

SPIDER-FEEDING BEHAVIOUR OF THE ORIENTAL PIED HORNBILL

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INTRODUCTION

This article reports upon a recent sighting of an observation of feeding behaviour of a male Oriental pied hornbill (Bucerotidae: *Anthracoceros albirostris*) in the Sungei Buloh Wetland Reserve (SBWR). This species had been recorded from Singapore but thought until recently to be locally extinct. It has made a comeback, and is thought to consist of a naturally migrated group from Johore (southern population) and escapees from the pet trade (northern population) (Wang & Hails, 2007).

The Oriental pied hornbill had been recorded to feed upon a variety of food, including fruits and large winged invertebrates and small vertebrate animals (Strange & Jeyarajasingam, 1993; Strange, 2000, 2001; Banwell & Lim, 2009). This species of hornbill had also previously been observed to feed specifically on these food items: leucaena (*Leucaena leucocephala*), and moringa (*Moringa oleifera*) (Tan, BESG, Aug.2010), MacArthur's palm fruits (*Ptychosperma macarthurii*) (Kwong, BESG, May 2010), fig syconia (*Ficus* species) (BESG, 2010b), guava (*Psidium guajava*) and rambutan (*Nephelium lappaceum*) (BESG, 2010a), papaya (*Carica papaya*) (BESG, 2009c), soursop (*Annona muricata*) (BESG, 2009a); and animals: caterpillar (Tsang, BESG, Jul.2009), grasshopper (BESG, 2009b), beetle (Tsang et al., BESG, Mar.2007), praying mantis (Tsang et al., BESG, Mar.2007), snail (Tsang et al., BESG, Mar.2007), and changeable lizard (Tsang et al., BESG, Mar.2007).

In the article by Banwell & Lim (2009: Fig. 3), a photograph depicts a male Oriental pied hornbill with a spider in its bill. This spider is the golden orb spider (Araneidae: *Nephila pilipes*), which is also the species being reported upon below.

OBSERVATIONS

This feeding behaviour was observed on 1 Jul.2010 at around 1030 hours along the mangrove boardwalk just north of the visitors' centre at the SBWR. This was a slightly overcast morning coinciding with the low tide during a field practical class outing.

The single male Oriental pied hornbill was initially not visually observed but heard rustling amongst the mangrove trees along the boardwalk. It was initially out of sight, obscured by the dense growth. The bird eventually managed to perch itself on a bare tree trunk (Fig. 1), but not before breaking some smaller branches; which attracted my attention. It proceeded to snap at mid-air at an unseen object. When I focused in on its bill, it had a large golden orb spider (Fig. 2). The hornbill proceeded to manipulate the hapless spider in its bill (Fig. 3), crunching it a few times (audibly), before finally consuming it. It then proceeded to preen itself and flew off shortly after.

REMARKS

The observed single male Oriental pied hornbill was released at the SBWR by researchers of the Singapore Hornbill Project, as part of the reintroduction program in Singapore, as was evident from its ringed right leg (Fig. 4). Although, SBWR is well within its recorded foraging range from the other reintroduction programme in Pulau Ubin (Hance's interview of Kitamura, 2010).

The foraging behaviour of the Oriental pied hornbill may account for the lack of Golden orb spiders (not empirically substantiated) in the SBWR; or it could just be a natural population fluctuation of the spider. However, more research is required to substantiate this observation.



Fig. 1. View of the male Oriental pied hornbill perched on the bare tree trunk.



Fig. 2. Oriental pied hornbill with a golden orb spider in its bill.



Fig. 3. Oriental pied hornbill manipulating the golden orb spider with its bill.



Fig. 4. Lateral view of the Oriental pied hornbill, showing its ringed right leg with only the digits "1002" visible (inset).

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