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AVICULTURAL MAGAZINE

THE JOURNAL OF THE AVICULTURAL SOCIETY

Vol. 106 - No. 2 All rights reserved ISSN 0005 2256 2000

ECUADORIAN BIRDS: NESTING RECORDS AND EGG DESCRIPTIONS FROM A LOWLAND RAINFOREST

by Ryan L. Hill and Harold F. Greeney

Despite its small size, Ecuador is a strikingly biologically diverse country. It boasts at least 1,600 species of birds, most which are seriously threatened by habitat destruction. As is often stated, tropical forests are being destroyed at an ever increasing rate. In light of this fact, ecological data of all kinds must be made available in the general literature so that conservation minded individuals have access to it. Birds are particularly amenable to conservation applications because of their relative ease of detection and popularity with birdwatchers and nature enthusiasts. It is with these thoughts that we present the following observations.

The nest records below were all observed in the vicinity of La Selva Jungle Lodge in the Provincia Sucumbios near the town of Anyangu. The lodge is located approximately 75 km (about 46 miles) downstream from the town of Coca along the Rio Napo at an elevation of approximately 250m (about 820ft). The habitat in this area, typical of upper Amazonia, is a complex mix of *terra firme*, *varzea* (flooded forest) and meandering oxbow lakes. Over 500 species of birds have been recorded from this site, which give it one of the most diverse avifaunas in the world.

Zigzag Heron *Zebrilus undulatus*

Observed March 23rd and 24th, 1998. An adult and one chick were located on a platform-type nest composed of spiny palm leaflets and petioles. The nest was encountered because either the adult or chick was vocalizing, and alerted us to its position. The call was different than that normally heard from this species. The normal call is a two noted, throaty 'enng-nah' that is slurred together (Moore, 1993 and pers. obs.). The call was higher pitched than that normally heard. It consisted of a medium pitched 'ehmp' repeated every second for two or three seconds followed by a pause before it was heard again. Because of the high pitch we believe it to have been made by the chick. Only the adult was visible from its perch on the nest,

which was hidden among many 'chontilla' palms *Bactris* sp. These palms are heavily armed with long sharp spines so the nest was well protected. The nest was within 2m (approx. 6ft) of a narrow backwater channel connecting an oxbow lake to the main river. At the time, the area was well flooded so that the area under the nest was inundated with water approximately 1m (about 3ft) deep. The nest was 1.5m (about 5ft) above the water.

While observers remained at a distance, the adult remained frozen in a hunched-neck, cryptic posture. When we approached to take photographs the adult stretched its neck with its beak pointed up in a defence posture. At this time the chick became visible. It seems apparent that the adult was hiding the chick because the chick was pure white and obvious once the adult moved. The pair remained perfectly still and no more vocalizations were heard.

On June 8th, 1998 an adult and immature were observed flying together in *varzea* forest along the outlet to an oxbow lake. The pair flew in front of us and landed in relatively plain sight less than 1m (3ft 3in) above the water. The immature then flew directly at the adult, came very near to striking it and then returned to nearly the same perch. The adult moved a short distance deeper into the forest, perched, and then retreated into the forest beyond our view.

White-eared Jacamar *Galbalyphynchus leucotis*

Two adults were observed April 26th, 1998, emerging from and entering a large ternitary located approximately 8m (26ft) up in a dead tree. The tree was located in a man-made clearing adjacent to the Napo River. The surrounding area was mostly coffee plantation adjacent to large tracts of primary forest. No food was observed being brought to the nest, and it is unknown if there were young present at the time.

Black-tailed Tityra *Tityra coryana*

March, 1998, two adults were observed entering and exiting a hole in a tree *Cecropis* sp. adjacent to an oxbow lake. The nest hole was approximately 9m (30ft) from the ground. The adults were observed in the late afternoon and evening. The area had several similar trees with holes that appeared suitable for nesting.

Black-fronted Numbird *Monasa nigifrons*

A nest was discovered April, 1998, in the side of a gentle hill on the edge of a large oxbow lake. The hole was over 1m (3ft 3in) deep, and no observations of the nest itself could be made. Adults regularly perched for hours at a time in nearby foliage.

White-fronted Numbird *Monasa morphoeus*

Two adults were observed April, 1998, excavating a hole in flat ground within 1m (3ft 3in) of a well used trail in primary forest. The nest was soon abandoned. It seems likely this was because of human traffic.

Ocellated Poorwill *Nyctiphrynus ocellatus*

Observed on December 18th and 22nd, 1997, between 9.00am and 10.00am. The nest was found on the side of a steep ridge (with an approx. 35-40 degree slope) in primary forest. It was located within 4m (approx. 13ft vertically) of the top of the ridge of a north facing slope. The nest consisted of a loose assemblage of dead leaves. The nest's downhill portion had several leaves arranged into a raised edge to create a flattened area and served to camouflage the adult from below.

