## SHORT COMMUNICATIONS

Zoology no. 154279) at the Santa Rita Prison near Livermore, Alameda County, on 18 March 1964. These are the northwesternmost records of this species in California.—GUY MCCASKIE, Tahoe City, California, RICHARD STALLCUP, Oakland, California, and PAUL DEBENEDICTIS, University of Michigan Museum of Zoology, Ann Arbor, Michigan, 7 June 1966.

Galápagos Finches Grooming Marine Iguanas.—A party from the National Science Foundation—University of California Galápagos Expedition spent the period from 26 January to 5 February 1964 on Punta Espinosa, Narborough (Fernandina) Island. This is a narrow point of mostly bare lava rock, although mangroves grow nearby. The Mangrove Finch (*Camarhynchus heliobates*) has been seen in these mangroves by others, but we did not succeed in finding it. The only geospizids I saw were a few individuals of the local population of the Small Ground Finch (*Geospiza fuliginosa*).

Punta Espinosa harbors perhaps the largest local concentration of marine iguanas (Amblyrhynchus cristatus) to be found anywhere in the Galápagos. Several of us noticed that one or two of the small finches were often to be seen hopping about not only among but also over the inactive reptiles. At first we supposed that this was fortuitous, but it soon became apparent that the finches were coming regularly to groom the iguanas. They examined the latter closely, while hopping about on their heads and bodies, and sometimes picked small objects from the rough epidermis and even from about the eyes of the reptiles.

The late A. H. Miller and his assistant Paul DeBenedictis collected one of the finches. Its gut contents were carefully extracted by Lt. Don R. Dietlein and sent to Captain Harry Hoogstraal of NAMRU, an authority on ticks. The following ticks were reported by Hoogstraal.

Amblyomma d. darwini or related species: large fragments of approximately 10 larvae and 24 nymphs. Ornithoderus capensis group: twelve larvae, four of them in good condition.

The gut contents also included parts of anthropods, perhaps beetles and centipedes, as well as a little vegetable matter and sand.

It is thus established that at Punta Espinosa, the finch *Geospiza fuliginosa* regularly grooms the marine iguanas for ticks at least at the season we were there. It is likewise known that there are other areas in the islands where the iguanas and this species of finch occur together but where such grooming behavior cannot be common or it would have been observed. Punta Espinosa is, however, a very barren place in so far as terrestrial life is concerned. The peculiar habit described above may be a local adaptation, just as is the even more remarkable habit of *Geospiza difficilis* of pecking incubating boobies (*Sula*) until it draws blood and then eating the blood, reported from isolated little Wenman Island by Bowman (The Living Bird, No. 4, 29-44, 1965).

I secured a photograph of a finch grooming an iguana that has been published on page 22 of a volume "The Galápagos" (University of California, Berkeley, 1966). Robert I. Bowman, editor of that volume, suggested that I prepare this note. Dr. Miller had planned to do so, but no manuscript could be found. Further study of this remarkable behavior is desirable. The field work was partly supported by National Science Foundation Grant GE 2370.—DEAN AMADON, The American Museum of Natural History, New York, New York 10024, 28 June 1966.

Additional Observations on the Status of North American White Pelicans.—The object of this note is to supplement the information on breeding colonies of White Pelicans (*Pelecanus erythrorhynchos*) reported by Lies and Behle (Condor, 68:279–292, 1966). These authors concluded that White Pelicans have declined since the status report of Thompson (U.S. Dept. Int., Natl. Park Serv., Contrib. Wild Life Div., Occas. Paper No. 1, 1933) and that their status requires close attention and their colonies close protection.

Pelican Lake, Manitoba  $(52^{\circ} 25' \text{ N}, 100^{\circ} 20' \text{ W})$ . During our three years of observations, 1963–1965, a colony of White Pelicans nested on Pelican Lake in western Manitoba; neither Thompson (*op. cit.*, pp. 56–58) nor Lies and Behle (*op. cit.*, pp. 287–288) reported a breeding colony on this appropriately named lake. Pelicans, along with Double-crested Cormorants (*Phalacrocorax auritus*) and Herring Gulls (*Larus argentatus*), nest on three small islands near the south-

## SHORT COMMUNICATIONS



Figure 1. A portion of the colony on Pelican Lake, Manitoba, 29 July 1963.

ern end of the lake; Great Blue Herons (Ardea herodias) nest on the only tree-covered island in the group.

In 1963 and 1964, while making aerial surveys of waterfowl, Bartonek took several series of photographs of the entire colony; our estimates of populations for these years are based upon counts of birds in the photographs. Figure 1 is one of the pictures used in estimating the population. Anderson censused the populations in 1965 in connection with a pelican-cormorant pesticide study. All of the population estimates are low because not all birds were present during times of censusing or photographing, and the photographs provided only partial coverages of the colony.

On 29 July 1963 a minimum of 3099 adult and juvenile pelicans were photographed on the three islands. On 29 April 1964, 1290 pelicans and some Great Blue Herons occupied the island in spite of the lake still being frozen. The number of pelicans increased to 2342 by 19 May 1964, and it is our best estimate of the breeding and nonbreeding population at the colony (no young were seen at this time). On 14 July 1965, 1534 adult and juvenile pelicans were counted, this number being at least 50 per cent fewer birds than during the comparable 1963 season. D. Davies, Manitoba Wildlife Biologist (personal communication), has estimated a minimum population of 1800–2000 juvenile and adult pelicans on all three islands on 21 July 1966. These figures indicate that the population has increased over 1965, but is still about 30 per cent fewer birds than the maximum known comparable population of 1963.

