INFORMATION SHEET ON RAMSAR WETLANDS (RIS) Mu Koh Ang Thong Marine National Park

1. DATE THIS SHEET WAS COMPLETED / UPDATED: 14 August 2002 2. COUNTRY: Thailand 3. NAME OF WETLAND: Mu Koh Ang Thong Marine National Park 4. GEOGRAPHICAL COORDINATES: $9^{\circ} 30' - 45'$ N and $99^{\circ} 39' - 44'$ E **5. ELEVATION:** 0 - 396 meters 6. AREA: 10,200 ha 7. OVERVIEW: Mu Koh Ang Thong Marine National Park is the second Marine National Park of Thailand. It comprises with 42 small islands in the gulf of Thailand, Surathani Province. It is about 750 km. far from Bangkok and about 31 km far from the northeast of Samui Island. **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 E D C I 9. 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. \square

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

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12. JUSTIFICATION OF THE CRITERIA SELECFIED UNDER POINT 9:

Criteria 1: Mu Koh Ang Thong Marine National Park comprises of many wetland types such as sandy beaches, rocky cliffs, mangrove forests and coral reefs. It is an example of a specific type of wetland ecosystem. (Master Plan of Mu Koh Ang Thong Marine National Park 1999-2003, Royal Forest Department, 1998.)

Criteria 2: Mu Koh Ang Thong Marine National Park supports endemic, endangered species such as *Paphiopedilum niveum* (endemic species of Thailand.), *Anthracoceros malayanus* (Black Hornbill, endangered species), and near threatened species such as *Haliaeetus leucogaster* (White-billed Sea-eagle), *Ducula bicolor* (Pied Imperial Pigeon) *D. aenea* (Green Imperial Pigeon) and *Aerodramus fuciphagus* (Ediblenest Swiftlet) (National Inventory of Natural Wetland in Thailand, Office of Environmental Policy and Planning, 2000)

Criteria 3: Mu Koh Ang Thong Marine National Park supports populations of plant and / or animal species important for maintaining the biological diversity of a particular biogeographic region, (Master Plan of Mu Koh Ang Thong Marine National Park, Royal Forest Department, 1998)

At least 53 species of birds were found including approximately 10 waterfowl and shorebird species. Of these, there are 32 residential species such as Little Heron (*Butorides striatus*) and Brahminy Kite (*Haliastur indus*) and 9 non-breeding migratory species the like of Black Bittern (*Dupetor flavicollis*), Eurasian Woodcock (*Scolopax rusticola*) and Common Sandpiper (*Actitis hypoleucos*). Black Hornbill (*Anthracoceros malayanus*) is the only endangered species found, while the near threatened species reported are White-billed Sea-eagle (*Haliaeetus leucogaster*), Pied Imperial Pigeon (*Ducula bicolor*), Green Imperial Pigeon (*D. aenea*), Edible-nest Swiftlet (*Aerodramus fuciphagus*) and Brahminy Kite.

There are many fish species found in the national park, e.g., Slender Body Meckerel (Rastrelliger sp.), Indian Mackerel (R. kanagurta), Epinephelus fasciatus, Saurida sp., Caranx sp., Rays. (Dasyatis gerrardi)., Nemipterus sp., Amblygaster clupeoides, Chacunda Gizzard Shad (Anodontostoma chacunda), Indian Anchovy (Stolephorus indicus), Croaker (Johnius aneus), Sciaena sp., Priacanthus tayenus, Scomberomorus sp., Chirocentrus nurus, Trichiurus haumela, Sphyraena baracuda, Parupeneus sp., Lutjanus sp., Dogger Tooyh Pike (Muraenesox sp.), Sole (Cynoglossus macrolepidotus), Caranx sp., Rays (Dasyatis kuhlii), Shark (Carcharinus sp.) and Valamugil sp. The species found in coral reefs include Gourami (Pomacentrus spp.), Abudefduf spp., Siganus spp., Holocentrus sp., Chaetodon octofasciatus, Chelmon rostratus, Pomacanthus annularis, Needlefish (Hemirhamphus sp.), Callyodon spp., Plectorhynchus pictus, Amphiprion perideraion and Labroides dimidiatus.

Only 5 species of amphibians were sighted, while at least 16 mammal species were found, including *Presbytis obscura*, *Lutra sumatrana*, *Aerodramus* spps. and Whales.

