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## NOTES: RED-TAILED HAWK PREDATION OF A STRIPED SKUNK

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## NOTES

**RED-TAILED HAWK PREDATION OF A STRIPED SKUNK**—Skunks (*Mephitidae*) are capable of projecting pungent, oily musk from paired anal glands (Verts 1967), which acts as a central nervous system depressant (Wade-Smith and Verts 1982), and can incapacitate birds of prey if directed into the eyes (Garcelon 1981). Consequently, few raptors are known to prey on striped skunks (*Mephitis mephitis*). Great horned owls (*Bubo virginianus*) are the only raptor that regularly preys on skunks (Bent 1938b, Lowery 1974, Houston et al. 1998), although occasional instances of predation by golden eagles (*Aquila chrysaetos*; Olendorff 1976, Palmer 1988a), bald eagles (*Haliaeetus leucocephalus*; Broley 1952, Wade-Smith and Verts 1982), northern harriers (*Circus cyaneus*; Fisher 1893), and rough-legged hawks (*Buteo lagopus*; Bent 1938a) have been reported. Striped skunk remains were found in two (1.1%) of 173 red-tailed hawk (*B. jamaicensis*) stomachs examined by Warren (1890), but because these raptors frequently scavenge carcasses (Errington 1933, Fitch et al. 1946, Orians and Kuhlman 1956), the skunks could have been consumed as carrion rather than killed as prey. Even the consumption of striped skunks as carrion appears infrequent as Fitch et al. (1946) noted only three (6.3%) skunks among 47 items of carrion consumed by nesting red-tailed hawks.

Here we report an instance of apparent predation of a striped skunk by a red-tailed hawk that occurred on 13 March 2010 along Ash Creek, ca. 25 km S-SE of Alpine in Brewster County, Texas. At 1815 hours (ca. 1.7 hours before dusk) we encountered an adult red-tailed hawk feeding on the fresh carcass of an adult striped skunk. The carcass was warm to the touch, and limp with no evidence of rigor mortis. The viscera, pulled from the abdomen and found beside the carcass, were also warm to the touch. Based on the physical condition of the carcass, we estimate the skunk was killed 20 to 30 minutes prior to our arrival. An extremely strong odor of musk permeated the site, suggesting the skunk sprayed before being killed. A considerable amount of hair had been plucked from the dorsum and abdomen of the skunk and was strewn about the kill site. The left side of the thoracic cavity was opened, and the heart and lungs were missing. Most muscle from the left ribs and thoracic vertebrae had been consumed by the hawk prior to our arrival; the left foreleg and scapula also were exposed and stripped of muscle. Two deep puncture wounds, consistent with talon injuries were noted on the mid-dorsal region of the skunk. We found the carcass on an embankment of fine alluvium that provided an excellent tracking substrate. Only skunk tracks were evident in the alluvium, indicating the skunk was killed by the hawk rather than another predator. To our knowledge, this is the only report of red-tailed hawk predation on any species of skunk.

Our observation was not unexpected as red-tailed hawks are highly opportunistic generalist predators that often prey on relatively large-bodied mammals equivalent in size or larger than striped skunks (Marti and Kochert 1995). Cottontail rabbits (*Sylvilagus* spp.), jackrabbits *Lepus* spp.), marmots (*Marmota* spp.), raccoons (*Procyon lotor*), and house cats (*Felis catus*) have all been reported in the diet (reviewed by Sherrod 1978), suggesting that red-tailed hawks are physically capable of capturing and killing striped skunks. We speculate that the few records of skunks in the diet of red-tailed hawks (and perhaps other diurnal raptors) result from the respective activity patterns of predator and prey; red-tailed hawks are diurnal predators (Palmer 1988b, Marti and Kochert 1995), whereas striped skunks are largely crepuscular and nocturnal (Verts 1967), and thus unlikely to be encountered by foraging hawks.

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