

## Bird Summary for the Rimba Raya project area January 2009

Some 361 bird species may reasonably be expected to occur in the Rimba Raya project area based on current knowledge regarding distribution and habitat preferences. The list includes 223 species (61.8%) that have previously been recorded in the adjacent Tanjung Puting National Park (TPNP) (bin Jalan & Galdikas 1986; Nash & Nash 1987).

### Habitat preferences

Based on habitat preferences:

- Some 232 bird species may be expected to occur in intact forest habitats, including *kerangas*, peat swamp, freshwater swamp forest, dipterocarp and riparian forest associations.
- 174 species may occur in anthropogenically disturbed forest habitats such as secondary forest, *tembawang*, small forest patches and coastal fringing forests and woodlands.
- 97 species may occur in converted habitats including *ladang*, regrowth scrub, *sawit*, grasslands and other cleared areas.
- At least 127 species may occur in freshwater non-forest wetland habitats, including swamps and rivers, and in coastal marine habitats. A suite of additional coastal and oceanic seabirds may be sighted along the coast but are not included in the list.

### Species of conservation concern

Of these, 156 species are of national and/or international conservation significance. Eighty species are listed by the IUCN as Threatened or Near-threatened with global extinction, including the Endangered Storm's Stork (*Ciconia stormi*) and eight Vulnerable. Eighty-three species are protected under Indonesian law and 48 species are listed under CITES Appendix I (Peregrine Falcon *Falco peregrinus*, Helmeted Hornbill *Buceros vigil*) or II.

Of nine globally Threatened taxa that may occur, the following seven have been recorded in the TPNP.

#### **Storm's Stork (Endangered)**

Endemic to the Sunda sub-region, where less than 1,000 birds remain in the forested swamps of Borneo, Sumatra and the Malay Peninsula. In Kalimantan both species occupy habitat along the Mahakam River and in scattered localities near the south coast including near Bandjarmasin, along the Negaro River and in TPNP (bin Jalan & Galdikas 1986; Nash & Nash 1987; Budiono et al. 2006; BirdLife International 2001). Importantly, Storm's Stork is believed to breed in TPNP.

#### **Lesser Adjutant (*Leptoptilos javanicus*) (Vulnerable)**

Formerly common in wetlands throughout Southeast Asia, habitat loss, hunting and disturbance have resulted in a dwindling and fragmented global population of less than 5,000 birds (BirdLife International 2001). Most closely associated with coastal mangroves and associated mudflats. Lesser Adjutant is believed to breed in TPNP.

**Black Partridge (Vulnerable)**

The ecology of this scarce and inconspicuous Sundaic endemic is poorly known, though it apparently inhabits lowland and hill forest, including peatswamp (BirdLife International 2001; Madge & McGowan 2002). Recorded breeding in *kerangas* in TPNP (Nash & Nash 1987).

**Crestless Fireback (Vulnerable)**

A scarce pheasant of lowland forests in Borneo, Sumatra and the Malay Peninsula. Few recent records from Borneo, with most restricted to the south and west (BirdLife International 2001). Recorded in TPNP (bin Jalan & Galdikas 1986; BirdLife International 2001).

**Large Green-pigeon (Vulnerable)**

A patchily distributed inhabitant of primary and logged lowland Sundaic forests (BirdLife International 2001). Extensive habitat clearance and hunting pressure have led to heavy declines in a global population that is currently estimated at less than 20,000 birds. As a large-fruited fig specialist it is likely not to depend heavily on *kerangas* or other low productivity forests. It has been recorded on multiple occasions in TPNP (bin Jalan & Galdikas 1986; Nash & Nash 1987; BirdLife International 2001) and is likely also to occur in surrounding areas.

**Blue-headed Pitta (Vulnerable)**

Endemic to Borneo where it is patchily distributed though locally fairly common in appropriate habitat within lowland and hill forests up to 600 m asl. The core habitat is primary and regenerating selectively logged forest near rivers and streams, where it prefers flatter terrain such as floodplains and alluvial terraces (Lambert 1992; Lambert and Woodcock 1996; BirdLife International 2001). The Blue-headed Pitta is particularly sensitive to logging. Unlike many other pitta species it has not been recorded in degraded habitats such as plantations and scrub, and it may only occur in logged forests that are adjacent to primary forest which acts as a source of dispersing birds (Lambert and Woodcock 1996; BirdLife International 2001). Moreover, while the recent high rates of deforestation have depleted populations of all lowland biota, those Bornean endemics preferring accessible and ecologically sensitive level riverine forest are likely to be placed under even higher pressure. This species is reported to occur in TPNP (BirdLife International 2001).

**Hook-billed Bulbul (Vulnerable)**

Endemic to Borneo, Sumatra and Bangka Island where it is a specialist resident of low productivity forests such as *kerangas* and peatswamp (Sheldon 1987; Dutson et al. 1991; BirdLife International 2001). It is reportedly common in inland forest areas in TPNP, including swamp forest, *kerangas* and fire-padang scrub (Nash & Nash 1987).

