

			Batam	Bintan
202	Plain-throated Sunbird	<i>Anthreptes malacensis</i>	x	x
203	Purple-throated Sunbird	<i>Nectarima sperata</i>	NSS	x
204	Copper-throated Sunbird	<i>Nectarinia calcostetha</i>	x	SR
205	Olive-backed Sunbird	<i>Nectarima jugularis</i>	'.'	X
206	Crimson Sunbird	<i>Aethopyga siparaja</i>	X	x
207	Little Spiderhunter *	<i>Arachnothera longirostra</i>	NSS	SR
208	Yellow-eared Spiderhunter	<i>Arachnothera chrysogenys</i>		'.'
209	Scarlet-breasted Flowerpecker *	<i>Prionochilus thoracicus</i>	NSS	NSS
210	Crimson-breasted Flowerpecker	<i>Prionochilus percussus</i>		x
211	Brown-backed Flowerpecker	<i>Dicaeum everetti</i>		'.'
212	Orange-bellied Flowerpecker	<i>Dicaeum trigonostigma</i>	x	x
213	Scarlet-backed Flowerpecker	<i>Dicaeum cruentatum</i>	x	x
214	Oriental White-eye (Kundur)	<i>Zosterops palpebrosus</i>		
215	Eurasian Tree Sparrow	<i>Passer montanus</i>	x	x
216	Java Sparrow	<i>Padda oryzivora</i>	'.'	
217	White-rumped Munia *	<i>Lonchura striata</i>		SR
218	Scaly-breasted Munia *	<i>Lonchura punctulata</i>	x	SR
219	Black-headed Munia	<i>Lonchura malacca</i>	'.'	x
220	White-headed Munia""	<i>Lonchura maja</i>	RFO	

(1952) or the author.

## THE RAPTOR COMMUNITY OF NIAS ISLAND, SUMATRA: SURVEY AND CONSERVATION

by

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### Summary

During a short survey of the diurnal raptor community on the island of Mas in July 1992, 1 (bund. seven species of Falconiformes. Three of them were hawk-eagles: *Spizaetus alhoniger* last confirmed in 1886, *S. nanus*, presumed to be extinct and *S. cirrhatus*, never cited for the island.

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These three eagles appeared to be highly endangered because of heavy deforestation but the future of the other raptor species seems more secure.

### **Introduction**

The results of the first ornithological survey of Nias Island, the largest and most populated island off western Sumatra, since over thirty years (Dymond 1994) and the review of the west Sumatran islands avifauna (Holmes 1994) prompted me to record the data obtained during a personal survey of this island from 20 to 26 July 1992. This survey was entirely focused on diurnal raptors (Falconiformes) and other birds were only incidentally recorded when this did not distract my attention from the intensive search for birds of prey. The only species, already known from the island but not recorded during the 17-day visit in May 1990 of Dymond (1994) and which I identified beyond any doubt was the Rufous Woodpecker *Ceileus brachyunis*.

During six fall days of continuous survey from dawn to night, mostly by foot, I searched only a small part of the island but concentrated on the most wooded areas according to the information provided by as many local people as I could question. The area surveyed extended first along the eastern coast from the Binaka airstrip to the main town of Gunungsitoli and from there to north of Tuhemberua (see map in Dymond 1994). From Gunungsitoli, I went both along the main road and through the hills to Botombawo and Alasa, then straight west to the western coast through the interior of the island.

As mentioned by Dymond (1994) and Holmes (1994), the island of Nias is almost totally deforested and covered with cultivated fields, low secondary growth, and plantations of rubber, coffee and bananas. Although some of these agroforests may still harbour a substantial part of the original forest avifauna (see Thiollay 1995a for the most diversified agroforest types in western Sumatra), they usually retained a much impoverished bird community, especially the extensive coconut groves. The significant forest patches that were found and visited were also the only two remaining ones mentioned by local people: a) a swamp forest along the coast north of Tuhemberua, at the northeastern tip of the island, and b) a logged, mostly secondary, but still dense forest in the hilly interior between AJasa and the western coast. Their respective areas could not be assessed, but they were probably not more than a few hundred hectares each. All the hawk-eagles were seen only over or around these degraded forests.

### **Results**

Among the seven raptor species recorded during this survey, the last three were not recorded by Dymond (1994) and one was even new to the island (not cited in Marle & Voous 1988 or Holmes 1994).