The lateral portions of the nest also consisted of leaves arranged so that overall it resembled a shallow dish. Under and around the eggs, the leaves were flattened down, which made them distinguishable from the surrounding non-nest leaves. However, without the clues of an adult or egg, the nest was barely discernable from the surrounding leaf litter. There was a single egg in the nest. This was pale tan with a slight hint of orange. The egg was sparsely blotched with darker tan at its thickest part. The egg was estimated to measure 32mm x 19mm.

The nest was less than 0.5m (2ft) from an infrequently used trail and was discovered when the adult flew off the nest as we passed. Had the adult remained motionless, it is doubtful it would have been detected due to its incredible camouflage when sitting in the leaf litter. The adult flew approximately 5m (about 16ft) away, landed the ground, and then moved to a horizontal liana 3m (almost 10ft) farther away. During the second visit to the nest, the adult stayed on the nest while we observed from only 3m (almost 10ft) away. Its eyes were open and it remained quiet and still. R. Hill approached within 0.5m (not quite 2ft), and it did not move until an insect net was brought closer still. It then flew off.

Black-spotted Bare-eye *Phlegopsis nigromaculata*

This nest, observed April 22nd and 23rd, 1998, was found in primary forest near the river's floodplain, but in an area that rarely floods. The surrounding area was flat and contained many palms and large kapok *Ceiba* sp. and fig trees *Ficus* sp. The most numerous trees in the area, however, were the Stilt-root Palm *Friartea deltoidea*. The undergrowth was not overly dense in this area, and allowed us to pass with relative ease. Nearby (within 100m (320ft)) was a moderately sized ravine.

The nest itself was found in the stump of a Stilt-root Palm approximately 1m (3ft 3in) from the ground. The stump had rotted such that its centre

formed a cup-like cavity. The nest consisted of a bowl-shaped mat of palm leaflets and thin vines. There was a young fern growing out of the palm that partially shaded the nest. The trunk had rotted away in such a fashion that it left an opening on one side. The adult sat on the nest in a position to see potential predators through this opening.

Two eggs were found in the nest. They were pale pink with dense, wavy, mauve lines. One egg was removed and measured 26mm x 19mm. When the nest was first encountered, we had approached from the side with the opening and the adult detected us and fled. It landed 10m (just over 30ft) away and allowed for proper identification. As we moved to get a closer look it fled again. The next day, when we approached from the opposite side the adult stayed on the nest until an attempt to photograph it from less than 1m (3ft 3in) was made. It promptly fled when we were detected. In both instances it flew rapidly and no vocalizations were heard.

White-winged Swallow *Tachycineta albiventer*

A nest was found in May, 1998 inside the bamboo hand railing of a boardwalk that served as a dock. The nest was 5m (approx. 16ft) away from shore out over the water on an oxbow lake. The nest was located in a piece of bamboo that had a small hole in the end that was approximately 6cm-7cm (approx. 2 1/4in-2 3/4in) in diameter. It consisted of pieces of vegetation such as grasses and possibly thin palm leaflets formed into a rough platform. Another nest was observed in late September 1997. This nest was located in the semi-hollowed out end of a fallen tree that was sticking out of an oxbow lake. This nest was approximately 3m-4m (approx. 10ft-13ft) from the bank. There were eggs in it at the time. The eggs were observed being eaten by a Cuvier's Toucan *Ramphastos cuvieri* as the adult swallows dive bombed it in obvious protest.

Black Vulture *Coragyps atratus*

Two young were discovered on June 27th, 1998 in a protected area that was made by the buttressed roots of a Kapok tree *Ceiba* sp. Two large roots growing out from the tree formed the sides, which were approximately 3m (about 10ft) tall and a secondary root off of one of the large roots grew between the two creating an enclosure. This enclosure seemed impenetrable to all but the most agile of terrestrial predators. The lowest part of the protected enclosure was 1.5m (almost 5ft) tall where the secondary root contacted the other large root. The ground area contained by the roots was perhaps 1.5m (almost 5ft) square.

The tree was located in *terra firme* primary forest. The adult was guarding the nest from a nearby perch approximately 5m (approx. 16ft) off the ground and made a rasping breathy, hiss-like warning call when we approached.

The young began hissing as well. The adult then swooped down over our heads and perched 3m (about 10ft) above us. The adult hissed again and then remained quiet. The young continued hissing when we looked down upon them.

Habitat preservation is critical to the process of saving our planet's wild areas. Yet correct choices cannot be made without knowledge of the ecology and behaviour of the world's fauna. We hope this, and other natural history papers, do not end up as nothing more than epitaaphs, but instead serve as valuable resources for generations of scientists to come.

Acknowledgements

We would like to thank the staff and administration of La Selva Jungle Lodge for their hard work and continual support without which our field work would remain tiresome and mundane. R. Hill would like to give special thanks to Bernard and Darlene Hill for their continued support and interest in his studies. H. Greeney would like to thank Robert and Kat Azar for their encouragement and support of his interest in natural history. This work is dedicated to the memory of Robert Yonally, whose passion for birds made a difference.

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