



United Nations
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The Protection of the
Underwater Cultural Heritage

INTRODUCTION

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Development of the Regional Capacity Building Programme on Underwater Cultural Heritage



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INTRODUCTION

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INTRODUCTION

Authors Ricardo L. Favis, Martijn R. Manders and Christopher J. Underwood

The Development of the Regional Capacity Building Programme on Underwater Cultural Heritage



Welcoming banner from the First Foundation Course on Underwater Cultural Heritage. © UNESCO/Takahiko Makino

Background

At the time when the Convention on the Protection of the Underwater Cultural Heritage was adopted by the UNESCO General Assembly in 2001, maritime archaeology was a relatively new discipline in Asia and the Pacific. Therefore, it was no surprise that during the UNESCO Asia-Pacific Regional Workshop on the 2001 Convention on the Protection of the Underwater Cultural Heritage (Hong Kong, SAR China, November 2003), the delegates identified the urgent need for a regional capacity-building programme to prepare them for the ratification of the Convention and to enable the effective implementation of the Convention in their countries. An offer by the Sri Lankan delegation to host a regional field training centre (hereafter referred to as the Centre) within the precinct of their Maritime Archaeology Unit at the World Heritage Site of Galle, Sri Lanka was welcomed and accepted.

In response, UNESCO Bangkok formulated a project entitled 'Safeguarding the underwater cultural heritage of Asia and the Pacific: building regional capacities to protect and manage underwater archaeological sites through the establishment of a regional Centre of Excellence field training facility and programme of instruction'. The regional training programme aims to embed the capacity-building and human resource development through the participation of site managers and national experts nominated by the competent national agencies responsible for safeguarding underwater cultural heritage. Moreover, beneficiaries are expected to share the skills and knowledge acquired from their training with their pool of national experts in their home countries.

The development goals towards which the regional project contributes are: (a) the protection of underwater cultural heritage; and (b) fostering peace and social cohesion among participating Member States. The protection of underwater cultural heritage also has an important economic aspect, considering that tourism may develop around underwater sites if properly managed and interpreted in on-site museums.

Through the establishment of a Centre, the project aims to achieve the following objectives:

- 1 Build regional capacity in the protection and management of underwater cultural heritage through professional training in field techniques on underwater archaeological site inventory and mapping, non-invasive techniques of site identification, inventory and investigation, museology techniques, and site monitoring and protection according to international professional standards. The application of the provisions of the Annex to the Convention is particularly stressed.
- 2 Provide an effective networking platform among partner Member States by encouraging close collaboration and dissemination of best practices, thereby promoting regional cooperation through exchange of information on the conservation and management of a shared heritage.
- 3 Prepare Member States in the ratification and implementation of the 2001 Convention and its Annex.

With the approval and funding support of the Royal Government of Norway, the project started to be implemented in March 2008 with a training course for Sri Lankan archaeologists and conservators to prepare them to be the future trainers of trainees coming from the region.

In April 2008, a Project Steering Committee Meeting was convened in Galle, Sri Lanka to decide on the project implementation strategy. The Committee decided to implement the project in the form of Foundation Courses and Advanced Courses on specialized topics. Within the approved duration of the project, two Foundation Courses and two Advanced Courses were foreseen to be organized. The Committee also planned to organize the first Foundation Course in October 2008. After the committee meeting, a training curriculum began to be developed and efforts were made to locate shipwreck sites in southern Sri Lanka that would be used for the practical components of the fieldwork.

However, despite the interest and commendable effort of the Sri Lankans, the first Foundation Course was postponed due to domestic difficulties. As these issues did not improve sufficiently during the following months UNESCO decided to find a new location for the training centre.

1 Thailand as Host to the Regional Field Training Centre

The Underwater Archaeology Department (UAD) of the Fine Arts Department of Thailand was approached to discuss the possibility of transferring the venue of the Centre to Thailand. The facilities and diving equipment of the UAD were found to be more than adequate to support the regional training activities. The Director of the UAD expressed his interest and enthusiasm to host the Centre, using the department's human and technical resources. Given the positive response, UNESCO sought the approval of the Government of Norway donor to change the venue of the Centre to Thailand, which was granted.

In May 2009, the Government of Thailand through its competent authority, the Fine Arts Department of the Ministry of Culture, agreed to host the Centre within the infrastructure of the UAD in Chanthaburi, Thailand, 250 kilometres away from Bangkok where the UNESCO office is located.