Dominant and common coral species found include *Porites* spp., *Acropora* spp. And *Pavona* spp. Other coral species found are *Fungia* spp., *Pocillopora* spp., *Montipora digitata*, *Galaxea* spp., *Lobophyllia* spp., *Merulinal* spp., *Dendrophyllia* spp., *Diploastrea* spp., *Favia* spp., *Goniopora* spp., *Goniastrea* spp. And *Platygyra* spp.

13. GENERAL LOCATION:

Mu Koh Ang Thong Marine National Park, Surathan Province located in the southern part in the gulf of Thailand and approximately 750 Km. far from Bangkok.

14. PHYSICAL FEATURES:

Ang Thong island group comprises of 42 small and medium islands, lying from north to south. Most of the island areas are steep limestone mountains. The water body of the park covers and area of approximately 84 square kilometers. (52,500 rai) or roughly 82% of the total area. Average depth of the water is about 10 meters. The water body in heavily influenced by sediments from the Tapi river. The coastlines in the national park have high slope, while coral reefs can be found in narrow strips off the shoreline.

Ang Thong island group is in monsoon climate, average temperature is about 27.7°C relative humidity is 79% and the average rain fall is 909.5 mm.

15. HYDROLOGICAL VALUES:

Fresh water resources and ground water resources.

16. ECOLOGICAL FEATURES:

Dry evergreen forests cover most area of large islands in the national park. Important plants species of the forests are *Memecylon cyaneum*, *Barringtonia fusiformis*, *Semecarpus curtisii*, *Cinnamonum iners*, *Caryota mitis*, *Calamus spp*. And *Paphiopedilum niveum*. Beach forests can be found in narrow strips on beaches and shoreline. Notable plants species found in the forests include *Terminalia catappa*, *Thespesia populnea*, *Calophyllum inophyllum*, *Hibiscus tiliaceus*, *Pandanus odoratissimus* and *Crinum* sp. Limestone forests have been found restricted to limestone mountain with shallow soil. Most species found in the forests are smaller plants such as *Dracaena loureiri*, *Euphorbia antiquorum* and *Morinda coreia*. Very few mangrove forests have been found in the national park. They can be found on beaches or mudflats of Mae Koh Lae in the inner bay of the east coast of Pha Laew island. The forests are quite young, comprise of mostly *Rhizophora apiculata*.

17. NOTEWORTHY FLORA:

Ang Thong Lady Slipper (*Paphiopedilum niveum*) is endemic specie of Thailand that can be found only on limestone mountain of Ang Thong Island.

18. NOTEWORTHY FAUNA:

At least 53 species of birds were found including approximately 10 waterfowl and shorebird species. Of these, there are 32 residential species such as Little Heron (*Butorides striatus*) and Brahminy Kite (*Haliastur indus*) and 9 non-breeding migratory species the like of Black Bittern (*Dupetor flavicollis*), Eurasian Woodcock (*Scolopax rusticola*) and Common Sandpiper (*Actitis hypoleucos*). Black Hornbill (*Anthracoceros malayanus*) is the only endangered species found, while the near threatened species reported are White-billed Sea-eagle (*Haliaeetus leucogaster*), Pied Imperial Pigeon (*Ducula bicolor*), Green Imperial Pigeon (*D. aenea*), Edible-nest Swiftlet (*Aerodramus fuciphagus*) and Brahminy Kite.

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Tooyh Pike (*Muraenesox sp.*), Sole (*Cynoglossus macrolepidotus*), *Caranx* sp., Rays (Dasyatis kuhlii), Shark (*Carcharinus sp.*) and *Valamugil* sp. The species found in coral reefs include Gourami (*Pomacentrus spp.*), *Abudefduf* spp., *Siganus* spp., *Holocentrus* sp., *Chaetodon octofasciatus*, *Chelmon rostratus*, *Pomacanthus annularis*, Needlefish (*Hemirhamphus* sp.), *Callyodon* spp., *Plectorhynchus pictus*, *Amphiprion perideraion* and *Labroides dimidiatus*.

