

No more hope for the Ivory-billed Woodpecker *Campephilus principalis*

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In 1986 the re-discovery of the Ivory-billed Woodpecker *Campephilus principalis*, in eastern Cuba attracted world-wide attention. In March that year Cuban biologists found the species in a hilly pine forest called Ojito de Agua. At the same site two *C. principalis* were seen by an international team in April 1986. Ojito de Agua immediately became a protected area. The willingness of the Cuban authorities to co-operate and the expectation that more birds could be found in other areas raised the hope that *C. principalis* could be saved. However, after two extensive expeditions in 1991 and 1993, it has become clear that the birds found in 1986 were in dire circumstances and no other suitable areas for *C. principalis* could be found. The conclusion must be that the Ivory-billed Woodpecker *C. principalis* had become extinct by 1990.

Less than a century ago *C. principalis* had a widespread distribution in the southern U.S.A. and Cuba. It was never a common bird, presumably since each pair needed a territory of at least 16 km²¹⁷. *C. principalis* used a special technique for foraging: they scaled bark from dead trees in search of wood-boring beetle larvae and other insects but birds only found sufficient food in primary forest with many dead and dying trees¹⁷. The habitat of *C. principalis* is usually cited as tall bottomland or swamp forest. It is the type of forest where all reported observations in the U.S.A. were made. However, there are two

subspecies of Ivory-billed Woodpecker, *C. p. principalis* in the U.S.A. and *C. p. bairdii* in Cuba where it frequented lowland hardwood forests as well as mountain pine forests⁸.

All over its range habitat was destroyed by logging activities and it is generally assumed that the species has been extinct in the U.S.A. for some time. The last sightings there are from the 1950s¹⁶ or late 1970s³. In Cuba most lowland forests were cut over by the beginning of the twentieth century, restricting *C. principalis* to the pine forests in the east of the island. In 1948 John V. Dennis and Davis Crompton discovered a last population in the Cuchillas de Moa mountain range² and during an ICBP (now BirdLife International) project in 1956 George Lamb found six territories there⁸. Lamb proposed to make a protected area of the most threatened territory, Bandolero, near the lumber and mining town of Moa. After the Cuban revolution in 1959 most foreign contacts were broken off and the state of *C. principalis* in Cuba became unclear.

In 1985, Dr. Lester Short obtained permission to search for *C. principalis* in Cuba. That year he, together with George Reynard and Giraldo Alayón, visited the Cupeyal reserve just west of the area of the 1956 sightings. No woodpeckers were observed but they found fresh marks of a foraging *C. principalis* and heard of a report from December 1984 in the area¹⁴. Giraldo Alayón and Alberto Estrada continued the search in October 1985 and March 1986^{4,5} and followed George Lamb's 1956 route. Although the forest close to the coast, near Moa, appeared long gone, the species was apparently still present in Ojito de Agua, one of the most inland territories described by Lamb. On 13 March Alberta Estrada briefly saw a single *C. principalis*. Giraldo Alayón then observed a female being attacked by two Cuban Crows *Corvus nasicus* on 16 March and in April that year an international team including Dr. Lester Short, Dr. Jennifer Horne and George Reynard saw at least one male and one female at the same spot¹⁵. One year later, in the afternoon of 16

Two of the study species for the Threatened birds of Cuba Project

Top left: Fernandina's Flicker *Colaptes fernandinae*
(D. Wechsler - VIREO)

Top right: Zapata Sparrow *Torreornis inexpectata*
(D. Wechsler - VIREO)

Two of the endemics still found in Ojito de Agua

Bottom left: Cuban Pygmy-owl *Glaucidium siju*
(Martjan Lammertink)

Bottom right: Cuban Tody *Todus multicolor*
(Huub Hunecker)

March 1987, an observation was made that would appear to be the very last positive record of the species. Giraldo Alayón and Aimé Pasada saw a female woodpecker flying at a distance of about 200 m. A National Geographic expedition in 1988 which included Ted Parker and Jerome Jackson could not find the species, although an individual might have been glimpsed⁷.

So, in 1991 I visited Cuba in a first attempt to assess the status of *C. principalis*. I conducted 62 days of fieldwork in and around Ojito de Agua. I did not see or hear the species and could not find any convincing signs of bark-scaling activity. Moreover, Ojito de Agua appeared to be far from ideal habitat. The best parts of the forest were cut over in the 1950s and 1980s and are now poor secondary growth. Reconnaissance searches to the east and west yielded some old growth where the birds could have retreated to, if the suitable forest extended far enough. In 1992 John W. McNeely further explored the areas to the east and found undisturbed vegetation there in the steep valleys of the headwaters of the Jaguaní and Piloto rivers¹¹.