As the venue of the Centre, Thailand offers many advantages, as follows:

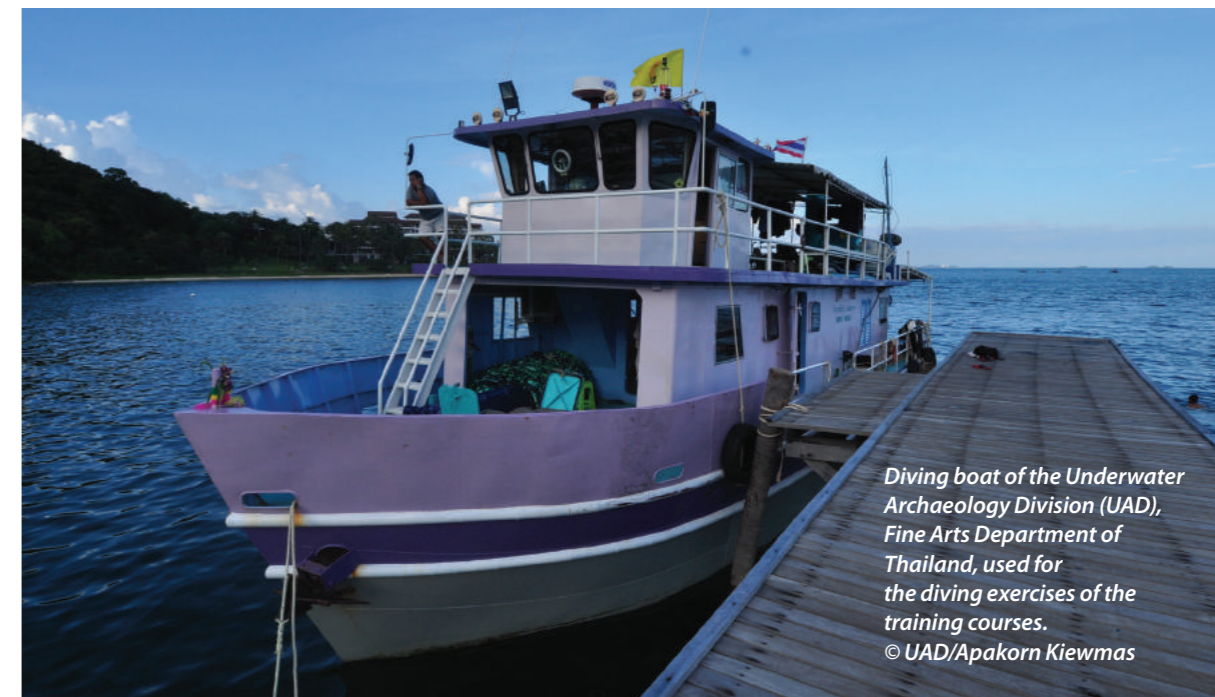
Accessibility: Thailand is centrally located in the Asia-Pacific region, thus reducing international transport costs of students to attend training courses. Its excellent road network facilitates local transfers between the airport in Bangkok, the Centre and coastal locations of field components of training courses. The UNESCO Asia-Pacific Regional Office is also located in Bangkok, thereby facilitating project supervision and monitoring.

Technical expertise and resources: The UAD has a professional staff of two maritime archaeologists and a technical diving team of ex-navy personnel. Since 1974, the UAD has had a long experience in underwater archaeology and collaborated closely on field surveys, scientific investigation/excavation and training activities with the Royal Thai Navy, the Regional Centre for Archaeology and Fine Arts of the South-East Asian Minister of Education Organization (SEAMEO-SPAFA) and the Faculty of Archaeology of the Silpakorn University based in Bangkok, Thailand. Furthermore, the UAD has never dealt with commercial enterprises in shipwreck excavation. The UAD is well equipped with surface supply equipment, scuba, trimix and rebreathers. It also has a newly commissioned diving vessel equipped with a rigid inflatable support boat, decompression chamber, adequate communication facilities and other equipment needed for underwater archaeological activities.

Logistics: The Fine Arts Department has provided a building as a venue for the Centre. It is conveniently located near the mooring place of the UAD diving vessel by the shore of the Chanthaburi River. The Centre has a fully equipped lecture room and accommodation facilities for students and trainers. It is also located near the UAD offices and the National Maritime Museum. Moreover, a modern naval hospital in nearby Pattaya provides medical care, if required by students during their field diving exercises.

Underwater cultural heritage sites: From 1974 to 2008, fifty-two shipwreck sites within Thai territorial waters have been identified and recorded. Among them, fourteen shipwrecks have been scientifically excavated by the UAD, providing a significant knowledge base and material culture for use by the Centre.

ICOMOS-ICUCH mobilized Martijn Manders to assist in the project implementation in Thailand. As an initial step, Mr. Manders alongside the UAD team conducted a survey of shipwreck sites in July 2009 to identify site(s) to be used for the practical field component of training courses. The Mannok shipwreck (also known as the Ruela Mail) was selected. It is a steamboat located at a depth of 20 metres near Mannok Island, Kleng District in the Rayong Province, an hour away from the venue of the Centre. The diving season of the selected site is from October to April, thus the First Foundation Course was organized from the 26 October to 4 December 2009.



