and will commence its official operation.

Community members plan to expand tourism capacity gradually, to ensure that they can maintain control of visitor numbers to the area. This strategy will reduce the potential for detrimental impacts to the cultural and environmental integrity of Chief Roi Mata's Domain, and will also facilitate the maintenance of quality visitor experience.

## 2.1 TOUR ITINERARY – HALF DAY TOUR

### Roi Mata Cultural Tour

8.30am	Pick-up (max 10 people) from hotels
9.00am	Arrive at Vanuatu National Museum Meet tour guide Guide gives a short introductory talk Visit the Roi Mata display Watch a video (5-10 minutes) about the story of Roi Mata Guide distributes tour brochure/information sheet to each tourist
9.30am	Travel to Mangaas by bus Guide provides interpretation to tourists as they travel to Mangaas
10.00am	Arrive at Mangaas Dramatisation of Roi Mata's institution of the Naflak system Visit Roi Mata's Village
11.00am	Travel to Fels Cave by boat Tour Guide provides interpretation while traveling by boat
11.15am	Arrive at Fels Landing Walk up to Fels Cave
11.30am	Arrive at Fels Cave Tour guide shows rock art to tourists inside cave
12.00 noon	Depart Fels Cave and walk back to Fels Landing
12.15am	Travel by boat to Mangaliliu
12.30am	Arrive at Mangaliliu Tour Guide talks to tourists about the significance of Artok (Hat) Island
12.45pm	Naflak lunch

1.15pm	Short time to rest Tourists are given the opportunity to buy handicrafts, paddle in a canoe, or go for a swim in the sea
2.00pm	Bus arrives to take all tourists back to Port Vila
2.30pm	Tourists arrive back at their hotels

## 2.2 DESCRIPTION OF ACTIVITIES WITHIN TOUR ITINERARY

Careful consideration has been given to the cost effectiveness and convenience for locals when planning the structure of this tour.

### Vanuatu National Museum

The tour will commence at the Vanuatu National Museum, where an appropriate introduction to the history of Chief Roi Mata will be provided to tour participants. People will be shown the display of artifacts excavated from the grave of Roi Mata and will watch a short film that introduces the tour destination and provides some facts about the sites to be visited. The film is intended to set the scene for the tour, so it must be engaging and must capture the interest of tour participants.

Visitors will also be issued an information leaflet, containing descriptions and maps of the sites to be visited and pinpointing areas of interest. This leaflet will be used as a reference sheet during the tour. It will also provide some information regarding issues of safety and cultural appropriateness that are to be observed throughout the tour.



Tamanu tree at Mwalakot, where the dramatisation will take place on the Roi Mata Cultural Tour.  
Photo by Pia Courtis



Rock art inside Fels Cave. Photo by Kerrie Bennison

The Vanuatu Cultural Centre provides an excellent departure point for the tour due to its central location in Port Vila. Commencing the tour here also means that the Tour Guide is able to give the visitors a briefing about CRMD and the cultural sensitivities of the tour, prior to arriving at the first tour site.

### Mangaas

The first site of CRMD that will be visited in the tour is Mangaas. This is the former village of Chief Roi Mata, where it is believed he resided about 400 years ago (Wilson and Ballard 2006). On arrival at Mangaas, visitors will be entertained by community members who will perform a dramatisation of the story of Roi Mata instituting the naflak system (a matri-clan system in which totems, or naflaks, are passed through the maternal line). The dramatisation will be held at Mwalakot, Roi Mata's beach and former canoe-landing area.

Following the drama presentation, tourists will be guided through Roi Mata's village. An existing walking trail enables tourist's easy access to most of the places of interest at Mangaas. Visitors will be able to see the original stone walls encompassing Roi Mata's residential quarters; the original gateway into his village; a reconstruction of a traditional kastom house; and a former dancing ground (Mwalasayen) that is marked by an impressive banyan tree believed to have been planted during Roi Mata's life time. Each of these features will provide a good visual interpretation of the site.

After visiting Roi Mata's village the group will return to Mwalakot, from where they will travel by boat to Aupa beach on Lelepa Island.

### Fels Cave

Once the visitors have safely disembarked from the boats at Aupa, they will be led up to Fels Cave. It is about a 15-minute walk along the shore and then up the hillside to reach the cave site.

Fels Cave is culturally and historically significant for several reasons. It is the location where Roi Mata is said to have drawn his last breath, and it is also the traditional

canvas for hundreds of rock paintings and engravings, some of which may date to as early as 3000 years ago (Wilson and Ballard 2006).

Tour guides will show visitors examples of this rock art once inside the cave. Some more recent graffiti, including people's initials and yearly dates, have been carved into sections of rock near the entrance to the cave. Some of the earliest engravings appear to have been left in the late 19th and early 20th centuries by visiting missionaries, visiting ship's crews, and American servicemen during WWII. Depending on people's level of interest, some geological information regarding the formation of the cave might also be offered.

After visiting Fels Cave, the tour will return to Aupa. Depending on the tour schedule for the day, tourists will either lunch at Aupa or travel by boat to the mainland and

lunch at Mangaliliu Village (see below).



Entrance to Fels Cave, Lelepa Island. Photo by Kerrie Bennison

Lunch at Mangaliliu Village or Aupa (Fels Landing on Lelepa Island)

At Mangaliliu Village, tourists will be hosted at a sheltered area near Mangaliliu landing. This area provides a clear and direct view of Artok (Eretoka or Hat) Island. It is therefore at this location that interpretation of Roi Mata's burial site on Artok will be provided. Given that visitation to the Island is not a viable option at this stage, interpretative material such as photos of the grave site (in particular images from Garanger's excavation in 1967 [Garanger, 1972]) will be used to portray the

significance of this renowned island to visitors.

A sense of chronology is maintained by including the interpretation of Artok at this point in the tour. Tourists have visited the site of Roi Mata's former residence at Mangaas, followed by the location of his death at Fels, and are finally provided a viewing point and interpretation of the place where his remains are buried on Artok Island.

Following the discussion of Artok and Roi Mata's grave site, the tourists will be invited to a naflak lunch. The lunch prepared for the visitors will feature some naflak (totem) food items that are locally grown and prepared. This thematic lunch brings a rounded sense of closure to the main interpretative content of the tour, by demonstrating how the naflak system is still present in the material, social and cultural landscape of contemporary village life.





Lunch prepared by women of Mangaliliu village for the first Pilot Tour. Photo by Matt Cattanach

As noted in the tour itinerary, 45 minutes will be allowed after lunch for visitors to rest, buy handicrafts, paddle on a canoe, or swim prior to the arrival of the tour bus which will return the guests to Port Vila.

It has been decided by the WHTC that the lunch location will be alternated between Aupa (Fels Landing on Lelepa Island) and Mangaliliu. This arrangement has been made so that it is easier for the women of both settlements to participate in and share the responsibility of food preparation for the tour. If lunch were located at Mangaliliu every day the Lelepa women would be required to paddle across (by canoe) from their island to deliver food for the tour. This would create a great and unnecessary workload and would make the commitment of providing food more difficult for the women to meet. Therefore, for three days of the week (Monday-Wednesday for example) Mangaliliu village will provide food and staff for the tour, while on the other three days (Thursday-Saturday) it will be the responsibility of Lelepa Island to cater for the tour. Through this arrangement, the sale of handicrafts can be shared between the two settlements over the course of a week. Mangaliliu will have the opportunity to sell their works on the days where tourists lunch near Mangaliliu and vice versa.

A clear view of Artok Island is also available from Aupa, on Lelepa Island, so the alternation of lunch location will not interfere with the chronology of tour interpretation. Information about Roi Mata's grave site on Artok Island can be given

at Aupa prior to having lunch. Following lunch the visitors will return to Mwalakot landing where the tour bus will be waiting (in the near by parking area) to return them to Port Vila.

## 2.3 TOUR IMPLEMENTATION

This section provides an outline of the actions required in order to prepare for the Roi Mata Cultural Tour. The following table, developed through consultation between facilitators of the Roi Mata World Heritage Project and members of the WHTC, provides a brief outline of what needs to be done and what is the desired outcome of the implementation. By June 2006, some of the proposed actions were in the process of implementation while others required funding (see **APPENDIX G** for itemised budget submitted to potential funding bodies).

What will be involved	What are the expected outcomes
<b>Training tour guides:</b> <ul style="list-style-type: none"> <li>• First Aid, interpretation, and emergency response.</li> <li>• Produce guide training manual for guides to refer to during and after training.</li> </ul>	Tour guides will be fully trained in interpretative skills and First Aid/ Emergency response.
<b>Interpretation:</b> <ul style="list-style-type: none"> <li>• Design interpretative materials (information brochure).</li> <li>• Develop Roi Mata display at the Vanuatu Cultural Centre.</li> <li>• Produce video for visitors to view at the Vanuatu National Museum. (This may be done at a later stage depending on availability of quality footage, equipment and expertise to complete the film).</li> </ul>	Tourists will be provided with informational tools that are culturally appropriate and which promote an interest in the cultural, historical and environmental values of the tour locations.
<b>Tour site development:</b> <ul style="list-style-type: none"> <li>• Carve tamtams and canoes, and build kastom house.</li> </ul>	The tour sites will be developed to illustrate, as clearly and authentically as possible, the significance and historical background of the CRMD.
<b>Infrastructure:</b> <ul style="list-style-type: none"> <li>• Construction of toilets, wharfs, tracks, shelters, seating areas, signage.</li> </ul>	Tour locations will be equipped to accommodate a safe and visitor friendly tour environment.
<b>Emergency:</b> <ul style="list-style-type: none"> <li>• Training of guides in emergency response and First Aid.</li> <li>• Supply of First Aid kits and fire extinguishers.</li> <li>• Issuing of radio communication to tour guides as well as bus and boat drivers.</li> <li>• Provision of TVL phone cards so that phone calls may be made in the event of an emergency.</li> </ul>	To ensure that visitor safety is maximised through the training of tour guides, the implementation of an emergency plan and also through the provision of First Aid supplies and communication tools.

<p><b>Transport:</b> Sourcing of boat and bus facilities and drivers.</p>	<p>Ensure that adequate and safe transport is available for the Roi Mata Cultural Tour to run effectively.</p>
<p><b>Food preparation and catering:</b> Human Resource Managers (WHTC) to source women in the Mangaliliu and Lelepa community who are interested in catering for tourists. Women of Lelepa and Mangaliliu to meet and discuss how food preparation will be coordinated between the two villages.</p>	<ul style="list-style-type: none"> <li>• Lunch and refreshments will be available to tourists and will be prepared entirely by community members.</li> <li>• The selected foods will bear cultural significance to the tour, through the representation of different naflaks (totems instituted by Roi Mata) food items.</li> </ul>
<p><b>Handicraft:</b> Human Resource Managers to arrange for members of the community to prepare handicrafts for sale to tourists during the tour.</p>	<p>Handicraft items such as mats, baskets, and fans, will be produced by women of the Mangaliliu and Lelepa Island villages, so that they may be sold to tourists attending the tours.</p>
<p><b>Dramatisation:</b> Development of script and workshop with Wan Smol Bag. Training of community members who are to participate in the dramatisation of Roi Mata instituting the naflak system.</p>	<p>Youth of Mangaliliu and Lelepa will be trained to re-enact the story of Roi Mata instituting the naflak system.</p>
<p><b>Marketing:</b></p> <ul style="list-style-type: none"> <li>• Choose a name for the tour as well as a name and logo for the prospective tourism business.</li> <li>• Produce tour brochure and marketing material for display in the selected booking centre (e-tourism centre.info, located on the Lini Highway, Port Vila).</li> <li>• Web page design.</li> </ul>	<ul style="list-style-type: none"> <li>• A community developed logo, in addition to a name for the tour and tour company, will be selected for registration of the tour business.</li> <li>• A simple set of marketing material will be produced for the tour, including the design of a web page to attract online bookings.</li> </ul>
<p><b>Uniforms:</b> Arrange for shirts and/or badges to be printed bearing the selected company name and logo.</p>	<p>Tour guides will be supplied with a shirt (or dress) that is to be worn as uniform for the tour. At a later stage these may also be produced for sale to visitors.</p>

Note: Refer to APPENDIX A for a more detailed 'Action Plan for the Pilot Tour'.

### Timeline

May 2006 is the start date for the pilot tour. The 'pilot tour' and 'pilot tour evaluation' phases of the Tourism Project are expected to run over a period of two months.

The planned start date for the tourism business is July 2006. At the end of its first operational year, a review will be conducted to assess how effectively the business is running. At this point, any required modifications will be made to the tour and/or business management strategy.

Note: Refer to the 'Business Plan' in section 9 of this report for a more detailed timeline for the tour implementation.

## 2.4 INTERPRETATION ISSUES AND OBJECTIVES

Interpretation of the tour site is paramount to ensure that visitors understand and appreciate the cultural and historical values of the locations involved. It is recommended that all visitors to Chief Roi Mata's Domain (CRMD) are accompanied by a tour guide who will interpret the significance of the sites and also ensure adherence to the communities' requirements for cultural site protection.

### Interpretation Issues

- **Obtaining funding for production of interpretative materials.** The WHTC is currently in the process of sourcing a small amount of funding to cover the cost of printing 100 brochures for the pilot phase of the tour. Following this initial print run, additional funding will be required to continue producing information brochures. Alternatively, photocopied versions of the brochure will have to be used until the next funding instalment or surplus profit from tourism operations can cover the cost of subsequent production. Interpretative materials will be produced before the end of June 2006, prior to initialising the operational phase of the tourism project.
- **Signage.** It has been decided not to install signage in Chief Roi Mata's Domain at this stage, as it will impinge upon the aesthetics of the tour sites and introduce an added workload to the community for ongoing maintenance of the signs. Also, due to financial limitations, any signage installed at this stage would be of poor quality. It would therefore fall into disrepair quickly and possibly reduce visitor appreciation of the site. Some signage may be developed at a later stage when adequate funding is available.
- **The need for ongoing training of tour guides.** Particularly as some decide to move on from tour guiding, the community will need to ensure that up and coming tour guides receive adequate training prior to commencing tour guide work. WHTC Human Resource Managers, along with previously trained tour guides, will need to administer and monitor the process of selecting and training new tour guides. Quality guides are of utmost importance as they significantly influence visitors understanding, appreciation and enjoyment of the tour product.
- **Dramatisation** is a significant aspect of the tour as it provides an alternative medium for communicating historical excerpts of the life and death of Chief Roi Mata to tourists. The community has already developed a short dramatisation piece for the tour. This short performance will be work-shopped over the next few weeks by a local theatre group called 'Wan Smol Bag'. The WHTC should consider employing the expertise of Wan Smol Bag staff on an annual basis, in order to continue to provide a professional and powerful drama presentation. Maintaining a quality performance standard may become a long term issue, relative to the effectiveness of interpretation on the tour. This will require commitment and continuity with regards to rehearsals and participation in tour performances. In order to ensure that the dramatisation runs effectively, it is essential that there is a cohesive team effort from those involved.

### Interpretation Objectives

- **Produce an Interpretation Workbook** for tour guides containing a range of interpretative topics. A first draft of the 'Tour Guide Training Manual' for Chief

Roi Mata's Domain was produced prior to the Tour Guide Training Workshop held in March 2006. Following feedback from tour guides during the workshop, and also in response to visitor comments about the tour during the 'Pilot Phase', this training manual is being modified to better meet the needs of tour guides and improve the tour product. The new Tour Guide Training Manual will be completed by the end of June 2006.<sup>3</sup>

- **Re-develop the Roi Mata display at the Vanuatu Cultural Centre**, to provide an improved facility with regards to both the informational content and the visual presentation of the artifacts on display. The upgrade of this display will allow for a better introduction to the tour and the story of Chief Roi Mata. Stage 1 of the Roi Mata Display redevelopment has already begun, its intended date of completion being 26 May 2006.
- **Write and produce an interpretative brochure**. Due to funding shortage and therefore the need to reduce the amount of interpretative materials initially required, this brochure will aim to: 1 – provide tour information to visitors. 2 – provide interpretation of the Roi Mata display. 3 – serve as a reference during the tour. A map of the tour sites will be included along with interpretative information corresponding to CRMD. At a later stage, three separate items should be produced for the individual purposes of marketing, interpreting the Roi Mata Display and interpreting the sites of CRMD. A separate 'visitor safety' sheet will be handed to tourists as they reserve their place on the tour.
- **Train tour guides to provide consistent interpretation** of the cultural, historical, archaeological, geological, floral and faunal environment of the CRMD. A tour guide training workshop and subsequent weekly training sessions have already been provided, to teach Mangaliliu and Lelepa Island's tour guides about interpretation. In the future, tour guides in training will need to relate to the Tour Guide Training Manual for Chief Roi Mata's Domain, for location specific interpretative material.
- **Include clear maps** in interpretative materials, so that visitors can easily identify the sites and features of CRMD.
- **Create a safe and visitor friendly tour environment** by providing preliminary information about preparing for the tour (ie: bring water bottle, hat, sunscreen, good walking shoes) and by briefing tourists about safety issues when on site. This information will be communicated through the distribution to tourists of a visitor safety leaflet. An arrangement will be made with the booking centre that each tourist is given an information leaflet prior to attending the tour.
- **Encourage visitors to respect** the cultural values of the community, such as modest dress standards for women, being quiet in sacred places and not touching tabu stones. This information will also be included in the brochure given to tourists prior to the tour to allow for adequate preparation.
- **Provide visitor access to the Cultural Site Management System** database for CRMD, which is being submitted as supporting documentation for the World Heritage nomination of the property. The database will be made available to

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<sup>3</sup> Upon its completion the Tour Guide Training Manual will be appended to this document.

visitors of the Vanuatu National Museum, in July 2006, via a computer that will be located in the museum's exhibition space. This will allow visitors to the museum, both local residents and international tourists, to browse the database and learn more about the culturally and historically significant locations within and around CRMD. Security measures will be applied so that culturally sensitive information is not made available to the public. At a later stage the database for Chief Roi Mata's Domain may be hosted on-line, either as a sample version or in full, to increase accessibility to information about CRMD.

- **Information packages** may be developed further down the track, with the allocation of adequate funding, to provide more comprehensive interpretation of CRMD, including the pre- and post-colonial histories of sites located within the property.

In the future the VCC and the WHTC may consider accommodating school and university groups, both local and international, that wish to visit CRMD. Catering to local school and university groups would provide an opportunity for the community to share their cultural heritage as well as their experience in developing sustainable tourism practices and working towards the World Heritage Listing of some of their cultural sites.

Accommodating International University groups may also provide an avenue for promoting the assets of CRMD outside of Vanuatu, while also offering some assistance and ideas with regards to the cultural heritage management of the property. Some tertiary level courses now include a cultural immersion experience as part of their curriculum, and for this reason two student groups from Australia recently visited CRMD. During their visit they participated in field work that has assisted with the preparation of the nomination file for CRMD. The groups also produced a list of 'Interpretation Suggestions' for CRMD (Mangaas Site), which is included as an (APPENDIX B) to this Cultural Tourism Strategy.



Participants of the tour guide training course, March 2006, Mangaliliu and Lelepa Island. Photo by Troy Mallie

### 3. ALTERNATIVE TOURISM IDEAS

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Some tourism ideas that may be considered at a later stage include:

- **Interpretative walk of Mangaas.** It has been suggested that a time be set when visitors can meet a local community member at Mangaas to participate in a guided interpretative walk of the site. Around 10am is a suitable time to conduct this activity as it does not conflict with the Roi Mata Cultural Tour. A small per-head charge could be attached to this interpretative walk. By establishing a set time when independent travellers may join a guided tour of Mangaas, there is an opportunity to have private travellers and other tour operators include a visit to Mangaas as part of their 'Round-Island' tour itinerary.
- **Inclusion of the site of Mangaas in Round-Island tours.** Round-Island day trips are a popular way to visit Efate. A newspaper announcement in the local Daily Post and The Vanuatu Independent could be published to inform bus drivers about including Mangaas in their tours. An interpretative brochure should be produced and made available at the Vanuatu National Museum for bus drivers to collect and distribute to their passengers prior to arriving at Mangaas.
- **Development of self-guided walks around Mangaas.** The WHTC may wish to consider this idea if they feel that it will not threaten the natural and cultural values of the site. A donation box could be erected so that a user-pays system is introduced to access interpretative trails (Ministry of Tourism and Aviation, Government of Solomon Islands & Tourism Council of the Pacific, 1991-2000). This will require the establishment of good quality signage at Mangaas, the site of Roi Mata's historic village, to ensure that visitors follow the proper walking track and receive adequate interpretation of the location.

Tourists, with their own means of transport, could purchase an interpretative self-guided brochure from the Vanuatu National Museum and make their way to the site independently. Interpretation of the cultural and historical values of Mangaas, in addition to information about flora and fauna, archaeological significance, and traditional land use may be included in the self-guided visitor brochures.

The WHTC will need to carefully monitor visitor impacts at the site of Mangaas if it is to be opened up to the public. It would be best to ensure that a member of the community is present at the site, to encourage visitors to observe appropriate codes of behaviour.

- **Additional short walking trails** could be opened for public to access. These could be kept outside of CRMD, in a nearby location, to ensure that CRMD does not suffer damage from over visitation.
- **Restrictions on visiting hours.** Visitation hours should be established by the WHTC prior to making the site of Mangaas available to the public for round-island tours or self-guided walks. Visits to the site definitely must be during daylight hours, as it is a cultural expectation that locals, and therefore visitors too, will not stay after dark at Mangaas. Visitation hours could be from 8am to 5pm for example.
- **Signage at the main road** should be erected if the area is to be accessed by independent travellers. By offering sign-posted directions to the parking area near

Mangaas, independent travellers may easily locate and access the Mangaas site for visitation. It should be publicised that this is not a place where night-time visits or overnight stays are to be made. This forms part of local kastom, as previously mentioned, whereby villagers from Mangaliliu and Lelepa Island generally do not visit Mangaas after sunset, due to its highly sacred and spiritual nature.

- **Picnicking facilities** would encourage independent travellers to visit, however such facilities should remain outside of CRMD, to reduce the amount of infrastructure and rubbish from picnickers that this might be introduced to the site.
- **Overnight stays or camping** may be introduced as future tourism activities, with careful consideration given to the potential for environmental and cultural impacts. An appropriate location for overnight stays or camping should be selected outside of CRMD. If a campfire is allowed it must be contained in an established fire pit, surrounded by stone walls, in a clear location preferably near the sea, to ensure that a wildfire does not escape. Firewood must not be collected from inside CRMD.
- **Demonstration of handicraft manufacture and carving.** Women could engage tourists by giving demonstrations, or even short workshops, where visitors are taught to weave a local style of fan made with pandanus leaves. This would not be too time-consuming as the fan is a small item that can be quickly produced. The activity provides a souvenir for the visitor to carry away with them and show to others as a means of generating potential business.

Women should be encouraged to continue to produce woven handicrafts that are unique to the Lelepa region. Mats, baskets, fans and trays may be sold to visitors as an extra source of income. By weaving items that are specific to the location, women will maintain cultural tradition while also offering visitors the opportunity to purchase products that are not available elsewhere in Vanuatu.

Similarly, demonstrations of canoe or tamtam carving could be provided, whereby visitors have the opportunity to observe a work in progress. In the future, the combination of a handicraft workshop and carving demonstration could be made into another tour product offered by the community.

- **World War II** is a topic of interest for some travellers to Vanuatu (De Burlo, 1990). Elements of World War II history could be incorporated into the interpretation of the area through reference, or even visits, to an old lookout post stationed near Mangaliliu village. Visiting the post would require a hiking trail to be selected, to enable visitor access to the site.

During the October/November 2005 tourism consultation workshops, Mangaliliu and Lelepa Island participants developed numerous ideas for community tourism activities that incorporate areas both within and outside CRMD. The tour operations that they conceived at these workshops are listed in **APPENDIX C**.



### 3.1 FULL DAY TOUR

The Roi Mata Cultural Tour has the potential to be developed into a full day tour. However it has been decided that as a first time operation, it is best to adhere to a small and simple operation, so that the community is not too overloaded by the new business.

