

Eggs, baby birds are sitting ducks for hornbill raiders

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The oriental pied hornbills of Singapore generally favour a diet full of figs, palm fruits and papayas.

But they sometimes crave more protein – especially females during breeding season – and seem to have found an easy source of it in urban Singapore. Eggs and baby birds in nests appear to be sitting ducks for these winged snatchers, with a number of sightings of such predation recorded here.

In January this year, a hornbill was photographed raiding the nest of a cockatoo in Changi Beach Park. In April last year, one was seen with an egg in its mandibles.

Intrigued by the growing number of anecdotal and documented cases of nest predation by hornbills here, a group of researchers led by National University of Singapore undergraduate Stacia Loong looked into this phenomenon.

By combing through scientific papers, media articles and social media, as well as speaking to those who had observed such events, they compiled a list of 18 nest predation events between 2009 and this year. Of these, 12 took place within the past two years.

The researchers found that in all cases, the male hornbill was the predator. Females were seen in only six incidents and played a supporting role – distracting the parent birds as the male hornbill picked up the eggs or chicks.

Thirteen of the 18 incidents occurred during the breeding season between December and May, added the researchers in a paper published in June in *BirdingAsia*, a bulletin of the Oriental Bird Club.

In four cases, the males were seen passing an egg or chick to the female in a nest. In the cases without a female, males took the eggs but were not observed eating them.

The researchers said the number of observed nest predation events seems to be rising in tandem with the bird's population in Singapore, although they acknowledged that this could also be because more people were noticing hornbills.

Oriental pied hornbills were once extinct in Singapore due to habitat loss.

They recolonised Pulau Ubin in the 1990s and benefited from a conservation effort involving the installation of nest boxes there, creating a conducive environment for the birds stopping over from Malaysia to breed.

Hornbills are now widespread all over Singapore.



Above: A hornbill raiding the nest of a cockatoo in Changi Beach Park in January.

Left: A hornbill with another bird's egg in its mandibles in April last year. In all 18 instances of nest predation recorded between 2009 and this year, the male hornbill was the predator. PHOTOS: CHEN BOON CHONG, KEVIN LEONG

The researchers think that Singapore's hornbills are more opportunistic than their forest counterparts. In the forest, a hornbill's diet consists of wild fruits, insects, small reptiles and the chicks of other birds, said Ms Loong.

"It is likely that the hornbills here are exploiting the more open urban habitats to forage for easy prey without competition from other predatory birds," she added.

Compared with other raptors such as eagles and kites, which mostly hunt in wide, open spaces, hornbills usually fly within the tree canopy to look for fruits.

This allows them to be able to find nests more easily than the other predators, said Dr Anuj Jain, an ecologist from conservation group BirdLife International and a co-author of the paper.

He said more studies are needed to assess the long-term impact of

the hornbill's nest predation on other birds.

He noted that the hornbills also seem to have become bolder and more tolerant of human spaces.

Several garden birds here, such as olive-backed sunbirds and yellow-vented bulbuls, build nests near human structures as this traditionally confers protection from hawks and eagles that tend not to venture into human areas, he said.

But hornbills are not shy or wary of human presence and would happily raid such nests.

Dr Anuj said: "While this is natural behaviour, we question whether the increased frequency of nest predation has to do with a lack of protein sources in urban areas. We don't know the long-term impact of this behaviour but will surely be monitoring it."

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