

Many of the birds which were in fair condition were saved as museum specimens. All birds examined were in an extremely emaciated condition, digestive tracts were empty with the exception of several Golden-eyes which contained a quantity of rubber bands and other small bits of rubber. One Merganser contained string and a mass of hair-like substance. One female Greater Scaup was completely oil soaked and scarcely able to swim.

The limiting of the open water areas reduced the possibility of feeding to a minimum, and we concluded that starvation brought about the above condition. Fortunately at this writing the weather has moderated and the thaws have made available large areas of open water for feeding.

We are much interested to know to just what an extent this condition prevailed upon the Great Lakes, particularly in our area.—O. J. GROMME, *Milwaukee Public Museum*.

**Mexican Turkey Vulture (*Cathartes aura aura*) at Brownsville, Texas.**—

While on a collecting trip to Brownsville, Texas, in the spring of 1930, I obtained three sets of eggs of the Turkey Vulture near the Rio Grande on the American side. These eggs are noticeably smaller, less marked, and of a paler creamy ground color than those of the same species that I have seen from elsewhere in the United States. They are nearly uniform in size and average 66.3 by 45.8 mm. in size, whereas the average measurements of the Turkey Vulture's eggs taken farther north are about 71 by 48.3 mm.

With this in view H. C. Blanchard of Brownsville, Texas, collected for me four Turkey Vultures during that fall. It develops that two of these are practically typical examples of the race inhabiting Mexico and Central America, *Cathartes aura aura*. Except for some fossil bones that Dr. Alexander Wetmore recently recorded from central western Texas this form of the species has never before been reliably reported from the United States.

The two specimens mentioned above are in my collection of Falconiformes; and their data are as follows:

*Number A-577.* Female, September 30, 1930, Brownsville, Texas.

Length of wing 487 mm.

Length of tail 235 mm.

Length of tarsus 59 mm.

*Number A-579.* Female, October 11, 1930, Brownsville, Texas.

Length of wing 488 mm.

Length of tail 240 mm.

Length of tarsus 62 mm.

The other two specimens collected about the same time are migrant birds of the western subspecies, *Cathartes aura teter*, recently described by Dr. Friedmann.

All these specimens have been identified by Dr. Harry C. Oberholser of the Biological Survey.—HERBERT W. BRANDT, *Cleveland, Ohio*.

**Additional Notes on the Prevalence of the Adult Marsh Hawk in South Florida.**—In 'The Auk' (1935, p. 209) the writer gave some comparative figures on ratio of adult male specimens of *Circus hudsonius* as against females and immature birds.

Having occasion to visit south Florida again in February 1936, the writer again kept careful check on this matter. This time, the country east of Lake Okeechobee was surveyed, the route being down the eastern shore to the extreme southeastern

corner of the Lake, thence east to Palm Beach, and west across the Tamiami Trail to Everglades. A total of sixty-one specimens was noted, of which twenty-five were adult males! This gives about one adult male to two and a half specimens seen! A decided increase above the ratio noted in the January trip, high as that was.

About the region lying southeast of Lake Okeechobee, the Marsh Hawk is very abundant and on two occasions five consecutive birds noted, were adult males! In a string of fifteen noted between Belle Glade and a point about half way to Palm Beach, eleven birds were adult males. South Florida seems to be far more prolific in adult males of this species in the winter range than any locality of which the writer has knowledge.—ALEXANDER SPRUNT, JR., *R. F. D. No. 1, Charleston, S. C.*

**Bone Healing in Young Marsh Hawks.**—In connection with some work on the food habits of the Marsh Hawk (*Circus hudsonius*) near Ruthven, Iowa, it has been part of our technique to tether the larger and more active nestlings in the vicinity of their nests in order to prolong the period of profitable study (Errington, Condor, 1932, pp. 75-86). During the summer of 1933, two immature Hawks, thus tethered, suffered broken legs and were brought in to the field laboratory for treatment. They were given the same food (small vertebrates) upon which they had been feeding in the wild. Notes were taken on their recovery as a matter of interest.

Particular attention was paid to the rate of return of function to the injured legs. It was not until the Hawks showed evidence of a fatal mouth disease that they were killed and the healed bones dissected out.

Hawk No. 1 broke its left tarso-metatarsus at about the mid-point on July 7. It was then 22 days old, at which age the young have commonly attained about three-fourths of their adult growth, and their bones, while fairly well formed, are still not enough calcified to be very strong. The young usually begin to fly at about five weeks (Breckenridge, Condor, 1935, pp. 268-276), and at three weeks are able only to walk and flap clumsily through the grass.

Although the bone slipped after bandaging, it is likely that the leg would have been somewhat less straight after healing had it not been for our aid. It is entirely possible, however, that the healing would have occurred naturally without serious deformity, as the positions assumed by the Hawk in standing and sitting tended to keep the leg comfortably outstretched.

By July 18, 11 days after the fracture, Hawk No. 1 (an unexcitable bird which had become tame) was using its injured leg to fair advantage; by July 21, the leg was quite functional; and by July 29, no indications of favoring were to be noted.

Hawk No. 2 was brought in on July 17, its left tibia broken near the distal end. This individual was between 29 and 31 days old, well developed, and with juvenal plumage predominating.

In this case, the loose bandage put on probably had slight if any influence in keeping the healing bone in place; and the bird was not disturbed except for an examination of the injury on July 21, at which time, four days after the break, the bone had not set.

By July 27, ten days after the break, the Hawk was beginning to put weight upon the leg, especially in the course of frenzied efforts to escape (contrasted with Hawk No. 1, No. 2 was untameable and reacted violently to human presence). Two days later, Hawk No. 2 was regularly using its weak leg, though not with complete freedom.

Recovery had progressed sufficiently by August 3 so that Hawk No. 2 was occasionally using its weaker leg to strike with when approached. In walking, most of the weight was borne by the uninjured leg, but this was partly due to a slight bow-like