

on the campus November 1, 1930, by Miss Mary E. Lamson. On November 4 this or another bird was captured at the same place by Roy Furgeson and was kept in captivity until February 3, 1931 when it was banded and released.

Another Owl was captured at Fisher Lake, near Three Rivers on December 18, 1930 by Frank Francisco who brought the bird to Battle Creek where it died January 1, 1931. This bird has since been mounted.

Another bird was seen near Ann Arbor by the first two observers on January 11, 1931. This bird was in an apple orchard somewhat distant from water, in the northern part of Washtenaw county.—RICHARD E. OLSEN, HUMPHREY A. OLSEN, and LAWRENCE H. WALKINSHAW, *Battle Creek, Mich.*

Short-eared Owl (*Asio flammeus*) in Virginia.—On January 28, 1930, I secured a Short-eared Owl (*Asio flammeus*), which had been wounded and caught at Markham, Virginia, approximately seventy miles west of Washington D. C. This species of Owl is a rare winter visitant in the District of Columbia.—JOHN ALEXANDER MOORE, 701 19th St. N. W., *Washington D. C.*

Feeding of Horned Owl on Jerusalem Crickets.—A Pacific Great Horned Owl (*Bubo virginianus pacificus*) killed by a friend near Benicia, Solano County, California, and brought to me for my collection of skins, shows by the stomach contents that it had fed heavily on the Jerusalem Cricket (*Stenopelmatus*) during the previous night.

Among the softer contents of the stomach were 85 mandibles and 101 leg segments of these bulky insects which seem to be favorites with most of the Hawks and Owls. This number of segments would necessitate the destruction of no less than 43 Jerusalem Crickets, which, as found by comparing the size of these parts with specimens of the crickets, must have averaged an inch and three-quarters each in length measuring from front of head to tip of abdomen. Due to the destructive habits of these crickets, the result of this stomach examination is a point in favor of the economic value of the Horned Owl. The above insect diet composed the entire bill of fare of this bird with the exception of one tiny bone, probably from a small rodent.

I have preserved such of these stomach contents as could be dried in one of my glass-covered mounting boxes. Many items of stomach contents can be easily preserved and I find that they make an interesting and instructive exhibit.—EMERSON A. STONER, *Benicia, Calif.*

Decrease of Hawks and Owls in Northern New Jersey.—In reviewing my notes of the past six years covering field-trips in northern New Jersey I was tempted to check in detail the numbers of Hawks and Owls recorded alive throughout this period. By way of explanation the number of trips, i. e. of an average duration of several hours in the field is 271, none to the south of Atlantic City, distributed as to season about equally

monthly, with the exception of September, when I have been away on vacation. During the past two years the number of trips has been greater than before and the daily ride across the Hackensack meadows has added a great many records of Hawks which I included. By taking the number of individuals of a species and dividing by the number of field trips a quotient is obtained which can be used in comparing the years 1925-1927 with the years 1928-1930 to determine the relative decline or increase in the various species. In general the decrease has been in direct proportion to the size of the bird. The most important conclusion however, is that while most of the Buteos and larger species have shown a decrease, the more harmful of the Accipiters and Falcons have shown a gain in contrast. Our present method of educating (?) hunters and gamekeepers has resulted in diminishing the species that should be protected and in increasing relatively the more harmful ones which perhaps should be controlled. For the sake of simplicity I have shown certain of the comparative species together. Considering these as a whole the frequency (number of species per field trip) has fallen 25% and the number of individuals 33%.

Marsh and Rough-legged Hawks decrease 54%.

Buteos—Red-tail, Red-shoulder and Broad-wing decrease 34%.

Sparrow-hawk decrease 25%.

Cooper's, Sharp-shin, Pigeon and Duck Hawks gain 14%.

I believe it is correct to say that the winter of 1929-30 was a good one for many Hawks, especially on the Hackensack Meadows while the present winter has been just the reverse in this locality. Breeding Hawks and Owls, except the Sparrow Hawk and Screech Owl, have decreased even more than the trends indicate, for during migration large numbers of Red-tails, Marsh and Broad-winged Hawks are sometimes seen. I have made many special trips to visit the most desirable country including Overpeck, Hackensack, Newark and Elizabeth marshes, Troy meadows, Barnegat and the Watchung and Kittatinny mountains.

All species of Raptores (21 considered).

	Frequency	Number of individuals seen per trip
1925	3.2	10.1
1926	2.0	4.5
1927	1.8	5.9
1928	1.6	2.1
1929	1.2	2.1
1930	1.6	3.1

—WARREN F. EATON, 63 Normal Ave., Upper Montclair, N. J.

The Yellow-bellied Sapsucker (*Sphyrapicus varius varius*) in Porto Rico.—On April 2, 1931, at Algarrobo, which is a flag-stop, about halfway between Vega Baja and Manatí, on the north coast, I saw a female Yellow-bellied Sapsucker. It was sitting on the rim of the bird