

**INFORMATION SHEET ON RAMSAR WETLANDS**  
**Had Chao Mai Marine National Park – Ta Libong Island Non-Hunting Area – Trang River Estuaries**

**1. DATE THIS SHEET WAS COMPLETED / UPDATED:**

14 August 2002

**2. COUNTRY:**

Thailand

**3. NAME OF WETLAND:**

Had Chao Mai Marine National Park – Ta Libong Island Non-Hunting Area – Trang River Estuaries

**4. GEOGRAPHICAL COORDINATES:**

7° 12' N - 7° 32' N and 99° 14' E – 99° 35' E

**5. ELEVATION:**

Sea level. Forested hills on Ta Libong Island and Had Chao Mai National Park rise to 311 m. and 432 m. respectively.

**6. AREA: (in hectares)**

66,313 ha

**7. OVERVIEW:**

Had Chao Mai Marine National Park – Ta Libong Island Non-Hunting Area – Trang River Estuaries comprises with three connected wetland ecosystems: riverine, estuarine and coastal wetlands. They locate in Trang Province consisting of many coastal wetland types such as mangrove, estuarine waters, sand beach, rocky marine shores, coral reef and seagrass bed.

**8. WETLAND TYPES:**

Marine – coastal: (A) (B) (C) (D) (E) (F) G H (I) J K Zk (a)

**Please now rank these wetland types by listing them from the most to the least dominant: A F I E B C D**

**9. RAMSAR CRITERIA:**

(1) (2) (3) 4 5 6 7 (8)

**Please specify the most significant criterion applicable to the site: Criteria 2**

**10. MAP OF SITE INCLUDED:**

Yes  No

**11. NAME AND ADDRESS OF THE COMPILER OF THIS FORM:**

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Royal Forest Department  
Paholyothin Road, Bangkok 90110, Thailand

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- Biological Resources Section

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## 12. JUSTIFICATION OF THE CRITERIA SELECTED UNDER POINT 9:

**Criteria 1 :** Had Chao Mai Marine National Park – Ta Libong Island Non-Hunting Area – Trang River Estuaries comprises of many wetland types such as mangrove forests, nypa forests, mud flats, sand beaches, coral reefs and seagrass beds. It is an example of a specific type of wetland ecosystem covering riverine, estuarine and coastal wetlands (Office of Environmental Policy and Planning, 2001).

**Criteria 2 :** Had Chao Mai Marine National Park – Ta Libong Island Non-Hunting Area – Trang River Estuaries supports at least 212 bird species, including critically endangered, endangered, vulnerable, and near threatened species as follows:

- near-threatened species : Malayan Night – Heron (*Gorsachius melanolophus*), Brahmin Kite (*Haliaster indus*), White – bellied Sea-eagle (*Haliaster leucogaster*), Grey-headed Fish-eagle (*Ichthyophaga ichthyactis*), Asian Dawitchee (*Limnodromus semipalmatus*), Pied Imperial Pigeon (*Ducula bicolor*), Nicobar pigeon (*Calaenas nicobarica*), Spotted Wood-Owl (*Strix seloputo*), Brown-winged Kingfisher (*Halcyon amauroptera*), Wreathed Hornbill (*Rhyticeros undulatus*), Oriented Pied Hornbill (*Antracoceros albirostris*), Great Hornbill (*Buceros bicornis*), Mangrove Pitta (*Pitta megarhyncha*), Edible-nest Swiftlet (*Aerodramus fuciphagus*) and Hill Myna (*Gracula religiosa*);

- endangered species : Chinese Egret (*Egretta alba*), Masked Finfoot (*Heliopais personata*), Nordmann's Greenshank (*Tringa guttifer*), Malaysian Plover (*Charadrius peronii*), and Roseate Tern (*Sterna dougallii*);

- critically endangered : Great Crested Tern (*Sterna bergii*), Chinese Crested Tern (*Sterna bernsteini*) and Black-necked Stork (*Ephippiorhynchus asiaticus*).

(Office of Environmental Policy and Planning, 2001).

The site also supports *Dugong dugon*, which is a critical endangered species of Thailand.