In 1993 I organised a second search for *C. principalis*. Alberto Estrada accompanied me as did Carlos Peña from the Museum of Natural History in Holguín, photographer Huub Huneker and Jabao Azharez. Our first aim was to explore areas west of Ojito de Agua, in the Cupeyal reserve. We found some patches of old-growth hardwoods there but none large enough to hold a territory. We also visited the spot where the species had been reported in December 1984¹⁴ although these pine forests around the headwaters of the western tributary of the Toa river appear to have been logged in 1992. The forest lay just outside a protected zone that was established in 1986. East of Ojito de Agua the valleys of the Jaguaní and Piloto rivers indeed hold undisturbed vegetation but because of their steepness most soil is washed away and few large trees grow. These areas could not support *C. principalis* on their own although the Jaguaní valley may have formed part of the pair's territory in 1986.

So, only Ojito de Agua at just c.56 km² could support the species and during 120 days of fieldwork conducted in 1989, 1991 and 1993 no *C. principalis* were observed. In 1993 we tried a far-carrying imitation of the call of the species¹² on the mouthpiece of a trumpet but

no response came. Local residents did not recall having seen this woodpecker for the past 6-7 years. The presence of the species can be deduced from the presence of "scaled" trees, particularly pine, but observations have shown that a scaling effect can be caused by the weather. In 1986 however, when the species was still present, the abundance of scaled trees had been much higher than in 1991 or 1993¹⁵ (also Estrada pers. comm.). A tract of pine forest in Ojito de Agua that was burned in 1990 and where the dead trees were now full of wood-boring insects should have attracted any woodpeckers that were present but no foraging signs were found there. In short, there are many indications that the *C. principalis* from Ojito de Agua have gone, with neither feeding signs nor woodpeckers found in 1991. The last-known population of *C. principalis* was presumably extinct by 1990.

Alberto Estrada and I investigated the possibility that different populations were present in other mountain ranges in eastern Cuba. A requirement for the presence of any *C. principalis*, of course, would be the existence of large, relatively undisturbed forests. Interviews with biologists and forest scientists of the Instituto de Investigaciones Forestales in Havana revealed that only a few localities remained for such forests. In the field most of these no longer appeared to hold suitable forest¹⁰. In the Sierra Maestra there is 18 km² of almost undisturbed mountain forest around the Pico la Bayamesa (1,730 m). However, this forest probably lies outside the original range of *C. principalis*. There are no historical reports of the species from there and local people were totally unfamiliar with the bird.

Following its rediscovery, plans were made to save the species. So what went wrong? First, out of the many proposals for study and management of *C. principalis*¹⁵, only one, a stop on all logging activities in Ojito de Agua, was carried out. Second, it has now become clear that the situation of the Ivory-billed Woodpecker in 1986 was already hopeless. To save *C. principalis* in Cuba, measures should have been taken at least 25 years earlier. Although the necessity for conservation was widely realised by then, the political situation made co-operation with Cuba difficult. Perhaps *C. principalis* holds the dubious honour of being the one species that was exterminated by the Cold War.

Ojito de Agua is of great importance for the

conservation of biodiversity in Cuba even without *C. principalis*. The area holds many endemic bird species in healthy numbers such as Cuban Trogon *Priotelus temnurus* (see cover), Cuban Tody *Todus multicolor* (see p44), Cuban Pygmy-owl *Glaucidium siju* (see p44), Cuban Solitaire *Myadestes elisabeth* and Cuban Green Woodpecker *Xiphidiopicus percussus*. The area is one of the strongholds of the near-threatened Bee Hummingbird *Calypte helenae*, the smallest bird in the world. Ironically, many Cuban Todies find a suitable place to dig their nest holes in the steep sides of the logging roads. Ojito de Agua is one of the few places where the threatened Cuban Parakeet *Aratinga euops* occurs and I have seen them taking over a nest hole from a pair of Red-bellied Woodpeckers *Melanerpes superciliaris*. The area is important for other taxa too. In recent years four new species of lizard, one new snake and three new frogs were discovered. Of the 110 species of butterfly recorded, 27 are endemic and many of 200 endemic plant species are found only there.

Ojito de Agua was to be a reserve for *C. principalis*. With the bird now gone this important area could be considered as the heritage of the species. Safeguarding it is our responsibility.

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