## SHORT COMMUNICATIONS

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## FIRST NESTING RECORD OF THE NEST OF A SLATY-BACKED FOREST-FALCON (*MICRASTUR MIRANDOLLEI*) IN YASUNÍ NATIONAL PARK, ECUADORIAN AMAZON

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The genus Micrastur consists of six species, all having a furtive life in humid and wet forests in Central and South America (Hilty and Brown 1986, del Hoyo et al. 1994). The Barred Forest-Falcon (M. ruficollis) and the Collared Forest-Falcon (M. semitorquatus) are known to nest in tree cavities (Mader 1979, Thorstrom and Morales 1993, Thorstrom et al. 1990, Thorstrom et al. 1991, Thorstrom et al. 1992) but there is no information on the breeding of the Plumbeous Forest-Falcon (M. plumbeus), Slaty-backed Forest-Falcon (M. mirandollei) and Buckley's Forest-Falcon (M. buckleyi) (del Hoyo et al. 1994). Del Hoyo et al. (1994) mention the only nest record of the Lined Forest-Falcon (M. gilvicollis). The bird was recorded using a stick nest but, because all other records for the genus involve cavity nests, they concluded that it was not a valid record. Apparently, this record was also dismissed by Bierregaard (1998) who listed the nest of this species as undescribed. Here, we describe a stick nest and incubation of the Slaty-backed Forest-Falcon (Micrastur mirandollei).

The nest was found on a routine road census of nesting Roadside Hawks (*Buteo magnirostris*), White Hawks (*Leucopternis albicollis*) and Ornate Hawk-Eagles (*Spizaetus ornatus*) in Yasuní National Park. The park is situated at 230 m elevation and has relatively pristine forest. Biological diversity in Yasuní National Park is among the highest in the world with as many as 825 woody species recorded in 2 ha (Romoleroux et al. 1997). There are 27 species of birds of prey listed for the park and jaguars (*Panthera onca*) and Harpy Eagles (*Harpia harpyja*) are seen regularly, indicating the forest's pristine condition.

The nest site was 50 km south of the Napo River at km 6.5 on the road to the Yasuní Research Station. We observed the behavior of a pair of Slaty-backed Forest-Falcons at this nest on 14 September 1997 using  $10 \times 42$  binoculars and  $20-50 \times$  spotting scope from 1500–1830 H. A falcon we began observing on the nest at 1500 H left the nest when a second falcon arrived at 1635 H and perched 5–6 m away. Both birds perched <1 m from each other for several min, enabling us to see that the

first falcon was smaller and probably the male of the pair. After the male flew into the forest, the female walked to the nest and stood on the edge for 2–3 min before it disappeared into the forest at 1642 H. At 1732 H, the female returned and perched in a tree 10 m from the nest and preened and cleaned its claws as if it had just eaten prey. At 1745 H, the female flew into the forest and did not return before we left at 1830 H. We concluded that the birds we observed were not Grey-bellied Hawks (*Accipiter poliogaster*) because the female had a pure white belly and the facial area was notably yellow and the male was slightly buff below. They also had long legs and three narrow, dirty white tail bands.

The nest was built in a fork of a secondary, horizontal branch at a height of about 15 m. It was rather flimsy and made of small twigs but deep enough to hide the head of the male from below and only 5-7 cm of the tail could be seen. The nest tree was a *Ficus* sp. (Moraceae) situated between the forest edge and a road, where there was a 8-m stretch of grassy vegetation where an oil pipeline was buried. Traffic on the road was moderate with only 10–20 oil company vehicles using the road daily. When we found the nest, the nest tree was completely leafless.

On 23 October, we observed the nest from 0600-1230 H and 1500-1830 H. When we arrived, the female was incubating. At 0935 H, she stood up, called six times ("kiu-kiu-kiu-kiu-kiu") within 20 sec and flew to a branch on a nearby dead tree. The male flew to the same branch and, after 1 min, the female flew into the forest. At 1015 H, a light rain started to fall and the male flew to the nest and began to incubate. When the rain stopped (1100 H), the male flew to the previous perch and, at 1110 H, disappeared into the forest. At 1200 H, a Green Oropendola (Psarocolius viridis) settled in a dead tree close to the nest and immediately was attacked and driven away by one of the two falcons. This falcon settled on the nest and brooded until 1230 H when observations were stopped. When we returned at 1500 H, a falcon was sitting on the nest and it remained there until 1830 H when it became dark.

When changeovers occurred, no prey was brought to the brooding falcon and no new nest material was added. We did not see the nest being built so we did not know if the falcons had taken an old nest made by another species, but we felt that this was unlikely because we did not see the nest on our regular censuses. Sixty days later (22 December 1997), the nest was observed between 0600–1200 H and 1500–1830 H but neither falcon was seen so we were not able to determine if the pair was successful in fledging young. The nest remained unoccupied from January–April 1998 and, in August 1998 when the tree lost its leaves, the nest had already begun to fall apart. When we revisited the site in August 1999, no trace of the nest was left.

While it is rare, nest building does occur in a variety of cavity-nesting species. The Monk Parakeet (Myiopsitta monachus), for example, is the only tree nesting psittacid that does not excavate a nest-hole or use a preexisting one. Instead, it builds a large enclosed nest out of interwoven twigs and sticks (Forshaw 1978, del Hoyo et al. 1994). Columbids such as the Stock Dove (Columba oenas) are also cavity nesters but many species built flimsy stick nests. Among the falconids, the Peregrine Falcon (Falco peregrinus) nests in trees but it does not build its own nest. Nevertheless, caracaras such as the Carunculated Caracara (Phalcoboenus carunculatus) build a variety of nests ranging from exposed ledge nests to nests hidden in crevices of rocky outcrops or holes in cliffs to stick nests in trees (Larrea 1987). They carry nest material such as large sticks and dry grass and line their nests with wool when available (de Vries et al. 1983). The Laughing Falcon (Herpetotheres cachinnans) uses tree cavities, old stick nests, scrapes in epiphytes and cliffs (del Hoyo et al. 1994), but there are no reports of nesting material being carried and the actual building of the nest. Of the six Micrastur species, two (M. plumbeus and M. gilvicollis) are suspected of nesting in tree cavities (Salaman pers. comm. Thiollay pers. comm.), and nests of M. buckleyi have not yet been discovered.

RESUMEN.-Se observó a una pareja del Halcón-Montés Dorsigris (Micrastur mirandollei) ocupando un nido hecho con ramas en el Parque Nacional Yasuní, en la Amazonía Ecuatoriana a 230 m. El nido estaba a 15 m de altura en una rama lateral de un Ficus (Moraceae), al borde de una carretera abierta por una compañía petrolera. Se hicieron observaciones durante 4 días (9 y 14 de Septiembre, 23 de Octubre y 22 de Diciembre de 1997). Ambos sexos incuban, pero durante el cambio de parejas ni presas ni ramas fueron traídas al nido. No se obtuvo información sobre el éxito de reproducción, pero el nido fue ocupado por lo menos por 44 días (9 de Septiembre hasta el 23 de Octubre). El sitio del nido está en un bosque prístino de tierra firme en terreno colinado con una alta biodiversidad (825 especies de plantas leñosas en 2 ha y 27 especies de aves rapaces registradas). Con esta observación se confirma el uso de un nido de ramas en el género Micrastur. Dos especies anidan en un hueco de un árbol, otra (M. plumbeus) posiblemente lo hace. La observación

de *M. gilvicollis* utilizando un nido de ramas ha sido considerada dudosa y por lo tanto merece verificación. El nido de *M. buckleyi* aún no se conoce.

[Traducción de autores]

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