**Criteria 3:** Had Chao Mai Marine National Park – Ta Libong Island Non-Hunting Area – Trang River Estuaries supports many kinds of plant and animal species such as *Rhizophora apiculata*, *R. mucronata*, *Ceriops decandra*, *Xylocarpus granatum*, *X. moluccensis*, to maintain biological diversity in mangrove forests. It also supports many kinds of seagrass species such as *Thalassia hemprichii*, *Enhalus acoroides*, *Cymodocea serrulata* and *Syringodium isoetifolium* to maintain many coastal and marine species

At least 212 species of birds are recorded, including many of near-threatened species, vulnerable species, endangered species and critically endangered species as stated in No.18. At least 75 fish species are found. Most of them are economic species inhabiting in seagrass beds such as *Rastrelliger kanagurta*, *Stolephorus indicus*, *Lutjanus sp.*, *Sphyraena sp.*, *Scomberomorus sp.*, *Siganus canaliculatus*. Thirteen species of amphibians

and 39 species of reptiles are recorded (Office of Environmental Policy and Planning, 2001).

**Criteria 8:** Had Chao Mai Marine National Park and Ta Libong Island Non-Hunting Area support a large seagrass beds of 6.36 square kilometers and 6 square kilometers respectively. The seagrass beds are of significant importance to diversity of marine life, by providing shelters, feeding sites and residential sites for juvenile fishes and crustaceans as well as dugongs (*Dugong dugon*).

### **13. GENERAL LOCATION:**

Had Chao Mai Marine National Park – Ta Libong Island Non-Hunting Area – Trang River Estuaries locates in Trang Province. It is approximately 312 km. and 828 km. far from Phuket and Bangkok respectively.

### **14. PHYSICAL FEATURES:**

Had Chao Mai Marine National Park comprises areas of shoreline mountainous forests, sandy beaches, mud flats, water body and islands (Mook, Kradan, Wan, Chuek, Plin and Meng). The shoreline comprises mostly steep limestone mountains with Chong Chun, Kuan Merd Joon and Kuan Kway mountain ranges lying east of the northern part of the shoreline. These mountains are head watershed areas of several streams, which later combine to form Bang Luk canal before discharge into Trang River. There are also grasslands, evergreen forests, mangrove forests, nypa forests, beach forests and sandy beaches on the shoreline. The water body in the national park is 20 meters deep on average. Coral reefs are found on island's shelf with high slope such as those around Wan, Chuck and Kradan islands.

Ta Libong Islands Non-hunting Area locates on the west of Trang river. The island comprises of various sediment rocks such as river sediment and estuarine sediment. The latter which consists of sediments, soil, hard sand particles, fine sand and silt, covers 28 percent of the islands, while the area of beach sediment, comprised of sand and fragments of shells, cover another 30 percent of the islands. Two-third of the eastern part of Ta Libong island are mangrove forests surrounded by mud flats, stretching to the southern part of the island. Beaches locate north of the islands, while the eastern cliffs of the island are covered with terrestrial forests. Had Toop island, located southeast of Ta Libong island, comprises of mostly sand mounts and mud flat as well as small patch of mangrove forests. Coral reefs can be found around Kwang Island.

Trang River is originated in Nakorn Si Thammarat mountain range in Thung Song District, Nakhon Si Thammarat Province. The river of approximately 175-km long, discharges into the sea at Kantang District, Trang province. Trang river estuaries are covered with roughly 38.5 square kilometers of mangrove forests. There are several canals and waterways in the mangroves including Banglak, Sinthao, Makao, Kasem and Kasem Nui. Mud flats are found connected to the mangroves during low tide.

The site has tropical monsoonal climate with an average annual rainfall of 2,379 mm. It receives rain from monsoons, the southwest from May to October and the northeast in December. Relative humidity ranges from 70% in February to 86% in October. Average daily temperature ranges from 26.4°C in November to 29°C in April. The prevailing winds are west from May to October, and northeast or east in other months.

### **15. HYDROLOGICAL VALUES:**

Had Chao Mai Marine National Park – Ta Libong Island Non-hunting Area – Trang River Estuaries are of significant hydrological values, providing water resources for

domestic consumption and aqua culture; preventing saline intrusion; preventing coastal erosion; filtering and trapping sediments, minerals, pollutants; and providing habitats to many living organisms.

