# BIRDS OF TANJUNG PUTING NATIONAL PARK, KALIMANTAN TENGAH A PRELIMANARY LIST

# by Bohap bin Jalan and Birute M.F. Galdikas (Received 3 October 1986)

# INTRODUCTION

Tanjung Puting National Park is located on the south coast of Kalimantan (Borneo) in the province of Kalimantan Tengah, between 2"35'S and 3° 20'S and 111° 50' and 112° 15'E. Tanjung Puling was first established as a game reserve in two parts during 1936 and 1937 by the Dutch colonial government and the Sultan of Kotawaringin. Consisting of 305,000 ha the reserve was established primarily for the protection of orang utans *Pongo pygmaeus*, proboscis monkeys *Nasalls larvatus* and rhinoceros *Dicerorhinus sumatrensis* with the latter, however, becoming extinct in the 1940's due to severe hunting pressure for its horns. Orang utans and proboscis monkeys still remain plentiful. In 1982 the status of Tanjung puting was upgraded to National park.

The park occupies most of the swampy, alluvial peninsula between Kumai Bay and the Seruyan River. The park is very flat with the highest point no more than 30 m above mean sea level. The soils are generally very poor, heavily leached, poorly developed and very acidic. The Park is drained by a number of small black water rivers radiating from its northern and eastern parts. Ground water forms an important part of all habitats and large areas of the Park are flooded for much of the year.

## VEGETATION

## a) Lowland Dipterocarp Forest

While the vegetation of Tanjung puling is quite varied, approximately 40t of the Park is covered by dryland forest which approximates Lowland Dipterocarp Forest, although it differs in composition from the better known Dipterocarp Forests elsewhere in Borneo; it is forest with a "tropical heath" appearance. Rarely are dipterocarps dominant at Tanjung Puling, and nowhere do they exhibit the size and diversity found in regions of greater soil fertility. The canopy is not particularly high, being about 30-40 m. high with emergents soaetimes up to 50-55 m. A wide selection of species is present including Durio, Shorea, Castanopsis, Lithocarpus, Xylopia, Sindora, Koompassia, Casuarina, etc, with ironwood Eusideroxylon zwageri abundant near the swamp edges.

## b) <u>Peat Swamp Forests</u>

Much of the Park, perhaps 40-50%, is characterized by various types of peat swamp forests, differentiated by degree of inundation, thickness of the peat, acidity, and frequency of species of trees. Stilt roots, pneumatophores and epiphytes are very comnon. The ground surface is made very uneven by roots and pneumatophores, with puddles between trees 2 m. or more deep during the wet season. Black water with a pH of 4.8 - 5.0 flows out of these forests and all over the Park. However, during the dry season the swamps totally dry up. Characteristic of these swamp forests are *Gonystylus bancanus, Dyera, Dactylocladus, Tetramerista, Ganua, Alstonia* and *Shorea balangeran*, although each swamp does not necessarily contain the full component of the above trees.

#### c) <u>Heath Forests</u>

Approximately 5 - 10% of the forests of Tanjung Puting are tropical heath forests which consist of pole-sized trees on leached sandy soils. These forests are frequently associated with peat swamps and the floras of the two habitat types have some affinities. Dacrydium, Eugenia, Castanopsis, Hopea, Schima, Diospyros, Jackia, Licuala and Vatica are characteristic. There is a mossy layer underfoot with some herbaceous vegetation. Big trees are relatively scarce, and the canopy is low and broken.

#### d) <u>Secondary Forests and Old Ladangs</u>

Approximately 10 of the Park consists of areas severely disturbed by human ictivity. Secondary forests with much *Macaranga* are found as are extensive old ladangs which sometimes stretch 2-3 km. in from the rivers. These old ladangs are covered with grass (*Imperata*) and ferns, and dotted with shrubs (such as *Melastoma*) and lone trees, frequently *Schima*.

