## The Stygian Owl (Asio stygius noctipetens) in the Dominican Republic

A very rare, difficult-to-find endemic race is, for a variety of reasons, a vulnerable bird

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THE STYGIAN OWL was known on the island of Quisqueya long before Columbus discovered the New World. A carved wooden figure of a bird with ear tufts found in a cave (Fig. 1), and an Indian drawing on a cave wall (Fig. 2), indicate that it could have been an important part of an ancient religious ritual or that it was a familiar figure in the caves in which the Indians sought refuge.

Apparently this bird was known to Vieillot who did some scientific studies in Haiti in 1807 (Bull. 155 Smithsonian Institution, 1931 pp. 245-247). He used the name "Bubo clamator" and said that the inhabitants knew of an owl that was called the "Houhou."

Asio stygius is about 44 cm (15-17 inches) in length. It is a very dark brown "long-eared" owl, with a dark facial disk, the upperparts mottled with buffy, heavily streaked and barred with black or dark brown, becoming paler on the lower abdomen. The ear tufts or "horns" are dark brown. The legs and toes are feathered (Peterson & Chalif, in A field guide to Mexican birds, 1973, say "feet naked, eyes yellow.") The head is illustrated on Plate 16.

THE HISPANIOLAN RACE of the Stygian Owl, (Asio stygius noctipetens), is one of six subspecies of this forest-dwelling species, whose range includes Mexico through Nicaragua (two races), Cuba and the Isle of Pines, with a possibly disjunct population in Brazil, Paraguay and Argentina. It is, in turn, one of six members of the genus Asio, which includes our Long-eared and Short-eared owls, two owls from Africa and one from Madagascar.

Asio stygius noctipetens Riley is listed by Alexander Wetmore in the Bulletin 155 (*Ibid.*) as a rare resident of the Dominican Republic. I quote: "Little is at present known of this owl, first described from an adult male secured by Dr. W. L. Abbott near Constanza at an elevation of about 1200 meters, Sept. 23, 1916. Kaempfer collected a second bird from the swampy forests at the mouth of the Rio Juna, which Hartert said is an adult female, taken Nov. 18, 1922. Ciferre secured skins at Moca Jan. 1, 1927 and July 6, 1929." (*Ibid.*)

It is the author's opinion that the status of the Stygian Owl has not changed since the bulletin was issued. I know of only 3



confirmed sightings and one collected specimen between the years of 1929 and 1977. They are as follows: George B. Reynard and the author saw one at the mouth of a cave located close to Ensanche Alma Rosa, at the eastern edge of Santo Domingo in November, 1970. John Terborgh's group of students from Princeton University reported one near Jarabacoa in a pine forest during the first week of February, 1973 (pers. comm.). Jim and Beth Wiley, ornithologists from Puerto Rico, flushed one in Los Naran-



jos, near Puerto Escondido in April, 1976 (pers. comm.). And as a result of publicity provided by the author, a specimen, badly mounted and with no data whatsoever was brought to the Museo Nacional de Historia Natural during the last week of April, 1977. The specimen had recently been taken in an old, abandoned cacao plantation close to the mouth of the Rio Juna. With the arrival of the mounted bird, we knew for certain that the Stygian Owl still existed on the island.

SIGHTING IN APRIL, 1978, resulting Ain a complete set of vocal recordings and some unsatisfactory photographs, was the culmination of 8 years of intensive work on the part of George B. Reynard, Donald D. Dod and the author. We had some interesting adventures; some were discouraging and disappointing; others were frightening; some were fun. We slept in caves, hiked for miles and suffered many insect bites. We sweltered in the lowlands and shivered in the frosty nights up in the mountains. We saw some beautiful country and became acquainted with many campesinos, who were interested in our investigations. They gave us much reliable and valuable information.

This owl has many vernacular names: Cu-chi, Ciguapa, Hu-hu, and La Lechuza Orejita. In English the bird is often called the Devil Owl.

