

The appearance and status of Writhed-billed Hornbill *Aceros waldeni* on Panay

New plumage characteristics of Writhed-billed Hornbill are highlighted in this article, which also draws attention to the increasingly precarious status of a bird already critically threatened.

Whilst studying frugivore-forest interactions in the West Visayan islands of Panay and Negros in the Philippines, we focused on the two critically endangered hornbill species, Visayan Hornbill *Penelopides panini* and Writhed-billed Hornbill *Aceros waldeni*. Visayan Hornbill is now known certainly only from Panay and Negros, being probably extinct, or nearly so, on Guimaras, Ticao, Masbate, Sicogon and Pan de Azucar. Writhed-billed Hornbill is confined to Panay, Negros and Guimaras, although assumed extinct on the latter¹. During our work in Hamtang Forest, Panay, in May 1995, 25 active hornbill nests were located, 24 of which were established as belonging to Visayan whilst there was only a single nest of Writhed-billed. In addition our nest scouts from the Sulud-Bukidon people, reported a further six nests to us, which we were unable to verify, that all apparently belonged to Visayan.

Close field observations of five Writhed-billed Hornbills (three males and two females) just prior to breeding, and of one male at a nest hole, plus of two females in captivity, gave us the opportunity to document detailed plumage characteristics. In doing so we noted several details not previously described in the literature.

The three males seen in a fig tree just prior to breeding, and one (possibly one of the same) subsequently tending a brood in a nest hole, were all broadly similar. They showed a dark warm brown iris, a coral red bill and saffron yellow facial skin, with the yellow extending onto the basal third of the red casque (plate 1). The ridges running across the casque appeared to be blackish or dark red, but only numbered 4-5, far less than the number illustrated by Diesmos³. In one male there was a faint tinge of azure blue overlying the yellow face where the bare skin borders the rusty brown feathers of the head; this extended nearly half-way across the face towards the base of the bill and across the bottom of the naked pouch. This feature could not be seen on the nesting male.

The two adult females seen in the field showed two distinct areas of facial skin – a round patch surrounding the eye and beneath it a bean-shaped patch. Where these skin patches bordered the base of the lower mandible, both were of a light saffron, less bright than the male, with an azure blue tinge across both the whole of the upper facial skin patch and the convex lower half of the lower. This combination of yellow and blue shades, although duller, resembled that of the males, but the facial skin area was much smaller and divided into two distinct upper and lower sections. As in the male the bill was coral red, and there were 4-5 grooves across the base of the lower mandible.

This description differs from the published literature in the following ways. Hachisuka⁴ depicts the male as having mossy green facial skin of half the size and an amber iris, whilst Kemp⁵ states that the male has yellow to orange facial skin with red ridges to the casque and lower mandible and that the female has black orbital skin. Blue facial skin is not mentioned for either sex.

The two females from Panay, being kept at the Breeding Centre of the West Visayas State University, Lambunao, were, in July 1994, at one month old, showing the male-like plumage typical of other *Aceros* species (plate 3). Again they demonstrated discrepancies with published accounts, in that the facial skin was white rather than yellow⁵ and the eye white with a wash of grey, rather than yellow-brown⁵. Interestingly the extent of the facial skin was almost as large as that of the adult male, rendering the appearance even more male-like than has been previously described.

By May 1995, at eight months, both birds were developing a facial skin coloration similar to that of a breeding adult female (plate 2). However, the blue was well developed only on the lower patch and the yellow was still absent. The iris was

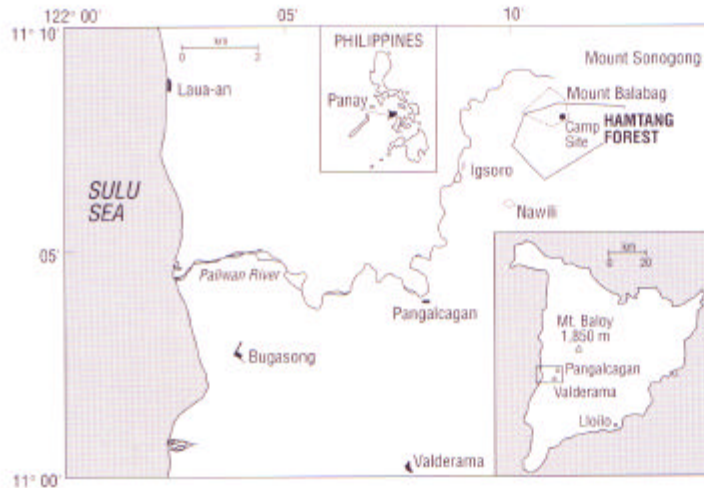
Writhed-billed Hornbill
Aceros waldeni
 1: Male Writhed-billed Hornbill
Aceros waldeni at the nest, Hamtang
 Forest Reserve, May 1995
 (Photo: A. Hamann)
 2: Eight-month-old female
 Writhed-billed Hornbill
Aceros waldeni in captivity
 (Photo: E. Curio)
 3: One-month-old female
 Writhed-billed Hornbills
Aceros waldeni in captivity
 (Photo: E. Curio)



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Figure 1: Map showing location of study site, Hamtang Forest, Panay.

amber not red brown⁵. Both these birds possessed white rather than rufous tails. It is believed that the rufous colour stems from an oil gland⁵, and it is possible that the oil has not yet attained an adult property, or there is some other condition-dependent factor that prevents the birds from staining the tail properly. A third possibility is that there are birds with either white or rufous tails in the population³. That both birds were still not mature was indicated by the juvenile eye colour and the undeveloped bill grooves. The presence of these two birds at Lambunao will allow detailed study of the colour changes in plumage and bare parts from fledging to maturity.

Writhed-billed were always markedly outnumbered by Visayan, both before (February/March 1995) and after (July 1995) the breeding season. In fact the only congregations of Writhed-billed we observed: were 4-5 regularly visiting a fruit tree in Hamtang Forest, and a post-breeding flock of 25-30 feeding on the ripe fruits of a large babagnun *Aziga* sp. near Dalagsaan, Aklan Province, the latter being the largest flock of the species ever recorded².

Visayan on the other hand were commonly seen in congregations of 2-3, occasionally up to 8, in upland areas near Mount Baloy, Bugasong-Valderama area, Antique Province. Similar numbers were also reported by Lambert (*in litt.*) near Dalagsaan. The densities (adults per km²) of the two species were estimated to be close to 1.5 for Visayans and 0.04 for Writhed-billed. In captivity on Panay we know of ten Visayans (in two locations) and only 3 Writhed-billed, one in Aklan Province (Lambert *in litt.*) and the two at the Lambunao Breeding Centre. This seems to reflect their relative abundance in the wild. It appears that the status of Writhed-billed Hornbill may be even more precarious on Negros³, and we are therefore deeply concerned by the low numbers of the species we recorded on Panay.

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