Only 5 species of amphibians were sighted, while at least 16 mammal species were found, including *Presbytis obscura*, *Lutra sumatrana*, *Aerodramus* spps. and Whales

Sediment discharged from the Tapi river, relatively shallow sea bed (about 10 meters), strong current between islands and trawling, all contribute to the lack of water transparency, which obstructs coral growth. The corals generally cease growing at the depth of approximately 4 meters. Dominant and common coral species found include *Porites* spp., *Acropora* spp. And *Pavona* spp. Other coral species found are *Fungia* spp., *Pocillopora* spp., *Montipora digitata*, *Galaxea* spp., *Lobophyllia* spp., *Merulinal* spp., *Dendrophyllia* spp., *Diploastrea* spp., *Favia* spp., *Goniopora* spp., *Goniastrea* spp. And *Platygyra* spp.

19. SOCIAL AND CULTURAL VALUES:

- The surrounded areas are breeding sites of economically important Slender Body Meckerel.
- The national park is an important tourist sites. Notable tourist attractions of the national park are 3 inland seas on islands. Two are located on Vua Ta Lub island which are the largest island in Ang Thong island group, while another is situated on Mae Koh island, which is approximately 20 wide, 250 meters long and 20 meters deep.
- Coral reefs of considerable beauty can be found around Sam-Sao island and Taiprao island

20. LAND TENURE/OWNERSHIP OF:

Most of the area proposed is National Park, state own, that has been operated by the Royal Forest Department.

Surrounding area is the sea that is operated by the Harbor Department.

21. CURRENT LAND USE:

National Park that supports for tourism, research and study.

22. FACTORS (PAST, PRESENT OR POTENTIAL) ADVERSELY AFFECTING THE SITE'S ECOLOGICAL CHARACTER, INCLUDING CHANGES IN LAND USE AND DEVELOPMENT PROJECTS:

Since the Ang Thong island group is located within distance for return visit, the area is visited from tourists from Samui island on daily basis. The lack of water transparency however, makes diving in the coral reefs an unattractive activity. The island group is also known as "golden bowl for fishery", signifying its importance as nursery site for various commercial species the like of Slender Body Meckerel. Such role is now under threats from illegal fishing method such as trawling, pollution from Ban Don bay. Use of measure to close bay areas in breeding season has been able to mitigate reduction of marine animals at certain level.

23. CONSERVATION MEASURES TAKEN:

An area of Mu Koh Ang Thong was declared as National Park since 1980 due to the Section 174 of the 97th issue of the Royal Decree declared the area a national park, on November 12, 1980.

24. CONSERVATION MEASURES PROPOSED BUT NOT YET IMPLEMENTED:

Master plan for 1999-2003 was developed by Natural Conservation Office, Royal Forest Department and the plan is for building capacity of its own staff will be implemented first in the next few year.

25. CURRENT SCIENTIFIC RESEARCH AND FACILITIES:

Mu Koh Ang Thong was declared as National Park for conservation and protection of natural resources, for research and study on natural resources and for recreation. The Royal Forest Department has already developed office and research facilities for their staff and educational institutes.

26. CURRENT CONSERVATION EDUCATION:

Department of Marine Science, Chulalongkorn University, 1988 ASEAN – AUSTRALIA Coastal living resource project: Coral Reefs Ang Thong Area.

27. CURRENT RECREATION AND TOURISM:

Mu Koh Ang Thong is the most popular recreation area for diving in the coral reefs and eco-tourism is promoted in this area. More than 50,000 tourists both Thai and Foreign always go to Mu Koh Ang Thong every year.

28. JURISDICTION:

According to the Section 174 of the 97th issue of the Royal Decree declared the area a national park on November 12, 1980 and responsible by the Royal Forest Department.

29. MANAGEMENT AUTHORITY:

Mu Koh Ang Thong Marine National Park Office, Natural Resources Office, Royal Forest Department, 14/51 Talard Lang. Road, Muang District, Surathani Province. Tel: 6677-286025, 6677-420225

30. BIBLIOGRAPHICAL REFERENCES:

- Natural Conservation Office, Royal Forest Department, Management Master Plan of Mu Koh Ang Thong Marine National Park 1999-2003, 1998.
- Office of Environmental Policy and Planning, National Inventory of Natural Wetland in Thailand, 2000.
- Ramsar Convention, Handbook: Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance.
- Walter S. Kerry and Harriet J. Gillett, Red List of Threatened Plants, IUCN, 1998
- Hilton-Taylor, Craig, Red List of Threatened Species, IUCN, 2000.