

MIDWINTER BREEDING BY SOME BIRDS IN THE HIGH ANDES OF SOUTHERN PERÚ

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As far as can be gathered from the very scanty information available, most of the land birds of the high Andes of southern Perú breed during or immediately after the summer rains, between November and April. At this season food, both animal and vegetable, is more readily obtained than in the rest of the year which, away from the humid eastern slopes, is characterized by severe drought.

I was therefore surprised recently to obtain proof of midwinter breeding by the three species of birds detailed below. Since little has been published concerning the nesting of these species, I include the details of nest placement.

Rhodops vesper. Oasis Hummingbird. On 5 July 1979 I found a nest containing two recently hatched young birds near Chiguata (Dept. Arequipa) at an elevation of 2,750 m, close to the uppermost limit of the vertical range of the species in this part of Perú. The nest was placed approximately one meter off the ground in the branches of a bush (*Tessaria integrifolia*) growing near a small stream.

Johnson (The birds of Chile and adjacent regions of Argentina, Bolivia and Perú. Vol. 2. Platt, Buenos Aires. 1967) mentioned September to December as breeding dates for the species in northernmost Chile (Arica and Tarapacá), which coincides with my experience at Mollendo, on the Pacific Coast (Dept. Are-

quipa). I know of no previous record of midwinter breeding by this species in any part of its restricted range along the coast and west Andean slopes of Perú and northern Chile.

Metallura phoebe. Black Metaltail. On the same date I also found a nest near the top of a steep, moss-covered bank near Chiguata at 2,720 m altitude. The nest was suspended from overhanging vegetation at the top of the bank, kept permanently damp by water filtering down from the agricultural terraces above. Although its contents could not be checked, the female was sitting on the nest when found, and her subsequent behavior, extreme agitation and reluctance to leave the area, indicated that it might have contained eggs or young.

I have been unable to find any previous reports concerning the breeding of this Peruvian endemic.

Phrygilus plebejus. Ash-breasted Sierra-Finch. On 8 July 1979 a nest containing two eggs was found at La Raya Pass, 4,320 m, on the border between the Departments of Puno and Cuzco. It was built inside a tuft of bunch-grass (*Stipa* sp.), approximately 30 cm off the ground. The female was incubating at the time.

Johnson (1967) stated that the species breeds between October and March in the Andes of northern Chile and in the past I have found nests near the city of Cuzco (3,500 m) in March and April. Midwinter breeding at La Raya Pass is noteworthy in view of the bitterly cold night temperatures there at that time of year, when minima of -10°C are commonplace. Roe and Rees (Auk 96:475-482, 1979) found the species breeding in June at Checayani (Dept. Puno) where conditions are only slightly less severe.

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FOOD HABITS OF THE BALD EAGLE IN NORTH-CENTRAL FLORIDA

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Food habit information for Bald Eagles (*Haliaeetus leucocephalus*) in the northern U.S. is available (Wright 1953, Imler and Kalmbach 1955, Dunstan and Harper 1975), and many anecdotal reports have been published for eagles in the southern U.S. (e.g., Fargo 1926, Bent 1937, Broley 1947, Hebard 1948, Noell 1948). We present the first quantified data on this subject from the southern United States, drawing on a larger sample than previously published reports for this species outside of Alaska (Imler and Kalmbach 1955, Lincer et al. 1979). As a part of a study of nesting ecology of the Bald Eagle (McEwan 1977), we collected animal remains from 16 productive nests after young had fledged in 1975 and 1976. Remains were taken from nests and from the ground beneath nests. The

nests were in the vicinity of Lake George, Orange Lake, and Newmans Lake in north-central Florida. This area supports a large (at least 40 active nests) and productive population of Bald Eagles (McEwan and Hirth 1979).

METHODS

Nest trees were climbed using Swedish ladders to avoid possible damage to the tree from climbing irons. Animal remains were identified by comparison with reference collections. We were unable to distinguish consistently between blue catfish (*Ictalurus furcatus*) and white catfish (*I. catus*) and between eastern cottontails (*Sylvilagus floridanus*) and marsh rabbits (*S. palustris*), but most other remains were identified to species. The weight of each prey species was estimated from values in the literature (Palmer 1962, 1976, Lowery 1974) and specimens in the Florida State Museum, Gainesville. We did not estimate the biomass of four large mammals (opossum, raccoon, hog, cow) that were probably obtained as carrion and thus only partially consumed by eagles (Table 1). Five species of fish that also grow to large size (blue and white catfish, bowfin, redfin pickerel, and Florida gar) were arbitrarily assigned the same weight as the brown bullhead (450 g), for which an accurate estimate was available.