## e) <u>Coastal Forests</u>

Nowhere are the mangrove forests well developed. Sea coasts have extensive Nipa formations which extend inland and mark the extent of brackish waters. On the sandy seashores of the south coast a typical flora of *Casuarina*, pandanus, *Podocarpus*, *Barringtonia*, and *Scaevola* exists.

#### BIRDS OF TANJUNG PUTING

Kalimantan (Borneo) has approximately 420 resident bird species and 130 migrants (Smythies, 1981). Although Borneo has the most specialized bird fauna in the Halaysian subregion with 29 endemic species, bird endemism is primarily a montane phenomenon and only few species of Tanjung Puting birds are endemic. Nevertheless the park is of considerable importance for its varied bird fauna representative of the poorer soils of the coastal plain. Shallow, marshy lakes hosting bird populations are a feature of Borneo's southern portion. Tanjung Puting contains the only reported active colony from Borneo for any species of white egret or heron. Located near Buluh Besar River, one "Danau Burung" or bird lake serves thousands of large birds of at least six different species, many of them now rare in Borneo (Galdikas, et al, 1985). Other colonies reportedly also include Lesser Adjutant Storks, and it is probable that Storm's Stork also breeds in the Park. probably these colonies serve entire populations of the south-central region, but no ornithologist has yet studied in depth the bird life of any Bornean lake, one of the great gaps in our knowledge. The need to safeguard the Tanjung puting colonies as one step in the overall conservation of Kalimantan's wetland bird population is obvious. The following preliminary list is incidental to 15 years of primate research of the Orang Utan and Conservation Project (O.R.C.P.) by several observers. Our 35 sq.km. study area consists of Lowland Dipterocarp Forest (63t), peat Swamp Forest (27%), Tropical Heath Forest (5%) and secondary and ex-ladang associations (5t). Most of the sightings were made within the study area itself while others were made at the "bird lake" (Danau Burung) in 1979 (Galdikas, *et al*, 1985) as well as on several brief forays and patrols into the northern and eastern sides of the Park. More recently many of the species on the list have been reconfirmed by Ken Burton and Steve and Anne Nash.

Although Tropical Heath Forests and Peat Swamp Forests generally have lower species diversity than Lowland Dipterocarp Forest, the variety of habitats at Tanjung puting provides opportunity for a wide range of species. The preliminary checklist indicates 165 bird species sighted in the park; more intensive investigations will, undoubtedly, push this figure well over 200. Some of the birds encountered at Tanjung puting such as the endemic Baldheaded Wood-Shrike *Pityriasis qyanocephala are* rare or under-recorded anywhere in Borneo. Some of the pheasants and wetland species could be endangered. Although Tanjung Puting is best known for its primates, the variety of birds already recorded in the following preliminary list enhances the intrinsic value of this important national park and gives urgency to its protection.

# PRELIMINARY LIST

Anhinga melanogaster Ardea purpurea Butorides striatus Bubulcus ibis Egretta alba Egretta garzetta Nycticorax nycticorax Leptoptilos javanicus Ciconia stormi Machaeramphus alcinus Haliastur Indus Accipiter trivirgatus Ictinaetus roalayensis Spilornis cheela Icthyophaga nana Argusianus argus Lophura erythrophthalma Lophura ignita Helanoperdix nigra Rollulus rouloul Gallicrex cinerea Tringa glareola Glareola maldivarum Treron fulvicollis Treron capellei Treron curvirostra Treron vernans Tieron olax Ducula aenea Chalcophaps indica Ptilinopus jambu Streptopelia chinensis Psittacula longicauda Psittinus cyanurus Loriculus galgulus Cacomantis merulinus

Surniculus lugubris Chryaococcyx xanthorhynchus Phaenicophaeus chlorophaeus Phaenicophaeus curvirostris Centropus sinensis Centropus bengalenais Phodilus badius Strix leptogrammica Otus bakkamoena Ninox scutulata Bubo sumatrana Batrachostrrous javensis Batrachostomus cornutus Eurostopodus temmincki Rhaphidura leucopygialis Hirundapus giganteus Apus affinis Collocalia esculenta Collocalia maxima Hemiprocne longipennis Hemiprocne comata Harpactes kasumba Harpactes duvaucelii Halcyon chloris Halcyon pileata Alcedo meninting Pelargopsis capensis Ceyx erithacus Nyctiornia amicta Merops viridis Anorrhinus galeritus Rhyticeros undulatus Rhyticeros corrugatus Buceros rhinoceros Anthracoceros coronatus Anthracoceros malayanus

