

of the bill in this subspecies is given as .89–1.00 inches. In this specimen the upper mandible is 2.1 inches long, while the lower mandible remains of normal length. It was an adult male and very fat, showing that the bird was surviving in spite of this

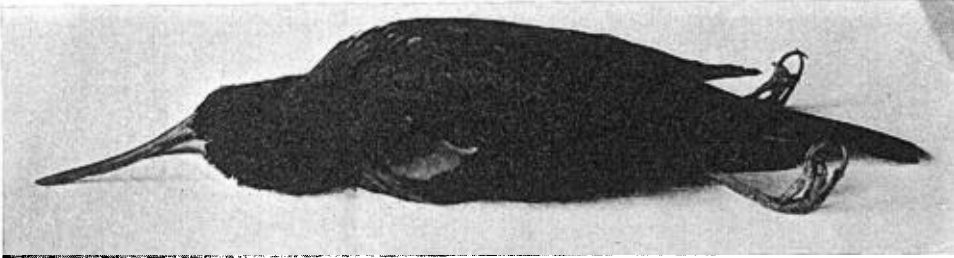


Fig. 49. A BLACKBIRD WITH A STILT'S BILL.

handicap. An examination of the digestive tract revealed that the recent diet was entirely of weed seeds. After the above picture was taken of it, this non-conformist was skinned and stuffed.—VASCO M. TANNER, *Biological Department, Dixie College, St. George, Utah, July 26, 1924.*

Do Bird Families Have Any Permanency?—THE CONDOR having become the medium for a discussion of this point, the writer submits a contribution. The drift of Miss Sherman's article in the May-June issue (vol. 26, no. 3, pp. 85-88) is that flocks of a number of species of birds are not formed by the aggregation of families. In this matter, as in most natural history subjects, we shall find probably that there is nothing like a universal rule. Whistling Swan and Canada Geese families I am sure from personal observation retain their identity at least to midwinter. On Currituck Sound, N. C., when large flocks of these birds are undisturbed for a period they gradually separate out in groups. In the case of the swans the fact that these are families is evident at a glance, the grayish necks of the cygnets making them easily distinguished from the adults. When one sees the birds grouped in this way, two white-necked, accompanied by 2 to 3, and rarely by as many as 5, gray-necked ones, and sees not one, but scores, and even hundreds of such groups, he becomes convinced that he has under observation swan families. When at ease the geese group in the same way, the families in this species generally numbering from 5 to 9. This grouping is well known to all the baymen, of course, and is accepted without question as indicating family ties among the birds; comment on the success of the last breeding season is based on the size of these subdivisions of the flock. There are notable variations in this respect in different seasons, the pairs of swans some years having from 1 to 3 cygnets each, and in others from 3 to 5.

While the writer knows these things from his own observation, he thought it well to write for confirmation to his old friend, Mr. Jasper B. White, of Waterlily, N. C., who has lived with the waterfowl of Currituck Sound for an ordinary lifetime. Mr. White not only gives the desired confirmation but adds further interesting data showing that family ties do mean something among these birds. His father had a pair of Canada Geese which were mated for 42 years; when the male was then accidentally killed the female died in a few months. Mr. White, the son, had an identical experience with the female of a pair that had been mated over 20 years. Game breeders report that Canada Geese have decided preferences about mating. Two specimens or any multiple of that number will not pair, merely because the sexes are equally divided. By no means; it seems they must fall in love, much as human beings do, but once mated, they set an example for constancy that may be equalled, but is never surpassed, among mankind.

The evidence pertaining to ducks is conflicting. We observe that drakes are promiscuous, and we know that in some species at least they desert the females when incubation gets under way, form bachelor gatherings, and even migrate, after the

molt, in exclusively male flocks, yet ducks kept for use as live decoys seem to remain permanently paired the same as the geese. These ducks often are wing-tipped Mallards or Black Ducks, or their immediate descendants, and it is not clear why captivity should change their nature so far as mating fidelity goes. Nevertheless, these birds form permanent pairs, a fact taken advantage of by the gunners, who separate the pairs when using them for decoys, thus inducing the females to call more vigorously and more frequently. Pairs, of which one member has been left on shore all day, recognize each other at a distance when the decoys are brought in; whether this is by voice or otherwise the writer does not presume to say, but he has observed the animated, even excited, behavior of the expectant ones and the chorus of greeting, and eager though awkward and brief caresses upon their reunion. These birds are reported by their owners to pair for life, and the writer is fain to believe the report; yet in some species of wild ducks it would seem from the habits of the birds that permanent pairing is impossible.—W. L. McATEE, *Washington, D. C., July 3, 1924.*

**Period of Incubation of the Golden Eagle.**—On Washington's Birthday, February 22, 1924, Guy O. Glazier, a member of the San Diego Society of Natural History, took from the nest of a Golden Eagle (*Aquila chrysaetos*) near his ranch in Dehesa Valley, San Diego County, a single Golden Eagle's egg, which was all the nest contained at the time. He undertook to hatch the egg by means of hens, three consecutive Rhode Island Red hens being required to take charge of the egg before it hatched, on the forty-first day, or April 3, 1924. The eaglet Mr. Glazier was able to keep alive for three weeks, when it died and its body was presented to the Natural History Museum, Balboa Park.

Mr. Glazier stated that his object in removing the egg from the nest was to induce the birds, if possible, to desert the nest in which they had started to lay and move to another nest-site in which they had evinced interest earlier in the season. This site was nearer to his home and he hoped that he and his visitors might have the pleasure of seeing the birds more often. His experiment was successful to the extent that the birds made the desired move and deposited the second egg in the other nest. However, it was deserted shortly thereafter.—CLINTON G. ABBOTT, *Natural History Museum, Balboa Park, San Diego, California, June 25, 1924.*

**The Natural End of a Bird's Life.**—In the process of nature every living thing must pass away; yet how many persons have actually seen a wild bird die from natural causes? Many people have found birds that were already dead, and many, no doubt, have seen birds meet a violent death—as, for instance, by flying against wires, or when captured by a hawk. But never yet have I heard any person speak of observing even one individual—from the millions of birds he may have seen—die from other than an external cause. I have been studying birds for the last seventeen years, ten of which have been spent in field work, and the following case is the first occurrence of the kind that has entered into my experience.

About 6:30 on the morning of April 4, 1924, I was quietly skinning birds on the screen-porch of my home in San Diego when my attention was attracted by an unusually loud chipping which I recognized as that of an Audubon Warbler (*Dendroica auduboni*), although the tone seemed queer and unnatural. The voice sounded so full of distress that I left my work and started to search a nearby thicket of roses from which the sound came, thinking that perhaps the bird was being alarmed by a stray cat. To my surprise, I discovered a female Audubon Warbler ascending a vertical rose stem in a peculiar spiral manner. It continued the ascent rapidly to the very top of the bush, chipping at the top of its lungs all the time, and then launched itself into the air, flying in upward spiral circles, still chipping, until it had reached a height of about ten feet above the bush. There it suddenly closed both wings and fell to the earth, dead.

I picked up the bird and examined it externally with great care, but could find not even a parasite. The specimen was later prepared as a study skin and a thorough examination was given the internal organs, with no diagnostic results; in fact, both the crop and the stomach were empty. The bird was fully adult, in nuptial plumage,