ASIAN BIRD: NEW DISCOVERY

A new hanging parrot from Camiguin Island, Philippines

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Introduction

In 2004 I learnt that ornithologists from the Field Museum in Chicago were going to describe a new form of the Philippine Hanging Parrot *Loriculus philippensis*. They had noticed that specimens from the small island of Camiguin taken in the 1960s were apparently different from nearby Mindanao's race *apicalis* to which they had hitherto been assigned. Male specimens from Camiguin lack the red throat-spot typical of these hanging-parrots. Moreover, Camiguin birds have distinctly longer tails and wings, the blue part of the cheek is more extensive, the red on the top of the head goes less far down the neck, and the green body plumage is darker, less yellowish, than in *apicalis*.

All in all the Field Museum team had 23 specimens at their disposal, of which only four were female. Of course, theoretically there was the possibility that the 19 males were wrongly sexed or were young birds, but this seemed rather improbable. According to the team's analyses, the Camiguin birds were, in fact, a new species. Their main argument was that the geographical location of the island and its proximity to Mindanao could not have generated such distinct morphological differences unless the population had been isolated for a very long time. If it had been just a normal subspecies, its coloration would have to have been between *L. p. worcesteri* on Bohol and Leyte and *L. p. apicalis* on Mindanao, which are the neighbouring populations to the north and south of Camiguin.

I was not entirely sure whether the males really did not differ from the females, since on a trip to the Philippine islands of Luzon, Leyte and Samar in December–January 2004–2005 I had indeed seen males which could be identified by the red throat-spot but, strangely, with the locals I had only seen females and males that had no full colouring. In one of the bird markets in Manila I even discovered a cage with about 50 Philippine Hanging Parrots, among which there was not a single full-coloured male. So I quickly decided that on my next trip to the Philippines, on which I was planning to search for racquet-tails *Prioniturus*, I would have to make a trip to Camiguin. This I did in January this year. Before I left the Chicago team sent me a first draft of their planned description and a request to check their data in the field, and if possible to check out the current status of the population.

Camiguin

Camiguin (sometimes Camiguin Sur, to distinguish it from Camiguin Norte in the Batanes Islands) is a pear-shaped island of volcanic origin (three volcanoes are considered still active), 238 km² in area, some 10 km off the north coast of Mindanao. In the centre rise the twin peaks of Mambajao (1,420 m) and Timpoong (1,580 m). The climate is pleasant all year round. Rainfall is light from April to June, whereas from November to January the months are cooler and wetter. Average monthly rainfall is 250 mm (min. 77 mm, max. 569 mm). Average humidity is around 89%.

The island can be reached by a regular ferry from Balingoan on the north coast of Mindanao or by ferry or air from Cebu. It is famous for its diving areas, so it is not hard to find good accommodation. The infrastructure is good. There is an 88-km road along the coast which permits a circuit in 2–3 hours. From this road at regular intervals fairly well developed tracks lead up into the interior, although only in a very few places can one penetrate as high as 600 m. Around 25 villages and the little island capital of Mambajal lie on the coast, while in the interior there are only about 10 villages. Camiguin holds about 70,000 inhabitants, giving a relatively high density, so that up to c.600 m one hardly finds any original vegetation. The primary forest has been completely replaced by coconut, fruit, coffee or banana plantations, and in some places by rice paddies.

Even though Camiguin is visible from Mindanao, there was never a land-bridge between the two islands, even in the Pleistocene, some 10,000 years ago, when the sea lay 120 m below its current level. This isolation makes Camiguin the smallest Philippine island on which endemic species were able to develop: only recently two new species of rodent were discovered there—so why not a parrot as well?

The Camiguin hanging parrots

After arriving at Benoni harbour I found a place at the Highland Resort, one of the few hotels not directly on the beach. Hanging parrots were unknown there, however, but the manager immediately found me a local security guard who knew every corner of the island. Over the next five days we visited even the last village in the interior

of the island, questioned hundreds of people, and followed up every mention or indication of hanging-parrot. The species was certainly well known on the island: I tracked down no fewer than 35 captive birds, practically all of them chained to a wooden perch in the Asian tradition—a sad sight because although the chains were relatively thin their weight must have been a torment for the delicate parrots.

Among these animals there were two birds in juvenile plumage that had not yet been described by the Chicago team. They were easily identifiable by the missing or incomplete red spot of their crown, and the reduced blue spot on their cheek.

I was keen to discover whether males were being kept and whether they had a red throat-spot or not. I repeatedly asked keepers how they distinguished males from females, and the response was always the same: they didn't know, because there was no difference. After talking to the fifth keeper I was convinced, especially because among the people questioned were some catchers who had

Plate 1. Camiguin Hanging Parrot *Loriculus camiguinensis*.

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Plate 2. Camiguin Hanging Parrot *Loriculus camiguinensis*.

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Plate 3. The island of Camiguin. To the right of centre lie the peaks of Mambajao and Timpoong.

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been in the business for decades and who had never seen a bird with a red throat-spot.

Quite quickly something else became clear. According to documentation relating to the Chicago specimens, in the 1960s the species occurred down to about 300 m, but this was clearly no longer the case, doubtless owing to human population increase and the conversion of the original forest to various types of agriculture. Unlike Philippine Hanging Parrots, Camiguin birds seem unable to make use of coconut palms as a food source.

Indeed, the birds did not occur in many parts of the island despite what seemed to me suitable habitat. According to the locals, especially the trappers, the population is concentrated in the uppermost areas of Timpoong and Mambajao, because only there do the trees grow that provide their food. The only two reported exceptions to this were the area between the village of Itum and the Ardent Hot Spring, and the area around the village of Kabadiangan. Here the hanging parrots are supposed to turn up sporadically in search of food, apparently visiting wild bananas, whose large seeds the trappers say they consume.

