

FROM FIELD AND STUDY

Nesting of the Galapagos Penguin and the Galapagos Sooty Gull.—Although the Galapagos Penguins (*Spheniscus mendiculus*) are fairly numerous along the west shores of Isabela Island and the east coast of volcanic Fernandina in the northwest section of the Galapagos Archipelago, I find only one report of nesting. Couffer (Condor, 59, 1957:399) gives an account of a nest with two downy young found on August 1, 1954, at Punta Espinosa, Fernandina Island.

It was my good fortune to locate a nest in the same locality, which, so far as I know, is the first noted with eggs. On July 31, 1960, a party from the Denver Museum of Natural History, on an Ecuadorian patrol boat, visited Punta Espinosa, at the northeast extremity of Fernandina Island. Numerous penguins were observed in the sheltered waters of a bay rimmed with flows of lava, and a few pairs resting among the lava boulders scattered on our approach into crevices which may have been nesting sites.

Late in the evening as we were working slowly along a wall some fifteen feet high, we located a shallow depression two feet above high water mark, stained, it seemed, by the excrement of generations of penguins. The depression faced north and in the hollow, completely in the open, was a Galapagos Penguin sitting upon two large white eggs. As the nesting cavity was in shadow, it was necessary to use a flash to secure still photographs.

The Sooty Gull (*Larus fuliginosus*) is a very comon endemic species of the Galapagos Islands. The nest of this bird was unrecorded until our party found one with eggs on a lava peninsula at the south end of Isabela Island near the little village of Villamil, on August 28, 1960. The two pale olive-colored eggs, with small and large splotches, measured 60×44 and 58×41.5 millimeters. They were on a lava flow in a crude nest of waterworn sticks, and the surrounding area was without vege-



Fig. 1. Adult Galapagos Penguin (*Spheniscus mendiculus*) at nest with eggs. Fernandina Island, Galapagos Archipelago, July 31, 1960.

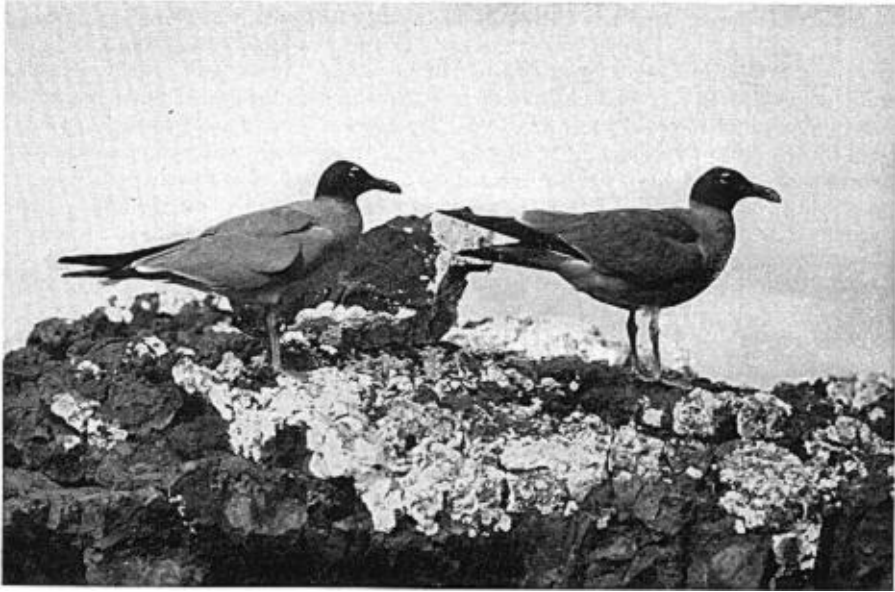


Fig. 2. Sooty Gull (*Larus fuliginosus*) near nest site. Isabela Island, Galapagos Archipelago, August 28, 1960.



