

FIRST NESTING RECORD OF THE PEREGRINE FALCON IN ECUADOR

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Although cosmopolitan, the Peregrine Falcon (*Falco peregrinus*) has not been recorded as a breeding bird in northern South America. The northern race (*F. p. anatum*) breeds south to central Mexico, while the austral race (*F. p. cassini*) breeds north to Atacama, Chile (Brown, L., and D. Amadon, Eagles, hawks and falcons of the world, p. 852. McGraw-Hill, New York, 1968). The species has been recorded in Ecuador (Chapman, F. M., Bull. Am. Mus. Nat. Hist. 55:240, 1926), yet there are no records of breeding birds in that country.

On 14 March 1979, we observed an adult female Peregrine Falcon in a deep wash approximately 30 km northwest of Quito, Ecuador. This location was at the junction of the foothills of the Eastern Cordillera and the floor of the Inter-Andean basin of the Guayllabamba River, at an elevation of 2,400 m. We also saw an immature female peregrine begging for food and fed by the adult. The next day, Arnold and Jenny observed an adult female, an immature female and an immature male (sexed by relative size) in the wash and again the immature falcons begged. The immature falcons had noticeably shorter tails and more rounded wings than did the adult, and the immature female had a small patch of natal down at the top of her head.

The vegetation of this region is dry thorn scrub, characterized by *Acacia pelalcantha*, terrestrial bromeliads (*Bromelia* sp.) and *Opuntia* and *Cereus* cacti. The wash is approximately 300 m wide with vertical sedimentary cliffs on both sides. Portions of the cliff are very soft and recent slides were evident. Vegetation on the floor of the wash is more lush than that of the surrounding area due to a small stream which runs the entire length of the wash from north to south, and flows into the Guayllabamba River. The west wall of the wash is approximately 50 m high and the east wall is approximately 100 m high. We saw copious amounts of fecal material on both walls, indicating that the falcons had been present there for many years.

In 1979 we observed both the immature and the adult falcons frequenting several cavities on both walls of the wash but since the young had already left the nest, we could not determine which cavity had been used as the nest. The behavior and appearance of the young suggested that they had been fledged for not longer than two or three weeks, hence egg-laying was

in late December or early January (Brown and Amadon, 1968:855).

On 3 February 1980, Bill Sullivan, Tjitte de Vries and Jenny observed an adult female and a sub-adult male peregrine in this same wash. The male was in adult plumage except for the outer rectrices and scapular feathers. He carried a large dove, probably an Eared Dove (*Zenaida auriculata*), to a ledge approximately 20 m from the female. Although she responded with vocalizations characteristic of a food exchange, the male refused to give up the dove. Furthermore, he displayed begging behavior that is normally associated with juvenile birds in the presence of their parents. After several minutes, the female joined the male on the ledge, whereupon he flew with the dove to a pot hole approximately 30 m away. The male then ate the entire dove and no further interaction was observed between the two falcons.

On 27 February 1980, Sullivan and Jenny observed the male eating another dove on the south side of the wash. The female was not observed and after one hour, he cached the remains in a clump of dried vegetation on the cliff. From these observations, we assume that the peregrines did not breed in 1980.

The Peregrine Falcons seen in Ecuador were less than 10 km south of the equator and approximately 3,000 km south of the southernmost breeding population of *F. p. anatum*. They are also approximately 3,000 km north of the northernmost breeding population of *F. p. cassini*, thus being the northernmost breeding peregrines in South America. The Ecuadorean peregrines may represent an isolated population, as they appear sufficiently distant from both *anatum* and *cassini*.

D. H. Ellis, however, has observed peregrines that were associated with cliffs suitable for nesting in central Peru (Ellis and Glinski, Condor 82:350-351, 1980) and M. Gochfeld has reported similar observations (Condor 79:391-392, 1977). Hence, a hitherto unrecorded population of peregrines seems to exist along the western Andes considerably north of what was thought to be the range of *F. p. cassini*. The Ecuadorean peregrines appear to breed during the austral summer, from December to February. Therefore, it seems likely that they are more closely associated with *cassini* than with *anatum*.

This work was supported by the Peregrine Fund of the Cornell Laboratory of Ornithology.

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