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## Tarutao NATIONAL PARK SATUN PROVINCE, THAILAND

“**O**ld, mysterious and primitive”, which in the dialect of Southern Thailand means Tarutao (Rainat, 1999; P. Tongsom, *pers. comm.* 2002), describes this island that has been the home for centuries of the Chao Lay more commonly called Sea Gypsies. Gray *et al* (1994) added: “These islands have long been hidden from the rest of the world, denied peace or prosperity because of a curse imposed by a beautiful princess of Langkawi who was wrongly executed for adultery. Perhaps the curse was a real one: for hundreds of years few vessels ventured into the area.” During World War II, it became a pirates’ haven, until a 300-man volunteer group from the Royal British Navy landed in March 1964 and quelled these pirates, who preyed on the cargo, fishing and passenger ferryboats that plied the Malacca Strait (Rainat, 1999; Gray *et al*, 1994). The island later became a penal

colony and place of detention for political prisoners.

Today, Tarutao National Park, which has a major marine component, is one of Thailand’s ASEAN Heritage Parks. The Park is an archipelago consisting of 51 islands, and encompassing a land-cum-sea area of about 150,000 hectares in Tambon Ko Sarai, Amphoe Muang (UNESCO website) in the province of Satun. It lies just 26 kms off the southwest corner of peninsular Thailand in the Andaman Sea (ASOEN/JICA/UNEP, *undated*), a short distance from the Malaysian Sea (Rainat, 1999), and extends over an area of 1,490 km<sup>2</sup> at the mouth of the Straits of Malacca, in the Indian Ocean (Gray *et al*, 1994).

Ko Tarutao (Ko means island), and the other 50 islands in the group were declared Thailand’s national marine park in 1976 (ASOEN/JICA/UNEP, *undated*). The largest in the group is Ko Tarutao, which is about 15 hectares or about 27 km long

and 12 km wide. Two other islands have areas exceeding 10 km<sup>2</sup>: Adang (3000 ha) and Rawi (3,100 ha). The Adang group of islands, which is about 40 or 50 km west of Tarutao, comprises Adang, Rawi and Lipe ((ASOEN/JICA/UNEP, undated) .

Gray *et al* (1994) described the national park thus: “These islands, geologically part of the Sunda Shelf, once stood as hills on dry land. Rising seas, fed by the melting ice caps, cut them off from the mainland about 8, 500 years ago.”

The Park has several attractive beaches that include Ao Phante Malaka (the Thai word “Ao” means bay), where the Park office is situated, Ao Mo Lae, and Ao Son, and a number of waterfalls and caves. It also boasts beautiful coral reefs that are home to various kinds of sea fauna, and historical sites such as the ruined prisons at Ao Talo Udang and Ao Talo Wao (Satun Province in [www.geocities.com/The\\_Tropics/Cabana/1654/tarutao.htm](http://www.geocities.com/The_Tropics/Cabana/1654/tarutao.htm))

Aside from its beautiful beaches, the Adang group of islands is famous as the nesting site for sea turtles. The neighbouring islands include Ko Hin Ngam where very beautiful unusual looking rocks are seen, and Ko Khai, one of the smaller islands with a strange looking natural stone arch where sea turtles lay eggs ([www.geocities.com/The\\_Tropics/Cabana/1654/tarutao.htm](http://www.geocities.com/The_Tropics/Cabana/1654/tarutao.htm))

Ko Lipe is the only island that is inhabited. This island is three kilometres south of Adang, and home to the Chao Lay, who were displaced from Ko Adang and Ko Rawi when the Park was established (Gray *et al*, 1994). Their major livelihood is fishing plus the cultivation of vegetables, rice and coconuts; they sometimes collect seashells for sale to tourists (Gray *et al*, 1994).

The Tarutao islands are rugged and hilly. The main island of Tarutao has the highest peak at 708 metres, but a large part of the area lies between 200 and 400 meters. Ko Tarutao is made up of two main rocks; about 65% of the island is sandstone while the remaining 36%, which is largely confined to the northern

and eastern parts, is limestone. The Adang group is also steep and rough - the highest point on Adang is about 702 metres, and Rawi, 463 metres - and has less flat land; it is largely granite, and no sandstone or limestone (ASOEN/JICA/UNEP, undated).

