

Site Nomination for Peat Site Profiles in Southeast Asia	
Category:	Protected Area
Name of Site:	Gunung Palung National Park
Country:	Indonesia
GPS Point:	Latitude: 1°00' - 1°20' S Longitude: 109°00' - 110°25'E
Location & Access:	<p>Administratively, this park is part of Sub districts of Matan Hilir Utara, Sukadana, Simpang Hilir, Nanga Tayap, dan Sandai. Regency of Ketapang (Province of West Kalimantan)</p> <p>Pontianak – Ketapang in 2.5 hours by Airplane Pontianak – Ketapang in 6 hours by Express Boat Ketapang - Tl. Melano in 2 hours by Mini Bus Tl. Melano – Area in 6 hours by Long Boat</p> <p>Pontianak - Tl. Batang in 4 hours by Express Boat Tl. Batang - Tl. Melano in 1 hours by Mini Bus Tl. Melano – Area in 6 hours by Long Boat</p>
Total Area:	90000.00 hectare(s)
Background of Site:	<p>The unique characteristic of Gunung Palung National lies in its forest ecosystem diversity, from coastal ecosystem to mountain top ecosystem. That's why this area is classified as one of the areas that possesses the most complete vegetation in the world.</p> <p>Physical: This National Park encompasses 90,000 ha of coastal forest and mountains (maximum elevation 1116 m), including one of the largest remaining remnants of primary lowland mixed Dipterocarp forest on Borneo. Gunung Palung National Park has been an active site of scientific research since 1985.</p> <p>Climatic conditions: Temperature 25° - 35° C</p> <p>Rainfall 3,000 mm/year</p> <p>Soil: Five main habitat types are found in the Park and were identified by elevation, soil parent material, amount of accumulated organic material, and drainage conditions: (A) alluvium: rich soils of a recent origin from both sandstone and granite parent material within the floodplain of the Air Putih, at 0 to 50 m elevation, generally well-drained but inundated frequently; (S) sandstone: well-drained sedimentary soils at 20-200 m elevation, high in clay content with occasional presence of shale; (G) granite: well-drained granite soils above 300 m elevation (see Webb & Peart 2000 for a more detailed analysis of this habitat), including submontane forest above 700 m along the two major ridge systems; (W) freshwater swamp: seasonally flooded and poorly drained gleyic soils; and (P) peat: bleached white sands with various amounts of accumulated organic matter, often several meters deep, at 5 - 10 m elevation.</p> <p>Ecology: This Park is the best and most extensive Dipterocarp tropical forest in Kalimantan. About 65% of the area is still primary forest, undisturbed by human activity, and it is rich in plant and wildlife communities.</p> <p>Physical Vegetation: Gunung Palung National Park is a nature conservation area with very high biodiversity value and a variety of ecosystems, including mangrove forest, swamp forest, peat swamp forest, freshwater swamp forest, lowland tropical forest and montane forest, always shrouded in mist.</p> <p>Others: A majority (67%) of the common species was significantly associated with a single habitat, while few were restricted to one habitat. A small proportion (16%) of the species appear to be habitat generalists. The peat habitat had the most profound effect on species distribution. Overall, a large amount of</p>

variation was found in the degree of habitat specificity, even within speciose groups. No obvious evolutionary or ecological correlates with degree of habitat specificity were found. These results suggest that a mixture of stochastic and deterministic processes determine species distribution even across strong environmental gradients.

Many wild orangutan are present, ranging through various habitats, and there is an impressive population of proboscis monkeys (*Nasalis larvatus*), which gather in large nocturnal groups along the swampy river banks. Other monkey species, such as macaques and leafeaters, are common, and the call of gibbons (*Hylobates agilis*) can be heard in the mornings. One of the reasons for the continued faunal abundance is the fact that the surrounding population is Melayu (Malay), not Dayak. These Muslims do not hunt any animals except deer. Dayaks are to be found at a distance and will harvest animals that are using outside forest corridors to move to or from the park. MacKinnon (1992) has generalized from the Gunung Palung situation to suggest that all remaining large populations of orangutan in Kalimantan tend to be located in Malay areas, a position challenged by others who argue that particular habitat characteristics are equally important (Payne, 1992; Mather, 1992).

Significant Value of Site:

- Biodiversity
- Hydrology
- Soil/Carbon
- Cultural & Historical Value
- Socio-economic

Notes:

Biodiversity e.g. plant, animals etc.:

Like many other parts of West Kalimantan, this Park is inhabited by jelutung (*Dyera costulata*), ramin (*Gonystylus bancanus*), damar (*Agathis borneensis*), pulai (*Alstonia scholaris*), rengas (*Gluta renghas*), kayu ulin (*Eusideroxylon zwageri*), *Bruguiera* sp., *Lumnitzera* sp., *Rhizophora* sp., *Sonneratia* sp., ara (a strangling plant), and medicinal plants.