In the future, the community would like to be able to include Artok (Hat) Island in the tour itinerary that is being implemented. Being his burial site, Artok is a key location in the story of Roi Mata. Hat Island is already a well-known landmark on Efate, and hence has the potential to be a significant draw card for tourists to visit CRMD. However, given that Artok is much further away from the mainland than Lelepa Island, better boat facilities will be required to transport tour groups to the site. Moreover, Artok borders on an open sea environment and can, at times, experience rougher waters than closer to the mainland. A larger and more powerful boat would make travel to Artok safer for visitors. It would also reduce the occurrence of cancellations due to sea conditions being too rough for the existing smaller boats to handle. Visits to Artok should be made early in the day, to avoid the onset of rougher seas in the afternoon.

An itinerary for a tour that includes a visit to Artok Island was developed by the Mangaliliu Village community during the October/November 2005 tourism consultation workshops. This itinerary could be extended to a full day tour by including a visit to Fels Cave, meaning that the three locations of CRMD are visited:



View of Artok from Aupa (landing area near Feles Cave), Lelepa Island. Photo by Troy Mallie

#### Roi Mata Historical Tour

8.30-9.00am – Vanuatu Cultural Centre

- Look at the Roi Mata display
- Watch a short video
- Guide gives a short talk about the tour

9.00-9.30am – Cultural Centre – Mangaliliu

- Travel by bus to Mangaliliu

9.30-10.00am – Mangaliliu

- Tourists receive a refreshment

10.00-10.30 – Mangaliliu – Eretoka

- Travel by boat to Eretoka (Best to arrive at Asnet as this provides a better visitor experience)

10.30-11.00am – Eretoka

- Hear the story of Roi Matas burial
- Visit the grave site

11.00-11.30am – Eretoka to Mangaas

- Travel by boat to Mangaas

11.30-12.00noon – Mangaas

- Visit the kastom village
- Watch a kastom activity

12.00-1.00pm

- Lunch and entertainment
- Look at handicrafts

1.00pm – Return to Hotel

- Tourists travel back to their hotels in Port Vila



Asnet Bay on Artok Island (Eretoka or Hat Island). Photo by Kerrie Bennison

### 3.2 OVERNIGHT STAY

During the Tourism Consultation Workshops, the community also expressed an interest to develop accommodation facilities in the future.

It was decided that it would be best to trial the running of tours first, before progressing to accommodating guests overnight. This way, the community can monitor more carefully the impacts of introducing tourism to their area and avoid activities that may be too intrusive of village life.

It is recommended that, should accommodation facilities be introduced to the area in the future, it would be best to construct these slightly away from the village. This way both tourists and locals are able to maintain a level of privacy.

If camping is considered it is vital that none be allowed directly within CRMD, in order to protect the natural and cultural values of the site. Should camping become an option for visitors, a designated site must be allocated, where there are appropriate toilet and water facilities near-by.

Safety issues also need to be considered with regards to visitor and fire safety.

## 4. ENVIRONMENTAL IMPACT

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### 4.1 TOUR SITE DESIGN AND INFRASTRUCTURE

Leading up to the Pilot Tour phase of the Roi Mata Cultural Tourism Project, some basic infrastructure, such as visitor walking tracks (see **APPENDIX J**), seating and compost toilet facilities have been arranged. Due to the absence of funding at this stage, the tour sites have not been developed to the extent that was originally intended for the Pilot Tour (see **APPENDIX A**). However, infrastructure development can be worked on by the community over time, as the tourism venture develops.

In all tour site development, consideration must be given to the visual catchment of CRMD. Construction (or reconstruction) on the sites must concur with the requirements for World heritage Listing (see section 7 of the Management Plan for the CRMD). Any development proposal that is set to interfere with the cultural, historical, environmental or visual integrity of the area must not be allowed to proceed. It is the responsibility of the WHTC (World Heritage and Tourism Committee) to oversee that this standard is maintained.

It is also important that infrastructure and visitor facilities are maintained, as this can greatly impact the visitor experience of CRMD.

**Local materials** should be used where possible to avoid introducing too many new products to the location<sup>4</sup>. The use of local natural materials will make infrastructure appear less intrusive. It is also more cost effective to employ the use of locally produced wood and other materials, rather than purchasing them from elsewhere. In addition, Mangaliliu and Lelepa Island community members will be better able to participate in infrastructure development, due to the fact that they will be collecting and using materials that they are familiar with, having the predisposed knowledge of how to best put local resources to use (Ministry of Tourism and Aviation, Government of Solomon Islands & Tourism Council of the Pacific, 1991-2000).

**Seating** for visitors has been installed on the beach area of Mangaas, known as Mwalakot, which is the location for the dramatisation of Roi Mata's 'peace feast'. The seats are made of fallen tree branches, which have been cut into wide stumps and placed around the beach, where visitors will sit to watch the drama.

In the future, seating could also be provided outside of Fels Cave and at Aupa Landing, so that visitors can rest after walking to and from the cave.

**Reconstruction** of the mwala (dance ground) at Mwalasayen and stone walls at Mangaas has been suggested, to better portray to tourists how the site may have looked years ago. If this goes ahead the reconstruction must be of traditional design, and must also comply with World Heritage standards<sup>5</sup>.

**Construction of wharfs**, for tourists' safe alight and disembarkation of boats, must

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<sup>4</sup> See section E5, Part 7, of the Management Plan for CRMD (World Heritage and Tourism Committee, 2006) for further details

<sup>5</sup> See section 2 (Mangaas) in Part 7 of the Management Plan for CRMD (World Heritage and Tourism Committee, 2006) for further details

also be designed to create minimal impact on the surrounding environment, both ecologically and visually.

The wharf design must be for a safe, strong and cost effective facility. It is imperative that the construction will not affect surrounding reef locations or obstruct the flow of water resulting in the unnatural erosion or build up of sand along the shoreline adjacent to the wharf. The design must allow for water movement to pass through the structure, hence reducing the impact on the natural shoreline. (Ministry of Tourism and Aviation, Government of Solomon Islands & Tourism Council of the Pacific, 1991-2000).

**Walking Trails** (already constructed at Mangaas and near Fels Cave) have been designed to minimise erosion hazards and avoid negative impact on culturally significant sites.

Visitor walking tracks have been carefully selected to ensure that they avoid directly passing under coconut trees, in case of falling fruit. Also considered in the tour site design is the location of tapu stones and a poison bush known as nangalat, which have been avoided for cultural and safety reasons respectively. See APPENDIX J for maps of Mangaas and Fels Cave with visitor track locations.

In the future, funding should be sought to improve the trail leading along the rocky coastal track from Aupa Landing and up to Fels Cave, on Lelepa Island. This will have the two fold effect of making the track safer for visitors and protecting the natural coastline from the impacts of erosion due to daily visits from tourists.

**Vehicle access** to CRMD must be restricted to roads only. No off-road driving should be allowed within the World Heritage area<sup>6</sup>. Visitors should not be allowed to drive off-road in the areas surrounding CRMD, for both safety and conservation reasons. (Uluru – Kata Tjuta Board of Management and Parks Australia 2000)

**Parking** for vehicles accessing CRMD is available to the south of the Mangaas site. An area at the end of the access road has been cleared to allow cars and small buses room to station



Visitors with tour guides at the parking area near Mangaas (1st Pilot Tour). Photo by Douglas Kalotiti

<sup>6</sup> See section E3, Part 7, of the Management Plan for CRMD (World Heritage and Tourism Committee, 2006) for further details

during the tour. In the future, if the public are allowed to access the area independently, this parking area should be signposted so that visitors are well aware of its location.

Designated parking sites are necessary so that visitors do not disturb vegetation or drive off road. It is also important that community members use the same parking locations when approaching CRMD, to ensure that the site is not damaged by vehicles repeatedly stationing outside of the parking area.

Communication is important to ensure that any operational, logistical, medical or emergency problems may be resolved as quickly as possible. Telephone facilities are available at Mangaliliu and on Lelepa Island, however a pre-paid phone card is required in order to use these telephone facilities. The WHTC will need to ensure that either the tour guides, the bus driver or another emergency contact person has a phone card that can be used when required.

The use of two-way radios (hand held radio transceivers) will also be employed to speed up communication between the tour locations. Efficient and reliable communication systems are particularly necessary in the event of an emergency to ensure prompt and professional emergency response. During tourism activities a hand held radio will be carried by the tour guide, bus driver and boat driver.

All communication facilities should comply with restrictions set out in section E1, Part 7, of the Management Plan for CRMD (World Heritage and Tourism Committee, 2006).

## 4.2 WASTE MANAGEMENT

Waste management is an important aspect to consider when introducing tourism to any area. It is inevitable that with tourism comes more waste that requires disposal. Through careful and responsible management, the adverse impacts of introduced waste can be reduced. The following outlines the considerations given to litter and solid waste that will need to be managed for tourism. The basis of this information is derived from section D5, Part 7, of the Management Plan for CRMD (World Heritage and Tourism Committee, 2006), which has been designed to protect the heritage values of the proposed World Heritage property.

**No rubbish bins** should be installed within CRMD. Instead tourists should be encouraged to carry out all litter that they bring to the site. In this manner the amount of rubbish that accumulates around visitor sites should be reduced in the long term (Carr, 2004).

**Rubbish collection** 'patrols' around each of the tour sites should take place before each tour group arrives, to remove any litter that has been dropped on site. Keeping CRMD clean and litter-free is an important part of maintaining the tour site and providing a quality visitor experience.

**Recycling** is not well established in Vanuatu at this stage. Glass bottles can be recycled in Port Vila at the Vanuatu Brewery but this is as far as recycling activities currently extend. If further recycling options are made available in the future then they should be incorporated into the waste management strategy for tourism within CRMD. Paper rubbish may be burned to reduce the amount of collected waste. Food scraps may be used as food for pigs and chickens, or otherwise composted to fertilise garden soil.

**Composting toilets** are being installed during a workshop on the 15th–19th of May 2006. This workshop will provide training to local residents in the construction, maintenance and benefits of compost toilets. Decomposed waste may be used as garden fertiliser, as a means of maximising the environmental and economic benefits of this waste management system.

Compost toilets offer an efficient alternative to using a septic tank, which requires constant emptying. Septic tanks also risk overflowing if they are not emptied often enough, creating an unsanitary and unpleasant tour environment.

**Sanitary management** will be discussed with the compost toilet developer, to devise a system that is compatible with solid composting toilets.

### 4.3 WATER MANAGEMENT

**Visitors must carry their own drinking water.** Water management is a particularly important issue for Lelepa Island, where there are no natural sources of drinking water available<sup>7</sup>. Residents of Natapao (the main village settlement on Lelepa Island) make daily canoe trips to the mainland to collect fresh water for drinking. Therefore it is vitally important that visitors are made to carry their own drinking water for the duration of the tour. This will ensure that the potential for dehydration and heat exhaustion is avoided.

Through tourists carrying their own water, the efforts of the local community are also economised. Instead of adding multiple water-collection trips to the work load of locals, individual visitors can carry their own. Furthermore, ensuring that visitors import their own water supply will avoid any significant depletion of current water resources accessed by the community. Tour guides will need to encourage visitors to carry out all water bottles that they bring to the CRMD, in order to minimise the accumulation of rubbish from discarded plastic bottles.

**Water holding tank(s)** may be installed on Lelepa Island in the future, which may be accessed by visitors to CRMD. However, this will require an additional commitment from locals. Standing water that is intended for drinking must undergo routine sampling, testing and treating, to ensure that the water quality is maintained at healthy drinking standards (Ministry of Tourism and Aviation, Government of Solomon Islands & Tourism Council of the Pacific, 1991-2000). Therefore the installation of drinking water tanks is not an effective solution for Lelepa Island at this stage.

Installing water tanks for community use would certainly benefit the residents of Natapao. A strategy for applying for funding for these water tanks is in place (see C1, Part 7 of the Management Plan for CRMD) to reduce the workload of collecting water from the mainland.

**Management of natural water sources** at tour sites on the mainland of Efate is important to consider. There is a small stream located on the southern boundary of Mangaas, and another larger stream to the south of Mangaliliu village. Although only the stream at Mangaas will actually be 'visited' or passed by tourists, both of these should be monitored for:

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<sup>7</sup> See section C1, Part 7, of the Management Plan for CRMD (World Heritage and Tourism Committee, 2006) for further details

1. Depletion of the water source
2. Salinity and rubbish
3. Erosion of the bank of the stream, particularly at Mangaas, where visitors may try to approach the stream.

Water sources must be maintained in a healthy condition in order to retain the natural and cultural integrity of the locations, and more importantly, to preserve the vital water resource on which the community depends.

#### 4.4 NEGATIVE ENVIRONMENTAL IMPACTS

The following is a list of potential impacts on the natural environment of the CRMD that may be caused by the Tourism Project. These impacts will need to be examined when this Tourism Strategy is revisited in June 2007. Formal monitoring points for assessing the impacts of the Tourism Project may need to be installed as a long-term measure. At this stage, formal monitoring is restricted to those features of the CRMD that represent the outstanding universal values of the property (see Part 8 of the Management Plan for the CRMD).

- **Increased amounts of rubbish** introduced to CRMD by tourists.
- **Depletion of local resources** (such as water and food), as tourists are catered for on tours and infrastructure is installed around tour sites.
- **Impact on marine life** as boats with outboard motors are used increasingly to transport tourists to and from Lelepa Island. Marine resources will need to be surveyed and monitored to ensure long-term sustainability.
- **Overloading tour sites** could lead to degradation of the natural values of CRMD. Overcrowding also diminishes the quality of visitor experience at the tour location. Site planning must cater to the amount of tourists that the community intends to welcome on each tour. Visitor walkways at Mangaas have been widened to allow for the increased traffic of tourist visitation. Some areas will remain unavailable to tourists to allow for complete conservation. Areas that are deemed inappropriate for visitation, due to their particular natural or cultural significance, will remain closed to the public.
- **Infrastructure** such as the transport access road and walking tracks will require continuous repair and maintenance. These access areas will affect the immediate natural environment and will therefore require monitoring.
- **Toilet and wharf facilities** will require ongoing maintenance as well as monitoring of their respective effects on the surrounding location. It is important that land and marine natural resources are not threatened by the introduction of tourists and visitor facilities to CRMD.
- **The *nambanga* or banyan tree at Mwalasayen** needs to be monitored for visitor impacts. As suggested by a group of visiting University Students from Australia (see **APPENDIX B**), the construction of a board walk around sections of the *nambanga* may ensure that the soil around the tree is not compacted and the



roots of the tree not damaged from visitors walking around the tree. At present the visitor walking track has been designed to approach the banyan from one point only, in an area that is clear of exposed tree roots above the ground<sup>8</sup>.

- **Vehicle access to tour sites.** Visitors must use the designated vehicle access tracks and parking areas. This will reduce the incidence of potential damage to the site due to increased traffic and off-road driving. Signage will be required to direct independent travellers to appropriate access roads and parking areas if CRMD is to be opened to the general public.

#### 4.5 POSITIVE ENVIRONMENTAL IMPACTS OF THE TOURISM PROJECT

- **Promotion of natural values:** By advertising the Roi Mata Cultural Tour as being connected to the heritage management of the CRMD through the Roi Mata World Heritage Project, the tourism project should raise visitor awareness about the importance of protecting the natural values of the region.
- **Generation of community interest in conservation:** Community members see the social and economic benefit of preserving the natural environment for tourism and heritage.
- **Environmental education:** Renewed interest amongst the community in learning about the natural environment and the traditional uses of environmental products as a way of explaining the cultural landscape of CRMD to tourists.
- **Controlled development:** Minimal infrastructure is installed within CRMD to maintain the aesthetics of the property.
- **Use of local resources:** The tour site design has been planned to maintain environmental integrity and reduce the visual impact of foreign materials within CRMD.
- **Supporting cultural connections to land:** Continuation of traditional land-use practices, such as gardening and harvesting of local foods (outside of CRMD) to cater to visitors for tourism.
- **Avoid importation of rubbish to CRMD:** Minimising the amount of potentially introduced waste, from western food packaging, as local foods are prepared for tours.
- **Focus on sustainable land management:** Monitoring of environmental impacts from tourism will lead to the preservation and responsible management of environmental assets.

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<sup>8</sup> See section 4 (Mangaas), Part 7, of the Management Plan for CRMD (World Heritage and Tourism Committee, 2006) for further details

## 5. CULTURAL CONSIDERATIONS

### 5.1 POINTS OF CONCERN FOR THE COMMUNITY

- **Intrusion on community life.** For this reason the tour business will start very small scale. This way the disruption to locals will be kept to a minimum, and any expansion of the business can be managed gradually by the communities.
- **Respect for conservation dress codes.** It is important to encourage visitors to respect modest dress standards observed by women within the villages. Information about the expected standard of dress will be given in tour brochures. It must be made clear prior to the tour that it is not acceptable for women to wear highly exposing clothing.

The provision or sale of sarongs and t-shirts at the Vanuatu National Museum may be a good way to overcome the problems that may arise when visitors arrive for the tour inappropriately dressed.

- **Extra workload created by the Tourism Project.** The project will take time away from other activities such as gardening, caring for children, cooking, washing and fishing. It is important to ensure a balance is struck between looking after the tourism business and other subsistence activities. Careful planning and delegation by the WHTC and village Chiefs will ensure that this balance is achieved.
- **Visitors respect for cultural sites.** Visitors must comply with certain codes of behaviour when visiting parts of the CRMD. For instance, they must not touch the tapu stones at Mangaas. Physical barriers to such tapu objects and places, such as stones aligning the side of footpaths, have been included in the tour site design to prevent people wandering into areas that are off-limits to tourists. It will be the responsibility of Tour Guides to ensure that visitors are aware of and adhere to cultural requirements in *tapu* areas.



Tour guide standing by a tapu stone. Photo by Matt Cattanach

## 5.2 INTELLECTUAL PROPERTY

Due to the absence of applied legislation regarding the use of Intellectual Property in Vanuatu, the community will be responsible for monitoring film, photography and the use of Intellectual Property (IP). Although there is some legislation in place to protect IP, it has never been applied and therefore the current situation in Vanuatu is that there are no effective laws regulating copyright activities.

Legislation:

- Code Civil 1979-1980, Propriété littéraire et artistique, Loi du 11 mars 1957, pp 305-317.  
This legislation was instituted prior to Independence. It has never been applied in the court of law. Unless revoked all pre-Independence legislation is still valid, according to the current Constitution.
- Constitution of the Republic of Vanuatu – Existing Law, article 95.(1) and (2).  
*Existing Law. 95.*  
(1) *Until otherwise provided by Parliament, all Joint Regulations and subsidiary legislation made there under in force immediately before the Day of Independence shall continue in operation on and after that day as if they had been made in pursuance of the Constitution and shall be construed with such adaptations as may be necessary to bring them into conformity with the Constitution.*  
(2) *Until otherwise provided by Parliament, the British and French laws in force or applied in Vanuatu immediately before the Day of Independence shall on and after that day continue to apply to the extent that they are not expressly revoked or incompatible with the independent status of Vanuatu and wherever possible taking due account of custom.*
- Republic of Vanuatu, Bill for the Trademarks, Patents and Designs Act (2002)  
This Bill, pertaining to intellectual property laws, has not yet been gazetted and therefore is not in force. An avenue for regulating filming activities in CRMD is through the Vanuatu Cultural Centre (VCC). The VCC is the overseeing body for all commercial film and photography of cultural subjects in Vanuatu. The National Film Policy, provided on the VCC website, is reproduced in short below:
- National Policy on Filming in Vanuatu  
*All film making (including video) in Vanuatu falls under the jurisdiction of the National Film and Sound Unit of the Vanuatu Cultural Centre, which must be notified of any film making activity in the country.*
- *The Vanuatu Cultural Centre, [is] the institution mandated to regulate commercial filming of cultural subjects in Vanuatu under section 6(2)(l) of the ‘Vanuatu National Cultural Council’ act (chapter 186 of the Laws of the Republic of Vanuatu). (Vanuatu Cultural Centre, 2005)*

Nevertheless, during tour activities it will ultimately be the responsibility of Tour Guides to ensure that visitors are aware of any culturally sensitive sites or activities that are not to be filmed or photographed. For general private photography it has been agreed by the WHTC that all tour sites are appropriate to be photographed by visitors. The main concern of community members is that visitors to the site will produce filmed or photographed images for commercial use and generate undue profit from such images.

A **permit system** may be introduced in the future, whereby visitors must purchase, and be approved to carry, a temporary photography permit for commercial use. This may be useful for regulating the appropriation and use of images if CRMD becomes a popular and/or World Heritage location (UKTNP, Filming and Photography: A matter of respect for the Park and its' people). At present, the demand from commercial photographers is not so great that a formally contracted permit system needs to be applied. However the WHTC should consider establishing a standard system and fee for all commercial photography activities that take place within CRMD in the future.

In a recent WHTC meeting it was decided that, at this stage, there are benefits to allowing commercial photographers into CRMD. The WHTC members feel that there is an opportunity to generate some much needed publicity and international awareness about CRMD and the Roi Mata Cultural Tour.

As previously mentioned, all film making within CRMD will be regulated by the Vanuatu Cultural Centre's filming policy. In addition, the Lelepa region community is currently developing a location specific filming permit and contract for CRMD, to ensure that World Heritage and local cultural standards are respected by commercial film makers.

### 5.3 NEGATIVE CULTURAL IMPACTS

The following is a list of potential impacts on the cultural environment of the CRMD that may be caused by the Tourism Project. These impacts will need to be examined when this Tourism Strategy is revisited in June 2007. Formal monitoring points for assessing the impacts of the Tourism Project may need to be installed as a long-term measure. At this stage, formal monitoring is restricted to those features of the CRMD that represent the outstanding universal values of the property (see Part 8 of the Management Plan for the CRMD).

- **Misuse and appropriation of images** from CRMD. If this becomes a problem in the future the WHTC will need to consider instituting a formal permit system for all commercial photographers and film makers. A contract should be signed and a fee should be paid by the permit holder before they are allowed to photograph or film within CRMD.
- **Commercial profits from Intellectual Property** of Mangaliliu and Lelepa Island residents, being made outside of the community. This is a concern that has been raised in WHTC meetings on several occasions. Members are concerned that others might gain from their cultural information, images and property, without benefits being returned to the community. Until IP legislation comes into force, it is entirely up to the community to regulate access to their intellectual property.
- **Degradation of cultural sites** as a result of visitation. Tour guides must ensure that visitors are aware of appropriate behaviour and that they are not allowed to deter from walking tracks to approach cultural sites. No one, not even tour guides, should ever touch the artwork in Fels Cave, as this may cause irreversible damage to the designs. (Australian Heritage Commission 1987).
- **Graffiti in Fels Cave** is an important issue that needs to be managed for visitors and locals alike. There is already a large amount of graffiti at the entrance to the cave,

which may encourage other visitors to carve their own names into the cave wall. Tour guides must be watchful that this does not occur. A sign might also be erected outside of the cave to inform all visitors that graffiti is not permitted in the cave.

- **Visitor disregard for cultural sites** (e.g. touching tapu stones) if appropriate interpretation is not delivered clearly and effectively.

#### 5.4 POSITIVE CULTURAL IMPACTS

- **Cultural education:** By advertising the Roi Mata Cultural Tour as being connected to the heritage management of the CRMD through the Roi Mata World Heritage Project, the tourism project should raise visitor awareness about the importance of protecting the cultural values of the property.
- **Cultural preservation:** Community members see the social and economic benefit of preserving their cultural heritage through a project of sustainable tourism.
- **Traditional ownership:** Cultural sites are retained by the community rather than being sold to foreign investors.
- **Incentive for youth:** Upcoming generations within the community experience the benefits of conserving their land and their culture.



Recently carved tamtam (slit drum). Photo by Matt Cattanach

- **Cultural sustainability:** Younger community members take a renewed interest in learning about cultural stories and traditions from elder members of the community.
- **Cultural leadership:** Other communities (on Efate and throughout Vanuatu) might be motivated to follow the example set by the communities of Mangaliliu and Lelepa Island, and work towards better management and preservation of their own cultural heritage sites and knowledge.
- **Maintaining kastom activities:** Local arts and crafts are maintained as women continue to weave and men to carve, for tourism. Youth may also take a renewed interest in learning these skills from older family members.
- **Benefits for the National Museum:** Being the departure point for the Roi Mata Cultural Tour, the Vanuatu National Museum will receive more visitors and thus generate more income from entrance fees.