Megalaima australis Megalaima rafflesii Megalaima mystacophanos Calorhamphus fuliginosus Sasia abnormis Picus miniaceus Mulleripicus pulverulentus Dryocopus javensis Dinopium rafflesii Blythipicus rubiginosus Meiglyptes tukki Henicircus concretus Chrysocolaptes validus Picus puniceus Calyptomena viridis Cymbirhynchus macrorhynchus Eurylaimus ochromalus Pitta granatina Hirundo tahitica Hirundo rustica Coracina striata Coracina fimbriata Lalage nigra Pericrocotus igneus Aegithina viridissima Chloropsis sonnerati Chloropsis cyanopogon Pycnonotus goiavier Pycnonotus eutilotus Pycnonotus plumosus Pycnonotus brunneus Pycnonotus erythropthalmos Dicrurus paradiaeus Oriolus xanthonotus Irena puella Platylophus galericuiatus Platysmurus leucopterus Corvus enca

Sitta frontalia Pellorneum capiastratum Trichastoma malaccense Malacopteron cinereum Macronus gularis Macronus ptilosus Stachyris maculata Stachyris erythroptera Eupetes macrocercus Copsychus malabaricus Copsychus saularis Orthotomus ruficeps Orthotomus sericeus Prinia flaviventris Rhinomyias umbratilis Ficedula dumetoria Cyornis turcosa Rhipidura javanica Hypothymis azurea Terpsiphone paradisi Lanius cristatus Gracula religiosa Pityriasis gymnocephala Anthreptes malacensis Antreptes singalensis Hypogramma hypogramnicum Nectarinia sperata Nectarinia jugularis Aethopyga siparaja Arachnothera longirostra Arachnothera flavigaster Prionochilus percussus Prionochilus thoracicus Prionochilus maculatus Dicaeum chrysorrheum Dicaeum trigonostigma Lonchura fuscans Lonchura malacca

## Acknowledgments

We are very grateful to the foundations, institutions and individuals who supported the O.R.C.P. over the years, particularly Dr. Soedjarwo, former Governor w. Gara, Governor Gatot Amrih, L.I.P.I. (Dr. Doddy Tisna Amidjaja, Mrs. Moertini Atmowidjojo and Mr. Napitupulu), and p.H.p.A. (Dr. Rubini Atmawidjaja). Major funding was provided by the wilkie Brothers Foundation (Mr. Robert Wilkie and Mr.Leigton wilkie), the L.S.B. Leakey Foundation, the National Geographic Society and Earthwatch.

# Ringkasan

Sebanyak 165 jenis burung yang ditemukan di Taman Nasional Tanjung Puting (Kalimantan Tengah) dicantumkan dalam suatu daftar. Taman Nasional yang luasnya 1k. 35 km persegi dan 1k. 30 m dpl., terdiri dari hutan dipterokarp dataran rendah (63%), daerah gambut beraua (27%), hutan Kerangas (5%), serta hutan sekunder dan bekas ladang (5%). Daftar ini aerupakan daftar pemula untuk jenis burung yang ditemukan di Taman Nasional tersebut.

## Deferences

Galdikas, B., G.L. Shapiro and P. Katz, 1985. Danau Burung, a Bird Lake in Southern Indonesian Borneo. Ardea 7.3:189-190.

Smythies, B.E. 1981. The Birds of Borneo.Third Ed. The Sabah Society and the Malayan Nature Society, KualaLumpur.

## Address

Orang Utan Research & Conservation Project, Tronol Pos 1, Pangkalanbuun Kalimantan Tengah.