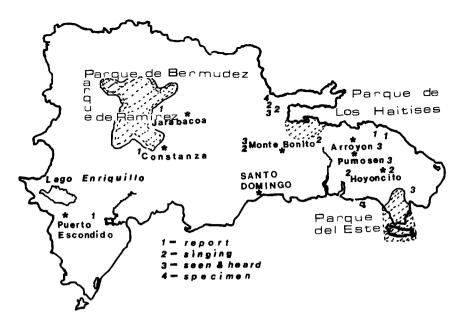
One important bit of information eventually led us to discover the bird. We learned from the inhabitants in Los Haitises that the Stygian Owl is generally silent, giving only one loud "Hu" once in a while, emitted sometime about midnight. However during the breeding season, apparently during the months of November, February and April, the male calls with low pitched "hoos" and the female answers, with higher pitched "whistles or screams," and they respond antiphonally at short intervals. We heard the male call several times before we were lucky enough to record the antiphonal performance.

We set up our camps in many places: Constanza, Jarabacoa, Bayajibe, Monte Plata, Pilancón, Boca de Yuna, several sites between Sabana de la Mar and Miches, Hoyoncito and Arroyón. We kept nocturnal vigilance, alternating watches, from early evening until dawn. Finally in April, 1978, at Pumosén, in a virgin forest, three hours' walk from the end of the road, we succeeded in obtaining the photographs and recordings (Fig. 3). (Record: Bird Songs in the Dominican Republic/Cantos de Aves en la República Dominican. George B. Reynard with the assistance of Donald D. and Annabelle Dod. Published by Cornell University, Laboratory of Ornithology, October, 1981.)

A youth from Hoyoncito showed me an old nest in a cana palm (Sabal umbraculifera) that probably was that of the Stygian Owl. It was largely composed of grasses, placed loosely together, about 15-20 feet from the ground. He told me there had been 2 nestlings.

A LTHOUGH WE WERE not able to make a biological study of the Stygian Owl, we have discovered some reasons for its scarcity. This rare bird seems to be known in the Dominican Republic only where virgin forests still exist. All recent sightings have occurred in old forests, sometimes near caves but never near houses or in second growth trees. We also learned that it is better known in the northeastern part of the island where the karst limestone hills limit the destruction of the forests.

Since the time when the first Spanish colonists arrived on the island in 1493 there has been a continuous destruction of the forests. This may have contributed to the extirpation of several small mammals (Jose Alberto Ottenwalder, pers. comm.). (The later introduction of the destructive, carnivorous mongoose could



have contributed also, to their demise.) Although we have no proof, it is easy to believe that these small mammals, that no longer exist, were an important part of the owl's food supply. Loss of both habitat and the source of food certainly must have caused a notable decline in the numbers of the Stygian Owl.



Fear of the bird is another reason for its scarcity. The Stygian Owl is associated with the devil because of its ear tufts. It is considered to have supernatural powers. One belief is that it can transform itself from a bird into a witch; as a witch it is believed to suck the blood of unbaptized children. As a result of such superstitions, the owl is considered an enemy—one to be feared and eliminated if at all possible.

Additionally hunting was a very popular sport in Hispaniola during colonial times, and some of that old culture survives today. Every boy who is big enough to walk has a sling-shot, and the youth who can afford it has a shotgun or an air rifle. Often military personnel use birds as targets, to improve their aim, and

sportsmen consider hunting the best of pastimes. A bird as big as the Stygian Owl doesn't have a chance if hunting is not controlled.

The owl is very vulnerable. Its habit of shrinking down and making itself as small as possible and then hiding close to the trunk of a tree instead of flying when discovered, makes it an easy mark for a sling-shot, a gun or even a thrown stone.

Because of the remoteness and inaccessibility of the national parks that are found in the Cordillera Central, we have not been able to ascertain the presence of the Stygian Owl in those areas. However, it is very gratifying to know that the territory of two recently-created national parks extend into areas where we know there are small populations of this rare bird. It has been seen in a cave in the Parque del Este, and heard in the interior of the Parque de Los Haitises, in an area known as Monte Bonito. With the protection offered by the parks system, and education through their programs, the bird will now have a better chance to increase in numbers. But until its populations increase, Asio stygius must be considered one of our rarest and most endangered species.

## ACKNOWLEDGMENTS

I WISH TO THANK my husband Donald D. Dod for his helpful and constructive criticism in the preparation of this paper. I also wish to thank Jose Alberto Ottenwalder, zoologist at the Museo Nacional de Historia Natural de Santo Domingo, República Dominicana.

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