Diving boat of the Underwater Archaeology Division (UAD), Fine Arts Department of Thailand, used for the diving exercises of the training courses.
© UAD/Apakorn Kiewmas



The Regional Field Training Centre for Underwater Cultural Heritage in Chanthaburi Province, Thailand.
© Christopher J. Underwood

2 Development of the Training Courses

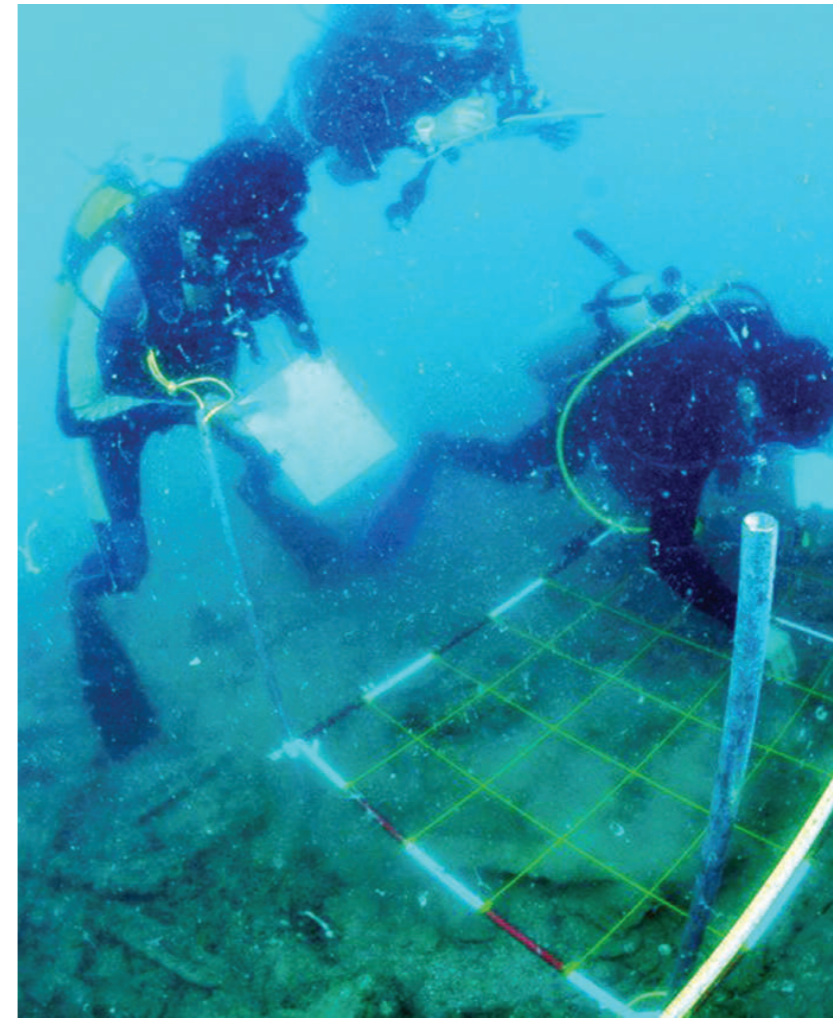
The Foundation Course aims to bring national experts from different academic backgrounds and varying experience in underwater cultural heritage to a common level of understanding about the multi-disciplinary nature of maritime archaeology. Considering that the target students often have government jobs which they cannot leave for an extended period of time, and given the complex nature of maritime archaeology, the project proponents decided on a six week duration for the Foundation Course. The course was designed to cover four weeks of intensive classroom and practical sessions on land plus two weeks of field work on underwater survey techniques at the selected shipwreck site.



Lecture on metal shipbuilding technology by Christopher Underwood during the Third Foundation Course (February to March 2011) © UNESCO/Montakarn Suvanatap



Practical exercise on material culture analysis during the Third Foundation Course. © UNESCO/Montakarn Suvanatap



Underwater survey of the Ruea Mail site during the field component of the Foundation Course, Mannok Island, Rayong Province, Thailand. © UAD/Apakorn Kiewmas



BELOW: Recording ship construction details of the Ruea Mail site, Mannok Island, Rayong Province, Thailand. © UAD/Apakorn Kiewmas

Through lectures, practical sessions and field work, students are introduced to the 2001 Convention and its Annex, and trained on the basics of a number of subject areas, including: maritime archaeology, site significance, material culture analysis, finds handling and conservation, management of underwater cultural heritage, *in situ* preservation and topics related to the regional context, such as Asian ceramics and Asian shipbuilding technology.



The Mannok shipwreck, Mannok Island, Rayong Province, Thailand. © UAD, Thailand

Advanced Courses are designed to train students on specific topics in more detail, using state of the art technologies and latest developments. Based on the recommendations from students of earlier Foundation Courses, a ten-day Advanced Course on the Use of Geographic Information System (GIS) in the Management of Underwater Cultural Heritage was organized in September 2010, followed by an Advanced Course on *In Situ* Preservation of Underwater Cultural Heritage in December 2011. The Advanced Courses were facilitated by international experts who have extensive experience in their field of expertise.