One unique plant in this Park is the black orchid (*Coelogyne pandurata*), which can be seen on the Matan river, in particular from February to April. The attraction of the black orchid lies in the shape of its flower, which is marked by green with black spots in the centre. The blooms last for five to six days.

One hundred and ninety species of bird have been recorded and 35 species of mammals, which play an important role in dispersing seeds throughout the forest. All the families, and probably even most of the species, of bird in Kalimantan are to be found in this Park.

Among the animals commonly found in the Park are the proboscis monkey (*Nasalis larvatus*), orangutan (*Pongo satyrus*), helmeted hornbill (*Rhinoplax vigil*), four-striped ground squirrel (*Lariscus hosei*), barking deer (*Muntiacus muntjak pleiharicus*), sun bear (*Helarctos malayanus euryspilus*), pig-tailed macaque (*Macaca nemestrina nemestrina*), slow loris (*Nycticebus coucang borneanus*), Muellers Bornean grey gibbon (*Hylobates muelleri*), western tarsier (*Tarsius bancanus borneanus*), banded leaf monkey (*Presbytis femoralis chrysomelas*), larger Malay mouse deer (*Tragulus napu borneanus*), rhinoceros hornbill (*Buceros rhinoceros borneoensis*), blue-banded pitta (*Pitta baudii*), red junglefowl (*Gallus gallus*), siamese crocodile (*Crocodylus siamensis*), Malayan giant turtle (*Orlitia borneensis*), and loggerhead turtle (*Carreta carretta*). Another interesting thing to note is the existence of canary squirrels (*Rheithrosciurus macrotis*) which are endangered and very rarely seen.

Hydrology:

The Park is located in downstream of three watersheds. In the northern part, it is included in Simpang watershed with main river of Sungai Semandang and three river branches of Sungai matan, sungai Melia, and sungai Bayas. In the western part, it is included in Pawan watershed with the main river of Sungai Pawan and two river branches of Sungai Laur and Sungai Jekah. In the southern part, it is included in Tulak watershed which consist of Sungai Pebihingan, Sungai siduk and Sungai Lekahan.

Soil/Carbon :

Peat and mineral soil

	<p>Cultural & Historical Value :</p> <p>Up until the last 100 years, the Gunung Palung region was predominately populated by Dayak indigenous groups, with ethnic Malays living on the coast and in the hills around Sukadana. Human populations have increased substantially since the 1960s due to high birth rates, trans-migration programs, and from people moving to the area to work for timber concession companies.</p> <p>Socio-economic :</p> <p>Gaharu wood extraction from Gunung Palung was very profitable for collectors, generating an estimated gross financial return per day of US \$8.80, triple the mean village wage. Yet, the estimated sustainable harvest of gaharu wood at natural tree densities generates a mean net present value of only \$10.83/ha, much lower than that of commercial timber harvesting, the dominant forest use in Kalimantan. Returns per unit area could be improved substantially, however, by implementing known silvicultural methods to increase tree densities, increase the proportion of trees that produce gaharu wood, and shorten the time interval between successive harvests. The economic potential of gaharu wood is unusual among nontimber forest products and justifies experimental trials to develop small-scale cultivation methods.</p>
Designated use (status/legal classification):	- National Park/State Park
Major Issues:	Illegal logging Forest fire
Site Jurisdiction & Administration:	Minister of Forestry, SK No. 448/Kpts-II/90
Peatland Type:	Lowland
Management activities:	<p>a) Past Aquaculture, logging</p> <p>b) Current</p> <p>c) Potential Tourism destination: Pulau Datok Beach and Lubang Tedong hill: marine tours and swimming.</p> <p>Mt. Palung (1,116 m asl.) and Mt. Panti (1,050 m asl.): climbing, waterfalls, observing plants and animals and camping.</p> <p>Cabang Panti: research centre complete with a research station, accommodation and a library.</p> <p>Matan and Simpang Rivers: kayaking/canoeing, observing animals and historical sites.</p> <p>Best time of year to visit: June to September</p>
Facilities & Activities Available on Site:	<p>The facilities available in the development and construction of Gunung Palung National Park are as follows:</p> <ol style="list-style-type: none"> 1. Resort outpost and personnel, and communication device, land and water transportation (speed boat). 2. Patrol road for monitoring the area. 3. Tourism shelter, as natural tourism and recreation facility. 4, Research station of research area
Institution Responsible for the Site:	<p>Name of Organization: Ministry of Forestry Balai Taman Nasional Gunung Palung</p> <p>Postal Address: Ministry of Forestry Balai Taman Nasional Gunung Palung Office address: Jl. KH Wahid Hasyim 41-A Ketapang, West Kalimantan Tel./Fax. : Ministry of Forestry Balai Taman Nasional Gunung Palung</p>

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Nominated by:

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