

**INFORMATION SHEET ON RAMSAR WETLANDS
PANG NGA BAY MARINE NATIONAL PARK**

1. DATE:

14 August 2002

2. COUNTRY:

Thailand

3. NAME OF WETLAND:

Pang Nga Bay Marine National Park

4. GEOGRAPHICAL COORDINATES:

8° 08' to 8° 26' N and 98° 27' to 98° 45' E

5. ELEVATION:

Situated at sea level, while islands and hill reach peak height of up to 439 meters.

6. AREA:

40,000 ha

7. OVERVIEW:

Pang Nga Bay is shallow bay, the depth between 1-4 meters with 1-3 meters tidal fluctuation, approximate 42 islands where mostly comprises of 40,000 ha of Phang Nga Bay National Park, approximately 21,180.96 ha of mangrove forest and 4,048 ha of mud flats. The bay is located near Tanoasri and Phuket mountain ranges, originated in cretaceous and early tertiary period, which act as natural boundary between Thailand and Myanmar and continue onward until reaching Pang Nga and Phuket provinces.

8. WETLAND TYPE:

Marine-coastal: (A) (B) (C) (D) E F (G) H (I) J K 2K(a)

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

9. RAMSAR CRITERIA:

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

Please specify the most significant criterion applicable to the site: Criteria 1

10. MAP OF SITE INCLUDED:

Yes.

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

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12. JUSTIFICATION OF THE CRITERIA SPECIFIED UNDER POINT 9:

Criteria 1: Pang Nga Bay Marine National Park comprises of 42 islands including Khao Tao, Pra Art Toh, Maprao, Boey Yai, Raya Ring, Pa Nak, Hong and Pan Yi, and many wetland ecosystem such as bay, estuary, mangrove forests, mud flats, cliffs, rocky shores and seagrass beds. It is a unique example of natural wetland type.

Criteria 2: It supports critically endangered, endangered, threatened and near threatened species as follows:

- Dugong (*Dugong dugon*), critical endangered species.
- Globally threatened species are Malaysian Plover (*Charadrius peronii*) and Asian Dowitcher (*Limnodromus semipalmatus*),
- Near threatened species, White-bellied Sea-eagle (*Haliaeetus leucogaster*) and Edible-nest Swiftlet (*Aerodramus luciphagus*) Asian Dowitcher (*Limnodromus semipalmatus*) and Black Finless Porpoise (*Neophocaena phocaenoides*).

Criteria 3: At least 88 bird species were found in Phang Nga Bay, including globally threatened species and near threatened species.

There were at least 82 fish species found, including Mullet (*Mugil spp.*), Whipjin Silverbidy (*Gerres punctatus*), Croaker (*Johnius spp.*) and Brownsport Grouper (*Epinephlus tauvina*), etc.

At least 18 reptile species such as Lizard (*Varanus salvator*, *V. bengalensis*) and Common Sun Skin (*Mabuya multifasciata*), and 3 amphibian species are Crab-eating Frog (*Rana cancrivora*) Common Ricefield Frog (*R. limnocharis*) and Common Tree Frog (*Rhacophorus leucomystax*) were found.

There were at least 17 mammal species found in this wetland area.

Criteria 4: It supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions such as Mullet (*Mugil spp.*), Whipjin Silverbidy (*Gerres punctatus*), Croaker (*Johnius spp.*) and Brownsport Grouper (*Epinephlus tauvina*), etc.

13. GENERAL LOCATION:

Pang Nga Bay is located in Pang Nga province, the southern part of Thailand with approximately 788 km. from Bangkok.

14. PHYSICAL FEATURES:

Pang Nga Bay National Park is a shallow bay surrounded by mangrove forest, the bay covered with mangrove forest, mud flat, seagrass bed, coral reef, islands and communities with total area of over 40,000 ha. The depth is roughly 1-4 meters with 1-3 meters tidal fluctuation, approximately 42 islands in the bay. Evergreen forest on coastal

and island are deep fertile soil in lower plains or valleys, while the crack of limestone soil found in some islands.

Tropical monsoonal climate with an average annual rainfall of 2,379 mm. Most of which falls during the southwest monsoon, from May to October. The relative humidity varies from 68% in February to 81% in October. The average daily temperature is 28.1 degree celsius (24.0-31.3 degree celsius).

15. HYDROLOGICAL VALUE:

The principal values of Pang Nga Bay are sediment trapping, transportation and maintenance of seawater quality.

16. ECOLOGICAL FEATURES:

Pang Nga Bay National Park included with mangrove forest with a high predominance of *Rhizophora* spp., mud flats, seagrass bed, coral reefs, islands and evergreen forest on coastal of the bay and the islands had 2 sub-ecosystem, terrestrial forest in lower plains or valleys, and limestone forest in some islands.

Mangrove forests around the bay are remained in mostly fertile forest. There are at least 28 species of mangrove are found such as Large-leaf Mangrove (*Rhizophora mucronata*), Small-leaf Mangrove (*R. apiculata*), *Bruguiera cylindrica*, *B. parviflora*, *Ceriops* spp., *Xylocarpus granatum*, *Avicennia alba* and *A. officinalis*. The lower canopy comprises of mostly Atap Palm (*Nypa fruticans*) and Sea Holly (*Acanthus ebracteatus*). Seagrass bed are also found at Lawa Yai island, they include *Halodule* spp..