## 6. ECONOMIC AND SOCIAL ISSUES

**'The tourism industry is a major contributor to economic growth in the South Pacific. Recent initiatives introduced to promote tourism in Vanuatu have resulted in a dramatic increase in the number of travellers arriving in country'**

(Jayaraman and Andeng, 1993)

Second only to agricultural exports 'the tourism sector is the [other] main foreign exchange earner for Vanuatu and has been recognised by its Government as a key sector in its economic development. Vanuatu needs a bigger tourism sector to provide employment opportunities for its young and rapidly growing population' (Australian Government DFAT, 2004)

With the continuing increase of cruise ship arrivals and airline services to Port Vila, there is great potential for communities such as Mangaliliu and Natapao (Lelepa Island) to benefit from the tourism market already available in Port Vila. The Vanuatu Statistics Office (2006) reports that visitor arrivals have increased by 13.4% between January 2005 and January 2006, and that 80% of the January 2006 (5,662 pers.) visitor arrivals were in Vanuatu for the purpose of vacation. These figures are an indication of the real potential that exists for community tourism operations, particularly those in close proximity to the main port of arrival, Port Vila.

It is important to ensure that any tourism development within the community is compatible with other regional development plans, such as the Vanuatu Government's Development Master Plan for Tourism. The VTDMP (Vanuatu Tourism Development Master Plan 2004-2010) outlines the Government's 5 year strategy for achieving tourism objectives. Some of the objectives outlined in the VTDMP that cohere with the Roi Mata Cultural Tourism and World Heritage project include the following:

- Develop Historical and Cultural Precinct(s) to preserve cultural, historical and archaeological sites as attractions for tourism (s 2.7 and Fig 10.5).
- Increase the participation of local people in tourism business (s 2.10.2).
- Spread tourism development to lesser developed areas such as North Efate (s 2.10.4, Table 7).
- Seal off the coastal road that links Port Vila to North Efate, to provide improved accessibility of tourism to rural communities (Fig 10.5).
- Reduce the incidence of local people being displaced of land and jobs (pg128, s 7.7.5).
- Preserve local culture and avoid erosion of cultural tradition (s 2.10.4, Table 7).
- Inform visitors of the local culture and the general expectations of local people (s 2.10.2, point 14).
- Prevent tourism development that may disturb or intrude on the daily life of locals or detract from their right to privacy (pg 47, Objectives and Responsibilities of NTO).
- Promote ni-Vanuatu participation in and ownership of tourism operations (pg 39-40, s 3.3.3).

(Vanuatu National Tourism, 2004-2010)

The compatibility of the Roi Mata Cultural Tourism Project with national tourism objectives means that this is an ideal time to be starting a project of this nature. Considering the government's visions for tourism, as outlined in the VTDMP, there should be more governmental support for the project as it has a better chance of obtaining funding and being well promoted by the National Tourism Office.

Furthermore, the lack of developed tourism infrastructure on many of the outer islands means that the majority of visitors stay in, or close to, Port Vila. This is advantageous for the Roi Mata Cultural Tourism Project, as it means that the community can offer visitors a cultural experience outside of Port Vila, without demanding too much time or expense in travel.

## 6.1 COMMUNITY SUPPORT

This project requires the commitment and mutual cooperation of the Mangaliliu and Lelepa Island settlements to ensure its success. The Mangaliliu and Lelepa Island community has demonstrated its support for this project by attending the 2005 Tourism Consultation Workshops, where an interest in developing community-based tourism was expressed through the development of vision statements for the community and prospective tourism activities within the villages. The following statements are quoted from course participants, where community members were asked to express their thoughts about introducing tourism to the community. Statements are written in English, Bislama and Local Language:

### Group 1

English: *"Our vision is that it [the tourism project] benefits the community and each family"*.

Bislama: *"Long drim blong mifala, mifala i ting se bae i benefitem community mo wanwan family"*.

Local Language: *"Naperean eg nem kinim ur to marwok kini, lag ego slae natkon eg nem, gane namatrau skeiskei ag nem"*.

### Group 2

English: *"We see that what we are doing here will really help our people in the future of Mangaliliu"*.

Bislama: *"Mifala i luk save se wanem bae yumi stap mekem nao ia bae i helpem mifala bigwan long future blong Mangaliliu"*.

Local Language: *"Au lo taea lag nsfa na tu do patia ego wiak Mangaliliu mal bila lab ne edo panei"*.

### Group 3

English: *"The purpose of the Tourism Project in Mangaliliu is to benefit each household and the whole community, through great commitment from the village – and at the same time to protect our environment and all our tabu [sacred] places"*.

Bislama: *"Purpose blong Tourism Project long Mangaliliu bai i benefitem bigwan wanwan house hold mo komuniti, from se i gat bigfala komitment long vilej – mo sem taem yu protektem environment blong yumi mo ol tapu ples"*.

Local Language: *"Namarwan pilan nawosinag (?) tetar negato mgalu ega vi ntapen pak nasma skeiskei ngo narein natkon nlakan epitlak natpekin pila to natkon ngo tung loparkat sarongan ntas ngo warangara, nginda ngo nalitap"*.



#### Group 4

English: *“The Mangaliliu Tour is a community project which aims to help village people to meet their needs regarding health, communication, and church funding. Another aim of this project is to protect the environment, sacred (tabu) places, and culture of our people”.*

Bislama: *“Mangaliliu Tour emi wan community project we aim blong hem se blong helpem pipol long vilej long ol smol smol nid long saed blong hospital, communications, church budget, mo narafala aim blong hem se blong protektem environment, tapu ples, kalja blong mifala”.*

Local Language: *“Mangaliliu Tour epi nawsina skeing narein Mangalu nae namarwan pel nangan lang enga do slae ten natkon talevan namlangon, namsausaun, talevan nalotuna ngna namarwan pel nangan skei lang ur ngna (?) loparkat wiak wartap angnim, nta angnim, nta angnim, namlas angnim, ne naton an tuei angnim”.*

Another example of community support is the subsequent participation and commitment of the appointed World Heritage and Tourism Committee, who are coordinating all tourism activities and the involvement of family groups within the community at large. The time they have dedicated to this work to date, as well as to the expenses of travel to attend meetings and tourism related activities, have been met voluntarily, demonstrating a strong belief in the value of this project to the community. Similarly, the work that has already been made by various members of the community, such as clearing walking tracks, carving tamtam's (slit drums), and preparing the tour sites for visitors, is further evidence of the more widespread community interest in the Roi Mata Cultural Tourism Project. Community members have also been involved in the development of a dramatisation, the rehearsal of custom dance and the training of tour guides in preparation for the upcoming Pilot Tours.

Letters from community members have been included as further evidence of community support in **APPENDIX D**.



Tour guides farewell visitors (1st Pilot Tour). Photo by Douglas Kalotiti

## 6.2 NEGATIVE ECONOMIC AND SOCIAL IMPACTS

Negative economic and social impacts that may arise as a result of tourism activities include:

- **Social change** within the community due to increased exposure to the behaviours and cultural differences of tourists (Leah Burns, 2004, MacClancy, 2002 and Stronza, 2001).
- **Competition and jealousy** between community members if tourism and its benefits are not shared in a satisfactory manner (Foale, 2001 and Notzke, 2004).
- **Competition between the Mangaliliu and Lelepa Island settlements** for involvement and receipt of benefits from tourism.
- **Disparity over the distribution of funds**, particularly between land owners who are required to negotiate an agreement of payment for road access to the tour site of Mangaas. The high concentration of land owners along this particular access road means that this is potentially one of the most complicated negotiations to be made, requiring a consensual commitment from about 20 people. In order to maintain financial viability for the tourism project, the agreed payment cannot be too high a sum. The WHTC need to negotiate a set payment or nasaotonga to be made on an annual basis. Ideally this should be a percentage of annual surplus income or, in the case of nasatonga, a traditional offering of local produce and crafts. It is important to strike an agreement that benefits both the community business and the land owners. The inclusion of these land owners helps meet the primary objective of the project which is to share benefits between each household within the community.
- **Potential for a downturn in the group cohesion** and enthusiasm of the WHTC as well as the community's support of this committee if tourism activities are not producing the desired or expected outcomes.
- **Unstable financial management.** There is a need for reinvestment in tourism operation to ensure continued economic viability and also to ensure that funds are not spent as soon as they are generated. The need to maintain positive cash flow is paramount to the long-term financial sustainability of the tourism operation. Financial management may require the assistance of an accountant, with the approval of the WHTC.
- **Other tour operators** wanting to run tourism within CRMD. This may be a positive or a negative impact, depending on how it is managed by the community. It is important for the community to maintain control of any other commercial activities that are invited into the area. The WHTC will need to ensure that benefits are always fed back to the community and that the communities' priorities and objectives are considered first when permitting other tour operators to run tours on their land.
- **Loss of privacy** in the villages if visitor activities are not managed appropriately. Tour guides must ensure that visitors do not wander into village settlements during the tour.

- **Abandonment of subsistence farming** in the wake of tourism and economic development. This may be particularly damaging if locals of the Lelepa region become dependant on the tourist economy. Relying solely on cash income and rejecting subsistence activities can lead to a decline in health (Stronza, 2001) as well as disempowerment through no longer being able to live independently 'off the land' (Nicholson-Lord, 2002). It is important that the community retains the ability to function independently of tourism activities, due to the often instable nature of the tourism industry (Nicholson-Lord, 2002 and Stronza, 2001).

### 1.3 POSITIVE ECONOMIC AND SOCIAL IMPACTS

Tourism provides an opportunity for Mangaliliu and Natapao village to generate some economic benefit while also maintaining a balance within the social structures and cultural values that are an important part of community life. For many generations, local populations have mainly survived on the basis of subsistence farming. The introduction of tourism enables people to maintain many aspects of their existing lifestyle while also exploring new and different methods of generating economic benefit from their land (Uluru - Kata Tjuta Board of Management and Parks Australia, 2000).

Some positive economic and social impacts that may derive from the Roi Mata Cultural Tourism Project include:

- **Community collaboration** through the establishment of a community tourism project that will be jointly managed by the Mangaliliu and Natapao settlements of North Efate.
- **Local ownership and management** of CRMD by the residents of Mangaliliu and Natapao (Lelepa Island settlement), which carries with it the added benefit of financial rewards generated by a community owned business
- **Renewed and strengthened pride** in natural and cultural heritage places.
- **Increased capacity** of members of the community to run small businesses.
- **Additional training** for the community in the areas of conservation, sustainable tourism practices, tour guiding and interpretation, First Aid, compost toilet construction, information technology, and nutrition and hygiene.
- **Provision of financial support** for other community programs and essential services (such as health, schooling and church facilities).
- **Sustainability** of the project through widespread community participation.
- **Employment** of local community members to run the tourism operation and to maintain visitor sites and infrastructure.
- **Avoid community diffusion** by providing incentive for community members (particularly youth) to remain in the villages, rather than relocating to Port Vila for work.

- **Supporting *kastom*** through the maintenance of many aspects of existing community lifestyle and structure.
- **Opportunity to improve language skills** in English and French through providing interpretation to tourists.
- **Other community initiatives** (such as the women's cooking business) are supported and reinforced as they are incorporated into the tourism operation (eg: through women preparing lunch for tourists). (Wingham, 1995).
- **Retaining *kastom* land tenure.** The tourism project enables the provision of an alternative to land sale, as the community is able to generate long-term economic benefit through retaining the land for tourism and World Heritage.

## 7. HEALTH, SAFETY AND SECURITY

Strategies to avoid threats to visitor safety include:

- First Aid training of tour guides and supply of First Aid kits
- Provision of tour guide training, including visitor safety considerations
- Development of emergency response procedures
- Improvement of visitor walking tracks to make access to tour sites as easy and comfortable as possible for individuals with ranging levels of fitness.
- Application for funding to install small boat wharfs, to reduce the chance of injury as visitors step in and out of boats (see APPENDIX G).
- Funding has also been requested for:
  - o Provision of life jackets and a fire extinguisher in tour boat.
  - o Purchase of torches and helmets to be used inside Fels Cave.
  - o Hand held radios to be carried by tour guides and tour vehicle operators.

In the future:

**Funding** should be sought to improve the track or install a 'raised walkway' (Department of the Environment, Sport and Territories, 1994) between Asnet landing and Fels cave. This will make the track much safer for tourists' and also reduce the impact on the coastline from daily visitation.

**Water holding tanks** should be installed so that water is more readily available for food preparation and for providing drinking water for tourists. Any water sources made available to tourists should be tested and treated, so training would have to be provided and funds allocated in order to make this viable.

**A permit system** should be introduced for other Tour Operators wishing to operate within the area. At present this is not an urgent requirement, however if CRMD becomes a popular tour location, the amount and type of visitation will need to be controlled. Monitoring and regulating the operation of other tour companies within CRMD is an important part of ensuring the sustainability and preservation of the World Heritage nominated sites (Uluru - Kata Tjuta Board of Management and Parks Australia, 2000).

**Formal First Aid Certification** through an internationally recognised training provider should be sought for tour guides. This will better equip the tour operation to meet duty of care requirements.



Tour guides briefing visitors (at Aupa) before walking to Fels Cave. Photo by Matt Cattanach

## 7.1 STAFF RESPONSIBILITIES AND TRAINING

**Wearing a uniform.** The WHTC has decided that all tour guides must wear a uniform. Males will wear an Island shirt with black pants. Females will wear an Island dress, or an Island shirt with a black skirt. The Island shirts and Island dresses will have the 'Roi Mata Tours' badge attached.

The selection of a uniform is also in accordance with the Vanuatu Tourism Development Master Plan 2004-2010, which states; It is also recommended that a dress code that would project strongly the cultural image of Vanuatu be adopted. (Vanuatu National Tourism, section 2.10.2, point 10).

**Educating visitors** about the cultural protocols and 'general expectations of the local people' (Vanuatu National Tourism, VTDMP 2004-2010, section 2.10.2.14) is an important responsibility of tour guides. Again supporting the direction taken by the Vanuatu Tourism Master Plan, this tourism project aims to educate visitors about cultural appropriateness in Vanuatu particularly with regard to dress code. All tourists on this tour will be required to dress appropriately (i.e., no bikini tops, short dresses, or short skirts to be worn by women). In the future sarongs and t-shirts should be offered at the Vanuatu Cultural Centre for those who arrive for the tour inappropriately dressed.

Tour guides must also pass on all necessary safety information to tourists, by briefing them before any activity that involves physical exertion or poses a potential safety hazard.

**Employment Contracts** or work agreements will be drafted by the WHTC for those participating in the project. There will be conditions for suspension if responsibilities are repeatedly breached and work standards are not met.

A warning system will be put in place whereby 3 warnings may be issued, followed by a period of suspension from work. There is no provision for permanent dismissal due to the nature of this project being a community initiative. It is important that members are given the opportunity to redeem any shortcomings and participate in the project once their period of suspension is over.

The WHTC has developed its own set of by-laws that committee members must follow. A copy of these by-laws, which have been individually signed by members of the WHTC, can be found in **APPENDIX E**.

**Staff Education and Training** is an ongoing requirement to ensure that the community is well equipped and prepared to participate in tourism operations. Some of the areas of training required by the community include tour guiding and interpretation, First Aid, book-keeping and administration, computer skills, dramatisation and infrastructure maintenance. Training workshops for tour guiding, interpretation, natural and cultural resource management, nutrition and hygiene, as well as some basic First Aid and computing skills have already taken place in Mangaliliu and Lelepa Island villages. However the provision of formal training is limited to the availability of funding and suitable trainers.

Tour Guide Manuals have been produced for training purposes, so that a basic framework for the Roi Mata Cultural Tour and interpretation of the sites is available to recently trained as well as future tour guides.

**Maintaining the Natural and Cultural Integrity** of the tour sites is paramount, otherwise the tour sites will lose their appeal to visitors and the opportunity to have CRMD entered on the World Heritage List will be lost. All community members must be aware of, and comply with, the requirements for sustainable and responsible cultural heritage management. The WHTC will be responsible for ensuring that the wider community is aware of the standards that are to be upheld, as specified in the Management Plan for the CRMD (WHTC 2006).

## 7.2 VISITOR INFORMATION

There are several mediums for distributing visitor information about the Roi Mata Cultural Tour to visitors:

- **The Vanuatu National Museum (VNM)**, where visitors will view the Roi Mata Display prior to departing for north Efate.
- **An Introductory Video** about CRMD which is to be viewed at the VNM. This short film has not yet been produced due to lack of funding and film-making resources. It should be developed at a later stage, once the tourism venture is formally established.
- **The distribution of an information brochure** containing maps, information about the sites to be visited during the tour, along with information about cultural sensitivities and the expected behaviour of tourists while on the tour. Safety information, including appropriate dress for the tour and the requirement for tourists to carry their own water, will also be included in the brochure.
- **Promotional brochures** need to be designed to promote the tour to visitors. The National Tourism Development Office (NTDO), on behalf of the National Tourism Office (NTO), has agreed to assist with the distribution of promotional materials to local accommodation and tour booking centres.
- **A Web page** will be posted on several internet sites, to raise the profile of CRMD and to reach a wider market audience. There are opportunities to have a web page hosted by several organisations such as the Vanuatu Cultural Centre, the NTDO and some local cultural tourism promoters.
- **Signage**, as previously discussed, is not being developed for the tour sites at this stage. However it should be considered in the future if visitation numbers increase significantly. Any signage introduced should be kept to a minimum to avoid unnecessary modification of the tour sites.
- **Interpretation from Tour Guides** on the tour is the primary way that information will be passed on to tourists. Interpretative materials (such as an information brochure) will be distributed to visitors by the tour guide, and photographs of Roi Mata's grave will be used to provide information about features of CRMD that cannot be experienced during the tour.
- **Dramatisation** will be employed during the tour, to communicate parts of Roi Mata's history in a diverse and more dynamic way. This will make the tour more interesting for visitors, as it breaks up the usual tour pattern of having a tour guide deliver all of the interpretative information.



Dramatisation at Mwalakot. Photo by Douglas Kalotiti



Playing the tamtam (slit drum). Photo by Douglas Kalotiti



## 7.3 EMERGENCY RESPONSE PROCEDURES

The aim of this section of the Tourism Plan is to maximise visitor safety through the provision of planned emergency response procedures. This will ensure that there is an action plan in place, which can be followed if an emergency arises during any tour activities. Some strategies for minimising risks to visitors will also be included in the training of Tour Guides leading up to the Pilot Tour. On-site preparation and monitoring of the tour destinations may be required in order to ensure that natural hazards and accidents are avoided and managed where possible.

In the following sections, each of the major safety concerns will be addressed, including the issues of fire, earthquake, cave fall, cyclone, tsunami, storm surge, flood, landslide and medical emergencies. The main resources that have been used to compile this emergency plan are 'The Weather Channel' Safeside website (<http://www.weather.com/safeside.html>), and Hazards Fact sheets from the FEMA website (<http://www.fema.gov/index.shtm>). However the recommended procedures have been modified to conform with the realities of the tour locations and the likely absence of on site emergency services in the event of a disaster.

### 7.3.1 FIRE

#### Potential fire danger locations:

- Mangaas (highly vegetated area)
- Fels Cave (Highly vegetated around the cave entrance and located uphill)
- Boat (if the engine ignites)

#### In the event of a fire:

- Tour guides are to lead all tourists to a safe area or evacuation point, which is least likely to be affected by fire.
- Do a 'head count' to ensure that the whole group is present.
- Check for injuries and administer first aid.
- Report the fire situation and tour group location to another community member, using the hand held radio transceiver. This radio (with a fully charged battery) should be carried by the tour guide on every tour.
- Make arrangements for the safe evacuation of the tour group, to a point further away from the fire, as soon as practicable.
- Return the tourists to Port Vila and ensure that any seriously injured persons are taken immediately to **Vila Central Hospital**.

Tour Guides are not to stay and fight the fire. Their priority is to ensure the safe evacuation of the tour group. However it is important that the Tour Guide reports the fire to other community members promptly, using their hand held radio. This will allow the community to alert the Fire Service in Port Vila and to coordinate any activities required to resolve the situation.

#### Evacuation points:

- Seaside - If near to the sea, as will be the case for the majority of the duration of the tour, the group should move directly towards the water.
- Cleared area - If further inland, the tour guide will need to locate a position where there is some cleared vegetation. Guides should also try to establish a position that is downhill and up wind from the fire. Fire moves much faster uphill, therefore it is best to remain on, or move to, lower ground, rather than trying to outrun a fire uphill.
- Burnt Ground - If the tour guide is able to locate an area of land that has already been burnt, they should use this as an evacuation point, as once the fire has consumed all of the fuel in one area it cannot return to that same place. Therefore the "black" or burnt areas are the safest places to stay if an alternative evacuation point, further away from the fire, cannot be reached.
- Wide roads and waterways - Other areas that may be used for protection in a fire are the cleared road to Mangaas and the creek, Noai, which runs along the southern perimeter of Mangaas.

#### Preventative measures:

- The community will need to ensure that the road to Mangaas and visitor tracks are kept clear of vegetation. This will not only be an important part of track maintenance but will also contribute towards reducing fire hazard within CRMD.
- A fire extinguisher is to be carried in the boat in case the engine ignites.
- The WHTC have selected three areas where smoking cigarettes will be permitted, a rule which applies to local residents as well as tourists:
  - o The parking area near Mangaas;
  - o Mangaas beach, and
  - o Aupa Landing near Fels Cave.

Shells or containers filled with sand will be provided for smokers to dispose of cigarettes. The WHTC anticipate that this will reduce the potential for wild fire to result from discarded cigarette stubs.

- Burning off of garden waste to reduce the fuel load of garden areas around Mangaas. This is a regular and routine practice, already performed by garden owners. The continuation of this activity is an important measure to avoid wild fire within CRMD, although extreme caution should be exercised during periods of drought or high wind.

#### 7.3.2 EARTHQUAKE AND CAVE FALL

**'Earthquakes are possible in many island countries where the sea floor is geologically active. The sudden release of pressures in the earth's crust sends a shock to the surface that can make buildings collapse and cause big changes on the islands. An earthquake in Vanuatu lifted parts of some islands about 6 metres out of the water'.**

(The Weather Channel, 2006)

Depending on where you are at the time of an earthquake, different response procedures are required. The following paragraphs outline the recommended action to be taken if the tour group happens to be inside a building (such as the Vanuatu Cultural Centre), outside, within Fels Cave or travelling in a vehicle.

**Inside a Building:**

- 'DROP' and take cover under something solid, like a desk or a table, or stand close to an inside wall.
- 'COVER' your head.
- 'HOLD' onto the sturdy structure (table or desk) that is covering you.
- 'STAY INSIDE' until the shaking stops. Do not leave the building during the earthquake as debris and outside walls may fall on you.

(The Weather Channel, 2006)

**Outside:**

- Move to open area, away from buildings, bridges, power lines, utility posts, and large trees.
- Drop to the ground.
- Stay in the open location until the earthquake has passed.

**Inside Fels Cave (Earthquake or Cave fall):**

- Move or stand close to the walls of the cave. This is the most solid part of the cave structure and will be safer than standing in the middle of the cave, where there is a greater chance of falling/crumbling debris.
- Wait for the earthquake to pass.
- Instruct visitors to cover their mouth and nose (preferably with a t-shirt or clothing item) to prevent the inhalation of dust and dirt.
- Evacuate the cave once the earthquake has passed, and any subsequent cave movement has settled. Visitors should make their way out of the cave, ensuring that they stay close to the cave walls. If there is difficulty locating the cave entrance (due to the visual impairment caused by debris clouding the air following the collapse of cave material), visitors should use the cave walls to 'feel' their way around the perimeter of the cave to the entrance.
- Once outside the cave, the Tour Guide must ensure that visitors stand well clear of the cave entrance, in case there is any delayed land fall, or another earthquake.
- Do a 'head count' of the tour group to make sure that all visitors safely exit the cave.
- Administer first aid and evacuate the site as soon as possible.
- Take extra care when descending from the cave and passing along the coastal

track to Aupa Landing (where the coastline rises steeply above the track) in case of any delayed land movement.

