

Bald Eagle, *Haliaeetus leucocephalus*, Preying on Maritime Garter Snake, *Thamnophis sirtalis pallidulus*, on Cape Breton Island, Nova Scotia

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At 1053 hours on 23 July 2006 a Bald Eagle, *Haliaeetus leucocephalus*, was observed in flight transporting in its talons a live Maritime Garter Snake, *Thamnophis sirtalis pallidulus*, at South Harbour (46°52'01.7"N, 60°26'45.8"W), Cape Breton Island, Victoria County, Nova Scotia.

Key Words: Bald Eagle, *Haliaeetus leucocephalus*, predator, Maritime Garter Snake, *Thamnophis sirtalis pallidulus*, South Harbour, Cape Breton Island, Nova Scotia.

The Bald Eagle, *Haliaeetus leucocephalus*, is a large North American raptor that usually frequents aquatic environments where it feeds predominantly on captured or scavenged fish. Eagles may be seen daily in South Harbour, at the northern end of Cape Breton, Nova Scotia. This area appears to be occupied by a resident pair based on an observation of two adults seen standing very close together on a mud flat at the mouth of the harbour on 16 July 2006. South Harbour is a shallow, brackish, nearly landlocked estuary with an artificially maintained channel through the sandbar across its mouth providing exchange of water with the Atlantic Ocean.

On 23 July 2006 at 10:53 h, the screams of eagles drew my attention to two adult birds wheeling and skirmishing in the air over the southern shore of the harbour (46°52'01.7"N, 60°26'45.8"W). When two birds eventually flew directly overhead I saw that the lead bird was carrying a snake in its talons. The grayish-brown coloration and very attenuated, pointed tail writhing in characteristic ophidian fashion precluded any possibility of the prey being an American Eel (*Anguilla rostrata*). Two other witnesses (Johanna R. Humphrey, Katherine Allen) also confirmed that the prey, which was very much alive, was a snake. The individual carried by the eagle appeared to be somewhat in excess of 600 mm in total length. The only snake of this size in Nova Scotia would be a Maritime Garter Snake, *Thamnophis sirtalis pallidulus*, females of which range from 412 to 916.9 mm, whereas males do not exceed 602 mm (Gilhen 1984). Because most of the area surrounding South Harbour, especially the southern shore, where the observation was made, is very heavily vegetated, the eagle most likely captured the snake while the latter was swimming across the

surface of the water. Maritime Garter Snakes are "excellent swimmers" and have been seen on "freshwater lakes 100 metres or more from shore" (Gilhen 1984: 132).

The Bald Eagle feeds almost exclusively on vertebrates, particularly on fish, followed by birds, and then mammals (Stalmaster 1987; Buehler 2000). Although Stalmaster (1987: 93) emphasized the eagle's "vast diversity of prey", he considered that snakes "are an unusual dietary item" (pages 95-96) and cited only the report of McEwan and Hirth (1980) of the remains of a single Black Swamp Snake, *Seminatrix pygaea*, in a nest in central Florida. Bald Eagles are notorious scavengers, and large numbers of snakes, including *Seminatrix*, are victims of vehicular traffic in central Florida (Smith and Dodd 2003), so there is a strong possibility that that food item was obtained as road kill. I have found no other references to Bald Eagles feeding on snakes, although they probably do so opportunistically wherever snakes and eagles occur together.

Literature Cited

- Buehler, D. A. 2000. Bald Eagle *Haliaeetus leucocephalus*. In The Birds of North America (506: 1-40). Edited by A. Poole and F. Gill, The Birds of North America, Inc., Philadelphia, Pennsylvania.
- Gilhen, J. 1984. Amphibians and reptiles of Nova Scotia. Nova Scotia Museum, Halifax.
- McEwan, L. C., and D. H. Hirth. 1980. Food habits of the Bald Eagle in north-central Florida. Condor 82: 229-231.
- Smith, L. L., and C. K. Dodd. 2003. Wildlife mortality on U.S. Highway 441 across Paynes Prairie, Alachua County, Florida. Florida Scientist 66: 128-140.
- Stalmaster, M. V. 1987. The Bald Eagle. Universe Books, New York.

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