

<b>Site Nomination for Peat Site Profiles in Southeast Asia</b>	
<b>Category:</b>	Best Management Practices Site (BMP)
<b>Name of Site:</b>	Phru Khuan Khreng Swamp Forest
<b>Country:</b>	Thailand
<b>GPS Point:</b>	Latitude: 7 I 0005'N Longitude: 1001 5'E
<b>Location &amp; Access:</b>	Located at the boundary between the bottom of Pak Panang Basin and the upper of Songkhla Lake Basin. East edge of Phru Khuan Khreng is 14 km. distance from the Thai Gulf coast. Western side is 6 km. away from southern train route. North side is next to Cha-Uat canal. South side is close to Thale Noi and Thale Luang.
<b>Total Area:</b>	31287.20 hectare(s)
<b>Background of Site:</b>	The peat swamp area covers 3 provinces: Songkhla, Phattalung and Nakhon Sri Thammarat. The area can be divided into 3 parts based on plant characteristics: - the southern part; next to Thale Noi is dominated by Cyperaceae, Lepironia articulata and grasses - the central part; is dominated by Melaleuca cajeputi and Lepironia articulate - the north part; is dominated by Melaleuca cajeputi and grasses Most of the land is annually flooded usually between November and December. The water level decreases during February to March and the area starts drying in April.
<b>Significant Value of Site:</b>	- Biodiversity - Hydrology - Soil/Carbon - Cultural & Historical Value - Socio-economic  Notes: Socio-economic: The villagers derive considerable income from the fishery, from utilizing aquatic plants and from the capture and sale of snakes.
<b>Designated use (status/legal classification):</b>	- Permanent Forest Reserve  Notes: The entire area is incorporated within the Thale Noi Non-Hunting Area. The Melaleuca forest has the status of National Reserve Forest, so that cutting of trees is forbidden in law.
<b>Major Issues:</b>	i. Degradation of fish resources Fish is an important resource of food and economy for the local people at the area. However, the fish population has been decreased resulting from inappropriate fishing practices. ii. Degradation of Lepironia articulata resources Over exploitation and destructive method for harvesting are the major causes of the species depletion. iii. Degradation of peat swamp forest Cause by forest burning either deliberately or accidentally. The forests are burned for agriculture, settlements and to provide easier access to fishing grounds. Over-harvesting also leads to loss of forest cover and peat soil degradation. iv. Unclear rights to resources Emergence of illegal settlers, take-over of land by outsiders, rising conflicts between local people and the government over land matters and encroachments and degradation of un-rehabilitated forest area. v. Change in hydrological regime Results of several construction around the area such as water resource development projects upstream of Phru Khuan Khreng and roads and agriculture projects which require the drainage of water from peat swamps.
<b>Site Jurisdiction &amp; Administration:</b>	The site is under three different provincial jurisdiction which are Songkhla, Phattalung and Nakhon Sri Thammarat. The wetland is state owned and open to public use; surrounding areas are mainly private small-holdings.
<b>Peatland Type:</b>	Lowland
<b>Management activities:</b>	a) Past Limited experiences exist on successful integrated management and sustainable utilization of natural resources. However, it has been realized that such an approach is important to ensure long term resource sustainability in Phru Khuan Khreng. Different stakeholders often have very different perceptions on how to achieve conservation and wise use which can lead to possible solutions to a problem.  b) Current Wetlands International - Thailand Program is proposed on establishment of continuous

dialogues and an avenue for communicating the results of the dialogues to the relevant authorities. The idea is to include all major stakeholders in dialogue process and through this dialogue to find the best possible solutions to the many different and often complex issues that threaten the integrity of the peat swamps and the livelihood of the people at the Phru Khuan Khreng peatlands.

Conservation measures proposed: Protection of wildlife and habitats should be improved. There should be better monitoring of rare breeding species such as *Mycteria leucocephala*. Artificial nest platforms for this species should be considered, since the small colony is said to be prevented from increasing because of a shortage of suitable large *Aistonia* nesting trees. Muddy scrapes might be constructed in areas surrounding the lake in order to increase their attractiveness to migrant shorebirds. - Fishing with gill nets, traps and electrocution methods. Aquatic vegetation is harvested for cattle fodder, and *Scirpus mucronatus* is planted and harvested for weaving as matting etc. The principal activities in surrounding areas are cultivation of rice (one crop of wet-season rice per year), cattle grazing and charcoal production. The proposed salinity barrier on adjacent Lake Songkhla may raise the water levels throughout Thale Noi. There has also been a proposal to construct a major new highway across the site, from Hua Sai to Thale Noi, although this has, for the moment, been shelved, partly because of the opposition of the government's Wildlife Conservation Division. It is possible that parts of the area will be developed for agriculture under the Phru Khuan Khreng Swamp Development Project.

c) Potential

**Facilities & Activities Available on Site:**

**Institution Responsible for the Site:**

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