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The Sundaic region, identified as one of the biodiversity hotspots on earth, ranks highly in endemism of its flora and fauna in comparison to other regions. It also harbours a disproportionately large number of primate species and endemics, some 28 in all. Unlike the Long-tailed macaque (*Macaca fascicularis*), an urban survivor, most primates are confined or linked to natural forests. Unfortunately, the Sundaic region also ranks highly for loss of primary forest cover. Thus most, if not all, Sundaic primate endemics are threatened with extinction.

The focal area of this study, Java and Borneo, comprise more than half of the land surface of the Sundaic region. Java has a history of human pressure dating several centuries; little forest remains now and the people are no longer largely dependent on the forest. Contrastingly, the largely forest-covered Borneo is undergoing rapid changes in land-use and human attitudes, which alter the pressures on wildlife populations.

It is surprising to read the claim that 'there is a lack of base line knowledge concerning the ecology of most, if not all, endemic primates in Indonesia', considering that easily more than 200 papers have been published on Indonesian primates. Furthermore, amongst the endemics of Java and Borneo, only one is listed as 'Data Deficient'. Certainly primates have attracted much more attention than the secretive carnivore family groups!

However, Nijman suggests that most long-term primatological studies in Southeast Asia have been concentrated at a limited number of field stations. These are located mainly in relatively pristine habitats, in areas with limited or no hunting pressure, almost entirely in the lowlands and where populations of the study species are present in relatively high densities. Furthermore, while the effect of disturbances (e.g. selective logging, hunting and fire) on primate populations have been studied in isolation, in reality, they appear to be tightly linked.

**Forest (and) primates. Conservation and ecology of the endemic primates of Java and Borneo.** Nijman, V., 2001. Tropenbos Kalimantan Series 5. Publisher: Tropenbos International, The Netherlands. 232pp. ISBN:90-5113-052-X. Price: EUR 20 (\$18 US). Order online at <http://tb.nieuwland.nl/> or write to Tropenbos International, PO Box 232, NL 6700, AE Wageningen, The

It is thus now necessary to build on these foundation studies to provide for practical conservation measures. This thesis is an example of such a step. Between 1994 and 2001, various field studies were conducted in Java, Borneo and in museums. This thesis integrates the contents of papers published earlier in scientific journals with other authors. It presents the reader with several objectives: (i) to assess the geographical distribution of individual species on Java and Borneo; (ii) to develop, test and evaluate census methods by which primate populations can be assessed and monitored; (iii) to determine the type and magnitude of the threats facing the individual species and habitats on the islands; (iv) using data collected under (i), (ii) and (iii), to re-assess the conservation status of the endemic primates of Java and Borneo using the IUCN threat criteria; and subsequently (v) to identify key areas for conservation based on densities of particular primate species, the co-existence of a disproportional large subset of primate species and management feasibility.

The chapters in this book are:

1. Forest and primates, a general introduction to the conservation of endemic primates in the Sundaic region.

**SECTION I. Background and Survey Methodology:** 2. Density and biomass estimates of gibbons (*Hylobates muelleri*) in Bornean rainforest: a comparison of techniques (with Steph B. J. Menken). 3. Effects of behavioural changes due to habitat disturbance on density estimation of rain forest vertebrates, as illustrated by gibbons (Primates: Hylobatidae). 4. Calling behaviour of wild Javan gibbons *Hylobates moloch* in Java, Indonesia (with Thomas Geissmann). 5. Geographical variation in pelage characteristics in grizzled leaf monkey *Presbytis comata* (Desmarest, 1822) (Mammalia: Primates: Cercopithecidae).

**SECTION II: Studies on Endemic Primates of Java:** 6. Occurrence and distribution of grizzled leaf monkey *Presbytis comata* (Desmarest, 1822) (Mammalia: Primates: Cercopithecidae) on Java, Indonesia. 7. Geographical distribution of ebony leaf monkey *Trachypithecus auratus* (Geoffroy Saint Hilaire, 1812) (Mammalia: Primates: Cercopithecidae). 8. A faunal survey of the Dieng mountains, Central Java, Indonesia: status and distribution of endemic primate taxa (with S. (Bas) van Balen).

**SECTION III: Studies on Endemic Primates of Borneo.** 9. Distribution and conservation of the proboscis monkey *Nasalis larvatus* in Kalimantan, Indonesia (with Erik Meijaard). 10. The local extinction of the proboscis monkey *Nasalis larvatus* in Pulau Kaget Nature Reserve, Indonesia (with Erik Meijaard). 11. Patterns of primate diversity on Borneo and selection of priority areas for conservation (with Erik Meijaard).

**SECTION IV: Synthesis:** 12. Re-assessment of IUCN conservation status of the endemic primates of Java and Borneo. 13. General discussion

Forests and primates face tough times. Indonesia's recent policy of decentralization had provided opportunities for illegal logging (Kearney, 2001; Richardson, 2001). However, in October 2001, Indonesia instituted an indefinite ban on the export of logs in line with a recommendation made by an International Timber Trade Organisation (ITTO) Mission in the country, which had found illegal logging to be rampant there (ITTO, 2001).

It is likely though that Java's history of deforestation will repeat itself on the other Sundaic islands and possibly other parts of Southeast Asia with growing human populations, all of which are host to much higher numbers of primate species. The findings and conclusions of the present study are thus applicable to the conservation of Southeast Asian primates and should be read by workers in tropical forest conservation and management, primate rehabilitation, captive breeding and ecology.

This fifth book in the Tropenbos-Kalimantan series is also the first zoological title. The publisher, Tropenbos

International, is a Dutch non-governmental organization, facilitating research and development programmes in Asian and Africa. In Southeast Asia, it is also developing research in Vietnam.

#### **LITERATURE CITED**

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Kearney, M., 2001. Illegal logging in national parks shocks minister. *The Straits Times*, 24 April 2001.

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