

Olive Warbler taking over a year to acquire adult plumage is more characteristic of *arizonae* than of more southern races. Such geographic variability throws doubt on the use of this molt character as a generic distinction, as was done by Bent (*op. cit.*) and Chapman (1907, "The Warblers of North America," D. Appleton & Co., New York, p. 110).—J. DAN WEBSTER, *Hanover College, Hanover, Indiana, and California Academy of Sciences, San Francisco, California.*

Unusual Nest and Nesting Behavior of a Mourning Warbler.—While studying the breeding biology of the Mourning Warbler (*Oporornis philadelphia*) at the University of Minnesota Forestry and Biological Station in Itasca Park, Minnesota, the writer found on June 21, 1956, a nest containing three eggs of the owner and one of the Brown-headed Cowbird (*Molothrus ater*). The latter egg was removed. The nest was located at the edge of a clump of raspberry (*Rubus* sp.) in a clearing in the forest. It was supported about 5.5 inches from the ground by several small dead branches.

The nest was peculiar in having two cavities instead of a single open cup. It was shallow and elongate, measured 9 inches in length, 5.5 inches in width and 3.5 inches in height. The depths of the cavities were 1.5 inches and 1 inch. The diameter of the deeper cavity was 2.5 inches and the overall inside diameter of the nest, including both cavities and the area between them, was 6.5 inches. Three other normal nests examined by the writer averaged 4.3 inches in outside diameter, 3.7 inches in height, 1.9 inches in depth of cavity, and 2.2 inches in inside diameter. Both cavities of the nest under consideration were poorly lined. The eggs were in the deeper of the two cavities.

The extra cavity, although never containing eggs or young, apparently stimulated incubating and brooding responses in the female. During attentive periods of incubation, when the female faced the secondary cavity, she would often hop from the main cavity to the secondary one. In many cases she did not settle but simply paused a few seconds and hopped back into the main cavity. At other times she settled, usually facing away from the main cavity. In settling, she used the same side-to-side rocking motion employed in settling on the eggs or young. The usual time spent in the secondary cavity was 10 seconds to 1.5 minutes although she occasionally remained as long as 3 minutes. Sometimes the female would resettle and was even seen to rise and poke in the cavity as though moving eggs or rearranging the nest lining. Visits to this secondary cavity occurred usually from 1-4 times during each attentive period of incubation, which averaged about 28 minutes in length in this female. This behavior continued after the young had hatched, although the time spent in the secondary cavity was less.

The construction of the nest was also responsible for the death of the young. In addition to being shallow, the nest was slightly tilted, making it easy for the young to fall out. On the morning of July 7, two young (one egg failed to hatch) were found on the ground beneath the nest. Although cold and feeble, they were still alive and were replaced in the nest. The side of the nest was propped up with a small stick, but despite this the young were found dead beneath the nest the next morning.

The writer wishes to thank George C. West and Richard Brewer for suggestions regarding the manuscript.—GEORGE W. COX, *University of Illinois, Urbana, Illinois.*

Pied-billed Grebes Mistake Highway for Water.—It is interesting to speculate upon the frequency with which birds, in flight or migration, make mistakes

in identification of landmarks. During an exceptionally heavy rainstorm in the early morning hours of April 18, 1958, as we were driving on Texas State Highway 27 between Kerrville and Ingram, Kerr Co., Texas, we noticed two Pied-billed Grebes (*Podilymbus podiceps*) in the south center lane of the road, a quarter of a mile apart.

At the time the birds were observed (1:30 A.M.) the night was very dark and the rain exceedingly heavy, so that the road was running with water, stippled with raindrops, and reflected the sheen of headlight glare in a manner similar to that of bodies of water. The first bird was located only 200 yards west of a small bridge and dam on Goat Creek, and the highway runs parallel to the Guadalupe River, some half a mile to the south. It would seem plausible that the birds were forced down by gusts and rain and landed on the road—mistaking it for the river or the creek.

Both birds were alive, and remained sitting in the "decoy position" despite the passing of the car. After observing the second bird, we returned to investigate it further, and drove the car to within two feet without disturbing it. The senior author, by leaping out from behind the headlights, was able to catch it by hand. Presumably the birds, unable to dive or take off, were confused by the lights and did not know what to do. The captive bird was completely uninjured, showed no ill effects, and was later released. The first grebe had been run over and killed by the time we reached it again, not five minutes later.—HENRY L. SHORT AND DAVID E. CRAIGIE, *Division of Vertebrate Ecology, The Johns Hopkins University, Baltimore 5, Maryland.*

Treatment of Foot Pox at a Feeding and Trapping Station.—During the fall of 1957 the incidence of "foot pox" became increasingly prevalent, particularly in the House Finches (*Carpodacus mexicanus*) frequenting our feeding and trapping areas located in the chaparral above Hollywood. This affliction increased greatly during the late fall and early winter and gradually began to extend to other species, including Brown Towhees (*Pipilo fuscus*), Oregon Juncos (*Junco oregonus*), White-crowned Sparrows (*Zonotrichia leucophrys*), Fox Sparrows (*Passerella iliaca*) and Golden-crowned Sparrows (*Zonotrichia atricapilla*). The incidence among all of the other species was, of course, considerably lower than that of the House Finches (*Carpodacus mexicanus*), which proved to be the carrier.

"Foot pox" is a viral infection called Avian Lymphomatosis, caused by a micro-organism which enters the foot usually between the scale openings, but also can be contracted orally and through open lesions. In its usual form it affects the foot of the bird, causing swelling, scaling and eventually gangrene, resulting in the loss of first the nails, then complete toes and eventually in the loss of the complete foot. It also causes protuberances about the face, eyes and base of the mandible. The incidence of fatality is very high. In addition to the species mentioned we have found it to occur in Anna's Hummingbird and Abert's Towhee. Different strains of this disease affect various groups of birds, when this infection occurs in chickens, pigeons, it is known as "fowl pox." Mr. Merton Rosen of the Department of Fish and Game, State of California, has been kind enough to confirm my diagnosis of the disease in birds I had captured and kept for him to check.

As preventive measures all of the feeding areas were sterilized; solutions of carbolic acid were used, which proved to be effective in killing the causative organism. We then conducted a series of experiments, using the House Finches (*Carpodacus mexicanus*) and found that the disease could be transferred through