## The Plant Life

In their book “National Parks of Thailand,” Gray *et al* (1994) mentioned that the Park’s vegetation includes island forest, sub-montane lowland scrub and mangrove swamp, with individual mangroves sometimes reaching almost a diameter. This includes a fascinating and distinctive scrubby flora that grows on limestone around the islands. About 60% of Tarutao is covered with island forest, sometimes referred to as semi-evergreen rainforest (Gray *et al* 1994).

Almost 20 years ago, there were more vegetation types identified in a plant survey conducted from 1979 to 1981. Congdon (1982) identified 10 vegetation types: freshwater swamps and marshes, and mangroves, *pes-caprae*, *Barringtonia*, tropical heath, limestone, scrub, semi-evergreen, and secondary forests. Congdon’s descriptions of these forests are summarised below.

The mangrove forest, which covers about 4.5 percent of Ko Tarutao, is characterised by species of the *Rhizophora*,



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*Bruguiera*, *Ceriops* and *Sonneratia* families. This type is found in both the Adang and Rawi islands but in very small patches.

The freshwater marshes that developed after the forest had been cleared are found close to small springs. Common herbaceous plant species include *Fuirena*, *Lepironia*, *Lipocarpa*, *Eriocaulon*, and *Xyris*.

*Ipomoea pes-caprae* and other sand creeping species take over sandy areas above the high tide mark along the beach. The species include *Canavalia maritime*, *Cassythea filiformis*, and those of *Cyperus*.

Further inland from the pes-caprae vegetation along the beach is the *Barringtonia* vegetation that is common on the west coast of Tarutao and north of Rawi. It is a very open sort of woodland; species common are *Barringtonia asistica*, *Calophyllum inophyllum*, *Terminalia catappa*, *Casuarina equisetifolia*, *Cocos nucifera*, *Heritiera littoralis*, *Hernandia nymphaeifolia*, and *Hibiscus tiliaceus*.

The tropical heath forest, which occurs on old raised beaches, are infertile with poor water-holding capacity. Common tree species include *Anacardium*, *Melaleuca*, *Vitex*, and *Myrsine*.

There are fairly extensive areas of limestone forest especially in the north and eastern parts of Ko Tarutao. These forests vary greatly in stature, structure and also species association depending on the terrain, as on exposed limestone rocks where the vegetation is low, sparse and thorny.

The limestone forest has a high percentage of species endemism in areas where moisture and soil are more available. The more common tree species found are *Hopea*, *Sapium* and *Terminalia*. It is also rich in herb plants such as the Gesneriaceae and Zingiberaceae families and varied orchid species.

On the south sides of Adang and Rawi are rocky hillsides covered with a sort of open grassy woodland that Congdon described as scrub forest, and likely to be an arrested form of secondary vegetation. Among the trees

found are *Dillenia obovata*, *Rhodamnia cinerea*, *Myrsine poteriana*, and *Erythroxylum cuneatum*. Dominant shrubs include species of *Bidelia*, *Desmodium*, and *Tephrosia* while the main herbs include species of *Arundinella*, *Cympogon*, *Dianella*, and *Ichaemum*.

The three-layered, semi-evergreen rainforest covers about 60% of the island of Tarutao, and is the richest in the Park both in plant and animal species. Generally, it is a high forest dominated by the Dipterocarpaceae, Anacardiaceae, Meliaceae and Leguminosae families.

The tenth vegetation type is the secondary forest that covers about 10% of Ko Tarutao. The more abundant species are *Imperata cylindrica* and *Neyraudia reynaudiana*, and secondary bush trees such as *Macaranga*, *Trema*, *Dillenia*, *Vitex* and other light-loving plants.

Congdon also found out that although Ko Tarutao and the Adang group of islands are quite close to each other, their species composition is largely different – only 21% of 833 plant species is common between the two; he traced this to their different geological characteristics.

### The Animal and Bird Life

As is typical of islands, only a few terrestrial animal species are found. The more common mammals include the wild pig, mouse deer, crab-eating macaque, slow loris, dusky langur, tree shrew, at least three species of squirrels, 12 species of bats and a number of rodent species. The mouse deer is common partly because of the absence of large carnivores (ASOEN/JICA/UNEP, *undated*).

The bird species for the park, which is estimated to be 100, is typical of islands with relatively few primary forest species. The list includes species of herons and bitterns, birds of prey, pigeons and doves, kingfishers, hornbills, thrushes, sunbirds and flowerpeckers. Two important species are the Nicobar and pied imperial pigeons (ASOEN/JICA/UNEP, *undated*).

