had in its stomach the precaudal portion of a two-lined salamander (*Eurycea bislineata*) (identified by Schueler, and deposited in the Natl. Mus. Nat. Sci., Ottawa, Canada) as well as vertebrae and other parts of a 5–6 cm fish. The snout-vent length of the salamander was ca. 45 mm. Bent (U.S. Natl. Mus. Bull. 170, 1938) lists "salamanders" (no specific details) as among the foods taken by Screech Owls, although from his reports these constitute, at most, a minor and occasional portion of their diet. In a 30-year study of Screech Owl natural history in northern Ohio, VanCamp and Henny (N. Am. Fauna No. 71, 1975) did not find evidence of feeding on salamanders, though they did find that Screech Owls occasionally ate fish. At the time this owl was killed substantial snow cover extended as far south as southern Maryland and Delaware and had persisted for several weeks.

It had been thought until recently that northern *E. bislineata* hibernated in winter, but Ashton and Ashton (J. Herpt. 12:295–298, 1978) recently found that in southwestern Ohio salamanders remained active in streams until stream temperatures dropped below 7°C, when they moved into subterranean winter retreats where the water was above that temperature. The salamander taken by this owl must have been active at the time of its capture. The juxtaposition of it with fish remains in the owl's stomach suggests that it was in open water (Screech Owls are thought to capture aquatic prey at times, VanCamp and Henny 1975), perhaps near a spring or in a cave.—J. D. RISING, *Dept. Zoology, Univ. Toronto, Toronto, Ontario M5S 1A1 and Dept. Ornithology, Royal Ontario Museum, Toronto, Ontario M5S 2C6 Canada* AND F. W. SCHUELER, *Dept. Zoology, Univ. Toronto, Toronto, Ontario M5S 1A1 Canada.* *Accepted 27 Apr. 1979.*

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Marsh Hawks feeding on waterfowl.—We observed 3 instances of Marsh Hawks (*Circus cyaneus hudsonicus*) feeding on waterfowl, 1 in Manitoba in 1972 and 2 at Horicon National Wildlife Refuge, Wisconsin, in 1977. Marsh Hawks were abundant in both areas.

At 09:55 on 25 April 1972, at Marshy Point, Manitoba, Blohm flushed a female or immature Marsh Hawk from the remains of a freshly killed Pintail (*Anas acuta*) hen. The carcass was in a grassy area about 10 m from water. Feathers were strewn about, back muscles had been removed and the breast muscle was partially consumed. The visceral cavity was opened, and portions of the proventriculus had been eaten. Well-developed ovarian follicles indicated that the hen was in good pre-laying condition.

At Horicon, Livezey flushed a Marsh Hawk, either a female or an immature, from the carcass of a Blue-winged Teal (*A. discors*) hen at approximately 11:00 on 13 June 1977. The teal was located in a dense, unmowed alfalfa field where several species of ducks (Blue-winged Teal, Gadwall [*A. strepera*] and Pintail) nested during the season. The breast, viscera and parts of the neck had been removed. The remains consisted of the feet, sternum, head and wings.

Again, at Horicon on 12 October 1977, at 14:45, Van Dyke flushed a female or immature Marsh Hawk from the remains of a crippled Mallard (*A. platyrhynchos*) drake on a mudflat bordering open water and an extensive stand of softstem bulrush (*Scirpus validus*). This duck was an experimental bird in a study of crippling loss at Horicon, and its wing was known to have been broken, rendering the bird flightless. The carcass was decapitated, with the head and neck lying beside the trunk. The heart, esophagus, trachea, most of the liver and small portions of the lungs, neck and breast muscle were eaten. The warmth of the visceral remains, lack of dried blood and moistness of the lungs, eyes and nictitating membranes indicated a very recent death. The duck did not appear to be emaciated at the time of death.

Previous food studies have indicated that Marsh Hawks primarily prey on small rodents (McAtee, U.S.D.A. Circ. No. 370:26–28, 1935; Errington and Breckenridge, Am. Midl. Nat. 7:831–848, 1936; Bent, U.S. Natl. Mus. Bull. 167:85–87, 1937; Randall, Wilson Bull. 52:165–172, 1940; Hecht, Wilson Bull. 63:167–176, 1951; Weller et al., Wilson Bull. 67:189–193, 1955), although the diet has been known to include larger prey and carrion (Errington and Breckenridge 1936; Cruickshank, Auk 56:474–475, 1939; Randall 1940). Evidence from food studies also indicated that waterfowl eaten by Marsh Hawks were ducklings (Errington and Breckenridge 1936, Bent 1937, Hecht 1951) or crippled adults (Errington and Breckenridge 1936).

Bent (1937) described a Marsh Hawk that pirated a duck (species not included) from a Peregrine Falcon (*Falco peregrinus*). However, other workers have observed Marsh Hawks attack and, in some cases, kill adult or nearly-grown waterfowl. Griffiths et al. (Br. Birds 47:25, 1954) saw a female or immature Hen Harrier (*Circus c. cyaneus*) attack, pick up and then drop a European Wigeon (*A. penelope*) along the coast of Hampshire, England; and Paulson (pers. comm.) watched a female Marsh Hawk stoop repeatedly at an adult Blue-winged Teal in Wisconsin. The teal avoided injury by diving underwater at each approach of the hawk. Hammond (Auk 65:297–298, 1948) saw a Marsh Hawk, identified as a probable adult female, attack and kill an immature American Wigeon (*A. americana*) in North Dakota. This duck was fully feathered and thought to be capable of flight. Finally, Beske (pers. comm.) took an adult Blue-winged Teal with a trained female Marsh Hawk in Wisconsin. We feel that our observations support the notion that Marsh Hawks are capable of preying on adult waterfowl, although these instances appear to be rare.

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Detrimental effects of cecal defecation in winter roosting Willow Ptarmigan.—Willow Ptarmigan (*Lagopus lagopus*) roost in snow holes, presumably for protection from cold and predators. The following account illustrates that snow roosting can have detrimental effects that may lead to predation on Willow Ptarmigan.

On 31 January 1976, on Karlsøy Island, Troms Co., Norway (70°00′N, 19°55′E) 1 of our pointing dogs retrieved a live Willow Ptarmigan. The bird appeared to be in good health, except that the tips of 3 outer primaries of 1 wing were frozen together by a clot of frozen cecal excrement. The bird had been flushed while feeding, and being unable to fly was captured by the dog. On 27 December 1976, on an adjacent island, a second Willow Ptarmigan, with the tips of several primaries of 1 wing similarly frozen together, was captured by the dog. Both birds were autopsied and were apparently in good condition.

Both ptarmigan seemed to have contaminated their wing tips with cecal excrement while in snow roosts. Ptarmigan shift position slightly while roosting, as evidenced by the distribution of woody droppings and slightly enlarged roost chambers. If shifting occurred shortly after cecal defecation wing tips could conceivably become contaminated and eventually freeze.

Willow Ptarmigan apparently feed only during daylight hours and may spend more than 16 h in snow roosts during midwinter nights. Inclement weather may further prolong roosting times (Irving, Condor 69:69–71, 1967). Woody droppings are commonly found in evacuated