The Advanced Course on the use of a Geographic Information System (GIS) in the management of underwater cultural heritage (September 2010). © UAD/Apakorn Kiewmas

Monitoring the site for changes after installation of the artificial seagrass. During the Advanced Course on *In Situ* Preservation (October 2011). © UAD/Apakorn Kiewmas



3 Development of the Curriculum

The curriculum and training units for the Foundation Course have evolved over time. The curriculum of the Foundation Course started to be developed in late 2008 by two experts representing ICOMOS-ICUCH and the Nautical Archaeology Society (NAS) in the Project Steering Committee. Their initial concern was to design a curriculum that aimed to train students from different academic backgrounds and levels of professional experience and to bring them to a common understanding of the complex nature of maritime archaeology within a limited duration of six weeks. This entailed the identification and selection of topics according to their relative importance in understanding underwater archaeology and how the 2001 Convention and the Rules of its Annex are applied in the proper safeguarding and management of underwater cultural heritage.

Given the diverse backgrounds of the students, it was decided to begin the Foundation Course with the Introductory and Part I training units developed by NAS on Foreshore and Underwater Archaeology (a license to use the NAS training units was secured for the Centre).

During the first Foundation Course, the trainers were requested to develop the training material for the topics assigned to them using their knowledge and experience, building upon what was developed earlier by the representative of ICOMOS-ICUCH. After the completion of the initial training course, feedback from the students and trainers was evaluated and used to improve the curriculum for the succeeding Foundation Courses. Some training units were enhanced further with the knowledge and experience of other expert trainers who were brought in to replace those who were not available to teach during the succeeding courses.

The delivery of training units was dictated by the logical order of topics, with each topic building upon the knowledge gained from the previous ones. The first week of the Foundation Course started with lectures on the 2001 Convention and the Rules of its Annex, followed by the Introductory and Part I NAS training units on Foreshore and Underwater Archaeology. The second week was focused on topics such as site significance, material culture analysis, Asian shipbuilding technology, finds handling and conservation, which are needed by the students to prepare them for their field survey exercises on an underwater archaeological site scheduled for the coming two weeks. The last two weeks were devoted to topics that enabled the students to prepare a management plan for the surveyed shipwreck site, which was presented during the closing ceremony of the training course. The order of training units was slightly altered over the first three Foundation Courses to suit the availability of selected trainers.

Practical exercises were group oriented. The organizers therefore scheduled a free day per week to provide students with time to relax and reflect, and organized social events and weekend tours to heritage sites to provide opportunities for team building among students. These arrangements facilitated group exercises during the training and enabled the graduates to network after their training.

4 This Training Manual and How to Use It

This manual aims to provide a consistent curriculum for Foundation Courses and a high standard of delivery of the training units. It also provides future trainers with a framework that enables them to create personalized presentations, practical sessions and assessments.

The manual is divided into eighteen units, one unit for each of the topics covered in the Foundation Course. The contents of each unit are:

- *Title of the unit*
- *Authors in the order of contribution*
- *Core knowledge of the unit*
- *Introduction to the unit*
- *Full text of the unit*
- *Unit summary*
- *Suggested timetable*
- *Suggested reading*
- *Teaching suggestions*
- *Additional information*

The units as presented in this manual are the result of the interaction between UNESCO, the trainers, students and the insight that was developed during the delivery of the first three foundation courses. This interaction resulted in the content of the units; the sequence of delivery of topics refined to maximize the educational benefits for the students. The curriculum presented here will continue to be used after the publication of this manual.

4.1 Assessment

The assessments on the performance of the students have been relatively informal and may take various forms, such as verbal questions to determine to what extent the lectures are assimilated by the students and to gauge their oral communication skills in responding to questions. Assessments are needed to provide a basis for future trainers to improve the structure of their presentations, thereby further enhancing the training units in future courses.

4.2 Criteria for the Selection of Students

In accordance with UNESCO protocol, notices regarding training courses are sent to the National Commissions for UNESCO of all Member States in Asia and the Pacific. In turn, the National Commissions are requested to notify concerned ministries and competent authorities, who in turn are requested to nominate qualified national experts to take part in the training courses.

To ensure that only qualified parties are nominated by the competent authorities, the following criteria for the selection of students for a Foundation Course are indicated in the official notice and on the nomination form attached to the notices.

Education: must have a college degree from a reputable academic institution.

Profession: must be an archaeologist in a scientific institution, a site manager of an underwater archaeological site, a conservator or college graduate with an interest in underwater cultural heritage and/or identified by competent authorities to play a lead role in the protection and management of underwater cultural heritage.

Commitment: must be involved in and committed to the safeguarding and proper management of underwater cultural heritage, in accordance with the principles of the 2001 Convention and the Rules of its Annex.

Diving qualifications: should have a minimum of fifty logged dives of which twenty dives should have been conducted under supervision by a recognized research/academic/scientific institution. They should have logged five dives deeper than 25 metres (considering the depth of the 20 metres depth of the Thai shipwreck used for the field training exercises).

Health: must be medically certified to be fit for diving. A medical certification from an established medical facility is required for a nominee/applicant to be considered eligible for selection.

Language skills: must have good comprehension, written and communication skills in English (nominees are required to submit proof of their English skills).

For qualified nominees who have not logged the required number of dives, the UAD was able to arrange for further dive training/experience prior to the start of the Foundation Course.