**Biogeography**

Borneo's southern coastal forests and wetlands (including 'Lake of a Thousand Birds' in Tanjung Putting National Park and Lake Sembuluh on the east side of the Seruyan River) host a variety of bird species that are entirely or largely restricted to these parts of the island. These include two species of woodpecker (Sunda Pygmy Woodpecker, Common Flameback), two kingfishers (Ruddy and Collared Kingfishers), at least three species of waterbird (Purple Swamphen, Common and Dusky Moorhens), and a suite of resident and migratory passerines (Mangrove

Whistler, Asian Glossy Starling, Great Tit, Brown and Long-tailed Shrikes, Copper-throated Sunbird and Crimson-breasted and Scarlet-headed Flowerpeckers).

In addition to the large number of IUCN-threatened bird species residing in the area, the adjacent Tanjung Putting National Park also supports breeding colonies of wetland birds that are known to breed in few or no other places in Borneo, including a number of Threatened birds. Species in this category include Storms' Stork, Lesser Adjutant and a variety of egrets and herons (bin Jalan and Galdikas 1986).

### Future research

Further research on birds in the estate is highly desirable due to a combination of factors:

- The distribution and ecology of Bornean birds are still poorly understood. Importantly, there are still gaps in our knowledge of the bird community structure in the TPNP and surrounding areas. The most extensive list to date was compiled over a single period between May and September in 1986 (Nash and Nash 1987). While this work provides a good background survey of the local avifauna, it does not constitute a complete inventory of all bird species present. In particular, a number of endemic and conservationally significant taxa may remain undetected (e.g. Wallace's Hawk Eagle *Spizaetus nanus*, Bonaparte's Nightjar *Caprimulgus concretus*).
- The high biodiversity values present in Bornean lowland forests.
- The high rate of loss of Bornean lowland forests in recent decades, including the destruction and degradation of habitat within protected as well as production landscapes. As a result, there is an emerging consensus that maintaining Indonesia's biodiversity will rely on conservation efforts within production landscapes (e.g. Meijaard et al. 2005).
- The high number of bird (and other) species of international and national conservation significance present within the TPNP, situated immediately to the west of the forest management unit, many of which may also occur in adjacent areas.
- The loss or degradation of ~40% of forest originally existing within the TPNP, particularly from illegal logging and forest fires (Environmental Investigation Agency 1999; Greenpeace 2004). These losses highlight the importance of adjacent areas in firming the ongoing viability of resident bird populations. Of more than 32,000 ha of Oil Palm estate situated immediately to the east of the TPNP, some 75% still supports intact or only lightly degraded forest (Stanley 2008). This area thus offers excellent opportunities for bolstering the viability of animal populations utilising the TPNP and surrounding areas.
- Taken together, these factors indicate that an on-the-ground biodiversity survey will be of great value in:
  1. Characterising the biodiversity values present within the oil palm license areas in or near the project area.
  2. Identifying areas and habitats important in maintaining the viability of local, regional and in some cases global populations of species of concern.
  3. Developing sustainable management of High Conservation Values present within the project area and biodiversity in the broader sense, the protection of which is a central feature of the CCBA standard.

## References

bin Jalan B. & Galdikas B. M. F. (1986) Birds of Tanjung Puting National Park, Kalimantan Tengah. A preliminary list. *Kukila* 3 (1-2): 33-37.

BirdLife International (2001) *Threatened Birds of Asia: the BirdLife International Red Data Book*. BirdLife International, Cambridge.

Budiono, Krib D. & Agustina R. (2006) *Biodiversity Surveys in the Middle Mahakam Lakes and Wetlands Area in East Kalimantan, Indonesia, 2005*. Middle Mahakam Conservation Program, 2006.

Dutson G. C. L., Wilkinson R. J. & Sheldon B. C. (1991) Hook-billed Bulbul, *Setornis criniger*, and Grey-breasted Babbler, *Malacopteron albogulare*, at Barito Ulu, Kalimantan. *Forktail*, 6, 78-82.

Greenpeace (2004) *Tanjung Puting National Park Under Siege*.

Lambert F. R. (1992) The consequences of selective logging for Bornean lowland forest birds. *Philosophical Transactions of the Royal Society of London Series B* 335, 443-457.

Lambert F. R. & Woodcock M. (1996) *Pittas, Broadbills and Asities*. Pica Press, Sussex, UK.

Madge S. & McGowan P. (2002) *Pheasants, Partridges and Grouse*. Christopher Helm, London.

Meijaard E., Sheil D., Nasi R., Augeri D., Rosenbaum B., Iskandar D., Setyawati T., Lammertink M., Rachmatika I., Wong A., Soehartono T., Stanley S. & O'Brien T. (2005) *Life After Logging: Reconciling Wildlife Conservation and Production Forestry in Indonesian Borneo*. CIFOR, WCS and UNESCO, Bogor, Indonesia.

Nash S. V. & Nash A. D. (1987) An annotated checklist of the birds of Tanjung Puting National Park, Central Kalimantan. *Kukila* 3 (3-4): 93-116.

Sheldon F. H. (1987) Habitat preferences of the Hook-billed Bulbul *Setornis criniger* and the White-throated Babbler *Malacopteron albogulare* in Borneo. *Forktail* 3, 17-25.

Stanley S. A. (2008) *Preliminary Carbon Estimate in the Proposed Extension Area of Tanjung Puting National Park, Central Kalimantan, Indonesia*. Draft Report to EnVision Corp.