I stayed in both areas but never saw the species. I declined an invitation to visit the peak of Timpoong because of the violent downpours that occurred at different times of day and night, precluding a night at the peak. A day-trip made no sense because even if we had set out at dawn we would only have had 1–2 hours on the peak, coinciding with the resting period of the parrots when they are least likely to be seen.

The trappers said that the parrots were mostly to be seen singly, in pairs or little family groups, and occasionally in flocks. Most of the time they perch in trees and bushes in search of food, greatly camouflaged by their plumage. They are shy birds, mostly only noticed when they give their high-pitched call, a quickly repeated *tziit-tziit-tziit*. Their food consists of nectar, seeds (particularly wild bananas), soft fruit, berries and blossoms. As for breeding, I could only discover that it takes place from September to November. A native told me that he had repeatedly found nests in holes in dead tree-ferns.

Plate 4. Juvenile Camiguin Hanging Parrot *Loriculus camiguinensis* (lacking the red crown and with little facial blue).

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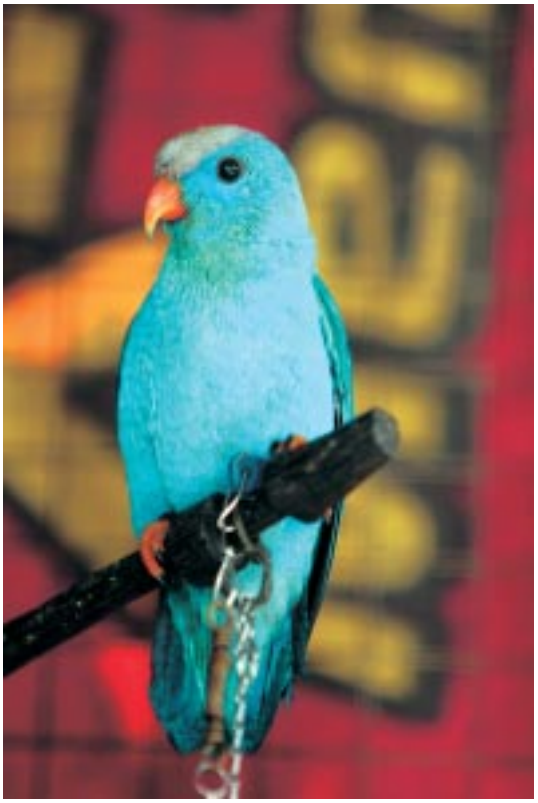

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Plate 5. Blue mutation of Camiguin Hanging Parrot *Loriculus camiguinensis*.

Population size

By looking at the contours on a map of Camiguin and subtracting the areas in which the parrot does not occur, it quickly emerges that the species is confined to just 40 km², indeed possibly only 20 km². We know from experience that areas of this size can accommodate a few hundred up to a maximum of 2,000 individuals only.

Research to establish the true situation is urgently needed because the parrots are being caught in rather large quantities. In Itum village alone there are around 10 people who occasionally catch parrots, each of them taking around five animals a year, which altogether makes 50 birds. But this figure is reached by one single catcher on the east coast of the island who specialises in hanging parrots and who had 14 animals when I met him. There are other catchers in Kabadiangan where I could have chosen from six birds on offer. Thus well over 100 hanging parrots per year must

Plate 6. Position of Camiguin Island (centre of the red circle) in the Philippine Archipelago.

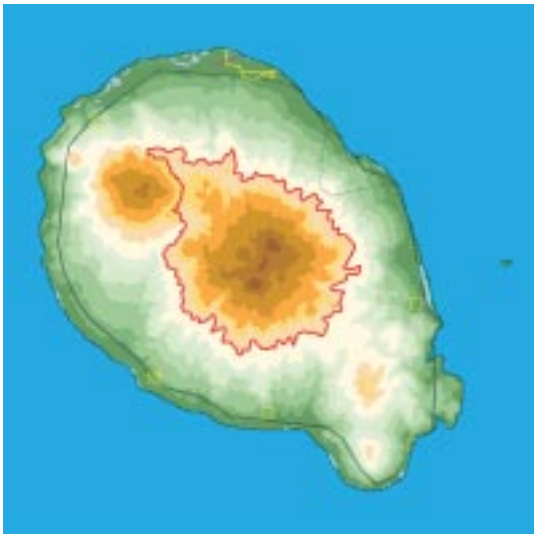

Plate 7. Map of Camiguin with the lower limits of the hanging parrot marked in red.

be caught. They are taken with decoys which they attach to a 3–4 m high pole. Below the top of the pole there are limed perches on which the wild birds are snared. The birds are mainly sold to Filipino tourists for whom Camiguin is a favourite destination.

One indication that the population has possibly already reached a critical limit is the appearance of a wild blue mutation. This was shown me by a dealer who gets his birds mainly from one of the trappers I met. The bird could possibly be a product of inbreeding depression to which the population is exposed.

Conclusion

My trip confirms that the Camiguin Hanging Parrot could indeed be a new species which by virtue of long isolation, in the midst of the range of *L. philippensis*, has developed not only distinct morphological but also ecological differences (use of habitat and feeding habits). It is considered as such by Tello *et al.* (2006), who in April this year gave it the name *Loriculus camiguinensis*. The species perhaps has to be classified as threatened already. In any case, research is needed to determine its ecological needs and true population status.

This article was translated and lightly abridged from Arndt (2006) by I. Weiss and N. J. Collar.

References

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Tello, J. G., Degner, J. F., Bates, J. M. & Willard, D. E. (2006) A new species of hanging-parrot (Aves: Psittacidae: *Loriculus*) from Camiguin Island, Philippines. *Fieldiana Zoology* 106: 49–57.

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