

Dr. Hurst Shoemaker of the University of Illinois informs me that frequently two female canaries may lay and incubate their eggs in the same nest. Under domestic conditions, morals of wild birds often break down. Wild birds under captivity may display this trait more commonly than birds in the wild.—FRANK BELLROSE, JR., *Illinois Natural History Survey, Urbana, Illinois.*

Bone repair in ducks (Plate 12, upper left figure).—The paper by Otto W. Tie-meier in the issue of 'The Auk' for July, 1941, reminded me that several years ago a young man presented me with the mended wing bones of two ducks which were shot, so he told me, in flight. I am not certain as to the species, but believe both were Mallards. In one specimen the radius had been fractured, and had mended without any distortion save a prominent callus. In the other specimen the humerus had been broken in the middle, the broken ends separated, and later fused through a flat bridge of bone. It is remarkable that a bird so handicapped should be able to fly.—CYRIL E. ABBOTT, *Searcy, Arkansas.*

Deformation in the wing of a Pied-billed Grebe (Plate 12, upper right figure).—A Pied-billed Grebe (*Podilymbus podiceps podiceps*) of great interest was received at the Zoology Laboratory of the New York State College of Forestry on October 15, 1942. The bird was one of ten brought to the laboratory by Game Protector Charles Hunter; the birds had been shot by duck hunters at Dalton Beach, Oneida Lake. This lake is frequented each fall by a great number of hunters from the nearby city of Syracuse, and the supposition is that a great number of grebes are mistaken for ducks and killed.

With a view to preparing the skins for the Roosevelt Wildlife Station museum, I closely examined each bird. The last bird to be examined was found to have a deformed and stunted wing. It was the belief of the staff that the bird had never flown; the wing and feather area were far too small to support the bird's body weight. Further examination showed the bird to be an immature. Having no power of flight, the grebe had been forced to rely on its swimming and diving prowess to escape predators and secure food. Oneida Lake is lined with summer cottages, and the summer human population is great. This fact plus the number of the bird's natural enemies (large fish, muskrats, snakes, and certain birds of prey) would lead me to believe that 'the survival of the fittest' should be modified to 'the survival of the luckiest.'

Except for the wing deformity, the bird was in excellent condition. Body weight was as heavy as, or heavier than, some of the others examined, plumage was in fine shape; internal organs were sound. There was a noticeable under-developed condition of the pectoral-muscle tissue as would be expected in a non-flying bird. Measurements showed the normal right wing extended to be 20.2 centimeters, while the stunted left measured only 8.5 centimeters. These measurements were made from the point of attachment to the body to the first primary feather, with the wing extended as shown in the photograph. Measurement from tip of bill to tail was 31.3 centimeters.

It is supposed that the bird was hatched with the deformed wing, for the bone structure at the carpal joint showed complete fusion; it was this malformation which made normal extension impossible. The bird must have led a solitary life—a life fraught with danger and hardship. It is probably just as well that this bird was quickly killed by a hunter's gun, for winter ice covers the largest part of Oneida Lake and the bird's problems would have been increased two-fold.