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ORIENTAL PIED HORNBILL (Anthracoceros albirostris) IN WEST BRUNEI: SUCCESSFUL NEST BOX BREEDING IN A RESIDENTIAL ENVIRONMENT

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ABSTRACT

In Brunei, a large population of Oriental Pied Hornbills survives in a patch of remnant coastal forest. Interestingly, this is a residential area. In 2006 it was shown that there was likely to be a shortage of nesting sites. They might be cut off from normal nesting sites and in addition the trees (although > 55 years old) might not provide suitable sites for nesting. The introduction of nest boxes since 2007 has shown to be successful. These were placed close to fruiting trees and in secondary forest to minimise the risk of disturbance and poaching. We present case studies here, which include a Hornbill pair that over two years did not breed successfully. The introduction of a nest box within their territory produced offspring. We conclude that a population of Hornbills within a relatively young area or an area that suffered habitat loss could benefit from the introduction of nesting boxes to support the repopulation.

Keywords: Nest box, Oriental Pied Hornbill, Anthracoceros albirostris, repopulation, residential



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Abstract

In Brunei, a large population of Oriental Pied Hornbills survives in a patch of remnant coastal forest. Interestingly, this is a residential area. In 2006 it was shown that there was likely to be a shortage of nesting sites. They might be cut off from normal nesting sites and in addition the trees (although > 55 years old) might not provide suitable sites for nesting. The introduction of nest boxes since 2007 has shown to be successful. These were placed close to fruiting trees and in secondary forest to minimise the risk of disturbance and poaching. We present case studies here, which include a Hornbill pair that over two years did not breed successfully. The introduction of a nest box within their territory produced offspring. We conclude that a population of Hornbills within a relatively young area or an area that suffered habitat loss could benefit from the introduction of nesting boxes to support the repopulation.

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INTRODUCTION

Hornbills in Brunei

In Brunei, all eight species of Hornbills that are known to Borneo can be found (Charles 2001) although most are rare (Charles 2001; Phillips 2011). All of them are protected under the Brunei Wildlife Act (1978, amended 1984). Some, like the White-crowned Hornbill and the Helmeted Hornbill, are found in primary forests only and are becoming increasingly threatened. Most of the other species (Rhinoceros, Asian Black, Bushy-crested, Wreathed, Wrinkled and Oriental Pied Hornbills) are rare but sometimes more common in a particular location. The Oriental Pied Hornbill is more common and occurs on islands, in the coastal and secondary forests and along rivers. It is the only Asian hornbill living on Borneo that does not depend on primary forest for habitat, not even for breeding (Poonswad 2013).

Oriental Pied Hornbill population in Panaga habitat

A large population of Oriental Pied Hornbills (*A. a. convexus* / OPH) resides in the remnant coastal forests of Panaga on the west coast of Brunei. Oriental Pied Hornbills are considered to be unique because of their co-existence with a human community. Panaga is a coastal neighbourhood in between two towns Kuala Belait and Seria. It is inhabited by an international community that lives in local company housing. The company's regulations do not allow hunting, fishing or poaching within housing compound. It is probably the lack of predation, human interference and the availability of tall trees for nesting sites, roosting and food, that allows this population to live and breed here widely (Teo 2002; Mc-Ilroy & Moore 2009). The only other hornbills that have been observed in this area are the Black Hornbill and occasionally the Wrinkled Hornbill.

Panaga area is a refuge for OPH that have lost their natural habitat. The Panaga area (600 ha) was constructed after 1940. In the eighties a colony of Oriental Pied Hornbills took up residence in this area from the surrounding peat swamp. OPHs can also be observed in the villages around Panaga.

Most houses are now surrounded by large gardens with varied lush vegetation. There are patches of mixed swamp forests. The larger tree species are *Casuarina equisetifolia* and Acacias; there are also figs and other (indigenous and exotic) fruiting trees, palms and mangroves. The small Seria river (= *Sungai Seria*) that runs partly into the area, supports large stands of *Nipa fructicans* (Teo 2002), the oldest trees are now over 55 years old. The area has a large variety of wildlife consisting of birds, mammals (monkeys, squirrels and otters), reptiles (monitor lizards, snakes) and many insects and invertebrates (Bloem & Henrot 2009) as well as domestic cats and dogs. Some of their natural predators are absent (like Marten and Binturong). These collective site attributes offer a suitable safe environment for OPHs. There is plenty of food for these birds, which are omnivorous and feed on wild fruits, beetles and occasionally smaller birds or lizards. The Panaga area is often seen as an example for many similar