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FIRST NEST DESCRIPTION FOR THE GENUS *MICRASTUR* (FOREST FALCONS)

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The genus *Micrastur* is a distinct group of six species of small to large falcons with long tails and short wings that inhabit forests from southern Mexico to Central Argentina. Little information exists on the natural habits of its members; indeed even nidification remains unknown (Brown and Amadon, Eagles, hawks and falcons of the world, McGraw-Hill Book Co., 1968; Schwartz, Condor 74:399-415, 1972). To my knowledge, the following is the first description of a nest for this genus.

I discovered a nest of the Collared Forest Falcon (*M. semitorquatus*) in a canopied forest (estimated to be 20-40 m high) in southwestern Guarico state, Venezuela. The nest was 12 m from the ground in the cavity of a 38-m tree (determined from a clinometer). The Guarico River was 200-300 m east of the nest. I found the nest around 10:00 h on 20 August 1978 and returned four hours later with three companions and tree climbing gear. I discovered one nearly fledged chick inside the nest cavity. I estimated the cavity to be about 0.50 m deep and 0.60 m wide. There were two openings into the hollow, both well sheltered from the rain and on opposite sides of the tree trunk. One was round, about 20-30 cm in diameter and at the top of the cavity. The hole appeared to be the place where a limb had broken off and since rotted. I first located the nest by hearing the chick calling and then seeing it peering out through this hole; it was probably the entrance used by the adults. The second entrance to the cavity was a vertical slit about 30 × 20 cm. Looking into the cavity from this opening, I could see no evidence of nesting material on the floor of the cavity so presumably this species of falcon, like most others, lays

its eggs in a bare scrape. The floor of the cavity had vines growing across it while the sides of the cavity were white-washed from falcon droppings. Although I could not see any prey remains, the nest smelled heavily of decaying animal matter. When I tried to grab the chick to obtain measurements and photographs it jumped to the round entrance hole and clumsily flew about 30 m to a tree. After climbing down I looked at the chick through 10 × 50 binoculars. The primaries and rectrices were noticeably short and not fully grown. I believe that this chick was the only one because I did not hear any others calling.

I first found this pair of falcons on 16 July. Although I saw an adult, presumably the female (with an obvious brood patch) I failed to find the nest. This bird walked along horizontal tree limbs and called at me. On subsequent visits I saw little of the adults but often heard them. They uttered two calls. The first appeared to be an alarm call aimed at me and sounded like "ho, ho, ho." The second call sounded like a single long "ho." At times an adult gave this call and the chick returned it, but at a different pitch. On other occasions the adults gave this call back and forth to one another.

The fact that the falcons nested roughly between June and August suggests that breeding may usually occur in the wet season (April-November in Guarico). Other forest hawks such as the Roadside Hawk (*Buteo magnirostris*), Crane Hawk (*Geranoospiza caerulescens*), and Bicolored Hawk (*Accipiter bicolor*) also breed in the wet season (pers. observ.).

I thank Kerry and Carla Rabenold and Linda Robinson for their help when I climbed to the nest. This work was incidental to a study of the Savanna Hawk (*Heterospizias meridionalis*) which was funded by the Frank M. Chapman Memorial Fund of The American Museum of Natural History, and The National Geographic Society. I also thank Tomas Blohm, whose generous support made my field work possible.

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THE GREAT POTOO IN COSTA RICA

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Little is known about the life history and behavior of the Great Potoo (*Nyctibius grandis*), probably because this species generally roosts in very tall trees in tropical forests and because its coloration—white with brown mottling—matches closely that of the limbs on which it rests (Wetmore 1968). The hunting as well as the roosting habits of *N. grandis* have been reported by Haverschmidt (1948).

I report here on observations made above the canopy of a primary lowland wet forest at Finca La Selva (a research station of the Organization for Tropical Studies), near Puerto Viejo, Heredia Province, on the Caribbean coast of Costa Rica.

I first saw a Great Potoo on 11 July 1978 from a platform I had built 33 m up in a Monkey-pot tree (*Lecythis costaricensis*). It sat on a limb of a leafless, 46 m tall *Hymenolobium* sp. (Leguminosae) tree some 80 m

away, within unbroken forest in the south corner of Washington Plot I (a permanent research site at La Selva). The bird was very difficult to distinguish, for it closely resembled the stump of a branch. This was the first time a Great Potoo had been seen in the area. The species has not been previously reported with certainty from Costa Rica (Slud 1964), although expected, for it was known to occur in regions to the north and south. The very few records from the north have come from Nicaragua (Wetmore 1968), Guatemala (Land and Schultz 1963) and a sighting, but no specimens, from Honduras (Monroe 1968).

On the afternoon of 13 July I climbed 40 m up into the *Hymenolobium* (Perry 1978). I saw the bird perched on the same limb as before (Fig. 1) at my level. It stood within a small area of bare bark, devoid of the usual encrusting lichens, suggesting that this was a regular perch site. Over the next two months I visited the tree at varying intervals and nearly always found the bird there. I photographed it repeatedly, confirming the identification, and noted some of its behavior.

When the potoo was not disturbed, it sat upright,



FIGURE 1. Great Potoo at Finca La Selva, near Puerto Viejo, Costa Rica.

facing forward, eyes closed, and with its head feathers erect so that it had an owl-like appearance. My presence several meters away did not seem to disturb the bird. When I made abrupt moves that shook the tree or when I called out, the potoo apparently became alarmed and immediately raised its head until it faced vertically, with eyes closed and head feathers depressed. In this position it resembled even more closely a part of the branch. Often, in either position, the mouth was held partially open. The bird was probably panting as it always sat in full sun. The mouth lining was a dull red.

Occasionally, for no apparent reason, the potoo shifted its body to a horizontal orientation; its head however, remained facing out, never down. At other times it stretched its wings or turned its head and looked around.

The bird perched on lateral limbs of the tree crown that ranged in diameter from about 15 cm to about 35 cm. It stayed within regions from one-half to two-thirds

of the distance from the trunk to the periphery of the crown.

During the period of my observations the *Hymenolobium* tree was in its reproductive phase. By the last two weeks of August, the fruit had become attractive to other birds, especially the Red-lore Parrot (*Amazona autumnalis*). These parrots came to the tree in groups of up to twenty and foraged noisily. On 23 August, after several days of this activity, I searched for the potoo but it was not in the *Hymenolobium*. On 1 September the potoo was in the tree again. At around 16:00 several Red-lore Parrots flew into the tree and began walking about the limbs looking for fruit. One parrot came to within a meter of the potoo, and the latter appeared to become agitated. It looked repeatedly toward the parrots as it made uncharacteristically quick movements and finally assumed its vertical alarm posture. The bird was not in the tree the next day and it still had not returned by 15 September, when I left La Selva.

The coloration of the potoo matches closely that of the lichen-covered limbs of *Hymenolobium* sp., and these trees, along with others that have similarly colored limbs, could be preferred perches. The species is probably more numerous than is generally realized but its cryptic coloring and habits make it difficult to find. Further inspection of canopy tree crowns may corroborate these conclusions.

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