All visitors to Fels Cave will be required to wear a safety helmet, as advised by staff of the local Geology, Mines and Rural Water Resources Department during a recent structural assessment of the cave. The helmets are recommended as a precautionary measure, for visitors' protection, in case a cave fall or earthquake should occur while inside Fels Cave.

**Travelling in a Tour Bus or Vehicle:**

- Stop the vehicle and remain inside. Where possible, move the vehicle to a clear location away from buildings, trees, bridges, power lines, and utility posts.
- Wait for the earthquake to pass before continuing with the journey. Avoid bridges or ramps that might have been damaged during the quake.

**Following an Earthquake or Cave Fall:**

- Check for any injuries.
- Provide first aid where required and immediately call the Vila Central Hospital or Pro Medical if there are any life threatening injuries (see section 7.3.7 for emergency numbers).
- Use handheld radio to call for help if unable to reach a telephone.
- Be on the lookout for further safety hazards, such as fallen power lines, unstable land and damaged building structures.
- If any after shocks are experienced 'DROP, COVER, and HOLD on'.  
(The Weather Channel, 2006)

Following an earthquake or cave fall the WHTC should seek the advice and expertise of the Mines, Geology and Rural Water Department. Examination of the cave site should be made in order to identify any movement or weak points. Recommendations regarding the future safe use and management of the cave should also be requested at this time.

**7.3.3 TSUNAMI**

**'Tsunamis, sometimes mis-named "tidal waves", are giant waves caused by earthquakes or underwater landslides that can sweep up on exposed shorelines. If they cross the ocean from a faraway earthquake there may be some warning of their coming, but not if they are generated nearby.'**

(FEMA, 2004)

Modern technologies often enable the prediction of tsunamis and therefore, in most cases, warning bulletins will be issued to threatened areas prior to their arrival. Nevertheless there is always the potential for tsunamis to develop quickly and without warning. In the event that a tsunami warning is issued to the direct or surrounding areas of CRMD, all tours should be cancelled until emergency officials announce that the threat has passed and it is safe to return to the area.

#### **Tsunami warning signs include:**

- Earthquake or underwater disturbance
- Loud rumbling sound emerging from the ground
- Rapid rise or fall in coastal waters

#### **What to do in a Tsunami:**

- Move inland to an elevated location.
- If possible carry disaster supplies to the elevated location, including a torch, first aid kit, portable radio, food and water.
- Remain at this location until emergency bulletins announce that the danger has passed.
- Use handheld radio transceiver to report your location, to call for help (if required) and to get updated emergency information if a portable radio (for tuning into local radio stations and listening to emergency bulletins) is not available.
- Stay away from the coast.
- Do not allow tourists to stay on the beach to watch the tsunami.

**'A tsunami is a series of waves that may be dangerous and destructive. When you hear a tsunami warning, move at once to higher ground and stay there until local authorities say it is safe to return home. Do not assume that one wave means that the danger is over. The next wave may be larger than the first one. Stay out of the area'**

(FEMA, 2004)

#### **After a Tsunami:**

- Check that the whole tour group is present and safe
- Help anyone who is injured or trapped.  
Administer first aid treatment
- People who are seriously injured must not be moved unless there is an immediate danger of further injury.
- Use radio transceiver to call for help.
- Give extra care to children, the elderly, and disabled people.
- Return the tour group to Port Vila as soon as it is safe to do so.
- Report any medical emergencies to Vila Central Hospital or Pro Medical (see emergency numbers in section 7.3.7).
- Advise tourists to take care if entering buildings that may have been affected by the tsunami. Do not enter damaged buildings.

### 7.3.4 CYCLONE

**‘Cyclones or cyclonic storms, also known as hurricanes in the Caribbean or typhoons in the North Pacific, may have high winds sometimes exceeding 200 kilometres per hour and heavy rains often accompanied by very high tides and large waves in coastal areas’.**

(FEMA, 2005)

According to the Vanuatu Meteorological Services, the official cyclone season in Vanuatu extends from the 1st of November until the 30th of April, however on rare occasions cyclones have hit Vanuatu outside of this time frame.

In most cases there should be adequate warning given prior to the arrival of a cyclone. The Vanuatu Meteorological Service provides information on the general approach and development of cyclones and this information is dispersed through the provision of public weather bulletins and radio announcements. If the threat becomes more serious there will be a warning bulletin issued. A warning will also be delivered to specific locations if it is anticipated that a cyclone may affect any settlements or communities. The warning bulletin should be issued to target areas within 24 hours prior to the arrival of the cyclone, and it is followed by routine 3 hourly updates. Hourly updates of a cyclones progress are distributed by radio once a warning bulletin has been announced.

In the event that a cyclone warning has been issued to the Mangaliliu and Lelepa Island settlements, all tours will be cancelled until the warning phase has passed.

If a cyclone warning is issued during the operation of a tour, the tourists should be returned to Port Vila immediately, providing there is adequate time to complete this transit prior to the predicted arrival of the cyclone.

If there is not enough time to return all tourists to Port Vila, the tour guide is to lead the group to the nearest designated “safe house” where they will remain until the cyclone has passed.

Safe houses have been chosen for both Mangaliliu and Lelepa Island villages, where tourists may be taken in the event of a cyclone:

Mangaliliu - *House blong ol Mama* or Women’s Meeting House

Lelepa Island – *Farea blong Chief* or Chiefs’ Club House

Traditional or kastom houses, made of bamboo, would also provide good shelter areas, as there is less potential for injury from falling concrete, galvanised iron or glass.

If possible, food, water and blankets should be collected prior to the arrival of the cyclone and placed in the shelter with the tourists.

Tour guides must ensure that their First Aid Kit is carried into the safe house in case of an injury requiring First Aid treatment. The guide should also carry their wind-up torch, which will be issued with their guide kit, as it may be needed to provide light at night time.

Once the cyclone has passed, tourists will be returned to Port Vila as soon as possible. Ensure that they are aware of the need to avoid fallen power lines, damaged buildings,

trees and flooded water courses.

**Action to be taken in the event of a Cyclone:**

- Take shelter in a “safe house”.
- If there is no built shelter available, move away from areas close to the coast. Move to areas located further inland and on higher ground.
- Check for disaster supplies, including torch (flashlight), portable radio, first aid kit, food, water and blankets.
- Once inside the safe house, stay inside and keep clear of windows.
- Listen to the radio (if available) for reports of the cyclone’s progress. Evacuate the location if instructed via official reports, and if transport is available.
- Do not use the telephone during any thunderstorms. Instead use the handheld radio if any communication needs to be made.
- Provide First Aid treatment where required.
- Return the tourists to Port Vila when authorities indicate that it is safe to do so.
- If any tourists are seriously injured do not move them unless there is an immediate threat of further injury.
- On the return to Port Vila, do not attempt to cross overflowing waterways unless you are certain that the vehicle can make the crossing safely. Also take care to avoid fallen power lines.
- Deliver any injured tourists to the hospital or a medical centre where necessary.  
(FEMA, 2005)

**7.3.5 STORM SURGE AND FLOOD**

**‘Facts About Flooding**

**Most people are unaware that:**

- **80% of flood deaths occur in vehicles, and most happen when drivers make a single, fatal mistake trying to navigate through flood waters.**
- **Just 6 inches of rapidly moving flood water can knock a person down.**
- **A mere 2 feet of water can float a large vehicle even a bus.**
- **One-third of flooded roads and bridges are so damaged by water that any vehicle trying to cross stands only a 50% chance of making it to the other side.’**

(FEMA, 2004)

Particularly during cyclone activity there is the risk of flash flooding as well as storm surge at coastal locations.

The *Vanuatu Meteorological Service Cyclone Guide* reports that storm surges ‘can easily form a dome of water up to 4 meters above normal sea levels’. As the Roi Mata

Cultural Tour will be operating in close proximity to the sea, it is necessary to plan a course of action to be followed if a storm surge or flash flood should take place during a tour.

In extreme circumstances, the sites of Mangaas and Mangaliliu have the potential for flash flooding, as water courses are already present at these locations. The third main tour location, Fels Cave, is much higher than sea level and therefore poses much less threat of being affected by flood or storm surge. However, tour guides will need to take care on the track leading up to Fels Cave (as this may become very slippery or damaged by water flow down the slope), and also along the coastal track below the cave (as this may be subject to the effects of storm surge).

**If there is a perceived threat of flash flooding or storm surge:**

- Prepare disaster supplies – torch, portable radio (to follow emergency instructions broadcast on local radio stations), first aid kit, food, water, blankets/warm clothing.
- Establish the quickest route to higher ground in case of tide surges or flood. Tour Guides will need to be able to move their tour group quickly to higher ground.
- Climb to higher ground and stay there until help arrives or until flood waters clear (flood water flow settles) and it is safe to abandon elevated areas.
- Use handheld radio to inform others of your location.
- **Do not** attempt to walk through flood waters. Instead, turn around and go directly to higher ground.
- If you are travelling in the tour bus, direct the driver to drive away from flooded areas. Never try to take a shortcut through them.
- If the tour bus stalls, immediately abandon it and climb to higher ground.
- Keep clear of fallen power lines and electrical wires. Electricity is easily conducted through water and therefore electrocution is a common cause of deaths during floods.
- Never try to swim through flood waters to safety.
- Provide First Aid where necessary.
- Return the visitors to Port Vila after the flood has passed.
- Call the Vila Central Hospital or Pro Medical immediately if there are any serious injuries that require medical attention (see section 7.3.7 for emergency numbers)

(FEMA, 2004)



### 7.3.6 LANDSLIDE

Most tour sites in the Roi Mata Cultural Tour are located on flat ground away from steep slopes that could give way to a landslide. The only location that poses any threat of landslide is the area near Fels Cave and Aupa Landing.

The track that leads from Aupa landing to Fels Cave lies at the base of a steep incline, with a cliff face rising about 10 to 15 meters above the track in places. Another potential landslide area is the track leading directly up to Fels Cave from the coast line, as it is very steep. Although the track has been developed (providing a stairway to aid the ascent of the track) caution should be taken following events such as earthquake, storm surge or flood in the direct area, as these may provoke the onset of a landslide.

#### **Landslide warning signs include:**

- New cracks appearing in plaster, tiles, bricks, or built foundations.
- Bulging ground develops at the base of sloping ground.
- Water breaking through the earth's surface in new places.
- Tilting or unusual movement of fences, walls, utility posts, or trees.
- A faint rumbling sound, which increases in volume, can be heard. This is the sound made as a landslide nears. The ground then slopes downward in a specific direction and starts to move in that direction under your feet.

(FEMA, 2004)

#### **If a Landslide occurs:**

- Move away from the path of the landslide.
- Quickly escape to a location on higher ground.
- Take shelter behind strong trees or a building if there are rocks or debris moving towards you.
- If unable to move to a safer location, crouch down and curl tightly into a "ball", making sure to protect your head.

(FEMA, 2004)

#### **Following the Landslide:**

- Keep well clear of the 'slide area' in case of delayed landslide activity.
- Check for any injuries and give first aid where required.
- Do a 'head count' to make sure that the whole tour group is safe. Search for any people that may have become trapped in the landslide.
- Give assistance to infants, the elderly, and anyone with disabilities, as they may require extra help.

- Use handheld radio to communicate your location and to request further assistance if needed.
- Arrange for the safe evacuation of the tour group and ensure that any serious injuries are promptly reported to the Vila Central Hospital (see section 7.3.7 for emergency numbers).
- Remain alert and on the look-out for flooding that may occur after a landslide.

Following a landslide it is important that the WHTC enlists the Mines, Geology and Rural Water Department to examine the site for any weak points, and to provide recommendations for the future safe use and management of the area.



Pumice wall near the entrance to Fels Cave. Photo by Kerrie Bennison

### 7.3.7 MEDICAL

First Aid training is to be arranged for those interested in working as Tour Guides for the tourism project. This is to ensure that some basic First Aid treatment may be administered in the event of a medical emergency. All tour guides must be first aid trained at a basic level, before commencing any guiding activities. Funding applications for First Aid training have been submitted to various agencies and await approval (see **APPENDIX G**). For any subsequent training it will be the responsibility of the WHTC to arrange funding and a training provider.

Two First Aid kits will be purchased for tour guides to carry during the tour. The kits will be carried in a backpack along with a torch and a water bottle.

The first aid kits will contain 'Sitrep (Situation Report) Forms' which are to be filled out in a medical emergency. This will enable the tour guides to provide information about the patient and their medical condition to medical practitioners. This information may be vital to the patients' survival, particularly if the casualty loses consciousness and is unable to provide the information themselves. Refer to **APPENDIX F** for a copy of the 'Medical Sitrep' form.

Tour Guides are to conduct any required First Aid medical response, to the level of their training, using the available First Aid kit. They are not to carry or issue any oral medication such as pain killers or aspirin.

If there is a medical emergency the Vila Central Hospital should be contacted immediately and arrangements should be made to return the injured tourist to Port Vila as soon as possible. In the event that Vila Central Hospital cannot be contacted and an Ambulance is required, Pro Medical should be contacted. A list of the agencies that should be contacted in the event of an emergency is provided below.

**Emergency Contact Numbers:**

Ambulance:

**Vila Central Hospital: 112**  
**Pro Medical: (678) 25566**

**Police: (678) 22222 (Port Vila)**

**Fire Service: (678) 22333 (Port Vila)**

**Cyclone Warning Centre: (678) 22932**

**Weather Observation: (678) 22433**

**NDMO: (678) 22392 (National Disaster Emergency Office)**

**Cyclone and Emergency information is broadcast on:**

**Radio Vanuatu - FM 98**

(Telecom Vanuatu Limited, 2005/2006)

## 8. TOURISM SECTOR

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### 8.1 NETWORKS

So far the Roi Mata Cultural Tourism Project has involved various local and international organisations working together with the Mangaliliu and Lelepa Island communities. The following lists the major contributing Government Departments and Non-Government Organisations (NGO's) that have assisted with the community tourism projects.

**Departmental Participation:** Government departments involved in this project include:

- **The Vanuatu Cultural Centre/National Museum:** Providing support and professional consultation for the project, as well as hosting an AYAD (Australian Youth Ambassador for Development) Volunteer and a VIDA (Volunteer for International Development from Australia) Volunteer to work on the World Heritage and Tourism project. The Vanuatu Cultural Centre is also hosting a third volunteer (AYAD), who is working on the redevelopment of the museum's exhibition space. This upgrade includes the Roi Mata Display that is to be visited on the tour.
- **The Australian Government Department of the Environment and Heritage:** Operating as Partner Organisation for the AYAD and VIDA Volunteers, offering advice and departmental expertise where required.
- **UNESCO (United Nations Educational Scientific and Cultural Organisation):** Provision of funding to support the preparation of the World Heritage Nomination of Chief Roi Mata's Domain, including the development of a management and tourism plan for the property.
- **AusAID:** Sponsorship of an AYAD (Australian Youth Ambassador for Development) volunteer to work on developing a tourism plan for the Mangaliliu and Lelepa Island community. In addition, AusAID are funding the placement of a VIDA (Volunteer for International Development from Australia) volunteer, who has been appointed to facilitate the construction of a Cultural Heritage Database, which will append the World Heritage Nomination of CRMD.
- **Peace Corps:** Placement of a Peace Corps Volunteer in Mangaliliu community, to assist with Business Management and Environmental Conservation for several community projects, including the Roi Mata Cultural Tourism Project.

**Agency Assistance (such as NGOs):**

- **Dawson Building:** Offering building advice and access to any construction plans for proposed wharfs.
- **Evergreen:** Investment in some tourism infrastructure facilities (a toilet block and shelter area) that are located within Mangaliliu village.

### 8.2 FUTURE INVOLVEMENT OF LOCAL TOURISM AUTHORITIES AND OPERATORS

As the Roi Mata Cultural Tourism Project progresses the involvement of various tourism organisations will be significant to the marketing and development of the tour. The following is a list of some of the local contributors and stakeholders that are likely to assist with the development of the community venture, 'Roi Mata Tours':

- **National Tourism Office (NTO):** Assistance with marketing and distribution of brochures to hotels and tourism booking centres around Port Vila.
- **National Tourism Development Office (NTDO):** Provides advice about establishing tourism businesses, who to contact for business and marketing assistance and where to source training for local tour operators. The NTDO can also make arrangements for ni-Vanuatu owned tourism businesses to have import taxes waved, for any materials or equipment that need to be purchased from abroad (e.g., tour vehicle, boat, hand held radios).
- **Vanuatu Tourism Office (VTO):** This is a tourist information office which carries brochures and distributes tourism information to visitors.
- **Vanuatu Tourism Education and Training (VATET) Office:** may be required in the future as additional training is sought. VATET is working towards developing a national standard of tourism training that is compatible with broader industry requirements.
- **E-tourism Centre:** Located centrally in the main street of Port Vila is likely to be the tour booking facility that will be used when the 'business phase' of the tourism project is implemented.



Visitors displaying local handicrafts purchased on the first Pilot Tour. Photo by Matt Cattanach

## 9. BUSINESS PLAN

The business section of this Tourism Plan is a basic model. It is not overly detailed to allow for modification following the Pilot Phase.

There are three phases for the implementation of the Roi Mata Cultural Tourism Project. This model has been developed by a Peace Corps volunteer, Ted Miller, who is currently working with the Mangaliliu and Lelepa Island community to develop a more comprehensive business plan for the tourism project:

### Phase 1: September-December 2005 – Feasibility and Consulting Phase

- Community consultation was sought, through several tourism consultation workshops, to identify a vision for a potential tourism operation in the Lelepa region.
- Land owners were consulted to determine project boundaries.
- Training was provided to promote sustainable tourism.

The table below (as prepared by Ted Miller) describes the main activities that comprised Phase 1:

DATE	ACTIVITY COMPLETED	LOCATION	OUTCOME
Aug -Sept 2005	Natural & Cultural Values Workshops and interviews	Mangaliliu & Lelepa	The outcome of the workshops and meetings was a comprehensive list of the natural and cultural values of the Lelepa region that the two communities wish to share with visitors. The communities also identified the natural and cultural values that they do not wish to share with visitors.
05/10/05 & 06/10/05	Mangaliliu & Lelepa Tourism Survey	Mangaliliu & Lelepa	A tourism survey was given to each household in both communities. The survey asked each household to provide information on their ideas for tourism and information on the skills of each member of the household. The results were tallied and then shared with the communities.
18/10/05-24/10/05 & 31/10/05-03/11/05	2 Sustainable Tourism Workshops	Mangaliliu & Lelepa	The outcome of the workshops were as follows: (1) The communities identified the positive and negative impacts of tourism (2) Learned the structure of the tourism market (3) Based on a market study, the communities developed a marketable tour (4) Identified all possible resources that can be utilised to develop the project (5) The communities developed the structure of the tourism committee (6) Created a vision statement for the tourism project.

16/12/05	Management Workshop for the World Heritage and Tourism Committee	Mangaliliu	The outcomes of the workshop were as follows: (1) Created by-laws for the WHTC (2) Created job descriptions for the individual members of the committee (3) identified management strategies and meeting timelines (4) Identified all landowners involved with the project and a compensation strategy (5) created an action plan for Phase 2 of the project.
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### Phase 2: January-June 2006 – Pilot Tour Phase

- Application for project funding.
- SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) for the tourism operation.
- Preparation of Pilot Tour.
- Launch of the Roi Mata Cultural Pilot Tour.
- Evaluation of the Pilot Tour.

Refer to **APPENDIX G** for the Pilot Tour funding proposal budget.

Refer to **APPENDIX I** for the Visitor Feedback Survey form, as used for the Pilot Tours.

The table below (compiled by Ted Miller) outlines the activities that comprise Phase 2:

DATE	ACTIVITY	PERSONS RESPONSIBLE	OUTCOME
06/2/06-10/2/06	Preparation of application for Shefa REDI fund	WHTC Financial Managers	The WHTC Financial Managers prepared a budget and project proposal to go to the Shefa Redi Fund to secure funds for the cost of the pilot tours (see budget).
13/3/06-19/3/06	Training Preparation	WHTC, Peace Corps, AusAid, Wan Smol Bag, Shefa Tourism Office	Sourcing training providers and preparing for tour guide training workshop.
27/3/06-31/3/06	Tour Guide Training	WHTC, Peace Corps, AusAid	Facilitation of a guide training course including technical training and First Aid training.
01/4/06-14/4/06	Preparation for Pilot Tour and follow up training.	WHTC, Peace Corps, AusAid, Vanuatu Cultural Centre	Organising logistics, uniforms, equipment, interpretative tools, and pricing for the pilot tour. Finalising track work and tour site infrastructure. Drafting 'visitor feedback survey' forms (APPENDIX I). Additional training for tour guides prior to the tour.
17/4/06-28/4/06	Development of dramatisation & redevelopment of Roi Mata display.	WHTC, Peace Corps, AusAid, Vanuatu Cultural Centre, Wan Smol Bag.	Blocking and rehearsal of drama/kastom dance. Drafting and translation of text, as well as selection of images for the Roi Mata display.

1/5/06-12/5/06	Booking of Pilot Tours	WHTC, Vanuatu Cultural Centre	Establishment of trial booking service. Made bookings for all organisations participating in the pilot tours.
13/5/06-20/5/06	Proceed with first round of Pilot Tours	WHTC	Completed pilot tours and reviewed evaluations from participants discuss evaluations with communities.
21/5/06-2/6/06	Retraining post pilot tours.	WHTC, Youth Challenge, Wan Smol Bag, Peace Corps, Aus Aid.	Basic first aid training provided by Youth Challenge. Workshop for dramatisation provided by Wan Smol Bag.
5/6/06-30/6/06	Proceed with second round of Pilot Tours.	WHTC	Implementation of remaining pilot tours and evaluation of the product.

### Phase 3: July-August 2006 – Marketing and Business Planning Phase

- Move from pilot project mode to business mode
- Develop marketing plan
- Identify industry partners
- Obtain business license
- Register business name
- Review and amend the business and tourism plan.

The following table (by Ted Miller) lists the primary activities that are involved in Phase 3:

DATE	ACTIVITY	PERSONS RESPONSIBLE	DESIRED OUTCOME
1/7/06-31/7/06	Creation of Marketing Plan	WHTC Tourism Managers	Marketing Strategy: Identify possible partnerships in Vanuatu's tourism industry including NGO's & private sector.
	Evaluate budget	WHTC Financial Managers	Create budget for marketing phase and request further funding for business infrastructure needs (i.e. liability insurance, computer facilities, telecommunications, transport).
	Request business license	WHTC Chairman and Vice Chairman	Acquire and submit all necessary permits and licenses to operate a small business.
	Evaluate human resource plan	WHTC Human Resource Managers	Consult with guides, food services, and administration to discuss compensation issues, decision making procedures and logistics.

The business and marketing plan that is being developed will give consideration to the following:

- Tour costing must cover all operational and administrative expenses.
- Inflation rate projection.



- Government tax.
- Financial viability of the operation.
- Periodic review of financial viability.
- Annual review of objectives and performance.

## 9.1 LAWS AND REGULATIONS

In order to formalise the tourism operation the WHTC will need the following:

- Business license: issued by the Shefa Provincial Council (responsible for local governance of Efate Island and the Shepherd Islands). This is a legal requirement as stipulated in the Business License Act [cap173] (Laws of the Republic of Vanuatu 1988).
- Registered Business Name and Logo: through the Vanuatu Financial Services Commission (VFSC). 'Roi Mata Tours' is to be the registered business name. Registering through the VFSC is also a legal requirement, detailed in the Registration of Business Names Act [cap 62] (Laws of the Republic of Vanuatu 1988).
- Insurance or disclaimer: to divert the possibility of the community being liable to pay damages for any injuries, or for "loss of joy" as has eventuated in New Zealand following the introduction of the 1987 Fair Trading Act (Britton, 1990). At this early stage it is not financially viable to take out an insurance policy for the community operation. Instead a disclaimer will be put on tour brochures, to avoid any liability for damages being laid on the community. An insurance policy should be sought in the future, if the venture grows to the extent that it can afford to purchase legal indemnity.

