

## EDITORIAL

I will have lasting memories of days spent in camps within die lowland forests of the Sundanese region, in Sumatra and Kalimantan West Malaysia and Brunei. Towards sunset on quiet, fine evenings. the air would ring with the 'songs' of a dozen Red crowned Barbet *Megalaima rafflesii*, each calling at a slightly different speed and pitch. At intervals, there would be die 'shay' call of a Crimson winged Yellownappe *Picus puniceus* in the upper branches of a dead tree (identity assumed, it would always be silhouetted against the setting sun), or the loud pig like squeals of a group of Black Hornbills *Anthracoceros malayanus*. Inside the forest, the White rumped Shama *Copsychus malabaricus* would be singing its last sweet refrain (or, perhaps, the Rufous tailed Shama *C pyrropygus* its last mountful refrain). As each bird settled into silence, the Malaysian Eared Nightjar *Eurostopodus temminckii* would herald the short dusk, signaling that it was time for a river cooled beer, and perhaps the Indian Cuckoo *Cuculus micropterus* would be commencing a night long chant. We nay not have always known then which strange night call belonged to which owl, frogmouth or forest nightjar, but there was pleasure in knowing that these mysteries were there to be solve&

Pleasant memories indeed. Last year, the realization came suddenly, like a blow in the stomach, that them wore becoming just that memories. Ironically, my very presence had often been an indication that the forest had already been designated for clearance. However. this did not then seem to be too important. This was in the 1970s, and a lot of form remained. The situation in Indonesia was quite favourable, when compared with some other countries in the region.

Twenty five years on, those endless forested plains have been converted to endless open country, as oil palm estates, pulpwood plantation, smallholdings, or in some cases a wilderness of coarse grass and burnt trees. In each case their monotony A never relieved by my birds except a few "trash" species that have moved in. Together with their forest even the lush mixed farming areas of the traditional river valley settlements are being lost. An entire fauna may be crashing to virtual extinction over just a few years. And that is just the birds. The mammal community of the Sundaic lowland forest is arguably the most spectacular and diverse in the world and now lies in shreds.

For the visiting bird watcher, on a rapid tour through selected national parks, the opportunities are still thin to capture the am experiences. He or she may have no reason to be aware of the extent of forest conversion outside the planned itinerary. However, Act the facts speak for themselves. Over little more than a decade, Sumatra has lost nearly 7 million hectares (ha) or 29% of the forests that were still extant in the mid 1980s. Kalimantan has lost 8.5 million ha or 21%, and Sulawesi 2.3 million ha or 20%. Over Indonesia as a whole, some 20 million ha have been lost in twelve years. That baseline was 1997, and possibly a further 5 million ha have gone since then. Nationwide, the annual rate of deforestation exceeds 1.7 million ha per year or 3 ha/minute. In terms of hornbill habitat, that is equivalent to up to 7,000 hornbills per day.

Some may argue that we are being alarmist, that Sumatra still has 35% forest cover, Kalimantan 60%, and Sulawesi 49%. The converted land earns revenue and foreign exchange, and improves the welfare of the people. This is the argument that is presented by the developers and the corporate interests (the principal beneficiaries). The government will claim that 10% of the land area has conservation status while a further 18% has protection forest status. In practice, in Sumatra and parts of Kalimantan, significant area with this status already no longer carry a forest cover. We may still have some very good reserves and parks, but they me isolated and becoming increasingly subject to encroachment.

It is of course mainly the lowland forests that are being converted. Assuming no change in the present rates, it is predicted that the forests of the non swampy lowlands will become extinct in Sumatra by about 2005, and the wetland forests soon after 2010. In Kalimantan, they would last five years longer. Only isolated pockets will remain, insufficient to support a fraction of their former genetic diversity. [Sulawesi is perhaps fortunate in that it is a mountainous island and the majority of its endemic birds are highland species]. The wetlands will now come under increasing pressure for conversion. Even the intractable peat swamp forests are not safe, despite the expected low returns. Increasingly, the investors must also turn to the hills, along with the peasant farmers displaced by loss of rights or unemployment in the plains.

Now there is a new worry, and the implications are appalling. Inappropriate government policies and vested interests have led to enormous over capacity in the pulp and paper industry, and this can only be satisfied through illegal logging. The reserves are now under greater threat than they have ever been, and the authorities seem to be powerless, or lack the incentive, to control it. Along with this, impoverishment resulting from the monetary crisis that commenced in 1997 has encouraged a ruthless 'harvest' of anything that can be eaten or sold, birds included.

There is another even bigger threat lurking, frightening in its finality. There is evidence, although not yet statistically proven, that forest clearance is resulting in decreasing rainfall and increased drought severity. This may be affecting especially the equatorial zone of Indonesia, in other words the more northern areas. While floods will indeed always occur, and they will be exacerbated by the forest loss, it is the spectre of fire that is our biggest worry. A national park that has been illegally logged will be a tinder box awaiting a spark in the next drought. The peat forests, especially those close to new estate developments, will be especially at risk. Kutai has already suffered to an intolerable degree through repeated fires. In the next big drought, perhaps in a year or two, Gunung Palung, Tanjung Puting, Berbak and Bukit Tigapuluh, to name a few, will face their severest test. The margins of the bigger parks, such as Barisan Selatan, Kerinci Sebelat and Leuser, are included in this dire projection. And there will always be another El Nino following on behind.

A recent paper<sup>1</sup> identifies 25 biodiversity hotspots that comprise only 1.4% of the Earth's surface yet support 44% of all species of vascular plants and 35% of all species in four vertebrate groups. Two of these hotspots are Sundaland and Wallacea, with the former Tanking in the eight most urgent. It is the Sundaland forests of Sumatra and Kalimantan that are suffering the most concerted assault. The new Asian Bird Red Data Book is likely to be a frightening document, with its focus, in this region, on the lowland birds that we hitherto took for granted. Genetic isolation especially of the larger lowland species is already a fact. Our battle will be to ensure that at least a large proportion of what remains in the protected area network will be passed down into perpetuity.

A few months ago, the World celebrated the arrival of a new millenium. Those of us who value the natural environment (and every one of us needs to acknowledge the services that it provides) can only bemoan its remorseless extinction as each year passes. Time is fast running out to ensure that our future generations will still have the opportunity to experience the sounds of the lowland forests with which we were familiar.

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<sup>1</sup>Myers, N., R.A. Mitterineier, C.G. Mitternicier, G.A.B. da Fonseca & J. Kent. 2000. Biodiversity hotspots for conservation pforities. *Nature* 403: 853 859 (24 February 2000).