The criteria listed above should also be applied to the selection of nominees/applicants for an Advanced Course. Moreover, ideally nominees/applicants for an Advanced Course must have completed the requirements of a Foundation Course. In case the Advanced Course has field diving components, the nominee must have the requisite logged dives and be covered by diving insurance.

The majority of the students have met the above criteria, but in a few circumstances exceptions have been made to enable the participation of partner countries. In these situations additional diving training was provided by the UAD. In other cases non-divers have been assigned other relevant tasks during the field dive session.

4.3 Expert Trainers

The selection of trainers is essential in ensuring a high standard of delivery of training activities. A number of possible trainers should be identified well in advance, so that comparative assessments of the candidates can be made, and a shortlist of trainers identified. As an initial step, the *curricula vitae* of potential trainers may be obtained to provide information regarding their academic background, areas of expertise, work experience and publications, leading to the identification of topic(s) that each potential trainer would be capable of handling.

The selection of trainers may also depend on their availability to deliver their assigned training units during the dates specified by the training programme. In some cases, another trainer has to take the place of the selected trainer due to prior engagements, thus it is recommended that trainers are provided adequate time to make themselves available during the training period. Given the cost of bringing international trainers to the training venue, it is recommended that their contribution is maximized by assigning each of them two or more topics.

In general, the following requirements apply to the identification and selection of trainers for both the Foundation and Advanced Courses:

- Must be proven specialist in the assigned topic(s)
- Must have extensive experience in the protection and management of underwater cultural heritage, in accordance with the principles of the 2001 Convention and the Rules of its Annex
- Must have excellent communication, written and comprehension skills in English
- Must have prior teaching experience and the ability to deliver their training units in ways that are easily understood by the target students

The following expert trainers shared their expertise during the Foundation and Advanced Courses:

Karina Acton, Senior Objects Conservator, International Conservation Services, Australia.

Course(s) taught: The First Foundation Course (Finds Handling and Conservation)

Ross Anderson, President of the Australian Institute of Maritime Archaeology, Maritime Archaeologist of the Western Australian Museum.

Course(s) taught: The First and Second Foundation Courses (co-trainer in Practical Dive Session)

Will Brouwers, Educational programme development, Museum het Valkhof, Netherlands.

Course(s) taught: Advanced Course on the Use of GIS in the Management of Underwater Cultural Heritage

Somlak Charoenpot, Former Deputy Director General, Fine Arts Department, Thailand.

Course(s) taught: The First, Second and Third Foundation Courses (Museology)

Wim Dijkman, Project Leader, Hydrography, Ministry of Transport, Public Works and Water Management, Region IJssel Lake at Lelystad, Netherlands.

Course(s) taught: Advanced Course on the Use of GIS in the Management of Underwater Cultural Heritage

David Gregory, Conservation Scientist, National Museum of Denmark.

Course(s) taught: Advanced Course on *In Situ* Preservation

Martijn Manders, ICOMOS-ICUCH, Senior Maritime Archaeologist and Maritime Heritage Programme Leader of the Cultural Heritage Agency of the Netherlands; Lecturer at Leiden University, Leiden, and Saxxion University, Deventer, Netherlands.

Course(s) taught: The First, Second and Third Foundation Courses (Underwater Archaeological Resources, Managing Underwater Cultural Heritage, *In Situ* Preservation, GIS for Underwater Cultural Heritage, co-trainer in Practical Dive Session), Advanced Course on *In Situ* Preservation, coordinator and curriculum preparation for the Foundation Course

Bobby Orillaneda, Museum Researcher II, Underwater Archaeology Section, Archaeology Division, National Museum of the Philippines.

Course(s) taught: The Second Foundation Course (Asian Ceramics), The Third Foundation Course (Asian Ceramics and co-trainer in Practical Dive Session)

Charlotte Pham, Bursary of the Ecole Française d'Extrême Orient, Viet Nam/Brussels, Belgium.

Course(s) taught: The Third Foundation Course (Asian Shipbuilding Technology)

Sayan Prainchanjit, Dean of the Faculty of Archaeology, Silpakorn University, Thailand.

Course(s) taught: The First Foundation Course (Asian Ceramics), The Second Foundation Course (Public Archaeology and Awareness Raising)

Mark Staniforth, Director, Maritime Archaeology Programme, Faculty of Archaeology, Flinders University, South Australia.

Course(s) taught: The First Foundation Course (Significance Assessment, Desk-based Assessment, Material Culture Analysis and Archaeological Publication)

Christopher Underwood, International Development Officer, Nautical Archaeology Society, Argentina.

Course(s) taught: The First, Second and Third Foundation Courses (NAS Introduction and Part I; supervising trainer of Practical Dive Session)

Hans Van Tilburg, NOAA Office of National Marine Sanctuaries Regional Maritime Heritage Coordinator for Pacific Islands Region, Honolulu, Hawaii, USA, United States of America.

Course(s) taught: The Second and Third Foundation Courses (Desk-based Assessment, Significance Assessment and Archaeological Publication)

Erbprem Vatcharangkul, Director, Underwater Archaeology Division, Fine Arts Department of Thailand.