Documents that outline management procedures to be followed include:

- The Vanuatu Tourism Development Master Plan 2004-2010: This is the main tourism document regulating document in Vanuatu.
- The Cultural Tourism Strategy for Chief Roi Mata's Domain: submitted to UNESCO in support of the World Heritage nomination for the property.
- The Management Plan for Chief Roi Mata's Domain: submitted to UNESCO in support of the World Heritage nomination for the property.

Environmental and Cultural Legislation: Information concerning the national legal protection of Chief Roi Mata's Domain can be found in Part 3 of the Management Plan for the CRMD (WHTC, 2006) and section 5 of the nomination document for the CRMD (Wilson and Ballard, 2006).

Intellectual Property: Refer to section 5.2 of this tourism strategy for information on the laws applying to Intellectual Property.

By-Laws of the World Heritage and Tourism Committee (WHTC): Refer to APPENDIX E for information about the by-laws and responsibilities of the WHTC



Members of the WHTC at the 'signing in' ceremony. Photo by Chris Ballard

## 10. ADMINISTRATION

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**Booking service:** For the purpose of the pilot tour a simple booking sheet has been drafted and tour participants have been advised to contact the Vanuatu Cultural Centre (VCC) if they wish to reserve a place on the tour. The Tourism Managers of the WHTC are then to contact the VCC on the afternoon prior to each tour, to confirm the number of 'tourists' who will be attending.

Following the pilot tour phase the WHTC will need to decide whether or not this booking service will continue to operate from the VCC, or whether a commercial tour booking centre should be enlisted. At this stage financial constraints mean that the operation cannot afford to pay high commission rates to a private booking agency. The WHTC should seek to secure an arrangement whereby during the first year of operation a booking service is provided at no, or at least a very low, cost to the community. There is an opportunity to negotiate this kind of arrangement with establishments such as the E-tourism Centre, located in Port Vila.

If the negotiation of commission rates proves difficult, the WHTC should simply issue their own budget to the chosen booking centre(s), stipulating the amount that they want to receive from each person on tour, and allow the booking centre to add the commission rate.

**Ticketing system:** Tour participants will need to be issued with tickets or vouchers as proof of their payment for the tour. This should be organised by the enlisted booking agent(s). The vouchers are to be collected by the tour guide(s) at the beginning of each tour and returned to the financial managers of the WHTC. This process will be particularly important if the tour company reaches a stage where international wholesalers are selling the tour out of country, as some tour wholesalers hold back payments to tour operators if there is no proof that their client has indeed attended the booked tour.

**Tour Cancellation:** This will be necessary at times due to unforeseen influences such as unfavourable weather, logistical difficulties or cultural reasons. The WHTC will need to draft a Refund Policy that should be employed in the event that a tour must be cancelled.

**Visitor Feedback procedure:** A comments book will be placed at the VCC and/or booking facility, where tourists can lodge their complaints or compliments regarding the tour. This book should be checked and discussed by the WHTC every 2 months. The WHTC should aim to reply to tourists who lodge a complaint and to make necessary amendments to the tour product as soon as possible, in order to avoid further negative feedback.

**Lost Property handling:** Lost property is to be returned to the Vanuatu Cultural Centre (VCC) where it will be recorded in a 'Lost Property Log Book'. Lost property items will be stored at the VCC for 3 months. If at the end of this 3 month period, no one has collected the item, it will be returned to the WHTC and the committee will then decide what to do with the lost item.

**Other Tour Operators:** The Roi Mata Cultural Tour operation is designed to directly benefit the members of Lelepa and Mangaliliu. Therefore any other tour operators

wishing to run tourism activities within or around CRMD must first gain the approval of the appropriate village chiefs and members of the WHTC. Such tour operators should then be required to employ local tour guides from Mangaliliu or Natapao villages, to ensure that the traditional owners retain control of the tour activities that ensue. A contractual agreement should be signed by all tour operators who wish to operate within CRMD. There is a plan in place for the WHTC to draft a permit system for commercial tour operators (see section B2, Part 7, of the Management Plan for Chief Roi Mata's Domain).

**Routine review:** Reviews should be conducted annually to reassess the administrative system and tour pricing for the Roi Mata Tours operation. The aim of administrative review is to ensure that the efficiency and organisation of the business is constantly improving, therefore creating a stronger tourism product in the long-term.

## 11. TARGET MARKET AND BRANDING

**'In physical terms, it is difficult for many South Pacific destinations to be promoted as unique. There are a host of similar islands, reefs, lagoons, beaches, each with the ubiquitous backdrop of a coconut palm'.**

(Kissling, 1990)

In terms of marketing, the advantage of the Roi Mata Cultural Tour is that no other location in Vanuatu can offer the same tour experience. Although there are other 'cultural' tours, the Roi Mata Cultural Tour differs in the connection it draws between contemporary culture, oral history, material archaeology and the physical environment of the CRMD.

The oral history of Roi Mata is already well renowned within central Vanuatu, and has made its way onto websites and into tourism publications such as Lonely Planet Vanuatu (Bennett & Harewood, 2003, pg 79). This puts the WHTC in a position to market their community tour as a distinctive and authentic, historical and cultural tourism experience.



Recounting the oral history of Roi Mata at Aupa, with Artok Island in the background. Photo by Troy Mallie

**Overview of the Tourism market in Vanuatu:** The following visitor and market trends are identified in the Vanuatu Tourism Development Master Plan (Vanuatu National Tourism) 2004-2010:

- Most visitors to Vanuatu come for the purpose of vacation.
- The average length of stay is 7.6 days (statistics from the year 2000)
- Most visitors fall within the age bracket of 20-49 years, meaning that the majority are 'young and active' (pg 65)
  - o 77% of visitors are 20-59 years old
  - o 8% of visitors are over 59 years

- There is a relatively even gender balance to visitor groups.
- 95% of the visitors that arrive by air stay in Port Vila.
- There is a gradual but steady growth in the number of tourists arriving by air.
- About half of the cruise ship visitors spend their time in Port Vila on day tours.
- In 1999 visitors to Vanuatu hailed from:
  - o Australia (22.4%)
  - o North America (16%)
  - o Europe (18.5%)
  - o New Zealand (14.6%)
  - o Japan (8.7%)
  - o Pacific (8.6%)

**Marketing strategy:**

- CRMD should be promoted with a strong destination image, as it is a unique historical and cultural location.
- The Roi Mata Tour should be marketed to a younger audience, which already comprises the majority of the tour market in Vanuatu, as there is a moderate level of physical exertion required in this tour.
- Gradual growth of visitor arrivals should be encouraged to ensure that the tour operation does not expand too quickly.
- Various potential markets should be identified and targeted, in order to avoid relying too heavily on one market group.

**Market segments:**

Segments of the tourism market that may be targeted include:

- Visiting Friends and Relatives (VFR),
  - Special interest groups (nature, archaeologists, war veterans, anthropologists, bush walking),
  - Cruise ship market,
  - Conference/business market,
  - Cultural enthusiasts: interest in traditional cultures, arts and crafts collectors,
  - Members of museum societies, arts associations, sociological and anthropological societies
- (Ministry of Tourism and Aviation, Government of Solomon Islands & Tourism Council of the Pacific, 1991-2000 and Vanuatu National Tourism, 2004-2010).

**Target Market:**

Section 2.9 of the Vanuatu Tourism Development Master Plan (VTDMP), states that one of the tourism marketing objectives of the National Tourism Development Office (NTDO), is to create new niche markets.

A profile of the ideal niche target market for the Roi Mata Cultural Tour is as follows:

- Culturally aware.
- Interested in anthropology and archaeology.
- Supports sustainable community based tourism.
- Interested in conservation through responsible cultural heritage and land management.
- Young (within 20 – 59 age bracket)
- Physically fit.
- Disposable income.
- Well educated.

**Marketing avenues:**

Information about the tour will be displayed in tour booking offices, tourism information offices, and at the Vanuatu Cultural Centre. An online website, for advertising the tour to visitors, will be developed as part of Phase 3 of the project implementation.

The following lists some avenues for marketing The Roi Mata Cultural Tour:

- Local newspapers and tourism brochures: The Daily Post newspaper, The Vanuatu Independent newspaper, This Week in Vanuatu tourism newspaper
- Air Vanuatu/Qantas in-flight magazines: presenting an opportunity to reach a more stable market of tourists who, according to the VTDMP 2004-2010, are likely to be staying in Port Vila for an average of about 7 days.
- The accommodation sector: Brochures may be distributed at resorts and hotels throughout Port Vila. However, due to the large number of brochures that are already on display in many hotel foyers, the 'Roi Mata Tours' company will need to find a way to stand out from the rest. This may be achieved by targeting accommodation venues that are more likely to attract adventurous and culturally aware visitors. The possibility of World Heritage status for the CRMD would also be a drawcard.
- National Geographic: There is an upcoming opportunity to include the Roi Mata Cultural Tour in a National Geographic cruise of the West Pacific, on the Endeavour sailing ship. If this goes ahead successfully the community may be able to arrange for an article to be published about the tour in a National Geographic magazine. This would be great publicity for the tour due to the wide readership of National Geographic.
- Tour publications: Tourism guides such as Lonely Planet Vanuatu (Bennett & Harewood, 2003), which already contain information about the legend of Chief Roi Mata, should be approached to have tour information included in their next publication. Tourism magazines, as well as television shows (such as The Great Outdoors and Getaway), should also be targeted once the Roi Mata Cultural Tour reaches a reasonably polished standard of operation.
- Archaeological, anthropological, and cultural journals: should be contacted, as they service a readership of enthusiasts in these fields. Entering articles and advertisements in such journals will assist in achieving a market niche for the Roi Mata Cultural Tour. It will also contribute to attracting the type of visitor previously profiled as the 'target market' for the tour.
- Web page Design: The design of a promotional web page is also to be included in the Project Development Phase 3. This web page (or at least parts of the web page) may then be hosted by various different agencies:
- Vanuatu Cultural Centre: are able to host the web page about the Roi Mata Cultural Tour and CRMD on their website.
- E-tourism Centre: hosts tour information online.
- National Tourism Development Office: have offered to have the 'Roi Mata Tours' web page hosted on their Government website.

- Wantok Environment Centre: promotes low impact tourism that contributes to rural villages in Vanuatu on its website page titled Aelan walkabaot long Vanuatu (Island Walkabout in Vanuatu).  
[www.positiveearth.org/bungalows/index.htm](http://www.positiveearth.org/bungalows/index.htm)
- Lonely Planet: Has a website containing tour information about Vanuatu. A paragraph about CRMD and the Roi Mata Cultural Tour could be posted here.  
<http://www.lonelyplanet.com/worldguide/destinations/pacific/vanuatu>
- Intrepid Challenges: Based in Australia, New Zealand, the United Kingdom, Europe and the United States of America, promotes cultural and eco tourism.  
[www.intrepidtravel.com](http://www.intrepidtravel.com)



Roi Mata's Grave Site, located on Artok (Eretoka or Hat Island). Photo by Chris Ballard



#### **Local Tourism Markets:**

- Volunteer networks: who usually have an interest in experiencing and learning about Vanuatu culture.
- Friends of the Museum: which currently has a membership of about 140 people, is another small market opportunity. Members of this association generally have an interest in historical culture. These members also have connections with the wider expatriate community and could therefore encourage other expatriate residents to attend the tour.
- Expatriate network: Most expatriates have a disposable income. Due to the fact that they are usually longer-staying residents, many would have a greater opportunity to explore the island of Efate.

#### **Potential Markets:**

- Cruise ship market: Although irregular, this could be a potentially lucrative market. Ideally the WHTC needs to find a way to tap into this market before the visitors arrive at Port Vila (either by advertising on the ship, or through booking centres and wholesalers in Australia). It will be important to educate visitors about appropriate dress standards for the tour. Cruise ship visitors with an interest in culture, and who want to experience a bit more than shopping in Port Vila during their short stay, should be targeted. The cruise ship visitors are also possibly more inclined to spend money on artifacts, due to the limited time they have available to purchase souvenirs.
- Pre-paid package tour market: Reaching this market requires strong networks to be established with local and off-shore wholesalers.
- Australian and New Zealand special interest groups: Due to the proximity of these countries to Vanuatu, Australia and New Zealand currently provide a large percentage of visitors to Vanuatu. Targeting special interest groups from these locations may bring group bookings and private charter groups to CRMD.
- European market: European visitors often have a specific interest in cultural tours (Pearce, 1990), making them a good market segment to target.

#### **Marketing issues to consider:**

- Producing a culturally appropriate market image
- Generating respect for natural and cultural values of CRMD. Both visitors and community members need to be aware of and support the requirements for natural and cultural resource management.
- Distributing accurate information.
- Avoid creating 'unrealistic visitor expectations' (Australian Heritage Commission 2001) or making promises that cannot be delivered (ie: do not advertise that tourists will see dugongs on the tour when it is very rare for them to be seen). Only advertise the core activities of the tour that can be expected on every trip.
- Employing kastom names in the promotion of the tour. This is particularly important in relation to Artok (or Eretoka), which is already widely known as 'Hat Island'. Encourage use of local names where possible, but also acknowledge and refer to pre-existing names that are already familiar to many visitors.



Inspecting local handicrafts. Photo by Matt Cattnach

## 12. TRIALLING AND EVALUATING THE TOUR

### 12.1 TRIALLING THE TOUR

The first two pilot tours have been scheduled for the 13th and 20th of May 2006. This marks the beginning of the trial process for the Roi Mata Cultural Tour. APPENDIX H (Flier for Pilot Tour) provides a copy of the flier that was distributed to volunteers, Friends of the Museum and expatriates, inviting them to participate as 'tourists' in the pilot phase of the project.

During the pilot phase a survey will be distributed to all who participate as 'tourists' in the trial process. Their feedback about the tour will be used to improve and assess the tour product prior to initialising the Roi Mata Cultural Tour officially.

### 12.2 EVALUATION

Annual evaluation of the community business will be made by the WHTC. This will assess the development and impacts of the community tour operation, as well as its financial viability. During this evaluation, consideration will be given to various aspects of the tour including, and not limited to:

- Impact on community
- Community involvement (how widespread is the level of community involvement? Are all family groups being included?)
- Impact on cultural sites and natural resources
- Financial feasibility
- Growth of tourist numbers
- Visitor statistics and feedback
- Drawbacks and opportunities for the tour operation
- Areas for improvement
- Training and infrastructure needs
- Distribution and investment of profits
- Impact of tourism on other community projects



Tour guide training session at Aupa (Lelepa Island). Photo by Troy Mallie



Tour guides in uniform for the first Pilot Tour. Photo by Douglas Kalotiti

**Maintaining visitor records** will assist with the annual evaluation of the tourism operation. The WHTC should endeavour to collect visitor details such as:

- Nationality
- Age
- How they found out about the tour
- How they arrived in Vanuatu (ie: by plane or Cruise Ship)
- How long they are staying in Vanuatu
- Where they are staying
- What they thought of the tour

**Visitor surveys** should also be conducted periodically. This need only be a short survey, which may be given to tourists to complete at the end of the tour. The WHTC should assess their records every 6 months in the first two years, and annually thereafter. Conducting visitor surveys will lend a great insight into the strengths and weaknesses of the tour and also into the types of tourists that attend the Roi Mata Cultural Tour. Refer to **APPENDIX I** for a copy of the Pilot Tour 'Visitor Feedback Survey' form.

## APPENDIX A: Action Plan for the Pilot Tour

This Action Plan was produced in the early stages of the project, following the October/November 2005 consultation workshops. Therefore, many of the tasks listed have already been completed while others have been made redundant. The sixth column of the table, titled 'status', indicates where the corresponding action currently sits in the implementation process.

What needs to be done?	Who will do it?	By what time?	What resources are needed?	How will we evaluate?	Status
Find a bus to carry 10 tourists. This bus must drop off all tourists at Mangaas at the beginning of the tour and collect them for return to Port Vila at 2.00pm. The bus must stay in the village all day, so that it is available in case of emergency during the tour.	Douglas Kalotiti will ask Amos (bus driver) and Port Vila North School (bus owner).	End of December		At the end of the Pilot Tour phase the WHTC must evaluate the effectiveness of using this bus service.	Completed
Ask the Cultural Centre if they can provide a booking service for the pilot tour.	Carly Greig	Before beginning of March		At the end of the pilot tour the WHTC must evaluate the booking service.	Completed
Arrange communication between Tourism Manager and the Vanuatu Cultural Centre.	Carly Greig	Before beginning of March	A phone card for the Vanuatu Cultural Centre and a phone card for the Tourism Manager (450 VT)		Completed
Develop a booking system for the Vanuatu Cultural Centre and Tourism Manager	Ted Miller and Carly Greig	Before beginning of March			Currently being trialed
Guide to meet the tourists at the Vanuatu Cultural Centre (VCC) and to travel with the tour group to Mangaliuu	Douglas Kalotiti	Start of the pilot tour	Boat and truck to carry the guide(s) to the Vanuatu Cultural Centre to meet the tourists (600 VT)		Training at the VCC to be provided for Tour Guides during the week starting 22 May 2006.
Improve the Roi Mata Display at the Vanuatu Cultural Centre	Carly Greig to consult with Ralph Regenvanu and Takaronga Kuaatonga at the VCC	Before beginning of March		Ask for tourists' feedback in a visitor survey	Stage 1 complete
Make a video about Roi Mata	Douglas Kalotiti will ask Koh-lanta (film company) for footage	By end of December		Ask for tourists' feedback in a visitor survey	Pending funding

What needs to be done?	Who will do it?	By what time?	What resources are needed?	How will we evaluate?	Status
Make a brochure (6 pages) and give it to the WHTC to check	Carly Greig, Ted Miller and Marketing Manager (Josua) of the VCC	Before the beginning of March	Photocopy machine at the VCC (600 VT for 10 brochures)		Currently being developed
Provide information for the tour that the tour guides can use. Need information: -for the guide to provide at the VCC -interpretation for the bus trip from the VCC to Mangaliliu -for during lunch (Artok) -in the boat from Mangaliliu to Fels at Fels Cave -In the boat from Fels to Mangaas -Script for the naflak dramatisation	WHTC, Ted Miller and Carly Greig – with assistance from the community	Finish script for drama before mid January			Tour Guide training workshop provided (covering information to be given at various points in the tour), Drama already developed by community.
Tour Guide manual	Ted Miller and Carly Greig	Early February	Old manual copy from Peace Corps		First edition produced.
Guide Training First Aid Training Emergency Training	Ted Miller and Carly Greig	Mid February			Guide/emergency/first aid training 28-31/03/06
Guides to meet the tourists at Mangaliliu	Human Resources must choose 2 guides	Early February (before tour guide training)			Guides chosen
Community members to prepare refreshments at Mangaliliu (seasonal foods, for example – coconuts, orange leaves, pineapple, mango, pawpaw. Tea and coffee during the cooler months).	Human Resources must choose who will prepare the refreshments	Before the beginning of March	All resources for preparing the refreshments – fruit, tea, coffee, sugar.		Women's cooking groups organised for food preparation. Youth groups organised to prepare refreshments for the tour.

What needs to be done?	Who will do it?	By what time?	What resources are needed?	How will we evaluate?	Status
A cleaner to prepare Mangaliliu Landing for the tourists	Human Resources must choose who will prepare the refreshment area	Before the beginning of March	All resources to prepare Mangaliliu Landing (toilet paper, flowers, table)		Completed for Pilot Tour.
Someone to make coconut shell cups	Richard Matanik	Before the beginning of March	Coconut shells		No longer required at this stage.
Mats for tourists to sit down at the landing areas	Leisara Kalotiti, Salome Max, Dolsi Sapua and Hellen Micah	Before the beginning of March	Pandanus		Completed
Ask a boat driver how much it will be to carry tourists from Mangaas to Fels Cave, and then on to Mangaliliu.	Richard Matanik	Before the next meeting			Completed. 3000vt to be paid to boat driver.
Prices of life jackets (10), First Aid Kits (2 – boat and bus), Fire extinguisher for boat, Torch and batteries (Fels Cave)	Carly Greig and Ted Miller	Before the next meeting			All quotes obtained. Refer to APPENDIX G: Proposed Budget for Phase 2 – Pilot Tour.
Price of a portable radio for communication at Mangaliliu, Fels, Mangaas	Carly Greig and Ted Miller	Before the next meeting			Completed. Refer to APPENDIX G Proposed Budget for Phase 2 – Pilot Tour.
Cost of three floating wharfs (Mangaliliu, Fels, Mangaas)	Carly Greig and Ted Miller	Before the next meeting			Completed. Refer to APPENDIX G Proposed Budget for Phase 2 – Pilot Tour.
Write a funding application to cover the costs of the pilot tour	Carly Greig and Ted Miller	Before the end of the year 2005			Three funding proposals submitted.
Fix up the road which leads from Aupa landing to Fels Cave	Students from America	Mid May.			Still in progress. Near completion. To be completed before the end of May 2006.
Bench to sit down outside Fels Cave	Richard Matanik	Before the beginning of March			Postponed completion date – End of may 2006.

What needs to be done?	Who will do it?	By what time?	What resources are needed?	How will we evaluate?	Status
Decide which track the tourists should use inside the cave	Douglas Kalotiti, Carly Greig and Ted Miller	Before the end of the year 2005			Completed
Decide where to put a compost toilet at Fels Landing	Douglas Kalotiti, Carly Greig and Ted Miller	Before the end of the year 2005			Site chosen
Find out the cost of a compost toilet	Ted Miller	Before the next meeting			Completed. Refer to budget in APPENDIX G.
Ask permission from Chief Fartepar to allow a track and toilet to be made near Fels Cave	Hellen Micah	Before next meeting.			Completed
Decide on the precise boundary for the World Heritage area at Mangaas	Douglas Kalotiti, Chris Ballard and Meredith Wilson	On the 9th December	Douglas, Carly and Ted must choose the track		Completed
Choose a visitors track for the village of Roi Mata	Douglas Kalotiti, Chris Ballard, Meredith Wilson, Carly Greig, Ted Miller and some members of the WHTC	On the 9th of December			Completed. Track cleared.
Ask all landowners of Mangaas to approve the boundary of the World Heritage area and the tourist track	Douglas Kalotiti, Leisara Kalotiti, Chris Ballard, Meredith Wilson, Carly Greig, Ted Miller and some members of the WHTC	After the 9th of December and before the 15th of December			Completed
Decide where to build signage, kastom house reconstruction and visitor walking track at Mangaas.	The WHTC must decide what and where to build, and then check their decisions with UNESCO as well as the relevant landowners.	After the 9th of December and before the end of January	Local building materials		Walking track complete. Signage and kastom house pending.



What needs to be done?	Who will do it?	By what time?	What resources are needed?	How will we evaluate?	Status
Decide where to build a shelter at Mangaas	Douglas Kalotiti, Carly Greig, Ted Miller and some members of the WHTC	Before the end of 2005			No longer required at this stage.
Ask permission of the kastom owner of Mwalakot about putting a shelter on the beach	Douglas Kalotiti, Leisara Kalotiti	Before mid January			No longer required at this stage.
Plates for food (Coconut leaves)	Salome Max	Before the beginning of March	Coconut leaves		No longer required at this stage.
Decide who will be involved in preparing the naflak lunch (and bring mats, cups, plates, and flowers)	Human Resource managers must choose who will make the preparations for lunch	Before the beginning of March	Local food		Decided.
Dramatisation of naflak	Ted Miller and Carly Greig, deliver a script to Wan Smol Bag.	Before mid January			Community has already prepared drama. Wan Smol Bag to workshop in late May 2006.
Handicraft	Human Resources must choose who will sell handicrafts for the pilot tours	Before the beginning of March			Completed.
Build Roi Mata's canoe	Maniario (Douglas Kalotiti will ask him)	Beginning of March			Postponed to end of May 2006.
Choose a logo and a name for the tour and tour company	Management Committee must choose the competition winner	Competition closes on the 18th of December			Name and logo chosen.