The ground cover on the two major nesting islands was affected by the density of the birds at the time of census. In 1963, with a high pelican population (2482), only 5 per cent of the largest island had a vegetative cover; in 1965, when the pelican population was low (780), 60 per cent of the island had a vegetative cover. A higher population on the tree-covered island in 1965 (711) was associated with a vegetative cover of 40 per cent, and a lower population in 1963 (493) was associated with 60 per cent.

Kazan Lake, Saskatchewan (55° 35' N, 108° 35' W). On 8 August 1962 Bartonek observed a possible pelican, cormorant, and heron colony during an aerial survey. No close observations were

## SHORT COMMUNICATIONS

made; but dead trees, guano, and pelicans nearby in the water suggested that this island was the site of a nesting colony. It is also noteworthy that Sigurd Olson (The Lonely Land, pp. 27–28, 37, 40–41, 1961) mentions large numbers on Lake Ile à la Crosse, only 20 to 30 miles from Kazan Lake. It would seem that this general area deserves further reconnaissance.

Dore Lake, Saskatchewan (54° 40' N, 107° 30' W). On 11 August 1962 Bartonek observed eggs and dead young pelicans on a small island. Lies and Behle (op. cit., p. 289) state that pelicans were last seen at the lake in 1962 and that the lake has since dried up. We question their statement that this large, deep-water, dystrophic lake has dried up.

Garrison Reservoir, North Dakota  $(47^{\circ} 34' \text{ N}, 101^{\circ} 19' \text{ W})$ . In July 1957 Anderson observed about 100 young pelicans on an island in the Wolf Creek arm of the reservoir. This island has since been inundated, and pelicans were not known to breed there in 1965, although many islands are still available.

Moose Lake, Manitoba  $(53^{\circ} 50' \text{ N}, 100^{\circ} 10' \text{ W})$ . In a 1965 census Anderson counted 440 adult pelicans in a comprehensive aerial survey covering a 25- to 30-mile radius around the breeding colony. There were 165 nests on an island on the west arm of Moose Lake. No other nesting islands were found, although all the major islands on both Moose and Talbot lakes were examined. Lies and Behle (*op. cit.*, p. 287) report nesting colonies on the east arm of Moose Lake and on Talbot Lake in 1963. Apparently, the Talbot Lake colony had been abandoned in 1965 and the Moose Lake colony on the west arm newly established.

Dog Lake, Manitoba  $(51^{\circ} 2' N, 98^{\circ} 1' W)$ . Lies and Behle (op. cit., p. 288) state that no information was available concerning the nesting status of pelicans on this lake. Anderson censused this colony on 24 June 1965 and found 360 young plus 16 eggs on the colony. The breeding population is roughly estimated at around 300 pairs. These data do not directly contribute to the 1963-1964 picture, but should serve as a reference for future censuses.

In summary, Pelican Lake should probably be considered a major North American White Pelican breeding colony according to the criteria of Lies and Behle (op. cit.), or at least a major Canadian colony. Secondly, if the Kazan Lake colony were verified, it would be the northernmost breeding colony known for the White Pelican rather than the Moose Lake area as reported by Lies and Behle (op. cit., p. 287).

We wish to acknowledge the assistance of the Manitoba Wildlife Branch, the Royal Canadian Mounted Police, the U.S. Fish and Wildlife Service, the Canadian Wildlife Service, and the Delta Waterfowl Research Station in making these observations possible.—DANIEL W. ANDERSON and JAMES C. BARTONEK, Department of Wildlife Ecology, University of Wisconsin, Madison 53706, 28 June 1966.

Bald Eagle Swimming in the Ocean with Prey.—In the summer of 1962 while tagging salmon for the Alaska Department of Fish and Game among the Inian Islands of southeastern Alaska, the tagging crew and I observed an adult Bald Eagle (*Haliaeetus leucocephalus*) in the ocean water. The bird was approximately 100 meters from shore. The eagle swam slowly to shore on the surface using its wings. Upon reaching shore the bird, with a flap of its wings, hopped onto a rock with a fish in its talons. The fish was approximately 30 centimeters in length and probably a pink salmon (Oncorhynchus gorbuscha).—THOMAS L. DANIELSEN, Department of Life Sciences, University of California, Riverside California, 20 June 1966.

Late-Autumn and Winter Bird Records from Interior Alaska.—Winter environmental conditions in interior Alaska (the taiga region between the Alaska and Brooks ranges) are rigorous. Snow normally covers the ground from early October to early May, and at any time during November through early March temperatures may drop to  $-50^{\circ}$  or even  $-60^{\circ}$  F. Average mean temperatures for the midwinter months at Fairbanks ( $64^{\circ}$  50' N,  $147^{\circ}$  45' W) are November,  $+3.9^{\circ}$  F; December,  $-7.7^{\circ}$  F; January,  $-11.1^{\circ}$  F; and February,  $-2.9^{\circ}$  F.

A maximum of 140 species of birds can be seen more-or-less regularly each year in interior Alaska. Of these species, however, only 28 can be considered regular winter residents, including two hawks, six tetraonids, five owls, four woodpeckers, and eleven passerines; in addition, a few