Brahminy kites have also been seen circling about the cliffs along the shore. A pair of magnificent white-bellied sea eagles has also been sighted on dead branches above the cliff, north of head-



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quarters. The eagles can be easily spotted, with the aid of binoculars, from the main swimming beach (ASOEN/JICA/UNEP, *undated*).

Although many areas have been disturbed because of dynamite fishing, large pristine coral reef areas of the Park still exist, and are among the best in the Andaman Sea. The seas within the Park boundaries are rich in marine life, and have always been rich fishing grounds. Three dolphin species have also been sighted; these are the Malay, common, and eastern bottle-nosed dolphins (ASOEN/JICA/UNEP, *undated*).

A very interesting aspect of the Park's marine life is the occurrence of four marine turtle species: Pacific Ridley, Green, Hawksbill and Leatherback. These turtles nest on the islands' several beaches from September to April (ASOEN/JICA/UNEP, *undated*). The green turtles, some of them as large as one metre long, nest on the Adang beaches, while others flock to the nearby beaches between Koh Tarutao and Koh Adang from November to December (Gray *et al* 1994).

## Park Management

Thailand's protected area system rests on two laws: the Wild Animals Reservation and Protection Act (WARPA) of 1992, and the National Parks Act (NPA) of 1961. WARPA provides for the creation of wildlife sanctuaries and non-hunting areas, the latter differing only in prohibiting the hunting and taking of animals, but not other human activities. Wildlife sanctuaries include some of the largest protected areas in Thailand, while non-hunting areas are usually small and protect particular species, or small wetlands. The Wildlife Conservation Division of the Royal Forest Department of Thailand manages both sanctuaries and non-hunting areas ((ASOEN/JICA/UNEP, *undated*).

The NPA, on the other hand, specifies the creation of national parks and "Forest parks". "Forest parks" are smaller forested areas usually managed for recreation and enjoyment. The National Park Division of the Forest Department manages areas under the NPA, but regional forestry



Photo taken from: [travelwithtime.hypermart.net](http://travelwithtime.hypermart.net)

authorities manage some "forest parks" (ASOEN/JICA/UNEP, *undated*).

## The best time to visit

The best time to visit the Park is from November to April. During the six months – May to October – of the southwest monsoon, the sea may be very rough, and the Park gets an average heavy rainfall of more than 300 millimetres per month. The north-east monsoon period, especially from December to March, is usually very dry and the mean annual temperature reaches 27 to 28 degrees C. The warmest weather occurs in April and the coolest, in November and December (Gray *et al*, 1994).

## How to get there

The Park is fairly accessible. The mainland port of departure for Ko Tarutao is at Pak Bara, which is 65 kilometres north of Satun and 22 km from Tarutao. A trip to Ko Tarutao on fishing boats that serve as ferries takes about 1 ½ hours but only 30 minutes by speed boat. Haad Yai, the nearest major city is connected by air to Bangkok and Penang and Kuala Lumpur (ASOEN/JICA/UNEP, *undated*; Gray *et al*, 1994).

Two boats leave from Pakbara port in Satun Province on the mainland everyday at 1030 and 1400 hours. And two boats return daily, leaving Pante Bay at 0900



Photo taken from: [nst.sawadee.com/satun](http://nst.sawadee.com/satun)

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and 1400 hours. From Pante Bay, one can make arrangements for travel by private boat and accommodation to other islands of the marine park (Rainat, 1999). There are plans to establish a regular year-round boat service (Gray *et al*, 1994).

### Park facilities

The Park headquarters can accommodate 300 visitors at any one time. There are meeting and lecture halls, picnic grounds, restaurants, and campsites. A government bungalow, longhouse and tents are available on Ko Tarutao and Ko Adang. On Tarutao, camping is recommended on Ao Son, Ao Phante, Ao Jak and Talo-u-Dang, a large bay at Tarutao's southern extremity. Camping is also permitted on Ko Lipe and huts may be rented from the village headman (Gray *et al*, 1994). Adang Island, which is the best place for snorkelling and observing coral reefs, also has a lodging place and a restaurant (ASOEN/JICA/UNEP, *undated*).