## APPENDIX B: Mangaas Site Interpretation Suggestions

Prepared by students of the University of New South Wales and Queensland University of Technology

### Fieldwork Visit: 26 November 2005

- Retain in present condition as a sacred place.
- Make a trail from entrance to banyan and rock wall to back.
- Rebuild the entrance.
- Rebuild the 300m rock wall across the front.
- Have an explanatory pamphlet available at end of trail (to avoid dropping and littering the site).
- Put plaques on:
  1. Banyan tree, entrance, stream, rock wall etc.
  2. On plants, trees (small).
  3. At the beginning of the trail with Site Map/Roi Mata.
- A raised wooden walkway around complete Banyan tree to preserve "sacred ground" (also protect tree, roots etc.).
- NB no consensus on use of signs/plaques as an aid (or hindrance) to interpretation. Also noted danger of "visual pollution".
- Begin tour at VCC (Vanuatu Cultural Centre).
- Guide to have backpack/rubbish bag (all rubbish taken away at end of tour).
- No bins!!
- Entry path to site needs widening and levelling.
- Provide water bottles for tour before walking.
- First Aid Kit carried by Guide (basic cuts and scratches).
- Tell story of nomination for World Heritage Site.
- Reminder notice at start of walking trail. "No talking, laughing, etc."
- Create link between Fels, Mangaas, Eretoka and with the wider politics of 17th Century Efate and Shepherds, and Naflak.

*Note: The WHTC chose to implement some of these proposals but rejected others as being inconsistent with the overall vision for the tour.*

## APPENDIX C: Alternative tour ideas proposed by the Lelepa region community

### Lelepa Island – Alternative Tourism Ideas

The following tourism development ideas were generated by the Lelepa Island community, during the tourism consultation workshop hosted on Lelepa Island in October/November 2005. During this stage of the workshop, the participants divided into four groups to discuss four different types of tourism experience that they could develop.

#### 1. Village Stay

- Tourists can visit the village but they must respect the kastom and culture of the community. Tour Guides must explain this to the tourists.
- If tourists are allowed to visit the village, no more than 20 per day will be allowed to stay.
- Tourists who visit could be offered the following activities: visit the nasara, snorkel, watch fish at night time, look at a display of artifacts, and learn how traditional owners (man ples) prepare local food such as laplap.
- Visitors could paddle and go fishing in a traditional canoe, or go on a nature walk.
- They could be allowed to attend traditional village weddings. It would also be good if tourists were able to come to the village to get married.
- Tourists could be taken to visit village elders who could tell them kastom stories.
- They could be allowed to look at coconut crabs.
- The main thing tourists should be shown is how the village maintains kastom. They could even learn some local language.
- Visit the local gardens.
- Visits to the school to listen to the children sing a song.

Everyone who worked in our group has agreed that tourists should be allowed to visit the village for a full day (8.00am to 5.00pm) and they could stay overnight too. If the visitors have children, people in the village could help look after their children while they are visiting different sites around the community. A set overnight rate should be charged to visitors wishing to stay for the night.

#### 2. Kastom (Traditional) Village

- The kastom village must be a traditional village.
- Toilet facilities must be built at or near the village if tourists are to visit.
- The kastom village must be authentic Lelepa tradition.
- The Chiefs' nakamal must be a small distance away from the village, but not too far away.
- The toilet must not be too close to the nakamal.
- All who visit the village must pay a visit to the nakamal on arrival.
- There must be a stone wall erected around the kastom village.
- Tamtams must be put outside the Nakamal, in their proper traditional place.
- Must not clear the trees around the village (like today).
- Information that should be given to the tourists: 1) Talk about the historical and contemporary importance of the kastom village. 2) Tell tourists about the different types of wood and local materials used inside the houses. 3) Show visitors other important features inside each room.
- The kastom house must have two doors.

Plan for *Kastom* Village Tour:

- The tour name will be 'Lolapa Tour' (Lo/lapa means plentiful or to see things in abundance).
- Pick-up time will be 8.30am
- Travel to the village at 9.15am
- Welcome given to tourists (by warriors)
- Tour Guide leads all tourists to the Chief's nakamal. The Chief gives the tourists instructions for their visits.
- Visit to kastom village.
- Guide gives interpretation about the connection between certain village houses and various naflak (clans or totems).
- Traditional lunch in the kastom village, prepared by the community.
- Snorkelling along reef.
- The Chief farewells the tourists and sends them off with a departing gift.
- Depart at 3.30pm

### 3. Visit to cultural sites

- The name of the tour is 'Aluk Tour' or 'Nawi Tour'
- The tour starts from the area known as Creek Ai, which was used as a 'tribal council' site for the filming of the American Survivor television series.
- Dramatisation of naflak (fight between nawi [coconut] and wita [octopus] totems).
- Short talk about the meaning of the place being visited (Aluk) and what kind of plants tourists should not touch along the roadside during the tour.
- Guides (must be of Nawi totem due to the kastom of the location) lead the tourists up hill.
- Stop at a garden to hear the kastom story of the 'longfala yam' (long yam). Only those of Nawi totem are allowed to tell this story.
- Swim in the waterhole at Aluk
- See the river flowing on top of the hill.
- Return to the 'tribal council'. Taste different kinds of naflak foods.
- Try to find the endemic goby fish at Creek Ai.
- Snorkelling in the sea.

NB: Plenty of time must be allowed to complete this tour as it is quite a long walk to hike up to Aluk.

### 4. Nature Tour

- Tour name: Lolapa navrakiki nature tour
- Tour duration: 5 hours
- Interpretation includes: Flora, kastom stories, wild animals, birdlife, and caves.
- Pick-up is from the Lelepa landing.
- Look at dolphins.
- Point out all plants that are used in kastom medicine, house construction and carving canoes.
- Guides point out: Fruit trees, drinking trees, kastom stories, and poison vines.
- Visit former radio transmission site.
- Tell story of Vanuatu's Independence.
- Visit the big swamp and wael duk (namalau)
- Enjoy the great view above Fels Cave.
- Visit Fels Cave

- Lunch.
- Swim at Aupa beach. Learn kastom stories about fish and shell fish in the area.

### **Mangaliliu – Alternative Tourism Ideas**

During the Tourism Consultation Workshop held in Mangaliliu village (October/ November 2005), the following ideas for tourism activities were discussed during a small group exercise:

#### **1. Village Tour**

- Tour should have 20 people maximum.
- Pick-up time: 9.30am
- Travel from Vila to Mangaliliu by bus – 30 minutes
- On arrival guests are welcomed by a string band and given flower lei.
- Kastom dance and refreshment.
- Visit village to see how the women cook local food and weave baskets, hats, fans etc.
- Swim in the sea and walk along the beach. Watch fish feeding and paddle in a canoe (1 hour)
- Canoe carving display.
- String band entertainment at 12.30am (30 minutes)
- Story telling after lunch, and walk around the village and surrounding area.
- Departure – 2.00pm

#### **2. Visit Cultural Sites**

- Tour can have a maximum of 10 tourists.
- Tour name: Roi Mata Tour
- 8.00am – Tour departs from the Cultural Centre in Port Vila
- 8.30-9.00am – Visit the Cultural Centre; watch a video about Roi Mata, look at the Roi Mata display. Talk about Roi Mata introducing the Naflak system, instituting peace, and his many wives.
- 9.00am – 10.00am – travel to Mangaliliu. Present each of the visitors with a flower lei.
- 10.00-10.30am – refreshments at Mwalokot. Observe the view of Artok (Eretoka or Hat) Island.
- 10.30am-11.00am –swim/snorkel in the sea.
- 11.00am-12.00 – Visit Roi Mata’s historic village, particularly the sites of Mwalokot, Serelapa, Roi Mata’s old mwala (dancing ground), Napwa Bantaf and Fat Tuma.
- 12.00 – 1.00am – lunch. After lunch tourists can go for another swim, purchase some handicraft items, or go for a canoe ride
- 1.00pm – Tourists return to their respective hotels.

#### **3. Adventure Tour**

Information for prospective brochure: Mangaliliu village adventure/historical tour is a community project that is just established. The aim of this project is to help people in the village in basic needs such as school fees, hospital, church budgets and sustainability in the village. The chief and his people at Mangaliliu village would like to thank those who have chosen to go on this tour.

- Tour name: Mangaliliu Village Adventure and Historical Tour
- 8.00am – pick-up from your hotel foyer
- 9.00am – arrive at Mangaliliu beach for morning refreshment, subject to weather conditions.

- 9.15am – depart Mangaliliu beach with your experienced tour guide. Here, you will be cruising by our banana boat to Mangaas. This is where you will see one of our greatest historical sites where our ancestors used to live with our famous and greatest chief “Roi Mata” who put down cannibalism on the island of Efate.
- 10.00am – depart Mangaas for Artok (Hat) Island where you will see his grave (Roi Mata), where he is buried with his court – most of whom were buried alive.
- 12.30pm – arrive back at Mangaliliu beach for buffet lunch. After lunch you can snorkel and feed the fish in our crystal clear water or just relax on our shore.
- 2.00pm – afternoon tea/coffee or have a look in our local made shade, which sells mainly handicraft and shells.
- 3.00pm – depart Mangaliliu beach for your hotel

#### 4. Eco-Tour

- Tour capacity: 10 people
- Operational days: Monday to Friday
- Tour name: Flame Angel Tour (Neik a soro)
- Departure time: Bus departs Port Vila at 8.30am
- Arrive at Mangaliliu at 9.00am. Tour Guide welcomes guests and presents them with a flower lei.
- Tour Guide gives an introduction to the tour and informs tourists about the places they will visit on the tour.
- Tour group walks to Mangaas. This will take about 20 minutes.
- During the walk to Mangaasi, the Tour Guide talks about the stone walls and the historical village of Mangaas where Roi Mata resided. Also talk about archaeological research at the site of Mangaas and Roi Mata’s grave site on Artok (Eretoka or Hat) Island.
- On arrival at Mangaas beach, guide explains how Mangaasi is a tapu place following the death of the legendary Chief Roi Mata.
- Tour Guide leads tourists through the historic village of Roi Mata.
- Before the visit continues there must be a kastom activity which takes place at Mwalasayen (this is the place where all activities associated with Roi Mata take place)
- Tour guide leads the tour group to visit the old stone walls and Roi Mata’s tapu stone as well as some significant trees such as the napakura (tamanu), nambanga (banyan) and nangae (canarium) trees.
- Tour guide leads everyone back to Mangaliliu. Lunch is served at 12.00 noon. During lunch time entertainment will be provided by a local string band.
- After lunch there is free time for snorkelling, fish feeding, and canoe rides.
- Tourists return to their hotels at 3.30pm.

#### 5. Fishing Charter

- Name of tour is: Mangaliliu Tour
- The Charter includes a light lunch and free bus transfer from the guests’ hotel.
- Departure time is 9.00am (20 minutes drive to Mangaliliu landing)
- A boat will be waiting at Mangaliliu landing to take tourists fishing around Artok (Hat) Island, at the site of Bafun
- Plenty of different kinds of fish may be caught, including wahoo and tuna.
- The fishing boat carries a maximum of 6 people.
- Fishing bait will be provided free of charge.

Return time (arriving at the hotel): 2.00pm

## APPENDIX D: Support letters from chief's and women's council of Mangaliliu and Natapao

Letter from Chiefs of Mangaliliu and Lelepa Island (Natapao village):

### Leta Blong Endorsement Roi Mata Wol Hertij Kaljoral Turism Projek

Mitufala paramaont jifs long Mangaliliu mo Lelepa vilij wantem telemaot se mitufala appruvem mo supotem Roi Mata World Heritage Cultural Tourism Projek. Mitufala bin ridim projek proposel finis mo mitufala ting se em i wan impotent step blong mekem sua se projek ia bae i gohed long tufala komuniti. Tank yu tumas.



Jif Kalkot Mormor  
Mangaliliu Vilij



Jif Donald Kalpokas  
Natapao Vilij

Letter from presidents of women's councils of Mangaliliu and Lelepa Island (Natapao village):

**Leta Blong Endorsement Roi Mata Wol Hertij Kaljoral Turism Projek**

Mitufala presidents blong PWMU long Mangaliliu mo Lelepa vilij wantem telemaot se mitufala supotem Roi Mata World Heritage Cultural Tourism Projek. Mitufala bin ridim projek proposel finis mo mitufala ting se long fuja projek ia bae emi benefitem ol mama long tufala vilij. Tank yu tumas.

Dolsie Supua.

Dolsi Supua  
Mangaliliu Vilij

SOPHIA MASIA.

Sophia Masia  
Natapao Vilij



## APPENDIX E: World Heritage and Tourism Committee By-Laws

### By-Laws of the World Heritage and Tourism Committee (WHTC) of the Lelepa Region

#### 1. Members

1.1 The Committee has 9 permanent positions:

1 x Chair

1 x Vice Chair

2 x Tourism Managers

2 x Human Resource Managers

2 x Financial Managers

1x Vanuatu Cultural Centre Representative;

1.2 The committee must always be represented by 4 men and 4 women;

1.3 The Chair and Vice-Chair must share their positions, one of which must be represented by an individual from Mangaliliu and the other from Lelepa Island;

1.4 The Chair and Vice-Chair must swap their positions every 6 months (in June and December every year);

1.5 In the two positions of Tourism Manager, one must be represented by an individual from Mangaliliu and the other from Lelepa Island;

1.6 In the two positions of Human Resource Manager, one must be represented by an individual from Mangaliliu and the other from Lelepa Island;

1.7 In the two positions of Financial Manager, one must be represented by an individual from Mangaliliu and the other from Lelepa Island;

1.8 Martha Yamsiu Kaltal is temporarily representing the Vanuatu Kaljoral Senta on the committee. The Vanuatu Cultural Centre representative should attend 4 committee meetings a year;

1.9 A Peace Corps volunteer (Ted Miller), an Australian Youth Ambassador (Carly Greig), and an Australian VIDA volunteer (Troy Mallie), will serve on the committee until no later than August 2007.

#### 2. Understudies

1.1 Each member of the committee must chose a male or female understudy to train in the work that they are undertaking with the committee;

1.2 The entire committee must approve of each member's choice of understudy;

1.3 The total number of understudies must be 8, and must comprise 4 men and 4 women;

1.4 The total number of understudies must include 4 representatives from Mangaliliu and 4 representatives from Lelepa Island.

### 3. Conflict resolution

- 3.1 If a committee member has a problem with their work they must approach the Chair or Vice-Chair first. If the Chair or Vice-Chair is unable to solve the problem then a meeting of the entire committee must be arranged in an attempt to find a resolution;
- 3.2 If there is a dispute or problem within the committee that the committee is unable to solve then members must ask a chief from the 'Lelema Council of Chiefs' to assist. Acting Chief Atafsaru and Chief Kalkot Murmur are authorised to make the last decision on an issue;
- 3.3 If a member has a problem that is not connected to their work, they should not bring this problem to the committee, and they cannot use this problem as a reason to no longer serve on the committee.

### 4. Committee meetings

- 1.1 The committee will meet on the last Tuesday of every month, at 8.00am;
- 1.2 The committee will meet at Mangalilu and on Lelepa Island on alternative months;
- 1.3 If a member of the committee is unable to attend a meeting then they must send their understudy to represent them. The understudy must deliver a report from the meeting to their mentor;
- 1.4 At the end of each committee meeting, the committee must confirm the place and time of the next meeting;
- 1.5 At each meeting the committee must check whether it has completed all of its stated objectives since the previous meeting;
- 1.6 If a member is unable to attend a meeting then they must write an apology letter to the committee. The reason for their lack of attendance must be acceptable.

### 5. Plan of Management

- 5.1 The committee must follow the conditions laid out in the Plan of Management for CRMD;
- 5.2 The committee is responsible for checking whether the conditions in the Plan of Management are current and appropriate;
- 5.3 During the first three years of the committee's operation (2006-2008), members must evaluate the Action Plan for CRMD each March (see section 8.1 of Plan of Management);
- 5.4 If the committee wishes to make a change to the Plan of Management, they must check with the Vanuatu Cultural Centre first to ensure that the proposed change is not in disagreement with World Heritage guidelines. This change can then be made by the Chair of the Committee on the Master copy of the Plan of Management which is held on the CRMD database;

2.5 If a member of the committee cannot find an answer to a problem in the Plan of Management, the committee must hold an extra-ordinary meeting to a) solve the problem and b) decide whether a new condition needs to be added to the Plan of Management;

2.6 If a member of the committee acts in opposition to the by-laws of the committee or the conditions of the Plan of Management, the remaining members of the committee must make a decision as to whether this member should be removed from the committee.

## 6. Record keeping

1.1 The Vice-Chair of the committee is responsible for recording the minutes at each meeting. If the Vice-Chair is not present at the meeting then his / her understudy must record the minutes;

1.2 The Chair and Vice-Chair must hold copies of all records of the committee. In the future, the committee will decide whether it requires a secretary.

## 7. Committee decisions

7.1 Every member of the committee must agree on each decision relating to finance;

7.3 The Chair, or if the Chair is not available then the Vice-Chair, must sign off on all decisions made by the entire committee. The entire committee must be present to witness the signature of the Chair or Vice-Chair;

4.4 A bank account for the committee must require two signatures to be accessible;

4.5 The committee will decide how much *nasaotonga* must be paid to *kastom* owners and landowners according to the profits of any tourism project which occurs in CRMD. Once a decision has been made, the Chair and Vice-Chair must arrange a meeting with the *kastom* owners and landowners to communicate this decision.

## 8. Communication

1.1 The two Human Resource Managers are responsible for writing an annual report about all decisions that the committee has made, especially in relation to employment. A copy of this report should be submitted to the Chair of the WHTC and deposited with the Vanuatu Cultural Centre;

1.2 The Chair and the Vice-Chair are responsible for informing chiefs (Lelema Council of Chiefs) and landowners with ground in the area proposed for World Heritage of all the decisions that have been made by the committee;

1.3 The Chair and the Vice-Chair are responsible for informing the community about important decisions that have been made by the committee. Identifying which decisions are important enough to discuss with the community are to be determined by the committee as a whole. These decisions will be communicated either at church or at community meetings held at Mangaliliu and Natapau on Sunday afternoons.

## APPENDIX F: Medical Sitrep Form

### Medical Sitrep

Main complaint:	
Details of accident:	
Time:	Date:
Location:	
Patient's name:	
Patient's age:	Male/Female:
Nationality:	
Patient's address:	
First Aid treatment given:	

## APPENDIX G: Proposed Budget for Phase 2 – Pilot Tour

ITEM	QUANTITY	UNIT PRICE (VT)	SUBTOTAL (VT)	SUPPLIER
<b>TRENING KOST</b>				
GUIDE FIRST AID TRAINING	20 PAX	4,500	90,000	RED CROSS
WAN SMOL BAG WORKSHOP	30 PAX	1,000	30,000	WAN SMOL BAG
GUIDE TRAINING MANUALS	20	400	8,000	VANUATU CULTURAL CENTRE
WORKSHOP NOTEBOOKS	20	350	7,000	SNOOPYS
PENS (15 A PACK)	2	250	500	SNOOPYS
<b>SAFETY EQUIPMENT</b>				
LIFE JACKETS	20	2,500	50,000	VILA MARINE
FIRE EXTINGUISHERS FOR BOAT AND TRUCK	3	4,200	12,600	WILCO HARDWARE
PORTABLE RADIOS FOR GUIDES	4	4,995	19,980	RECREATIONAL EQUIPMENT CO.
GUIDE FIRST AID KITS	4	6,900	27,600	AUSTRALIAN FIRST AID KITS
BOAT FIRST AID KITS	2	4,800	9,600	AUSTRALIAN FIRST AID KITS
GUIDE FLASHLIGHTS	4	2,000	8,000	DAVID STEIN VANREPA
GUIDE UNIFORMS	20	750	15,000	VILA HANDPRINTS
<b>INFRASTRUCTURE</b>				
COMPOST TOILETS	2	44,430	88,860	SHEFA
PERMANENT WHARFS	2	652,896	1,305,792	DAWSON BUILDERS
TOTAL			1,672,932	
<b>COMMUNITY CONTRIBUTION</b>				
<b>COMPOST TOILET MATERIALS</b>				
Sand (m3)	2	2,000	4,000	Community
Coral (m3)	3	4,000	12,000	Community
Wood for Structure	1	3,000	3,000	Community
Natangura for Roof	15	300	4,500	Mele
Bamboo for Walls	20	100	2,000	Community
No. 10 Blocks	95	130	12,350	Wilco
Cement (40k bags)	7	940	6,580	Wilco
Arc Mesh F52 2.4m x 6.0m	0.5	5,316	2,658	Wilco
100mm PCV Pipe 5.8m	0.5	3,666	1,833	Wilco
<b>PERMANENT WHARFS</b>				
Labor- 10 Men	72 hrs.	1,000	30,000	Community
<b>FIRST AID TRAINING</b>				
Food & Lodging- (2 people/2 nights)		4,800	9,600	Community
<b>WAN SMOL BAG TRAINING</b>				
Food & Lodging (3 people/ 3nights)		7,200	21,600	Community
TOTAL			110,121	

## APPENDIX H: Flyer for Pilot Tours

### Roi Mata Cultural Tour

Pilot Tours Operating on:

**Saturday 13th of May**

**Saturday 20th of May**

**From 9am to approx 2:30pm**

**Tour departs from the front of the  
Vanuatu Cultural Centre**

**2,500vt pp**

Price includes Island kaka'e lunch and return transport from the Vanuatu Cultural Centre

Cash payment only please to be paid on the morning of the tour

**If you are interested to attend please contact Edgar, Thomas or Henline at the VCC to reserve a place on the tour. Tel: 22129**

There are only 14 places on each tour so make your booking soon!

BYO: Water bottle, hat, sunscreen, camera, culturally appropriate clothing, and comfortable walking shoes that can get wet!

Flip flops are not recommended. This tour involves some moderate hiking.



**Banyan tree at Mangaas (Roi Mata's Village)**



**Artok (Eretoka) Island (Grave site of Roi Mata)**

This site will not be visited in the tour but great views like this can be seen on the boat trip to Lelepa Island.

We hope to include a visit to Artok in the tour at a later date.



**Fels Cave (Lelepa Island)**

Contains several panels of art work, some of which is believed to be around 3000 years old!

Come and see for yourself!

## APPENDIX I: Visitor Feedback Survey Form

This survey has been drafted using the example provided in the Yaga Bay Sample Ecotourism Plan of the Indigenous Ecotourism Toolbox (Australian Training Products, 2006).

### Visitor Feedback Survey

Thankyou for participating in the Pilot Phase of the Roi Mata Cultural Tour.

To assist the development and improvement of our tour, we ask that you spend a short time answering the following questions.

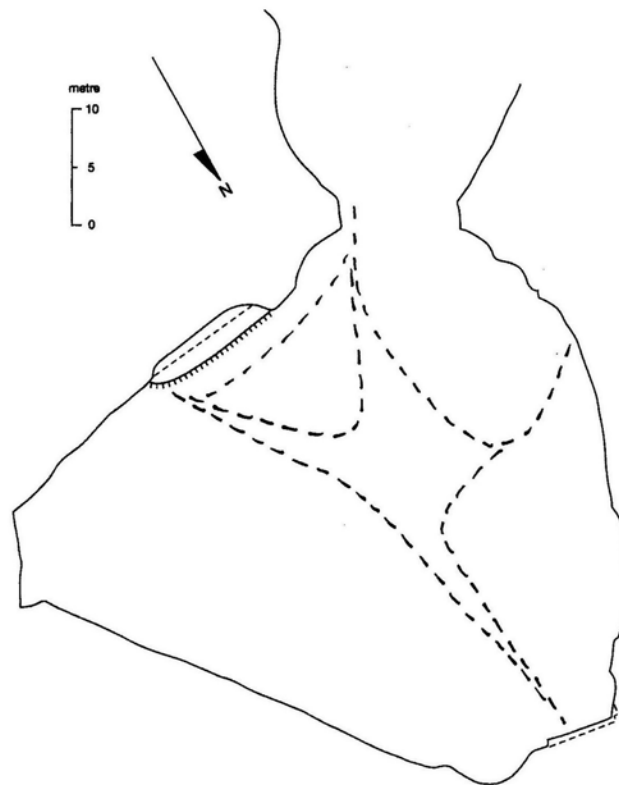
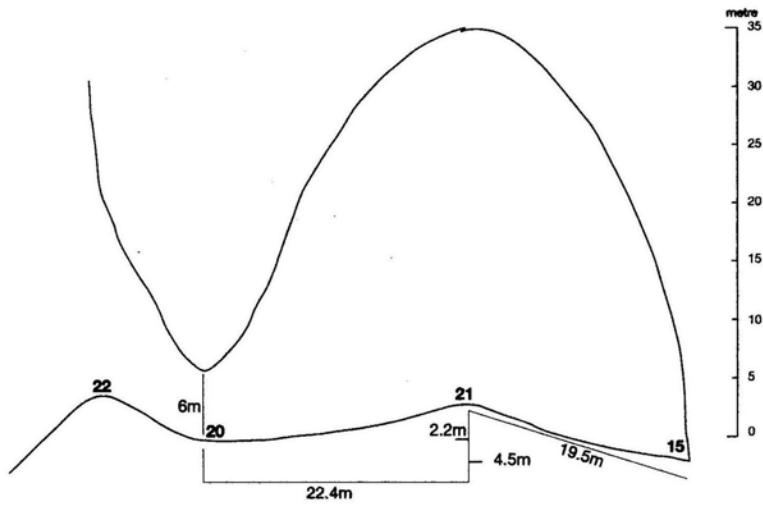
Your responses will be a valuable contribution to this community tourism project.