Course(s) taught: The First, Second and Third Foundation Courses (Asian Shipbuilding Technology)

Andrew John Viduka, Assistant Director Maritime Heritage, Department of Environment, Water, Heritage and the Arts, Historic Heritage Division, Maritime Heritage Section, Australia.

Course(s) taught: The Second and Third Foundation Courses (Material Culture Analysis, Introduction to Intrusive Archaeology, Finds Handling and Conservation)

Ricardo Favis, Culture Programme Officer and Project Coordinator, UNESCO Bangkok Office.

Course(s) taught: The First, Second and Third Foundation Courses (Introduction to the 2001 Convention)

Manitapone Mahaxay, GIS Programme Officer, UNESCO Bangkok Office.

Course(s) taught: The First, Second and Third Foundation Courses (GIS for Underwater Cultural Heritage), Advanced Course on the Use of GIS in the Management of Underwater Cultural Heritage

Takahiko Makino, Abhirada Komoot and Montakarn Suvanatap, Course Administrators

5 Organization of Training Courses and Cost Considerations

The Foundation and Advanced Training Courses in Thailand were successfully organized at a reasonably low budget due to the facilities, technical resources and logistic support provided by the UAD, the main project implementing partner. The Centre has classroom and accommodation facilities for the students, resulting in a reduced subsistence allowance for students. The UAD has more than adequate diving equipment and a diving boat equipped with a new decompression chamber and communication facilities, which ensured safety and economy during the field diving exercises. The central location of Thailand in the region and the excellent road infrastructure reduced international and local transport costs of the students. The assistance provided to the students by the UAD technical diving team and a medical nurse on board the diving boat during field diving exercises maximized output and minimized injury among the students. More importantly, the proximity between the Centre and UNESCO Bangkok Office enabled closer project coordination, supervision and monitoring.

Organizing costs were decentralized to the implementing partner (UAD) under a service contract covering the following cost items:

- Project administration
- Project coordination and supervision
- Secretariat assistance and maintenance crew for the centre (fees for secretariat staff, security, janitorial, helpers)
- Subsistence allowance for support staff (drivers, technical divers, boat crew, secretariat staff) on the days they are involved in training activities
- Food for students (meals and snacks provided by a local caterer)
- Training materials and supplies (stationary, communication costs, electricity and water, supplies for diving equipment such as air compressor, diving gears, diving boat)
- Local transport of students (rental of transport vehicles, fuel for transport vehicles and diving boat)
- Other organizing costs

UNESCO Bangkok Office provided the students with the following:

- International plane tickets (most economical plane fares)
- Travel allowance
- Reduced daily subsistence allowance (excluding allowance for accommodation and meals)
- Other travel costs of students (visa fees, airport fees)

UNESCO Bangkok established consultant contracts with the international expert trainers, covering the following cost items:

- Consultant fees
- Cost of international plane tickets (most economical plane fares)
- Travel allowance
- Daily subsistence allowance for external consultants
- Other travel costs

To ensure the safety of students during field diving exercises, UNESCO Bangkok secured a one year membership and standard diving injury insurance coverage for students (without insurance coverage) from the Divers Alert Network (DAN), the only provider of diving insurance in Asia and the Pacific.

6 Project Achievements

Five training courses were successfully organized during the duration of the project funded by the Government of Norway, as follows:

- First Foundation Course (26 October–4 December 2009)
- Second Foundation Course (1 February–15 March 2010)
- Advanced Course on the Application of GIS in the Management of Underwater Cultural Heritage (20–29 September 2010)
- Third Foundation Course (14 February–26 March 2011)
- Advanced Course on In Situ Preservation of Underwater Cultural Heritage (19–26 October 2011)

Seventy site managers and national experts representing seventeen Member States from in Asia and the Pacific and Kenya, benefitted from the five training courses. The following chart shows the number of beneficiaries from each participating Member State.

