THAILAND Thungyai-Huai Kha Khaeng Wildlife Sanctuaries

II.1 Introduction

Year of Inscription 1991

Organisation Responsible for the Report

 Royal Forest Department (RFD) 61 Phaholyothin Rd., Chatuchak, Bangkok, 10900, Thailand

II.2 Statement of Significance

Inscription Criteria N ii, iii, iv

Statement of Significance

Proposed as follows:

"Thung Yai – Hua Khaeng is the largest area of legally protected forest in mainland SE Asia today, and is the core of a conservation area covering over

12,000 km2 [an area] large enough, and sufficiently undisturbed, to support truly natural communities of herbivores and predator species within this dry tropical ecosystem."

 The NP which largely incorporates two intact river systems and

> watersheds, is also at the junction of four bio geographic zones. The sanctuary contains a third of all terrestrial vertebrates in mainland SE Asia. 28 animal species are internationally threatened.

Status of Site Boundaries

- The buffer zones on the northern and southern borders of the property are well protected and would be appropriate for an extension of the current World Heritage boundary.
- There is also a proposal to include a disused mining complex named 'Pu Jur' as a National Wild Animals Reservation on the edge of the WH Site.



II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- All major development projects such as dams and road constructions in the area are suspended. No changes are foreseen.
- A comprehensive list of 146 ecological and taxonomic studies carried out at the site are attached. Two projects have also examined Karen indigenous knowledge of the fauna and flora.

II.4 Management

Administrative and Management Arrangements

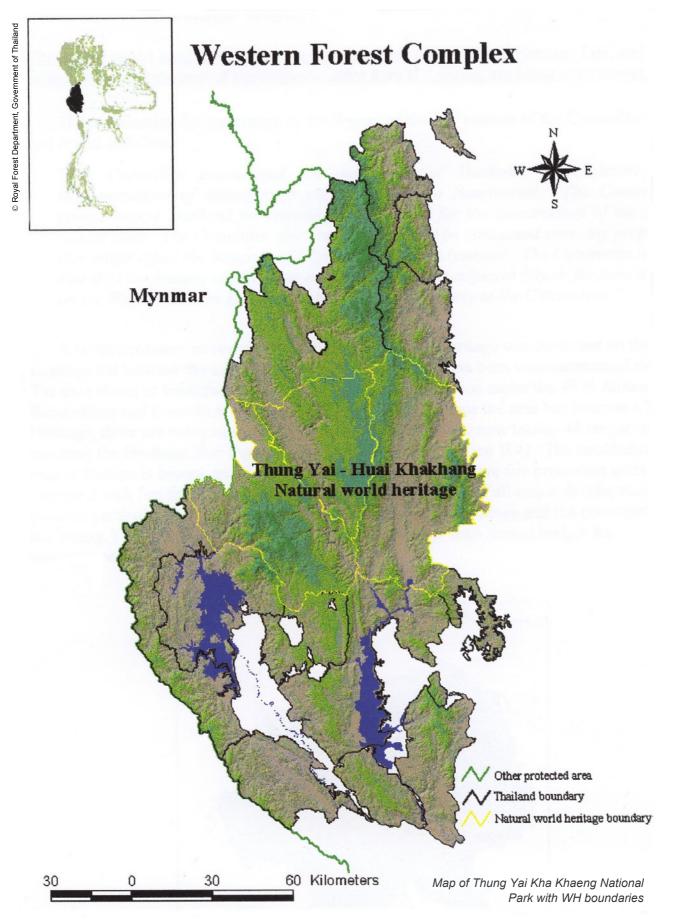
- The WH Site is made up of two wildlife sanctuaries (Thung Yai & Huai Kha Khaeng), the strongest level of protected area in Thailand.
- The 1960 Wild Animals Reservation & Protection Act (1992 Amendment) is the main legislative instrument used for protection of this WH Site.
- The Royal Forest Dept. has created a
 'World Heritage Nature Education
 Centre' with its own budget near the
 Huai Kha Khaeng in 2002.
- With assistance from the Government of Denmark, the RFD has also launched a project called the Western Forest Complex Ecosystem Management (WEFCOM) to promote (i) "science-based" adaptive management; (ii) a provincial conservation forum; and (iii) a 'management-zoning map' for the area.

Present State of Conservation

- The northern and southern borders of the property are contiguous to well-managed buffer areas, while, on the western side, borders with Myanmar are still virtually intact.
- The only worrying border is on the Eastern side where a narrow forest area (< 5 kilometres) buffers the WHS from urban development.
- Three villages were resettled to the fringe of the sanctuary in 1991 following WH inscription.

