

American Kestrel rejects captured spadefoot toad.—Although the diet of the American Kestrel (*Falco sparverius*) includes a wide range of prey items (Heintzelman, Wilson Bull. 76:323–330, 1964), I could find no records of American Kestrels preying on toads. Therefore, the following observation of a kestrel capturing but not eating a toad is of interest.

On 17 October 1975 at 09:40, about 5 km west of Elgin, Arizona, I observed a female American Kestrel fly about 50 m from a utility pole to the ground in an open short-grass field. Shortly she returned to the pole carrying a toad in one foot. The kestrel picked at the head of the toad sporadically and occasionally shook her head from side to side. After 2 min 55 sec, when she was frightened by a passing vehicle, she carried the toad about 150 m to another pole. She held the toad 3 min 45 sec on this perch before making an attempt to eat it, then began biting the head again but shook her head violently after each bite. After 5 min 55 sec of intermittent bites and head shakes she carried the toad about 200 m to a fence post. Soon she flew a short distance to the ground and returned to the post without the toad. She sat on the post with her feathers ruffled, constantly changed foot positions, and continued the head shaking. After 2 min she flew to the ground and captured a grasshopper which was carried to a utility pole farther out in the field. After eating the grasshopper she still occasionally shook her head.

I found the toad on the ground near a small bush. It was crawling feebly and the rostrum was covered with blood but it had no other injuries. The toad, a western spadefoot (*Scaphiopus hammondi*), measured 44 mm SVL and weighed 14 g. It exhibited normal locomotion and behavior within 24 h and lived for 22 days before being released.

Bent (U.S. Natl. Bull. 170, 1937) lists "toads" in the diets of 4 species of Accipitridae and Sexton and Marion (Wilson Bull. 86:167–168, 1974) report evidence of Swainson's Hawks (*Buteo swainsoni*) feeding on plains spadefoot toads (*Scaphiopus bombifrons*). Perhaps there are differences in the tolerances of different hawks to the distastefulness of toads and differences in the distastefulness of different species of toads.

That the toad was carried to the ground and released rather than dropped from a perch is probably explained by the food storing behavior of American Kestrels. Tordoff (Wilson Bull. 67:139–140, 1955) and Stendell and Waian (Condor 70:187, 1968) reported food storing by American Kestrels, and I have observed it in the Elgin area on 5 occasions; 3 times prey was stored in a small bush.—G. SCOTT MILLS, *Dept. of Ecology and Evolutionary Biology, Univ. of Arizona, Tucson 85721. Accepted 20 July 1976.*

Winter distribution of Red-tailed Hawks in central New York state.—The winter distribution of raptors in relation to their prey has seldom been investigated systematically. Several authors (e.g. Snyder and Hope, Wilson Bull. 50:110–112; Weller et al., Wilson Bull. 67:189–193) have noted concentrations of raptors where meadow voles (*Microtus* sp.) were abundant and Craighead and Craighead (Hawks, Owls, and Wildlife, Dover, N.Y. 1969:144) concluded that in a 90 km² study area in Michigan raptor density in winter was highest where vole density was highest.

While driving between Ithaca and Albany, New York I noticed on several occasions that Red-tailed Hawk (*Buteo jamaicensis*) density along the route varied greatly. This study was undertaken to determine whether the differences in hawk density were correlated with density of meadow voles (*Microtus pennsylvanicus*), one of their principal prey species (Craighead et al., USDA Circ. 370, 1935).

Methods.—Five surveys were made on clear days between 1 February and 1 March 1974 on the 241 km route which followed US Rt. 13, NY Rt. 26, and US Rt. 20.