The headquarters on Phante Bay also has a small museum with maps and exhibits on natural history, and a library that offers a wide range of materials including information on local nature conservation; a sea turtle nursery, and two restaurants are also found close to the headquarters (ASOEN/JICA/UNEP, *undated*; Gray *et al*. 1994).

Two prison buildings from Tarutao's days as a penal colony are being restored as historical sites and museum, and also as overnight shelter for hikers.

These buildings are separated by a 12-km long jungle track.

### What to see and do

**Hiking.** The park has a number of nature trails, leading to panoramic views and superb beaches. Closest to the headquarters is Toe-Boo Chief Trail, which is relatively short and ends atop a cliff, where one can have a panoramic view of the surrounding island. A much longer trail that takes about 4 hours walking, leads to the old prison site at Talo Wao, which has now been converted into a temporary accommodation for visitors (ASOEN/JICA/UNEP, *undated*).

**Walking along beaches.** The main scenic attractions are the beautiful stretches of beaches and the impressive rocky cliffs along much of the shoreline, which often overhang caves. Son Bay for example has a three-kilometre stretch of sand lined with *Casuarina* trees. At the northern end of the beach, a stream runs into the sea. The southern end offers access to a large mangrove swamp (ASOEN/JICA/UNEP, *undated*).

**Boat rides/ Island hopping.** Visitors can hire boats to explore the shoreline and observe the coral reefs with their spectacular fishes, sea urchins, crinoids, sea fans, polychaete worms, and countless other denizens. (ASOEN/JICA/UNEP, *undated*).

One can also explore fossils, with lots of trilobites and other marine life cast and preserved when these sedimentary rock



Photo taken from: [biron.usc.edu/~sage/long](http://biron.usc.edu/~sage/long)

strata were deposited 400 to 500 million years ago.

**Snorkeling and diving.** The coral reefs fringing some of these islands are worth exploring, although underwater visibility is sometimes limited, especially around Ko Tarutao itself. Snorkeling off Tarutao is best recommended at Ao Son and off the cliffs on the northwest end of the island.

Better still is Mu Koh Klang, the group of three islands that lies halfway between Ko Tarutao and Ko Adang. The southeast and west coasts of Ko Adang and Ko Rawi also have nice coral and fish remaining, with generally good visibility. Ko Kra, Ko Jabang and Ko Yang are especially good sites for snorkelling.

Diving can be breathtaking at the Adang-Rawi group of islands in the western corner of the national marine park area, which contains many coral reefs of high-species diversity (Rainat, 1999)

Accordingly, the Park contains 25% of the world's fish species, including members of the shark, ray, gulper, eel, catfish, salmon, flying perch, angel and butterfly fish. Among the marine mammals, are the dugong, common and Irawaddy dolphin, sperm and minke whales (Rainat, 1999).

Aside from snorkeling, scuba diving, island-exploring and following the trail to the 114-metre-high Toe-Boo Chief Cliff for a panoramic view of the distant islands, one can enjoy swimming and sun-bathing in your "own" private beach (Rainat, 1999).

**Spelunking.** Spelunkers will find an abundance of cave systems, many of which have never been explored. Both Ko To Kieng and Ko Rang Nok, the Bird's Nest Island, just off the southwest tip of Ko Tarutao, have caverns that are home to many thousands of swiftlets. The Park law now prohibits the collection of the birds' nests. (ASOEN/JICA/UNEP, undated; Gray *et al.* 1994). A shrine that is meant to placate the spirits, guards the entrance to the limestone cave at Birds' Nest Island (Rainat, 1999).

**Bird watching.** Ko Tarutao and the other pristine islands in the archipelago

are wildlife sanctuaries where dusky langurs, crab-eating macaques, flying lemurs, fishing cats, monitor lizards, pythons, cobras and coral snakes, live in creature comfort with different bird species – residents and migrants (Rainat, 1999)

One can easily spot the reef egrets, the majestic white-bellied sea eagles, ospreys, hornbills, herons, kites, kingfishers, sunbirds and both the scarlet and orange-backed flower-pecker (Rainat, 1999).

## Cultural Activities

**Tarutao National Park Festival.** This is held annually in November. Call the National Parks Division (Tel : (66-2) 5794842; (66-2) 5790529) for more information and accommodations.

## Kite-Flying Festival

The kite-flying festival has been adopted to promote Thai Traditional games and culture. The festival is held annually in February.■

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