The important species include in the lower plains or valley forest are *Shorea gratissima*, Pterocarp (*Pterocarpus indicus*) and Fish Tail Palm (*Caryota mitis*). As for limestone forest, where vegetation is widely scattered through out, important species are *Dracaena loureiri*, *Pandanus* sp. and *Cycas pectinata*. In two evergreen forest sub-ecosystem both found species of Zingiberaceae, Araceae and Orchid.

17. NOTEWORTHY FLORA:

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18. NOTEWORTHY FAUNA:

At least 88 bird species were found in Pang Nga Bay. Among of those, the globally threatened species are Malaysian Plover (*Charadrius peronii*) and Asian Dowitcher (*Limnodromus semipalmatus*), which are classified as endangered species of Thailand. In addition, 2 near threatened species, White-bellied Sea-eagle (*Haliaeetus leucogaster*) and Edible-nest Swiftlet (*Aerodramus luciphagus*) have been sighted in the bay area. There was a report of Lesser Crested Tern (*Sterna bengalensis*) at Yao Yai island in 1982.

There were at least 82 fish species found, including Mullet (*Mugil* spp.), Whipjin Silverbidy (*Gerres punctatus*), Croaker (*Johnius* spp.) and Brownsport Grouper (*Epinephelus tauvina*), etc.

At least 18 reptile species such as Lizard (*Varanus salvator*, *V. bengalensis*) and Common Sun Skin (*Mabuya multifasciata*), and 3 amphibian species are Crab-eating Frog (*Rana cancrivora*) Common Ricefield Frog (*R. limnocharis*) and Common Tree Frog (*Rhacophorus leucomystax*) were found.

There were at least 17 mammal species found, including the critically endangered species Dugong (*Dugong dugon*). In addition, the endangered species are White-hand Gibbon (*Hylobates lar*), Serow (*Capricornis sumatraensis*) and Black Finless Porpoise (*Neophocaena phocaenoides*). The threat in the wild mammal species found in these area are Dusky Langur (*Presbytis obscura*), Smooth-coated Otter (*Lutra perspicillata*) and Crab-eating Macaque (*Macaca fascicularis*).

19. SOCIAL AND CULTURE VALUE:

Mangrove forest around Pang Nga Bay is a continuous piece with most fertile forest in Thailand. Thus, the forest is of tremendous value for forestry and fishery as well as plant genetic pool resource and a nursery site of marine animal

With its unique natural scenery, Pang Nga Bay has become an international tourist site such as Pan Yee Island, Ping Kun Mountain and Tapoo Mountain. At Khian Mountain, Pan Yee Mountain and Raya Mountain, where the area is also of archeological importance due to presence of over 1,000 years old ancient paintings found, are most interesting site.

There are heterogeneous groups of people living in the proposed Ramsar Sites. These groups of people have different cultures and way of life, so Pang Nga Bay reflects a typical diversify of human cultures. For instance, there is a unique island community of Chao Lae (Sea Gypsy) who are animists at Pan Yee Island. Chao Lae are Moslem and have their own sea spirits. Moreover, the existence of Buddhist and Moslem communities show how people of different religious background may live together in harmony.

20. LAND TENURE/OWNERSHIP:

Pang Nga Marine National Park is state own that operates by the Royal Forest Department. Surrounding areas are mangrove forest that own by the state and declared as the preservation forest.

21. CURRENT LAND USE:

Fishing and harvesting the fronds of *Nypa* palm for the production of thatch. The area is a major tourist attraction and a great many boatmen realize income from parties of sightseers, cave support populations of Edible-nest Swiftlets..

22. ADVERSE FACTORS AFFECTING THE ECOLOGICAL CHARECTER OF THE SITE:

Threats to the area include encroachment of mangrove forest, aquaculture in forest, shell harvesting in the coral reefs, illegal fishing, the enlargement of communities which situated in National Park as well as over massive tourists and boat at Ping Kun Mountain and Tapoo Mountain.

23. CONSERVATION MEASURES TAKEN:

Mangrove forest, mud flats, seagrass bed, coral reefs, island and evergreen forest are included in 40,000 ha of the Pang Nga Bay National Park, while the other of Pang Nga Bay, 25,000 ha, are not included.

24. CONSERVATION MEASURE PROPOSED BUT NOT YET IMPLEMENTED:

None.

25. CURRENT SCIENTIFIC RESEARCH AND FACILITIES:

None.

26. CURRENT CONSERVATION EDUCATION:

None.

27. CURRENT RECREATION AND TOURISM:

In the proposed Ramsar Site is an international tourist site such as Pan Yee Island, Ping Kun Mountain and Tapoo Mountain. The ancient painting in Khian Mountain, Pan Yee Mountain and Raya Mountain has much recreational site. While mangrove forest has potential for eco-tourism. Many tourists more than 200,000 come to visit Pang Nga every year.

28. JURISDICTION:

Pang Nga Province, Muang district and Takauthung district and all concerned Tambon Administration Organization and the Royal Forest Department.

29. MANAGEMENT AUTHORITY:

Pang Nga Bay Marine National Park,
Muang District, Pang Nga Province 82000
Tel: 6676-412188, 6676-411136

30. BIBLIOGRAPHICAL REFERENCES:

- National Inventory of Natural Wetland : Southern Part of Thailand, Office of Environmental Policy and Planning, Bangkok, October, 2000
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