

winged Scoter (*Melanitta deglandi*) and Hooded Merganser (*Lophodytes cucullatus*), both rare in autumn, were observed at Northampton in 1933 on October 28 and 27 respectively. The Red-breasted Merganser (*Mergus serrator*) was unprecedentedly common in western Massachusetts in the spring of 1934, between March 18 and May 12. The Wood Duck (*Aix sponsa*) arrived very early (March 18), despite the harsh winter, and the Green-winged Teal (*Nettion carolinense*) lingered very late: a pair were at Northampton on April 27, and one was seen at South Windsor, Conn., on May 9 by C. W. Vibert. Mr. Vibert also recorded a Lesser Scaup (*Nyroca affinis*) there on May 7. A ♂ Old-Squaw (*Clangula hyemalis*) was noted at Holyoke, Nov. 8, 1933, and a ♀ Bufflehead (*Charitonetta albeola*) was there March 18-19, 1934.—SAMUEL A. ELIOT, JR., *Smith College, Northampton, Mass.*

**Lead Poisoning in *Branta canadensis canadensis*.**—On May 23, 1934, a male Canada Goose, which had been captured the day before at the St. Clair Flats, St. Clair County, Michigan by State Game Warden O. B. McClellan was examined by the writer at the Museum of Zoology of the University of Michigan.

The bird was in a weakened condition, with wings hanging but not trailing on the ground, when it was forced to walk which it did in an unsteady manner. It was evidently unable to fly as it made no attempts to do so when placed on the floor in the laboratory. It did struggle when handled and a light green fluid came from the throat as a result of its struggles. The voice was very weak, the eyes bright and steady and the feces light green and watery, with evidence of a very small amount of organic matter present. The bird was emaciated and weighed 3023.25 grams. A small number of *Phlopteryids* were present, but not enough to seriously affect the bird.

Dr. E. C. O'Roke made a blood examination for *Leucocytozoon anseris* but found no evidence of the presence of this parasite. Upon autopsy the flesh was found to be pale in color. The testes measured, left 7 mm. x 4 mm. and the right 5.5 mm. x 4 mm. These sizes are small, but it was unknown whether or not the bird was of breeding age.

The proventriculus was greatly distended and packed with grasses, scirpus, and common horsetail. A group of seven lead shots were found in the posterior part, in contact with the tissue, which at this point was dark gray or black in color and sloughed easily. The remainder of the inside of the proventriculus appeared to be in a normal condition.

The gizzard contained nine lead shot and a small amount of fine gravel. Large areas of the lining of the gizzard were carotized, with areas between in which the mucus membrane was soft and sloughed easily. The shots showed evidences of having been ground, while those in the proventriculus were comparatively smooth. An examination of other organs revealed no parasites and showed no evidence of anything which might have contributed to the sickness of the bird.

The contents of the proventriculus (food, grit, etc.) weighed 359 grams; of the gizzard, 10-9 grams. There were sixteen shot of various sizes, seven in the proventriculus (6 grams) and nine in the gizzard (6.5 grams).

The size of some of the shots may be inaccurate because of grinding.

Dr. Miles D. Pirnie of the W. K. Kellogg Bird Sanctuary, Augusta, Michigan, reports an examination of five Canada Geese found dead by Game Warden Summer April 13, 1933 on Indian Lake, Barry County, Michigan. The number of shots found in these birds is an interesting contrast to the number found in the one above described. They were as follows: two females weighing 2275 and 2750 grams contained 5 and 2 shots; three males weighing 2825, 4125 and 3560 grams, contained 3, 4 and 7 pellets. Each bird was carefully examined for other contributing causes of death, but none was found.

Two other Canada Geese, which were evidently victims of lead poisoning have been found and examined by Dr. Pirnie. A male weighing 3000 grams was found dead on the Sanctuary grounds April 4, 1934. The gizzard contained four lead shots. Another bird, weighing 2575 grams and containing 20 lead shot was found April 29, 1934 on Sherman Lake, Kalamazoo County, Michigan. This one had evidently been dead some time when found.

In making examinations of sick or dead birds the fact that the bird is emaciated and has a packed gizzard does not necessarily mean that it is a victim of lead poisoning. Birds have been found with what are known as "typical lead poisoning symptoms" and no lead had been found either in the gizzard or the tissue. The only sure method of determining whether or not a bird has lead poisoning is by the actual presence of lead shot or presence of lead in the intestines or tissue. And then we can not be sure that lead poisoning was the cause of death, as there are Mallard Ducks at Michigan State College, apparently healthy, which were fed lead shot experimentally two years ago by Drs. Stafseth and Thompson.—WILLIAM JOHNSTON HOWARD, *W. K. Kellogg Bird Sanctuary, Augusta, Mich.*

**Voice of the Turkey Vulture (*Cathartes aura septentrionalis*).—**Aside from a low hiss, the voice of the Turkey Vulture or Buzzard is so rarely heard that it has been considered almost a voiceless creature, and very few instances of its emitting sounds have been recorded.

J. R. Pemberton in 'The Condor,' Vol. 27, Jan. 1925, p. 38, under the title "Voice of the Turkey Vulture" has noted the voice of the species as he heard it in California. He says, "It distinctly gave voice to a low pitched nasal whine, slowly repeated at intervals of about three seconds and greatly resembled the whine of a small puppy." He states that the beak was not opened.

On July 15, 1934, I made a trip to the top of Lairds Knob in the Massanutts, near Harrisonburg, Va., altitude about 3,300 feet. At the top of the peak I came upon two Buzzards. Before flying one emitted several peculiar notes, beginning with a short, staccato *tschuck, tschuck*, repeated