Beneficiaries of the Underwater Cultural Heritage Training Programme

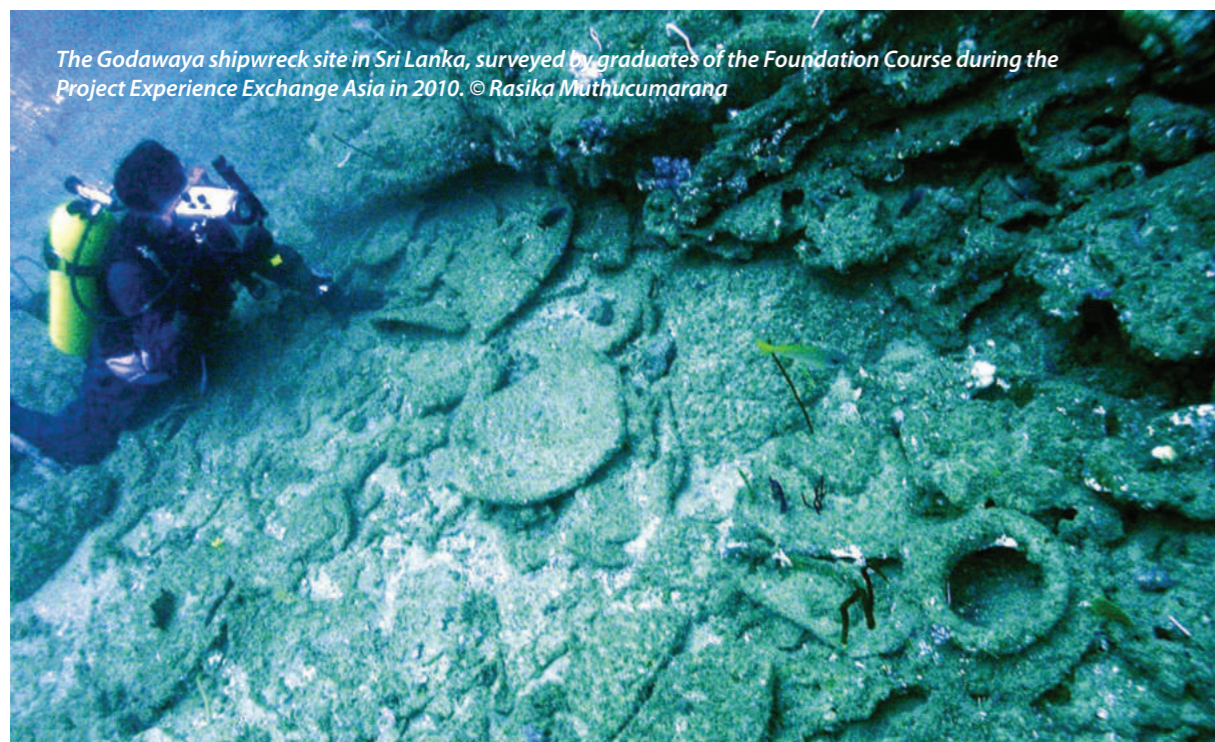
COUNTRIES	First Foundation Course	Second Foundation Course	Advanced Course on GIS for Underwater Archaeology	Third Foundation Course	Advanced Course on In Situ Preservation	TOTAL
Bangladesh		1	1*	1		2
Brunei Darussalam		3				3
Cambodia	1	1	1	2	1*	5
Fiji			1	1*		1
India			1	1		2
Indonesia	2	3	2	4	3*	11
Kenya				1	1*	1
Kyrgyzstan				1	1*	1
Lao PDR	2			2		4
Malaysia	2	2	1		2*	5
Pakistan		1	1		1*	2
Palau			1			1
Philippines	2	1	2	(1*) 2	1*	5
Singapore			1			1
Sri Lanka	2	3	2	3	2*	10
Thailand	4	3	2	3	(2*) 3	13
Viet Nam		1	2			3
TOTAL	15	19	17	(2*) 21	(14*) 15	70

* Number of students who completed the requirements of a Foundation Course and an Advanced Training Course. All students of the Advanced Course on In Situ Preservation are graduates of an earlier Foundation Course, with the exception of a member of the Secretariat who also participated in the training activities during earlier Foundation Courses.

A replica of the Ruea Mail Shipwreck featured in the international exhibition 'Saving Our Underwater Cultural Heritage' at Siam Ocean World, Bangkok, Thailand (August to October 2010). © UNESCO/Rojana Manowalailao



To bring the message on safeguarding underwater cultural heritage to a wider audience, UNESCO Bangkok Office organized the first ever UNESCO exhibition on global underwater cultural heritage in the Asia-Pacific region at the Siam Ocean World Bangkok from 16 August to 31 October 2010. The interactive exhibit featured underwater heritage scenes from around the world, a life sized replica of a Thai shipwreck, showcases of artefacts recovered from the seabed, special demonstrations of maritime



The Godawaya shipwreck site in Sri Lanka, surveyed by graduates of the Foundation Course during the Project Experience Exchange Asia in 2010. © Rasika Muthucumarana

archaeologists in action and various interactive play zones for children. The exhibit was viewed by an estimated 150,000 local and foreign visitors. Exhibit items are now part of the permanent exhibition of the National Maritime Museum in Chanthaburi, Thailand.

To encourage active networking and experience sharing among the graduates of our training courses, UNESCO and the Dutch Government supported the Project Experience Exchange Asia organized by the Central Cultural Fund of Sri Lanka in December 2010. Under the survey and research project, students conducted a non-intrusive survey on an ancient shipwreck, located at a depth of 31 metre in Godawaya, southern Sri Lanka. The shipwreck dates back to the first century, making it one of the oldest shipwrecks found in Asia. UNESCO sponsored the participation of one Malaysian and one Filipino, while the Dutch Government sponsored the participation of three Indonesians and one Indian. They joined the maritime archaeologists of the Maritime Archaeology Unit of Sri Lanka. All students including the team from the Maritime Archaeology Unit of Sri Lanka are graduates of the Foundation Course.

