

Summer Food Habits of the Short-eared Owl in Northwestern Iowa.—

While winter data on the food habits of the Short-eared Owl (*Asio flammeus*) have been rather easily procurable in those parts of Wisconsin and Iowa where I have carried on field studies in recent years, it has not proved so convenient to obtain summer data on this species.

The data from the examination of the comparatively few summer stomachs and pellets that have come to hand are of considerable interest, however. Summer diet does not show quite the monotony of mouse representation that winter diet commonly does; and, moreover, it provides a better index to the upper size limits of prey which the owls are able to handle.

The specimen material from northwestern Iowa consisted of thirty-four pellets and one stomach from two localities, for which the data may be briefly summarized. The determinations of food items were made by Mrs. Frances Flint Hamerstrom. Items representing contaminations have not been listed.

June and July, 1933—Pasture in the vicinity of the University of Iowa Biological Station, Lake Okoboji, Iowa.

Of 25 pellets, 1 contained jumping mouse (*Zapus*); 1, house mouse (*Mus*); 22, meadow mouse (*Microtus*) (39 individuals); 2, deer mouse (*Peromyscus*) (4 individuals); 2, undetermined mice; 1, young Franklin's ground squirrel (*Citellus franklini*); 3, striped ground squirrel (*C. tridecemlineatus*, including 1 young); 2, short-tailed shrew (*Blarina*); 1, shrew (*Sorex*) (2 individuals).

June, July, and August, 1934—Marshy ground, near Mud Lake and Baringer's Slough, Ruthven, Iowa.

Of 9 pellets and 1 stomach, 1 contained young cottontail (*Sylvilagus floridanus*); 1, jumping mouse (2 individuals); 1, Norway rat (*Rattus norvegicus*); 5, meadow mouse (6 individuals); 3, deer mouse; 2, Fringillidae; 1, Red-winged Blackbird (*Agelaius phoeniceus*); 1, young (about three and one-half weeks) Ring-necked Pheasant (*Phasianus colchicus torquatus*).

The question has previously been raised by Errington (*Condor*, Vol. XXXIV, pp. 176-186, 1932) as to how strictly the related Long-eared Owl (*A. wilsonianus*) takes its prey in order of availability and may well apply to the Short-eared Owl, also. The lack of insect prey in the diets of pasture-living Short-eared Owls suggests that, if availability is the chief factor influencing food habits, it may at times be operative within narrower limits for these owls than for most other mid-west owls studied. On the other hand, higher vertebrates ranging in size up to adult ground squirrels and adult meadowlarks (Errington, op. cit.) seemed to be preyed upon more in accordance with what might be judged their comparative availability in habitats occupied.—PAUL L. ERRINGTON, *Iowa State College, Ames, Iowa.*