

ASPECTS OF THE NUTRITIONAL ECOLOGY OF THE RED-SHOULDERED HAWK (*Buteo lineatus lineatus*) IN SOUTHWESTERN QUEBEC.

Red-shouldered Hawks were studied for two seasons to determine the diet composition and to measure the effect of brood size on the feeding frequency by the parents. Some aspects of their growth were quantified and the effect of specific body parameters and forms of nest attendance were studied.

Adults brought a wide variety of prey items to the nestlings with significantly more mammal prey delivered in 1980 than in 1979. This annual variation of the two main prey types may be related to winter weather conditions prior to each nesting season. The total weight of prey delivered in the 4-hour observation blocks was negatively correlated with the number of prey deliveries in small (1 or 2 young) and large (3 or 4 young) broods. Larger broods received significantly more prey than smaller broods. However individuals of the largest natural brood size (4 young) were not fed as much as individuals of the most common brood size (3 young).

The growth of bill, tarsus and tail feather length were significantly different in broods of 3 compared to broods of 1. No difference was found for wing feather growth or weight gain between the two brood sizes.

Nest attendance in terms of frequency of brooding and delivery of greenery to the nest, was greater in broods of 3 compared to broods of 1.

A combination of increased brooding, delivery of greenery and prey in broods of 3 compared to broods of 1, probably accounted for the differences in growth of certain body parameters.

Penak, Brenda L., 1982. Aspects of the Nutritional Ecology of the Red-shouldered Hawk (*Buteo lineatus lineatus*) in Southwestern Quebec. MSc. Thesis, Macdonald College of McGill University, Ste.-Anne-de-Bellevue, Quebec.

ANNOUNCEMENTS

BURROWING OWL COLORMARKING: REQUEST FOR INFORMATION

In 1983 burrowing owls were colormarked in south-central Saskatchewan during a research program investigating movements of these owls during the breeding season. Information is requested from anyone seeing a colormarked owl to aid in determining migration routes and wintering areas which are presently unknown. Each owl carries a Fish and Wildlife band and from one to three colored plastic leg jesses. Jess colors are yellow, fluorescent red, light blue and dark green and are one centimeter wide and extend approximately 1.5 cm beyond the leg.

Persons observing colormarked owls please record the following: location, date, color and position of leg jess or jesses, leg of attachment of metal band and jess or jesses and any details of the owl's situation. Please send this information to, Bird Banding Office, Canadian Wildlife Service, Ottawa, Ontario, Canada, K1A 0E7 plus an additional copy to the bander, Elizabeth A. Haug, Dept. of Veterinary Anatomy, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0. Thank you for your assistance.

Note: Owls were banded with colored leg *jesses* in Saskatchewan and with colored leg *bands* in Manitoba. Please note this difference if marked birds are seen.