The project also supported the participation of five graduates of Foundation Courses during the Inaugural Asia-Pacific Regional Conference on Underwater Cultural Heritage, held in Manila, Philippines from 8-11 November 2011. Their participation enabled them to present academic papers regarding their maritime activities and exchange information and best practices with other international experts and practitioners. Supported by other sponsors, twelve other graduates of the Centre participated and presented papers. The seventeen graduates of the UNESCO training courses made a showing during the conference which attracted more than one hundred experts and site managers from all over the world. The proceedings of the conference have been published. (See: www.themua.org)

Being the first training courses on underwater cultural heritage that are regional in scope, the project has achieved high visibility not only within the Asia-Pacific Region, but beyond. As a result of the regional capacity-building programme, participating Member States have started to strengthen their existing underwater archaeology units or establish new units. Five graduates of the Foundation Courses have established the Underwater Archaeology Unit in Cambodia. Five beneficiaries from the National Museum of the Philippines have initiated collaborative projects with other government and academic institutions for a shipwreck management programme in the Philippines. Amjad Ali of Pakistan (Second Foundation Course) has submitted project documents on underwater archaeology to funding agencies. Using knowledge and skills learnt during the Third Foundation Course, Caesar Bitia of Kenya supervised an underwater cultural heritage impact assessment on an underwater fibre optic cable laying project and dredging of a harbor. Eko Triarso of Indonesia (Third Foundation Course) has mobilized a team to prepare a management and conservation plan for underwater archaeological resources in the Natuwa Waters in northern Indonesia. Chandraratne Wijamunige (Second Foundation Course) initiated the Project Experience Exchange Asia in Sri Lanka in December 2010, participated by graduates of earlier Foundation Courses from four countries. Beneficiaries working for the Malaysian Department of Heritage have launched an awareness campaign among divers and coastal communities. Nia Ridwan of Indonesia (Second Foundation Course) has conducted a survey of potential underwater archaeological resources to support the establishment of a Maritime Conservation Area in Bangka Belitung Waters, and a survey of a ship wrecked by a tsunami in Mentawai Waters. Other beneficiaries of the regional programme have sent their feedback on how they have improved their strategies in the protection and management of their underwater cultural heritage.

After the Norwegian funded project expires at the end of March 2012, the Fine Arts Department of Thailand has expressed its commitment to sustain the Centre over the long term and to nominate the Centre to be placed under the auspices of UNESCO as a Category II Centre in the near future. To realize these objectives, the Department shall explore long-term collaboration with the Association of Southeast Asian Nations (ASEAN), the Regional Centre for Archaeology and Fine Arts (SPAFA) of the

Southeast Asian Ministers of Education Organization (SEAMEO), Silpakorn University (Thailand) and other institutions worldwide to assist in future activities of the Centre. The Department plans to organize an annual Advanced Course on specialized topics and new maritime archaeology technologies and a Foundation Course every two years. To take advantage of the relatively low cost of organizing training programmes in Thailand, national and sub-regional training initiatives are welcome to arrange with UAD of Thailand for the use of the Centre's facilities and to avail of the technical support of the experienced team of UAD.

Considering the multi-disciplinary nature of maritime archaeology and given the limited knowledge and skills acquired by students during a six week Foundation Course, participating Member States are encouraged to support their expert's continuing education and training in established universities offering maritime archaeology courses, and to enable them to participate in joint underwater research and survey activities in other countries. Relevant national agencies are therefore encouraged to seek bilateral cooperation with countries with expertise in maritime archaeology and financial resources to sponsor the training of their experts.

Summary

This manual includes all topics taught by trainers during the first three Foundation Courses organized by UNESCO Bangkok Office, in partnership with the Underwater Archaeology Division of the Fine Arts Department of Thailand, ICOMOS-ICUCH, other institutions and international experts. The curriculum of the Foundation Course has evolved since 2008 when the representatives of ICOMOS-ICUCH and the Nautical Archaeology Society (NAS) to the Project Steering Committee initiated its development. This manual illustrates the quality of the training under the project supported by the donor Government of Norway. By using this manual, other training providers will benefit from the experience gained during the duration of the project. It is anticipated that this manual will continue to evolve as future expert trainers contribute their own experience and expertise in succeeding Foundation Courses.



Suggested Reading: Full List

- Gaur, A.S., Muthucumaran, R., Chandraratne, W.M., Orillandeda, B.C., Manders, M., Karunarathna, S., Weerasinghe, P., Dayananda, A.M.A., Zainab, T., Sudaryadi, A. Ghani, K.A.B.A., Wahjudin, J. and Samaraweera, N. 2011. Preliminary Assessment of an Early Historic (2000 years old) Shipwreck in Godawaya, Sri Lanka, *Bulletin of the Australasian Institute for Maritime Archaeology*. No. 35, pp. 9-17.
- Manders, M.R. and Underwood, C.J. 2012. UNESCO Field School on Underwater Cultural Heritage 2009-2011: Thailand Capacity Building in the Asian and Pacific Region. Tripathi, S. (ed.). *Maritime Archaeology*. New Delhi, Kaveri Books.
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