**Brahminy Kite** *Haliastur inchis* and **White-bellied Sea-eagle** *Haliaeetus leucogaster*. Isolated individuals observed along the eastern coast on four occasions each. They seem to be reasonably common, but narrowly dependent upon coastal resources and adjacent wetlands or ricefields.

**Crested Serpent-eagle** *Spilornis cheela aslirius*.

At least eighteen different individuals recorded in a wide variety of secondary forests, open woodlands and tree plantations from coastal swamp forest to the hilly interior. It is probably the most abundant and least threatened raptor species on the island.

**Crested Goshawk** *Accipiter trivirgatus niasensis*.

Interestingly, Nias is the only island of all the West Sumatra islands where a population (endemic subspecies) of this otherwise widespread species is known (Marle & Voous 1988, Holmes 1994). I saw this goshawk at least eight times, some of the birds in display flight, in both coastal swamp and hill forests, highly degraded and fragmented forest patches, rubber, coffee and even coconut plantations. Although it is considered as a dense forest species, it seems to tolerate here a fairly high degree of deforestation or forest disturbance and thus to be able to survive on Nias at least in the relatively short term.

**Changeable Hawk-eagle** *Spizaetus cirrhatus*.

This species had never been cited from Nias. I saw it twice in the interior of the island (west of Alasa and between Alasa and Botombawo), both were dark-phased individuals similar to those I often observed in western Sumatra (Thiollay 1995b). In the west Sumatran islands, the Changeable Hawk-eagle was only known from the islands of Simeulue to the northwest of Nias (endemic subspecies *vanheurmi*) and from Siberut to the southeast (presumably the widespread subspecies *limnaeetus*). Its presence on Nias is not surprising and may have been overlooked previously. However, it cannot be ruled out that this hawk-eagle may have colonized Nias after widespread deforestation had created the open woodland habitat that this species usually selects throughout most of its range. The subspecies involved remains to be identified, although the dark phases observed are a common feature of the *limnaeetus* populations, notably on the Sumatran mainland.

**Blyth's Hawk-eagle** *Spizaetus alboniger*.

One adult was identified near the only significant patch of forest encountered in the interior of the island. It was last collected in 1886 (Dymond 1994) and cited by Ripley in 1944 (Marle & Voous 1988). The long term survival of the island population of this dense forest eagle is in doubt because of the almost total disappearance of its typical habitat.

**Wallace's Hawk-eagle** *Spizaetus nanus stresemanni*.

This endemic subspecies was described from Nias and not seen again for more than 50 years. According to accepted rules, it was consequently presumed extinct by Dymond (1994). I saw well, and on two different days, an adult and an immature bird in the dense swamp forest north of Tuhemberua. This last remnant of lowland forest was an isolated fragment still encroached by recent and sometimes on-going clearance, and was surrounded by densely cultivated areas with no other forest patch in view. Thus, while this endemic subspecies was extant in 1992, its long term survival is very unlikely under such a high and continuing rate of deforestation.

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## Discussion

Nias is the largest and most accessible island among the numerous islands off the west coast of Sumatra. Yet it is rarely visited by ornithologists and most of our knowledge of the avifauna dates back to 50-150 years ago (Dymond 1994). At the time of the first collections, Nias was probably much more forested than it is now and forest species must have been more numerous and widespread. Nias is also the most deforested island of all the west Sumatran archipelago (Holmes 1994). However, only one possibly resident raptor species, the Black Eagle *Ictinaetus malayensis*, collected in 1854, has never been recorded since that early time. Both the surveys of Dymond (1994) and mine were too short and partial to allow a full and reliable assessment of the actual abundance of local raptors, let alone their population dynamics and their true extinction risk. Nevertheless at least several forest bird species, often endemic taxa at the subspecific level, are probably endangered today on Nias. The three hawk-eagles have apparently extremely low and patchily distributed populations that may not be viable in the long term. On the other hand, some other less sensitive raptors exhibit a remarkable degree of tolerance to habitat disturbance and are more likely to maintain viable populations. This widening of habitat niche compared to more continental situations (see Thiollay 1995b in Sumatra) is typical of the insular syndrome (MacArthur *et al.* 1972) and may help the species involved to overcome heavy habitat disturbance.

The only proposed protected area on Nias appears to be a 48,800 ha game reserve (Holmes 1994), but even if this was actually gazetted and really enforced, it may not prevent agricultural development and heavy logging. Yet stopping the destruction of the very last forest patches and the degradation of the remaining secondary woodlands would be the only hope to save eagles and other forest species. Additional surveys are now needed to confirm more precisely this preliminary analysis.

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