

AGGRESSIVE BEHAVIOUR DISPLAYED TOWARDS THE JAVAN HAWK-EAGLE

by

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Summary

Aggressive behaviour displayed towards the Javan Hawk-eagle *Spizaetus bartelsi* is described. Most of the attacks were performed by drongos but attacks by Woolly-necked Stork *Ciconia epsicopus*, and towards Crested Serpent-eagle *Spilornis cheela*, are also described.

Introduction

The Javan Hawk-eagle *Spizaetus bartelsi* Stresemann 1924 is endemic to the island of Java where it is restricted to lowland and montane forest. It is known to occur in not only the western and eastern part of the island (MacKinnon & Phillipps 1993) but also in Central Java (Sozer & Nijman, in press). The species is one of the world's least known raptors (van Balen *et al.* 1994) although recently more information is becoming available. The Javan Hawk-eagle is classified as endangered according to the IUCN threat criteria (Collar *et al.* 1994) because of its small population of probably less than 200 birds [van Balen & Meyburg (1994) estimate 52-61 pairs], the continuing habitat destruction and fragmentation, and trade.

During research on the Javan Hawk-eagle during the period March-August 1994, the authors frequently observed it being attacked by other species. As very little is known about the behaviour of this species, observations of aggressive behaviour are presented here as they provide some insight into interspecific relations. Most but not all of the attacks were performed by drongos.

Drongos and Javan Hawk-eagles

Most of the observations of drongos mobbing Javan Hawk-eagles were made on one breeding pair of the latter that inhabited several valleys on the western slope of Gunung Pangrango, near the border of the Gede-Pangrango National Park, West Java. On 25 March, the female of this pair was attacked while soaring by two Black Drongos *Dicrurus macrocercus*. The attacks were performed from above, and ceased when the eagle retired to settle in a tree. On 22 April, both the male and female eagle were attacked by two drongos, while the female was chasing the male for food, and later that day the male was attacked from below by a Black Drongo while it was flying along a ridge. While under attack, the male gave a hard call: 'glie-eek On 8 May a Javan Hawk-eagle was attacked by two crow-like birds, but the distance was too far and the light conditions inadequate for identification. The attack consisted of frequent mobbing by both birds from all

directions while the eagle was soaring above a ridge. In order to get rid of its aggressors the eagle repeatedly let itself fall 10 to 15m during which time it turned on its back for defense. During these attacks the eagle gave several calls consisting of a three-syllabled 'ee-ee-eeew'. On 11 May, the male eagle was attacked in flight by an Ashy Drongo *Dicrurus leucophaeus*, the attack lasting for 25 seconds. Finally on 15 May the female was attacked by two Black Drongos at ca. 200 m from the nest tree. While flying toward this tree, one of the drongos mobbed her 13 times, every time from above. Each time, the eagle dropped a few metres but kept on flying. During each attack, it uttered a harsh 'ee-eeew'.

A bold attack of a drongo towards a flying eagle was observed on 24 August on the southern slope of Gunung Slamet, Central Java. The attack lasted for several seconds but no change of behaviour was noted in the eagle.

Drongos are well known for their aggressive behaviour and they are known to attack hawks and cuckoos (MacKinnon & Phillipps 1993), hornbills and even frogmouths (Nash & Nash 1985", 1985"). AB the attacks on Javan Hawk-eagles were performed while the latter were flying or soaring. However we also observed a Black Eagle *Ictinaetus malayensis* being frequently attacked by a drongo while the eagle was perched in a tree.

Javan Hawk-eagles and other raptors

In March 1994 T. Sibuea (pers. comm.) observed a juvenile Javan Hawk-eagle continuously following a Crested Serpent-eagle *Spilornis cheela* until the latter flew off. During our study we have quite often seen Javan Hawk-eagles in close assembly with other raptors, for instance during thermal soaring. We also observed Black Eagles and Javan Hawk-eagles soaring very close together without any aggressive behaviour between them.

Storks and Javan Hawk-eagles

On 27 August, at the foot of Gunung Besar, Central Java (109°37'E, 7°05'S) we were very surprised to see a Javan Hawk-eagle being attacked by a Woolly-necked Stork *Ciconia episcopus*. Two storks were seen above a small valley at an altitude of ca. 600 m, close to relatively undisturbed lowland forest. During that morning these two birds always stayed close together and were seen regularly. At 11.02 hrs, they were seen again, at a distance of several kilometres, and were joined by a third bird. The three birds were flying from south to north-east in a straight line, but after 30 seconds the two storks veered to the west while the third bird continued its course. Shortly after this, the third bird was identified as a mature Javan Hawk-eagle. While this eagle was passing over the observers, the two storks had returned and one of them attacked the eagle while the other followed a few metres behind. During the attack the eagle kept its wings close to its body and stooped down into the forest canopy, after which it was lost to sight. The storks were then also lost to sight behind a small hill.

In conclusion, the following behavioural patterns were recorded in Javan Hawk-eagles in response

to attacks by other birds:

1. Whilst flying or soaring, the eagle will lose height, at the same time turning on its back to defend itself; and calling.
2. The eagle maintains its flight in a straight line but responds to each attack by a drop in height, and calling.
3. The eagle gains speed by stooping with the wings close to the body.
4. The eagle appears to ignore the attack, with almost no change noted in flight pattern or behaviour, although the bird may be vocalizing.

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ADDITIONS TO THE AVIFAUNA OF PULAU ALOR, NUSA TENGGARA

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