Fig. 3. Nest and eggs of the Sooty Gull. Isabela Island, Galapagos Archipelago, August 28, 1960.
Photographs by author.

tation. An account of this find and the nesting of the endemic Swallow-tailed Gull (*Creagrus furcatus*) has been reported in a Denver Museum publication (Museum Pictorial No. 15, January 20, 1961).—ALFRED M. BAILEY, *Denver Museum of Natural History, Denver, Colorado, September 10, 1961.*

Social Breeding Behavior of the Mexican Tanager.—In a recent paper on "Helpers among Birds" Skutch (Condor, 63, 1961:198–226) reviews and analyzes most of the known cases of nests being attended and of young being fed by birds other than the parents. He cites observations on three species of tanagers of the genus *Tangara*, in each of which one or more extra birds in adult or apparently adult plumage helped to feed the nestlings. In one of these species, *Tangara larvata*, juveniles were also observed to help at the nest. Skutch suggests (p. 203) that the adult helpers in at least some of these instances may have been birds that had lost their mates or were physiologically abnormal.

A few observations on the breeding behavior of the Mexican Tanager (*Tangara mexicana*) in Trinidad suggest that in this species adult helpers at the nest are regular and normal. The Mexican Tanager is highly social, living in small, closely knit groups which commonly number 4 to 7 individuals. Observations have been made at two nests with young, and the feeding of fledged young has been observed several times. At the first nest, 25 feet up in a medium sized tree, five adults came around the nest in great alarm when a climber began to ascend the tree, and when the nestlings flew off strongly as the nest was shaken, the five adults flew after them. The second nest, which was watched on three mornings, was attended by four adults, all of which fed the young. However, on one occasion one of two birds which had just fed the nestlings dropped to a lower branch, accepted food from a third member of the party, and took it to the nestlings. A fifth adult, which was one of this group, had been collected a few days previously. On the several occasions when fledged young have been seen being fed by adults, there have always been several adults in attendance. In one case two juveniles were seen being fed on four occasions over a period of 25 days. On three of these occasions five, and on one occasion four, adults were seen to be attending them, and there was little doubt that all were contributing food. It may be noted that in no case has a bird in juvenal plumage been seen attending a nest or feeding a fledgling.

Observations on the earlier phases of the nesting cycle are very limited. On two occasions when Mexican Tanagers have been watched building, one bird only, the presumed female, has built, attended closely by another bird, the presumed male, the sexes being indistinguishable. The presumed female of one pair was color-banded. She was one of the group that lived round the house of one of us (D.W.S.) and had previously often been seen in company with four other adults.

It seems likely that in the Mexican Tanager the social group consists of two or more pairs, often with the addition of one or more unpaired birds; that when a pair comes into breeding condition they separate themselves temporarily from the group while nest building and perhaps also while incubating; and that the young are attended and fed by the whole group from the time they hatch until independence. If the pairs within the group come into breeding condition at rather irregular intervals within a prolonged breeding season, and the little evidence we have suggests that this may be so, this kind of social nesting organization might have considerable selective value in ensuring ample food and protection for the young at all stages.—DAVID W. SNOW, *Edward Grey Institute of Field Ornithology, Oxford, England*, and CHARLES T. COLLINS, *University of Michigan Museum of Zoology, Ann Arbor, Michigan, September 16, 1961.*

The Ridgway Whip-poor-will in Arizona.—The occurrence of the Ridgway Whip-poor-will (*Caprimulgus ridgwayi*) in the portion of Guadalupe Canyon lying in New Mexico was established in 1958 when Johnston and Hardy (Condor, 61, 1959:206–209) collected a male and observed others in that area. Since Guadalupe Canyon runs some 5 miles through the extreme southeastern part of Arizona after leaving New Mexico, and since the vegetation and habitats are essentially the same in the canyon in both states, it was reasonable to believe that the Ridgway Whip-poor-will would also be found in Guadalupe Canyon in Arizona.

After searching the area unsuccessfully for this bird in 1959, my brother John and I succeeded in collecting a singing male in the canyon about 2 miles into Arizona from the New Mexico border at about 1:30 a.m. on May 12, 1960. The bird was very fat but had enlarged gonads which measured 5 by 10 millimeters. This bird was first flushed from the road where it had been resting silently. It thereupon lit on a dead snag, six feet high and commenced to sing its characteristic loud, musical,