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State of Conservation of the World Heritage Properties in the Asia-Pacific Region

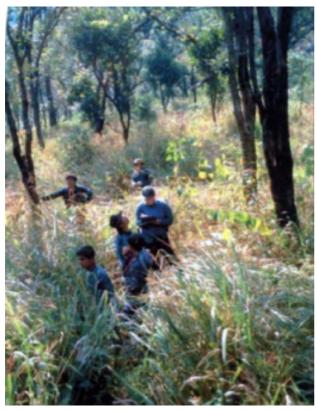


Staffing and Training Needs

- 551 staff (with 16 forest officers) were employed on the site in 2002.
- Training courses required for the staff include: (i) protection and patrolling; (ii) nature education; (iii) research & monitoring; (iv) use of GPS; (v) use of GPS and maps; and (vi) technical assistance.

Financial Situation

- The total annual budget for the WH Site in the last 5 years (1997-2002) ranged from US\$ 0.8-1.53 million.
- The wide budget range is due to the cost of constructing ranger stations and a Nature Education Centre in 1998.
- * International Assistance from WHF as follows: (i) 1998, US\$20,000 Technical Co-operation for reviewing fire arrangements at Thung Yai and Huay Kha Khaeng national parks.



Protection and patrolling: basic course training

Access to IT

• No information supplied.

Visitor Management

- 'World Heritage Day' is celebrated yearly on 9 December.
- There exists the Huai Kha Khaeng Nature Education centre as well as the 'Seub Kakhasathien Memorial' (named after the late architect of the WH nomination) for information distribution on world heritage matters.

- There are four nature trails in the protected area zone, but none in the core wildlife sanctuaries which do not allow entrance to tourists.
- No visitor management plan or visitor statistics were provided.

II.5 Factors Affecting the Property

Threats and Risks

- Increased poaching,
- Fires,
- Increased number of Karen villages in the area,
- Livestock raising,
- Illegal logging & forest product collection,
- Mining.

Counteractive Plans

- No emergency plan has been developed, but the "immediate goals are to reduce poaching, illegal logging and forest fires".
- If Karen villages inside the WH zone exert increasing demands on natural resources in the park, relocation will be conducted.
- The 44 established ranger stations also include 5 forest fire protection units (one with a helicopter and crew). In 1998, with only one fire unit, 75,788 ha of forest were burned, compared with some 6,639-32,496 ha between 2000-02 with 5 protection units.
- A proposal also exists to revoke a mining concession near the Thung Yai Wildlife Sanctuary in order to enhance the protection of the WH property.

II.6 Monitoring

Monitoring Arrangements

- Monitoring is divided into a 'coarse scale' of satellite interpretation on forest area changes (RFD and Kasetsart University), and a 'fine scale' including field surveys of wildlife inside Huai Kha Khaeng.
- In Thung Yai, the same research team has monitored the dynamics of ecosystem "resilience" following the relocation of Hmong villages.

Monitoring Indicators

- Indicators identified include: (i) large mammals such as gaurs, bantengs and tigers; (ii) forest area around Karen villages; (iii) baseline household survey information.
- A more systematic monitoring system would ideally incorporate habitat suitability mapping; abundance of key species; and further land use change detection by satellite.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- World Heritage status has been used "for defending the area from some development projects such as road construction proposals."
- Planning and ecosystem management should in the future be directly based on monitoring results.

* State of Conservation Reports

1998 Ext Bureau CONF.202/4 The Bureau was informed that IUCN had reported severe damage to the site by fires of anthropogenic origin that had affected Thailand and other countries in South-East Asia. It was pointed out that local people started fires to clear farmland and fields adjacent to protected areas to enhance pasture and mushroom production. Forest fire prevention and the greater involvement of local people in the management of the site was therefore identified to be a major management issue by experts who visited Thungyai-Huai Kha Khaeng as part of a WH workshop hosted by Thailand in January 1998.

The Bureau was informed that the Chairperson had approved a sum of US\$ 20,000 for a project submitted by the National Committee for the Protection of the World Heritage of Thailand, for research, training and raising awareness of local people on forest fires. The project foresaw the implementation of joint activities by site staff and representatives of local communities in forest fire prevention and control during the dry season. A representative of IUCN pointed out that it's Forestry Programme initiative in Asia would explore possibilities to assist the site.

1998 Committee CONF.203/8rev The Committee requested the Centre, IUCN and the State Party to co-operate to ensure the timely implementation of a forest fire management project in the site, and to elaborate a policy to solicit the co-operation of local people. The Committee invited the State Party to submit a report on the outcome of fire management practices to be tested out during the dry season.

1999 Bureau CONF.204/5 The Bureau was informed that the Delegate of Thailand had submitted a report to the 1998 Committee session which noted that the fires had only damaged a small part of the site, and were integral to the ecology of the dry dipterocarp forests.

1999 Committee CONF.209/14 The Delegate of Thailand and IUCN indicated that they would report on the fire-management policy of the site at the time of the 23rd extraordinary session of the Bureau.

2000 Committee CONF.204/10 The Committee was informed that the State Party had submitted its final report on the fire-management project in August 2000, which had been transmitted to IUCN for comments.