Please rate the following:	POOR	AVERAGE	GOOD
Tour Guide Skills and Knowledge			
Interpretation of Tour Sites			
Transport			
Food and Refreshments			
Health and Safety Considerations			
Cultural Experience			
Environmental Experience			
Walking Tracks			
Tour Site Infrastructure			
What was your favourite aspect of the tour?			
What was your least favourite aspect of the tour?			
What areas of the tour require improvement?			
Do you have any further comments?			





Fels Cave: Visitor track marked in cave interior.



-- visitor walking track inside Fels Cave

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**LAWS OF THE REPUBLIC OF VANUATU**

**CONSOLIDATED EDITION 2004**

**ENVIRONMENTAL MANAGEMENT AND  
CONSERVATION**

ENVIRONMENTAL MANAGEMENT AND CONSERVATION ACT NO. 12 OF 2002

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## ENVIRONMENTAL MANAGEMENT AND CONSERVATION

**An Act to provide for the conservation, sustainable development and management of the environment of Vanuatu, and the regulation of related activities.**

Be it enacted by the President and the Parliament of the Republic of Vanuatu as follows:-

### PART I – PRELIMINARY

#### 1. Application of this Act

This Act applies throughout Vanuatu, including its lands, air and waters.

#### 2. Interpretation

In this Act, unless the contrary intention appears:

**authorised officer** means a person appointed under section 5.

**biological diversity** means the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part, including diversity within species, between species and of ecosystems.

**biological resources** includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.

**bioprospecting** means any activity undertaken to harvest or exploit all or any of the following:

- (a) samples of genetic resources;
- (b) samples of any derivatives of genetic resources;
- (c) the knowledge, innovations, and customary practices of local communities associated with those genetic resources;

for purposes of research, product development, conservation or industrial or commercial application, and includes investigative research and sampling, but does not include customary uses of genetic resources and derivatives.

**conservation** includes the preservation and protection of natural resources and heritage.

**Council** means the Biodiversity Advisory Council established under section 29.

**Department** means the Department responsible for the environment.

**Director** means the Director of the Department.

**environment** means the components of the earth and includes all or any of the following:

- (a) land and water;
- (b) layers of the atmosphere;
- (c) all organic and inorganic matter and living organisms;
- (d) the interacting natural, cultural and human systems that include components referred to in paragraphs (a) to (c).

**environmental impact assessment** means the environmental impact assessment process as provided in Part 3, and **EIA** has a corresponding meaning.

**Environmental Registry** means the registry established under section 6.

**foreign organism** includes all stages of any life form not endemic or normally found in Vanuatu.

**genetic material** means any material of plant, animal, microbial or other origin containing functional units of heredity.

**genetic resources** means genetic material of actual or potential value.

**land** includes land covered by water.

**Minister** means the Minister responsible for the environment.

**natural resources** includes all living and non-living, finite and renewable resources found within Vanuatu but does not include resources lawfully maintained for domestic or commercial purposes.

**person** includes any statutory body, company or association or body of persons corporate or unincorporate.

**project proponent** means the person whose signature appears, or is otherwise nominated, on any application form as being responsible for any project, proposal or development activity.

**regulation** means a regulation made under this Act.

**traditional knowledge** has the same meaning as indigenous knowledge in the Copyright and Related Rights Act No. 42 of 2000.

**water** means all or any of the following:

- (a) water flowing or situated upon the surface of any land;
- (b) water flowing or contained in:
  - (i) any river, stream, creek or other natural course for water; or
  - (ii) any sea, lake, lagoon, bay, swamp, marsh or spring;  
whether or not it has been altered or artificially improved;
- (c) groundwater, including geothermal water;
- (d) any estuarine or coastal sea water.

## **PART 2 - ADMINISTRATION**

### **Division 1 - Powers and functions**

#### **3. Director appointed**

- (1) A Director of the Department is to be appointed under the Public Service Act No 11 of 1998.
- (2) The Director is accountable to the Public Service Commission for the efficient and effective administration of this Act.
- (3) The Director must advise and assist the Minister in all matters relating to this Act.

#### **4. Functions of the Director**

- (1) The Director is responsible for the development, co-ordination and, where appropriate, implementation of the Government's environmental policies and programs.
- (2) In carrying out the functions outlined in subsection (1), the Director must do the following:
  - (a) administer the Environmental Registry established under section 6;
  - (b) prepare State of the Environment Reports under section 7;

- (c) prepare National Policies and National Plans under section 8;
  - (d) administer the Environmental Impact Assessment procedure under Part 3;
  - (e) prepare guidelines, standards, codes of practice and procedures;
  - (f) prepare advice on international environmental treaties and instruments, including implementation strategies;
  - (g) undertake environmental research, assessment, monitoring, and inspection generally;
  - (h) undertake such other duties and responsibilities as may lawfully be required by the Minister.
- (3) The Director may carry out any duty, function or responsibility under this Act in association with any other Government Ministry, Department, Agency, local government or municipal council.

**5. Powers of the Director**

- (1) The Director has the powers conferred by this Act, and such other powers as may be necessary or convenient for the performance of the Director's functions under this Act, including:
- (a) the appointment of persons not employed by the Department as authorised officers for the purpose of administering this Act; and
  - (b) the establishment of committees for the purpose of ensuring better inter-departmental and inter-agency co-ordination on particular environmental matters.
- (2) The Director must consult with the Public Service Commission and such local government or municipal council as is appropriate before appointing any authorised officer under paragraph (1)(a).
- (3) The Director must consult with the Minister before establishing any committee under paragraph (1)(b).
- (4) The powers, duties and responsibilities of any person appointed under paragraph (1)(a) or any committee established under paragraph (1)(b) must be stated in any instrument of appointment or establishment.
- (5) The Director may delegate to officers of the Department and any authorised officers appointed under paragraph (1)(a), such powers and functions as he or she considers appropriate, with the exception of this power of delegation.

## **Division 2 - Instruments**

### **6. Establishment of Environmental Registry**

- (1) The Director must establish, operate and maintain an Environmental Registry of all records relating to:
  - (a) environmental impact assessment documentation provided under Part 3; and
  - (b) applications, permits and approvals required or issued under this Act; and
  - (c) regulations, standards, guidelines or codes of environmental practice established under this Act; and
  - (d) National State of the Environment Reports prepared under section 7; and
  - (e) National Policies and National Plans prepared under section 8; and
  - (f) Community Conservation Areas registered under section 37; and
  - (g) international environment and conservation treaties and instruments to which Vanuatu is a party; and
  - (h) such other matters as may be prescribed by regulation.
- (2) All material entered in the Environmental Registry must be lodged with the Department in a physical or electronic form, and be available for public inspection during normal working hours.
- (3) If the Director determines that any registered material is commercially or culturally sensitive, he or she may classify that material, including any part of any material, as confidential and stipulate the terms and conditions, if any, on which any person can access that material.
- (4) The Minister on the advice of the Director may, by order, prescribe a system of fees and charges for the purpose of recovering any operational costs arising from requests for copies of material held in the Environmental Registry.

### **7. Preparation of National State of the Environment Reports**

- (1) The Director must prepare and publish a National State of the Environment Report at least once every 10 years following the commencement of this Act.
- (2) A National State of the Environment Report must include all of the following:
  - (a) an assessment of the state of all natural resources;
  - (b) a review of the current use of natural resources;

- (c) an assessment of the quality of Vanuatu's environment;
  - (d) an assessment of social and economic development trends and their likely impact upon the environment;
  - (e) a summary of government and private sector policies, programs and initiatives to address and monitor environmental management and conservation issues;
  - (f) such other matters as the Minister considers appropriate.
- (3) A National State of the Environment Report must be submitted to the Minister for approval, and a copy of any such report must be lodged in the Environmental Registry.

**8. Development of National Policies and National Plans**

If the Minister determines that a National Policy or National Plan is required for the conservation, sustainable development and management of the environment, the Director must prepare the National Policy or National Plan.

**9. Purpose of National Policies and National Plans**

- (1) The purpose of a National Policy is:
- (a) to promote the environmentally sound and safe management and conservation of the natural resources of Vanuatu; and
  - (b) to provide for the co-ordination of related activities.
- (2) The purpose of a National Plan is:
- (a) to provide for the implementation of the National Policy; and
  - (b) to provide for the conservation and/or sustainable management and development of particular natural resources of Vanuatu.
- (3) A National Policy must include all of the following:
- (a) an evaluation of the current state of the particular matter that is the subject of the Policy;
  - (b) an evaluation of the social, human health, custom, economic and ecological considerations and issues in respect of that matter;
  - (c) a description of any relevant national priorities;
  - (d) an outline of the objectives to be achieved by the Policy;

- (e) specific actions, initiatives or activities required to give effect to the objectives of the Policy - including any specific legal, financial and institutional aspects that need to be addressed;
  - (f) mechanisms for monitoring and reviewing the implementation of the Policy.
- (4) A National Plan must contain details of all the operational matters that are necessary to implement the National Policy.
  - (5) National Policies and National Plans must be developed through appropriate public consultation, and be submitted by the Director to the Minister for approval.
  - (6) Once approved by the Minister, a National Policy or National Plan must be referred to the Council of Ministers for approval. A National Policy or National Plan takes effect on the date of its publication in the *Gazette*.

**10. Variation of National Policy or Plan**

- (1) The Minister may instruct the Director to prepare a variation to any National Policy or National Plan.
- (2) A variation must be prepared, notified and consulted upon in accordance with this Act and the regulations.
- (3) A variation must be approved by the Council of Ministers, and takes effect on the date of its publication in the *Gazette*.

**PART 3 - ENVIRONMENTAL IMPACT ASSESSMENT**

**Division 1 - Activities subject to EIA**

**11. All activities subject to this Act**

All projects, proposals or development activities that:

- (a) impact or are likely to impact on the environment of Vanuatu; and
- (b) require any license, permit or approval under any law;

must comply with the provisions of this Act.

**12. Activities that are subject to an EIA**

(1) All projects, proposals or development activities that:

- (a) cause or are likely to cause significant environmental, social and/or custom impacts; or

(b) cause impacts relating to the matters listed in subsection (2);

are subject to the EIA provisions of this Part.

(2) Without limiting subsection (1), all projects, proposals or development activities that will do or are likely to do all or any of the following are subject to the EIA provisions of this Part:

- (a) affect coastal dynamics or result in coastal erosion;
- (b) result in the pollution of water resources;
- (c) affect any protected, rare, threatened or endangered species, its habitat or nesting grounds;
- (d) result in the contamination of land;
- (e) endanger public health;
- (f) affect important custom resources;
- (g) affect protected or proposed protected areas;
- (h) affect air quality;
- (i) result in the unsustainable use of renewable resources;
- (j) result in the introduction of foreign organisms and species;
- (k) result in any other activity prescribed by regulation.

**13. Activities not subject to an EIA**

The following projects, proposals or development activities are exempt from the requirements of this Part:

- (a) the construction of any single family residential building in an approved residential development area, however, such construction must be at least 30 metres from any river, stream, or from the line of mean high water spring tide of the sea;
- (b) any additions to an existing residential dwelling, being additions that are used only for residential purposes and are at least 30 metres from any river, stream, or from the line of mean high water spring tide;
- (c) the construction of traditional or custom structures fabricated from traditional materials, however, any natural rock, sand, coral, rubble or gravel that is used must not be taken from within 20 metres of the line of mean high water spring tide;
- (d) emergency action to protect the lives and property of people where there is not enough time to follow the requirements of this Act;



(e) any other activity prescribed by regulation.

**14. Preliminary assessment of applications**

(1) Subject to subsection (2), any Ministry, Department, Government Agency, local government or municipal council that receives an application for any project, proposal or development activity not exempted by section 13, must undertake, or have undertaken on its behalf, a preliminary EIA of that application to determine:

(a) whether the project, proposal or development activity is likely to cause any environmental, social or custom impact; and

(b) the significance of any identified impact; and

(c) whether any proposed actions are likely to effectively mitigate, minimise, reduce or eliminate any identified significant impact.

(2) If any Ministry, Department, Government Agency, local government or municipal council is the project proponent, the person who receives the application must refer the application to the Director for an assessment of the need for an EIA under section 17.

(3) The Ministry, Department, Government Agency, local government or municipal council that received the application must, within 10 days after the preliminary determination is made, advise the Director in writing of the determination, and may process the application without further reference to this Act if the preliminary EIA determines that:

(a) no significant environmental, social or custom impacts are likely to be caused by the project, proposal or development activity; or

(b) the proposed actions will effectively mitigate, minimise, reduce or eliminate any identified significant impact.

(4) The Ministry, Department, Government Agency, local government or municipal council that received the application must, within 10 days after the preliminary determination is made, refer the application to the Director if the preliminary EIA determines that:

(a) significant environmental, social or custom impacts are likely to be caused by the project, proposal or development activity; or

(b) the proposed actions will not or are not likely to effectively mitigate, minimise, reduce or eliminate any identified significant impact.

**15. Director may require direct referral**

(1) Despite section 14, the Director may, by written notice served on the relevant Ministry, Department, Government Agency, local government or municipal council, require the application for a project, proposal or development activity to be referred directly to the Director for an assessment of the need for an EIA.

- (2) However, the Director cannot require a direct referral unless he or she is:
  - (a) aware of significant impacts caused by similar projects, proposals or development activities inside or outside Vanuatu; and
  - (b) satisfied that a direct referral is more efficient having regard to the likely impact of the project, proposal or development activity.
- (3) The Director must inform the relevant Ministry, Department, Government Agency, local government or municipal council of the grounds for the referral in the written notice under subsection (1).

**16. Lead agency determined by Director**

- (1) If an application for the same project, proposal or development activity is required to be made to more than one Ministry, Department, Government Agency, local government or municipal council, the Director must be advised by each authority receiving an application and must determine which authority is to act as the co-ordinating lead agency for the purpose of undertaking the preliminary EIA.
- (2) Despite subsection (1), the Department must act as the lead agency if the Director so determines and undertake the preliminary EIA.

**17. EIA determination**

- (1) The Director must determine the need for an EIA if:
  - (a) a referral is required under subsection 14(2); or
  - (b) a referral has been made under subsection 14(4); or
  - (c) a direct referral has been made under section 15.
- (2) The Director must advise the project proponent, in writing, of his or her decision on the need for an EIA within 21 days of receiving the application, unless a longer duration is agreed with the project proponent.

**Division 2 – EIA process**

**18. Environmental Impact Assessment**

- (1) This section applies if the Director determines under section 17 that an EIA is required.
- (2) The EIA must be undertaken:
  - (a) in such manner as the Director determines as appropriate in the circumstances; and
  - (b) as required under section 19; and
  - (c) in accordance with the regulations; and
  - (d) in a manner consistent with any guidelines issued for this purpose by the Director.

- (3) The Director must:
  - (a) register the particulars of the project, proposal or development activity in the Environmental Registry; and
  - (b) notify the project proponent and any affected Ministry, Department, Government Agency, local government or municipal council concerning the registration of the project, proposal or development activity.
- (4) An EIA must be undertaken with the fullest practicable consultation with the project proponent and other relevant interested parties.

**19. Terms of reference for EIA**

- (1) The Director must develop a terms of reference for any work that is to be undertaken for an EIA, including a description of the scope of work required.
- (2) In developing the terms of reference, the Director must give special consideration to the need for consultation, participation and involvement of custom landowners, chiefs and other interested parties, and may consult with the National Council of Chiefs for that purpose.
- (3) The Director must refer the terms of reference for the EIA to the project proponent for written comment within 15 days or such longer period as the Director specifies.
- (4) Within 30 days after receiving any written comments from the project proponent, the Director must make such revisions as are considered appropriate, and issue the final written terms of reference for the EIA to the project proponent. A copy of the terms of reference must be lodged in the Environmental Registry at the same time.
- (5) Unless otherwise agreed, all costs associated with the preparation of an EIA are the responsibility of the project proponent.

**20. Public notice of EIA**

- (1) The project proponent must give such public notice about the project, proposal or development activity as the Director determines is appropriate in the circumstances.
- (2) Any requirement for public notice must be practical and be reasonably certain to reach any identified interested parties.
- (3) If the public notice invites written submissions, it must specify:
  - (a) the time period by which submissions must be received; and
  - (b) the address to which submissions must be sent.

- (4) If practicable, a copy of any public notice must be lodged by the project proponent in the Environmental Registry.
- (5) Unless otherwise agreed, all costs associated with any public notice requirement are the responsibility of the project proponent.

**21. Deficiencies in EIA Report**

After receiving and reviewing the EIA report, including any submissions made under section 20, the Director may, by notice in writing, require the project proponent to correct any deficiencies and/ or provide additional information in relation to the EIA report.

**22. Review of EIA**

- (1) Within 30 days after receiving the EIA report and any additional material required under section 21, the Director must review the report and make a recommendation on the project, proposal or development activity to the Minister.
- (2) The Director's recommendation must include any draft terms and conditions by which the application for the project, proposal or development activity can proceed.
- (3) The Director and the project proponent may, by agreement, extend any time limit under subsection (1).

**23. Decision on application**

- (1) The Minister must consider the Director's recommendation and, within 21 days after receiving the recommendation, make a decision on the application for the project, proposal or development activity.
- (2) The Minister must do one of the following:
  - (a) approve the application with or without terms and conditions;
  - (b) refer the matter back to the Director for further assessment;
  - (c) reject the application.
- (3) The Director must advise the project proponent in writing of the Minister's decision within 14 days after the Director becomes aware of it.
- (4) If the Minister refers the matter back to the Director or rejects the application, the Minister must provide the Director with written reasons for the decision.

**Division 3 - Miscellaneous**

**24. Activities without approval**

- (1) Subject to subsection (2), it is an offence for any person:

- (a) to undertake any activity that is subject to an environmental impact assessment prior to receiving written approval under this Part; or
  - (b) to undertake any such activity where approval has been refused under the provisions of this Part.
- (2) A project proponent may undertake any activity necessary for the purpose of preparing the EIA report if:
- (a) such activity has minimal impact on the environment; and
  - (b) the Director is advised, in writing, of the nature of any such activity at least one week in advance of its undertaking.
- (3) A person found guilty of an offence under subsection (1) is punishable on conviction to a fine of not more than 1,000,000 vatu or to imprisonment for a period of not more than 2 years, or both..

**25. Compliance with terms and/or conditions**

If an application is approved under section 23, the project proponent must comply with all terms and/or conditions of the approval.

**26. Directions**

- (1) The Director may issue a notice in writing if:
- (a) a breach of a term or condition of an approval given under section 23 occurs; or
  - (b) an activity is undertaken contrary to the provisions of this Part.
- (2) The notice may require either or both of the following:
- (a) the stopping of any specified activity for such period of time as is stated in the order;
  - (b) the restoration of any area affected.
- (3) An activity that is subject to a notice must not restart until the Director cancels the notice and notifies the project proponent in writing.

**27. Director may determine alternate process**

- (1) If the Director considers that an EIA is not appropriate in the circumstances, an alternate agreed process may be established consistent with the regulations.
- (2) If an alternate agreed process is not completed to the satisfaction of the Director, he or she may terminate the process and require the activity to be completed in accordance with this Part.

**28. Minister's approval no guarantee**

- (1) If the Minister approves a project, proposal or development activity, the approval is not to be interpreted as an approval for all requirements under the laws of Vanuatu.
  
- (3) A project proponent is responsible for ensuring that all approvals, permits, licences, agreements, authorities or permissions required under or by any other Act are obtained before proceeding with the approved project, proposal or development activity.

## **PART 4 - BIODIVERSITY AND PROTECTED AREAS**

### **Division 1 - Bioprospecting**

**29. Establishment of Biodiversity Advisory Council**

- (1) The Biodiversity Advisory Council is established.
  
- (2) The Director is the Chairperson of the Council, and the Department is to provide administrative support to the Council.
  
- (3) The Minister, in consultation with the Director, may appoint up to 5 additional members to the Council, on merit and for such terms, not exceeding three years, as he or she determines, taking into account:
  - (a) the scientific, custom and technical needs of the Council; and
  - (b) the nature of the legal and commercial issues likely to be involved; and
  - (c) the volume of relevant bioprospecting applications; and
  - (d) any other relevant matters.
  
- (4) The Council is to meet as the Director requires but must meet at least twice every year.
  
- (5) The Council is to regulate its own procedures.
  
- (6) Members of the Council may be reappointed for a further term or terms.

**30. Other terms and conditions**

The Minister is to determine, on the recommendation of the Director, the other terms and conditions of appointment of the additional members of the Council.

**31. Functions of the Council**

The Council is responsible for advising the Minister, through the Chairperson, on any matter relating to the implementation of the *Convention on Biological Diversity* and, in particular, on matters relating to commercial bioprospecting.

**32. Bioprospecting to require permit**

A person who:

- (a) undertakes or attempts to undertake any biodiversity prospecting without a bioprospecting permit; or
- (b) exports or attempts to export any specimen obtained from biodiversity prospecting without a bioprospecting permit; or
- (c) imports or attempts to import any foreign organism that may have a significant adverse impact on Vanuatu's native flora or fauna without a bioprospecting permit; or
- (d) contravenes any law relating to the protection of Vanuatu's native flora and fauna;

is guilty of an offence punishable on conviction to a fine of not more than 1,000,000 vatu or to imprisonment for a period of not more than 2 years, or both.

**33. Application for bioprospecting permit**

- (1) Any person wanting to undertake bioprospecting must apply in writing to the Director.
- (2) The application must be in such form as is approved by the Director and include the following:
  - (a) the name and particulars of the applicant, including that of any associate, affiliate or party that may benefit or share in the research or obtain any benefit from such research;
  - (b) a full and accurate description of the nature and extent of the research that is to be undertaken, and the area where such research will take place;
  - (c) a description of the nature of any biological resource or traditional knowledge that is to be investigated;
  - (d) a statement concerning the nature of the research to be undertaken, including an outline of the investigation and sampling methods to be used;
  - (e) an outline of the nature, duration and extent of any expected commercial research and development plan that may result from the biodiversity prospecting;

- (f) a statement indicating whether any information in the application should be regarded as confidential;
  - (g) and such other matters as the Director considers appropriate in the circumstance.
- (4) If the Director is satisfied that the application is complete, he or she must refer the application to the Council for determination.

**34. Determination of application**

- (1) The Council must meet within 21 days after receiving an application from the Director for the purpose of determining that application.
- (2) The Chairperson and at least 3 Council members must determine the application.
- (3) The Council must do one of the following:
  - (a) approve the application with or without terms and conditions;
  - (b) refer the matter back to the Director for further assessment or additional information;
  - (c) reject the application.
- (4) The Director must advise the applicant in writing of the Council's decision within 14 days of the determination.
- (5) If the Council refers the matter back to the Director or rejects the application, the written advice must state the reason for this.
- (6) Before making its decision, the Council must satisfy itself that:
  - (a) a legally binding and enforceable contract is concluded with custom landowners, or any owner of traditional knowledge, concerning:
    - (i) rights of access; and
    - (ii) rights of acquisition of any biological resource or traditional knowledge; and
    - (iii) appropriate fees, concessions or royalties that will be charged for any research, or the acquisition of any biological resource or traditional knowledge, or for any commercial benefit that may be obtained; and
  - (b) a research and investigation plan is completed by the applicant which outlines the nature of the research to be undertaken, the investigation and sampling method, and any specimens to be taken; and



- (c) a monitoring and auditing system is established to verify all activities undertaken by the applicant; and
- (d) any bond arrangements for damage or harm that may result from any non-compliance with the Government of Vanuatu are properly in place; and
- (e) the decision is consistent with all other Acts.