## 16. ECOLOGICAL FEATURES:

- Had Chao Mai Marine National Park. :

Plant communities comprise of moist evergreen, beach forests, mangrove forests and mixed forests on rocky mountains. Beach forests are open deciduous forests and found in narrow strips on beaches, rocky shores as well as mountainous areas along the shoreline. Mangrove forests are found only in low intertidal coastal area. Plant species found in mangroves include *Rhizophora apiculata*, *R. mucronata*, *Ceriops decandra*, *Xylocarpus granatum*, *Eugenia cinerea* Kurz., *Melaleuca cajuputi*, *Randia dasycarpa*, *Heritiera littoralis* and *Casuarina equisetifolia*.

- Ta Libong Islands Non-hunting Area :

Plant communities comprise of moist evergreen, beach forests and mangrove forests. Plant species found include *Anacolosa sp*, *Hydnocarpus ilicifolius*, *Rhizophora apiculata*, *R. mucronata*, *Pluchea indica*, *Dolichandrone spathacea*, *Nypa fruticans.*, *Xylocarpus granatum*, *X. moluccensis*, *Phoenix paludosa*, *Lumnizera racemosa*, *L. littorea*, *Thespesia populnea*, and *Avicenia spp*.

- Trang River Estuaries :

Plant communities are mainly mangrove forests. At least 20 plant species are found, including *Acanthus spp.*, *Xylocarpus spp.*, *Bruguiera spp.*, *Avicenia spp.*, *Sonneratia spp.*, *Barringtonia spp.* and *Caesalpinia spp.*

## 17. NOTEWORTHY FLORA:

In both Had Chao Mai Marine National Park and Ta Libong Islands Non-hunting Area, at least 8 species of seagrass beds are found. They are *Thalassia hemprichii*, *Enhalus acoroides.*, *Cymodocea rotundata*, *Halodule uninervis*, *Cymodocea serrulata*, *Syringodium isoetifolium*, *Halodule pinifolia* and *Halophila ovalis*. In this area it is the most healthiest of seagrass ecosystem in Thailand. It is very rich of diversity and quantity of seagrass.

## 18. NOTEWORTHY FAUNA:

At least 212 species of birds are recorded, including many of near-threatened species, vulnerable species, endangered species and critically endangered species as follows:

- near-threatened species : Malayan Night – Heron (*Gorsachius melanolophus*), Brahmin Kite (*Haliaster indus*), White – bellied Sea-eagle (*Haliaster leucogaster*), Grey-headed Fish-eagle (*Ichthyophaga ichthyactis*), Asian Dowitcher (*Limnodromus semipalmatus*), Pied Imperial Pigeon (*Ducula bicolor*), Nicobar pigeon (*Calaenas nicobarica*), Spotted Wood-Owl (*Strix seloputo*), Brown-winged Kingfisher (*Halcyon amaropectera*), Wreathed Hornbill (*Rhyticeros undulatus*), Oriented Pied Hornbill (*Anthracoceros albirostris*), Great Hornbill (*Buceros bicornis*), Mangrove Pitta (*Pitta megarhyncha*), Edible-nest Swiftlet (*Aerodramus fuciphagus*) and Hill Myna (*Gracula religiosa*);

- endangered species : Chinese Egret (*Egretta alba*), Masked Finfoot (*Heliopais personata*), Nordmann's Greenshank (*Tringa guttifer*), Malaysian Plover (*Charadrius peronii*), and Roseate Tern (*Sterna dougallii*);

- critically endangered : Great Crested Tern (*Sterna bergii*), Chinese Crested Tern (*Sterna bergsteini*) and Black-necked Stork (*Ephippiorhynchus asiaticus*).

Chao Mai beach is the only nesting site of Black-necked Stork in Malay peninsular. Chao Mai beach and Ta Libong Islands are also important habitats of shorebirds that migrate into the area in winter. Over ten thousands seabirds and shorebirds mostly inhabit at Had Toop, TaLibong Island, which are mud flats rich with food sources. Common visitors are *Sterna* spp., *Charadrius* spp., *Numenius* spp., *Limosa* spp. as well as Asian dowitcher (*Limnodromus semipalmatus*), *Tringa totanus*, *T. nebularia* and Stint (*Calidris* spp). Crag plover (*Dromas ardeola*) which migrates from Africa, is rarely found.