## **Division 2 - Community Conservation Areas**

### **35. Identification of sites having national biodiversity significance**

The Director may negotiate with custom landowners for the protection and registration of any site as a Community Conservation Area where he or she is satisfied that the site:

- (a) possesses unique genetic, cultural, geological or biological resources; or
- (b) constitutes the habitat of species of wild fauna or flora of unique national or international importance; or
- (c) merits protection under the *Convention Concerning the Protection of World Cultural and Natural Heritage*.

### **36. Director may provide assistance**

If custom landowners agree to establish a Community Conservation Area, the Director may consult with and provide assistance to the landowners, chiefs and other interested parties to do all or any of the following:

- (a) review and evaluate the nature of any proposed Community Conservation Area;
- (b) accurately identify the area to be included in any proposed Community Conservation Area;
- (c) verify rights and interests in land that is to be included in the proposed Community Conservation Area;
- (d) identify and evaluate the conservation, protection and management options proposed.

### **37. Registration of Community Conservation Areas**

- (1) If custom landowners agree to the formal protection of areas of biodiversity significance, these areas may be registered by the Director as Community Conservation Areas.
- (2) Before registering a Community Conservation Area, the Director must ensure that:

- (a) the objectives of the proposed Community Conservation Area are identified, and are in accordance with sound conservation practices; and
  - (b) the boundaries of any proposed Community Conservation Area are accurately identified; and
  - (c) consent and approval are obtained from all persons having rights and interests in any land that is to be included in the proposed Community Conservation Area; and
  - (d) an appropriate conservation, protection or management plan is developed for the area to ensure the achievement of identified conservation objectives.
- (3) If the Director is satisfied that the requirements of subsection (2) have been met, he or she may register the proposed Community Conservation Area as a Community Conservation Area in the Environmental Registry, and issue a certificate of registration to the landowners.

**38. Amendment to registered areas**

- (1) A landowner may, at any time, apply in writing to the Director for a determination to do all or any of the following:
- (a) cancel the registration of a Community Conservation Area, or any part of such area;
  - (b) amend any established conservation, protection or management plan;
  - (c) modify any area of the registered Community Conservation Area.
- (2) Upon receiving an application from a landowner, the Director must consult with the landowner and other interested parties before determining the application.
- (3) If the registration of the Community Conservation Area is cancelled, the Environmental Registry must be amended accordingly.
- (4) If any amendment is made to a Community Conservation Area, a new certificate of registration must be issued and the Environmental Registry amended accordingly.
- (5) Before modifying any Community Conservation Area, the Director must ensure that:
- (a) the boundaries of any area to be added to or removed from a registered Community Conservation Area are accurately identified; and
  - (b) agreement is obtained from all persons having rights and interests in any land to be added to the registered Community Conservation Area.

**39. Effect of registration**

- (1) The landowners, or the management committee formed by the landowners or Director for the purpose, is responsible for the development and implementation of any conservation, protection or management plan established for a registered Community Conservation Area.
- (2) The Director may provide technical or financial support to the landowners or any such management committee for the purpose of developing or implementing an appropriate conservation, protection or management plan.
- (3) If a registration is cancelled under sections 38 or 40, the Director must provide no further technical or financial support to the landowners.

**40. Deregistration if plan not implemented**

If the conservation, protection or management plan for a Community Conservation Area is not implemented within the time agreed with the Director at the time of registration, he or she may, by notice in writing, cancel the registration of that Community Conservation Area and must remove it from the Environmental Registry.

**PART 5 - OFFENCES**

**41. Offences**

A person who:

- (a) provides false or misleading information, including any false or misleading report, under any requirement of this Act; or
- (b) hinders or obstructs an officer or any person empowered to carry out any function or duty under this Act; or
- (c) fails to give all reasonable assistance to any officer or any person empowered to carry out any function or duty under this Act; or
- (d) contravenes a term or condition of an approval, permit or notice issued under this Act; or
- (e) contravenes or fails to comply with any regulation, direction or order made under this Act; or
- (f) contravenes any term or condition of a registered community conservation area;

is guilty of an offence punishable on conviction to a fine of not more than 1,000,000 vatu or to imprisonment for a period of not more than 2 years, or to both.

**42. Continuing offence**

Where an offence under this Act is committed or continues on more than one day, the person who committed the offence is liable to be convicted for a separate offence for each day on which the offence is committed or continues.

**PART 6 - MISCELLANEOUS**

**43. Appeal to the Supreme Court**

(1) A person may appeal to the Supreme Court against any decision made by the Minister or Director to do all or any of the following:

- (a) to require an EIA under section 17;
- (b) to reject an application under section 23 or section 34;
- (c) to impose terms and conditions on any approval given under section 23 or section 34;
- (d) to issue a direction under section 26;
- (e) to make a decision prescribed by the regulations as a decision in respect of which an appeal can be made.

(2) An appeal must be brought, by originating application, not more than 28 days after the date on which the appellant is notified of the decision appealed against, or within such further period as the Supreme Court may allow.

(3) The Supreme Court may:

- (a) confirm, reverse or modify the decision appealed against, and make such orders and give such directions to the Minister, Director or Council as may be necessary to give effect to the Court's decision; or
- (b) refer the matter back to the Minister, Director or Council with directions to reconsider the whole or any specified part of the matter.

**44. Protection of officers etc**

An individual is not liable to an action or other proceeding for damages for or in respect to an act done or omitted to be done in good faith in the exercise or performance, or purported exercise or performance, of a power, function or duty conferred on him or her by this Act.

**45. Regulations**

(1) The Minister may make regulations to give effect to the purposes and provisions of this Act, including for all or any of the following:

- (a) to establish criteria for the licensing of environmental practitioners and environmental laboratories or analytical facilities;
  - (b) to prescribe and promote standards, guidelines or codes of environmental practice to give effect to any requirement under this Act;
  - (c) to establish alternate dispute resolution processes for resolving environmental disputes, including the prescribing of criteria for the appointment of qualified persons to act as a mediator, arbitrator or facilitator;
  - (d) to provide for the variation of any environmental assessment procedure;
  - (e) to prescribe fees and charges in respect of any application made or service provided under this Act - including for the purpose of expert review of applications;
  - (f) to control the taking or use of specified species;
  - (g) to provide for the registration of Community Conservation Areas;
  - (h) to establish conditions or model agreements for bioprospecting.
- (2) The Minister may make regulations with other Ministers, including for the purpose of any or all of the following:
- (a) regulating the environmental effects of:
    - (i) the importation and transportation of hazardous substances;
    - (ii) the proposed introduction of foreign organisms;
    - (iii) pests and weeds;
    - (iv) waste management;
    - (v) air and water pollution;
  - (b) regulating the harvesting of marine resources;
  - (c) providing for the containment, isolation, seizure, transportation, safe-keeping or disposal of any species of wild flora or fauna.

**46. Commencement**

This Act commences on the date of its publication in the Gazette.

**Table of Acts**

Environmental Management and Conservation Act No. 12 of 2002. Assented to 31.12.02.  
Date of commencement, 10.03.03. (ref. Gaz # 6, 10.03.03)

## Clarification of the Nomination of "Chief Roi Mata's Domain"

### A response to ICOMOS

The Vanuatu Cultural Council welcomes this opportunity to respond to the issues raised by ICOMOS following the field evaluation of the nominated Property of "Chief Roi Mata's Domain". In its letter GB/2008/C 1280 of 7 December 2007, ICOMOS identifies two broad areas of concern:

1. Clarification of the boundaries for those areas currently nominated.
2. Consideration of the scope for inclusion of a larger area for the nominated core zone.

In addition, questions about the status and implications for the nomination of two commercial leases have been raised. Each of these issues is addressed in this note of clarification. A memorandum to the World Heritage Centre on proposed revisions to the boundaries of Chief Roi Mata's Domain is also attached, containing two maps which are referred to here.

#### 1. Clarification on Areas Currently Nominated

##### Artok Island

The entire area of Artok Island, together with its fringing reef, is being nominated as a core zone (see Figure 1). The integrity of Artok rests on the concept that the entire island, and not just the burial site, is subject to the traditional *tapu* prohibition placed on the island following the death and burial of Roi Mata. The original colonial era protection ordinance covered only the area of the burial site, and this may be the source of confusion about the extent of the nominated core zone. The proposal to nominate the entire site and its reef is clearly understood and supported by the local community, which retains traditional rights to the island's reef and terrestrial resources.

#### 2. Consideration of Larger Area for the Core Zone

As a guiding principle, the definition of areas of Chief Roi Mata's Domain as lying within the "core" or nominated Property zone has been restricted quite tightly to the three principal sites: Artok Island, Fels Cave and Roi Mata's personal enclosures at Mangaas. These three sites constitute the core physical locations of the Roi Mata legend, and contain the material or archaeological proofs that largely substantiate the legend. The conservation goal for these three sites is one of near-complete preservation, with very strict restrictions on access, development and use. While traditional harvesting of marine resources, and fruits, nuts and other terrestrial resources within the core locations is envisaged, gardening or forest clearance is not permitted.

In a living and continuing landscape, in which a growing population continues to develop both traditional and modern forms of livelihood, it is not feasible to restrict activities in this way over a significantly larger area. The members of the Lelepa-Mangaliliu community, whose knowledge and support are integral to the values and

### **3. Commercial Leases**

#### Commercial Lease over Artok Island

There is still universal opposition to the long-standing Rural Commercial Lease on Artok Island amongst the Lelepa and Mangaliliu communities, and from the Vanuatu National Museum and Cultural Centre, the Shefa Provincial Government and the Vaturisu (Efate Council of Chiefs). The consent of these groups would be required by the Vanuatu Investment Promotion Authority in order to approve any applications for development on the island, and there is thus no foreseeable threat posed by the lease to the integrity of the island's Outstanding Universal Values.

While the Nomination document for Chief Roi Mata's Domain reported that the Artok Island lease had been revoked in late 2005, legal issues surrounding the right to compensation of the Australian investor holding the lease have yet to be resolved finally. A recent meeting of relevant government Ministers and Directors-General, together with representatives of the Vanuatu National Museum and Cultural Centre, has resolved that the Vanuatu Government should acquire the island, paying compensation both to the investor and to the customary owners. All rights of the customary owners bar that of alienation of the property through lease will continue to be respected, but the Republic of Vanuatu will hold the island of Artok as public property.

The final decision of the Ministers on the scale of compensation has been delayed due to individual absences, but is anticipated for March 2008. This should complete the process of the revocation of the lease, and ensure the long-term future integrity of Artok Island. The Vanuatu National Cultural Council will undertake to promptly inform ICOMOS and the UNESCO World Heritage Centre of further developments in this process.

#### Aquarium Farming

Two recent forms of marine resource development have occurred within the proposed core zone of the nominated property. The first venture involves a recently initiated Japanese Government-funded project to restock rare species formerly common to the Lelepa region (Trochus, Green Snail and Giant Clam) through a program of out-planting. This program is being conducted within the framework of customary marine tenure, with the full involvement and assent of the local chiefs. The restocked species are subject to restrictions or tabu amongst the local communities. This program should be seen as a management enhancement initiative, both augmenting the powers of traditional customary tenure and other practices, and contributing substantially to the natural values of the nominated property.

The second development is aquarium trade collection or harvesting (not farming) by the United States-owned company Sustainable Reef Resources (SRS). This venture, which involves the occasional harvesting of selected species, has been the subject of annual leases or access agreements contracted directly between local chiefs and SRS. However, the harvesting has been poorly monitored by the responsible government authorities and has attracted considerable criticism from local communities. These leases have not been renewed for 2008, and the chiefs have indicated that, with the Japanese re-stocking program in place, they have no plans to renew the SRS agreements in the future.



## Revisions to the Boundaries of Chief Roi Mata's Domain

At the invitation of the World Heritage Centre, which has drawn attention to limitations in the existing definition of boundaries for the nominated property Chief Roi Mata's Domain (CRMD), the following notes and maps outlining a series of minor revisions to those boundaries have been prepared.






Figure 1, attached to this document, now revises and replaces Figure 1.1 in the CRMD Nomination File. It contains the following revisions:

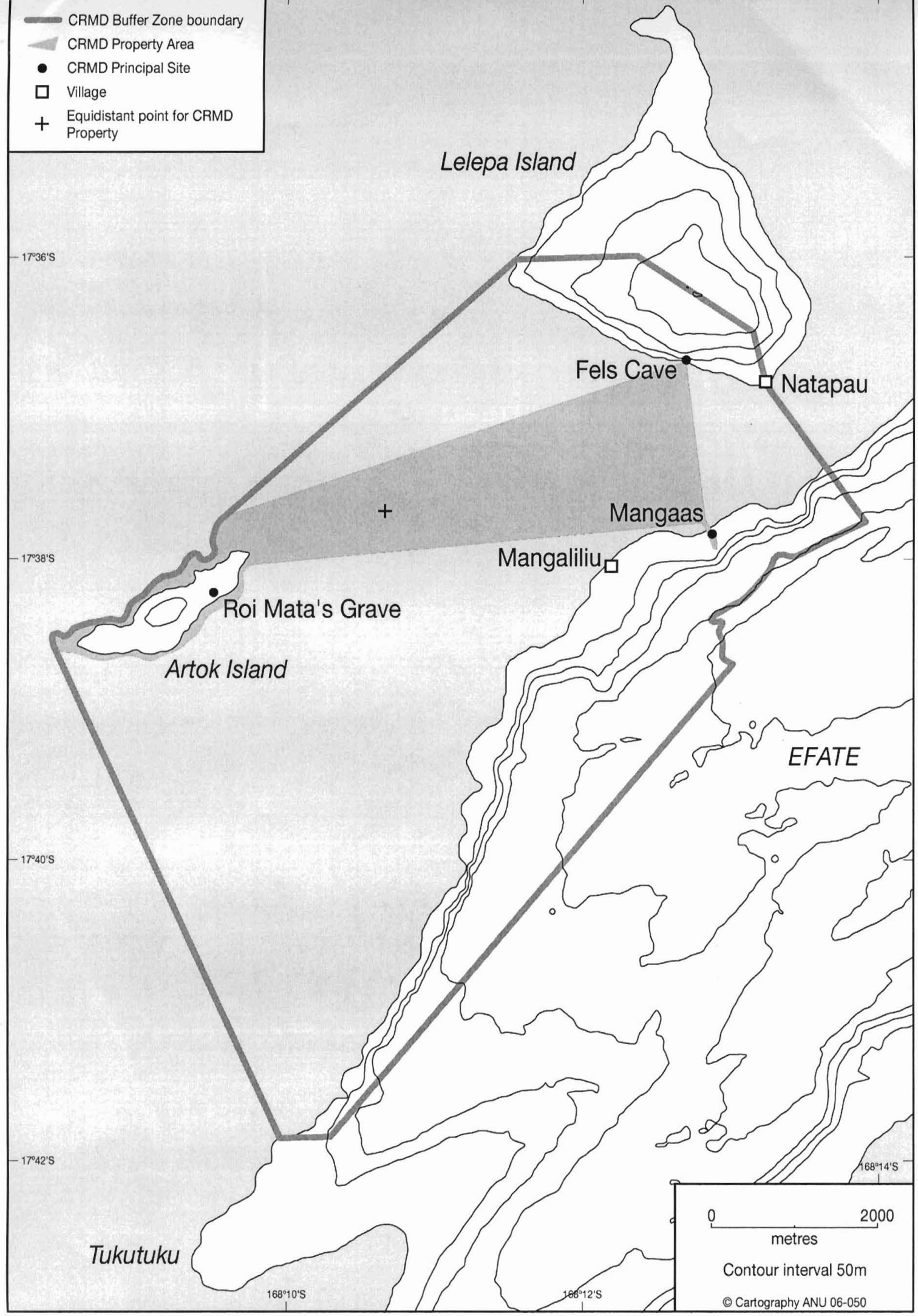
### Property Boundaries

1. The entire area of Artok Island, together with its fringing reef, is included within the core nominated area.
2. Precise corridors and boundaries have been defined for the principal sites of Mangaas (on mainland Efate) and Fels Cave (on Lelepa Island). At Mangaas, the property boundary consists of a corridor extending from the core inland area of the site down to the beach and out to the edge of the fringing reef, where the reef passage used by Chief Roi Mata is still clearly marked by large coral outcrops. At Fels Cave, the corridor extends from either side of the mouth of the cave down to the beach. Details of these boundaries are illustrated in the inset maps in Figure 2.
3. The marine boundaries of the CRMD Property now extend from the reef and beach limits of the principal sites of Mangaas and Fels Cave in direct lines to the fringing reef around Artok Island, which defines the property boundary in this portion of the property.
4. A new equidistant point has been calculated for the CRMD Property, at:  
E 168° 10' 39.79"  
S 17° 37' 41.05"
5. The total area of the CRMD Property is now calculated at 886.31 ha.
6. Precise coordinates for the CRMD Property boundaries are located in Figure 2 and listed in Schedule 1 (Points 1, 12, 13-26).






### Buffer Zone Boundaries

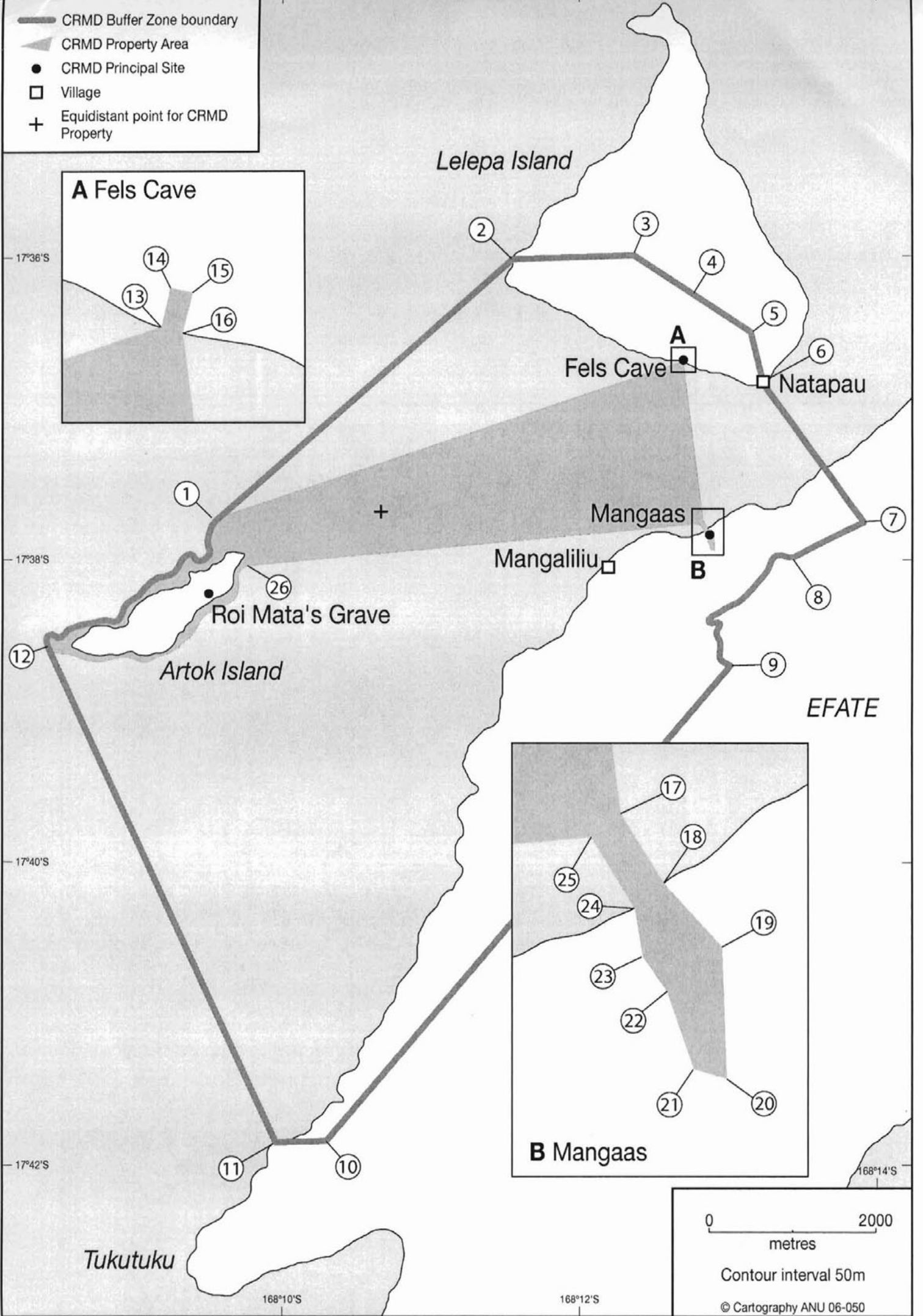
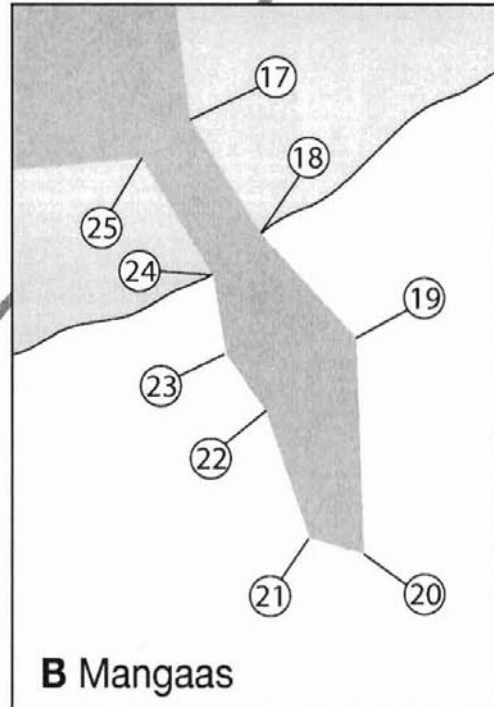
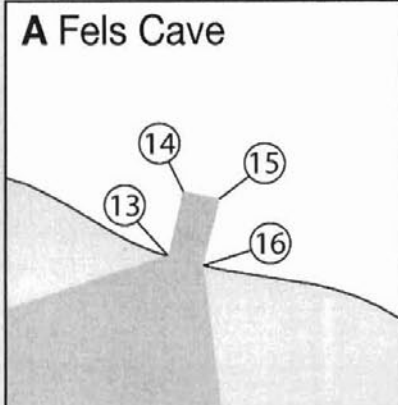
1. The Buffer Zone has been slightly modified to allow for the provision of more precise coordinates for its boundary.
2. The redefined Buffer Zone extends from the fringing reef of Artok Island at Point 1 to Lelepa Island at Point 2, and across the peak of Lelepa Island at its highest point (Point 4), down to the village of Natapau at Point 6, and then directly in a line across the sea to the Efate mainland at Point 7. From there, it intersects the round-island road at Point 8, following the route of the road to Point 9, and then tracing a straight line at the top of the cliff behind Mangaliliu Village to Point 10, descending to the coast at Point 11, and extending out to the fringing reef of Artok Island at Point 12, before following the outer limits of the reef to complete the boundary at Point 1.
3. Precise coordinates for the CRMD Buffer Zone boundaries are mapped in Figure 2 and listed in Schedule 1 (Points 1-12).

-  CRMD Buffer Zone boundary
-  CRMD Property Area
-  CRMD Principal Site
-  Village
-  Equidistant point for CRMD Property



0 2000  
metres  
Contour interval 50m  
© Cartography ANU 06-050

-  CRMD Buffer Zone boundary
-  CRMD Property Area
-  CRMD Principal Site
-  Village
-  Equidistant point for CRMD Property



0 2000  
metres

Contour interval 50m

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