Large seagrass beds around Ta Libong Islands and between Yong Ling Peninsular and Mook Island, comprising *Cymodocea rotundata*, *C. serrulata*, *Enhalus acoroides*, *Holodule pinifolia*, *H. uninervis*, *Holophila ovalis*, *Syringodium isoetifolium* and *Thalassia hemprichii*, are significant habitats of dugongs (*Dugong dugon*) which is a critically endangered species of Thailand.

At least 75 fish species are found. Most of them are economic species inhabiting in seagrass beds such as *Rastrelliger kanagurta*, *Stolephorus indicus*, *Lutjanus* sp. , *Sphyræna* sp., *Scomberomorus* sp., *Siganus canaliculatus*.

Thirteen species of amphibians are recorded including *Bufo* spp. *Fejervarya* spp, *Rana* spp., *Microhyla* spp., *Occidozyga martansii* and *Limnonectes blythii*. Thirty-nine species of reptiles are recorded such as *Chelonia mydas*, *Eretrnochelys imbricata*, *Cuora amboinensis*, *Indotestudo elongata*, *Ptychozoon lionatum*, *Calotes emma*, *Draco maculatus*, *Boiga cyanea* and *Lycodon laonensis*. There are at least twenty two mammal species including *Manis javanica*, *Tupala glis*, *Cynocephalus varirgatus*, *Cynopterus* spp., *Macaca fascicularis*, *Aonyx cinerea*, *Viverra zibetha*, *Tragulus javanicus*, *Ratufa bicolor* and *Dugong dugon*.

## 19. SOCIAL AND CULTURAL VALUES:

Both the inshore and offshore fisheries are important at a local scale. The site is of importance for both small and large scale tourism because of many beautifully attractive tourist sites. Notable tourists sites include white sandy beaches of Toong Kay bay, a small island Had Toop which locates southwest of Laem Ju Hoy and inhabited by over ten thousands of birds, Thung Ya Kar waterfall which discharges into the sea and beautiful coral reefs around Kwang island.

The mangrove forests at Trang River Estuaries can be directly harvested for fuel woods and other forest products. The forests also indirectly support local aqua culture and provide habitats for wildlife, which are of economic and social importance. Other uses of the forests include fishing, harvesting of mud crabs, cage fish farming and shrimp farming.

## 20. LAND TENURE/OWNERSHIP:

Had Chao Mai Marine National Park and Ta Libong Islands Non-Hunting Area are state owned and surrounded area are privately owned. At Trang River Estuaries, there is forestry concession in the mangrove forest but it will be over by the year 2003, while the surrounded areas which are privately owned, and are used as rubber and coconut plantations.

## 21. CURRENT LAND USE:

Inshore fishing, using hand nets and trawl-nets, and harvesting of mud flat invertebrates for food. The latter include bivalve molluscs, sea cucumbers, anemones, priapulids and crabs. Cultivation of rubber, bananas, coconut palms and rice in surrounding areas of Had Chao Mai Marine National Park which is preservation area.

**22. ADVERSE FACTORS AFFECTING THE ECOLOGICAL CHARACTER OF THE SITE:**

The threats to the National Park include encroachment for crop cultivation, rubber plantation and procession, illegal logging of commercial timber species on islands and use of destructive fishing tools and explosion on coral reefs.

Trang River Estuaries is under threats from discharge of wastewater from upper-watershed communities, aqua cultural operations, industrial facilities, while some mangrove forests have been encroached by shrimp farms.

On Talibong Island which is declared as Non-hunting Area, some shorebirds are hunted and netted on a small scale and there is a considerable amount of indirect disturbance to roosting and feeding birds. In addition, Monitor Lizard (*Varanus* sp.) are caught in noose traps and eaten by villagers. Over-exploitation of benthic invertebrates may threaten natural stocks.

**23. CONSERVATION MEASURES TAKEN:**

The entire island of Ta Libong and part of the mainland coast are incorporated within Ta Libong Island Non-Hunting Area which was declared by the Section 44 of the 96<sup>th</sup> issue of the Royal Decree on March 27, 1979. Had Chao Mai was declared as Marine National Park by the Section 170 of 19<sup>th</sup> issue of the Royal Decree on October 14, 1981. The mangrove forests on Teai Lang canal and Kiam river are currently maintained by Kantang Mangrove Ecosystem Research Station.

**24. CONSERVATION MEASURES PROPOSED BUT NOT YET IMPLEMENTED:**

Many related agencies developed measures and strategic plans for managing the areas but some of those are not implemented. They are as follows:

1. Master Management Plan of Had Chao Mai Marine National Park by the Royal Forest Department;
2. Strategic Plan of Trang Province;
3. The Management Plan of Had Chao Mai Marine National Park – Ta Libong Island Non-hunting Area, Trang River Estuarine Wetlands, developed by the Office of Environmental Policy and Planning, will be finished by the end of 2001. This Wetland Management Plan is developed with participation of local communities surrounded the areas.

**25. CURRENT SCIENTIFIC RESEARCH AND FACILITIES:**

There are 2 Research Centers of the Royal Forest Department onsite. They are Kantang Mangrove Ecosystem Research Station and Natural Research Center of Marine National Park, Trang Province. Both of them are also Training Center for Royal Forest Department officers and students to strengthen their knowledge and understanding about marine ecosystem and ecology of some important fauna. Therefore, at Had Toop of Ta Libong Island Non-hunting Area is a major site of bird watchers.

**26. CURRENT CONSERVATION EDUCATION:**

Both Kantang Mangrove Ecosystem Research Station and Natural Research Center of the Marine National Park, Trang Province, disseminate information about mangrove forests, seagrass beds ecology and life history of *Dugong* sp. and act as visitor centers for students and tourists to study on ecosystems.

**27. CURRENT RECREATION AND TOURISM:**

Had Chao Mai Marine National Park is one of the most beautiful site of Thailand. It comprises with many beautiful beaches such as Had Pak Meng, Had Chang Lang, Had Laem Yong Lam and Had Sun, beautiful islands with coral reefs such as Kradan, Mook, Chuak and Van Islands. Ta Libong Non-hunting area is an important habitat for shore birds.

At least 250,000 tourists, both Thais and foreigners, come to visit Had Chao Mai and Ta Libong Island every year. Local communities earn significant income from tourist activities.

## **28. JURISDICTION:**

Most of mangrove forest in Trang River Estuaries are concession forest that will be finished in 2003 and will be changed to forest conservation area, that will be taken care by the Royal Forest Department. Had Chao Mai Marine National Park and Ta Libong Island Non-hunting area are preservation areas under Forestry Acts.

## **29. MANAGEMENT AUTHORITY:**

1. Had Chao Mai Marine National Park  
Royal Forest Department.  
P.O. box 9 Maifard Sub-district., Sikao district  
Trang Province 92150, Thailand  
Tel : 66-75-210099.
2. Libong Islands Non-hunting Area  
Royal Forest Department  
Libong Island  
Trang Province, Thailand.  
Tel : 66-75-251932

## **30. REFERENCES:**

- National Inventory of Natural Wetland in Thailand, Office of Environmental Policy and Panning, 1999, 412 pp.
- Wetlands Managing Planning Project at Had Chao Mai Marine National Park, Ta Libong Islands Non-hunting Area and Trang River Estuaries, Final Report, Office of Environmental Policy and Planning, 2001.
- Survey of Species, Population and Habitat of Birds in Non-hunting Area and Major River Estuaries in Southern Part of Thailand, Interim Report, of Bird Conservation Society of Thailand, 2001.
- Derek A. Scott, A Directory of Asian Wetlands, IUCN, 1988.
- Handbook: Strategic Framework and guidelines for the future development of the List of Wetland of International Importance, Convention on Wetland, January 2001, 60 pp.
- Walter, S. Kerry and Harriet J. Gillett, Red List of Threatened Plants, IUCN, 1998.
- Hilton, Craig and Taylor, Red List of Threatened Species, IUCN, 2000.