

## Note

# Snapping Turtle—Tortue serpentine—turtle mi' kjikj (snapping; *Chelydra serpentina*), added to the herpetofauna of Cape Breton Island, Nova Scotia, Canada

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Gilhen, J., and T. Power. 2018. Snapping Turtle—Tortue serpentine—turtle mi' kjikj (snapping; *Chelydra serpentina*), added to the herpetofauna of Cape Breton Island, Nova Scotia, Canada. *Canadian Field-Naturalist* 132(1): 4–7. <https://doi.org/10.22621/cfn.v132i1.2020>

### Abstract

Snapping Turtle (*Chelydra serpentina*) is native to mainland Nova Scotia, but its status on Cape Breton Island has been uncertain. Although it was recorded from Cape Breton Island as early as 1953, until 1984, it was known from only three widely scattered locations. Since that time, additional reports received from the public by Nova Scotia Department of Natural Resources and the Nova Scotia Museum of Natural History suggest that the species is native to Cape Breton Island. Thus, we are adding Snapping Turtle to the native herpetofauna of Cape Breton Island, Nova Scotia.

Key words: Snapping Turtle; *Chelydra serpentina*; herpetofauna; Mira River watershed; Cape Breton Island; Nova Scotia; Canada

Snapping Turtle (*Chelydra serpentina*; Figure 1), is native to mainland Nova Scotia. It was first recorded on Cape Breton Island in 1953 when a large adult was reported from the beach at Port Hood, Inverness County (Bleakney 1958; Gilhen 1984). In 1977, two additional specimens were collected from Richmond and Cape Breton counties (Gilhen 1984). Thus, until 1984, the species was known only from these three widely scattered locations, and the individuals were presumed to be released or escaped captive turtles originating from the mainland (Gilhen 1984).

Since 1984, reports received from the public by the Nova Scotia Department of Natural Resources and the Nova Scotia Museum of Natural History show that the

species is much more widely distributed than believed earlier. Detailed investigation of all reports of Snapping Turtle between 1953 and 2017 ( $n = 75$ ) has provided a much clearer picture of the distribution of this species on Cape Breton Island, particularly in the Mira River watershed (Figure 2; Power and Gilhen 2018). These reports include adult turtles, especially nesting females, as well as juveniles (Figure 3). On 12 July 2006, we excavated the first documented nest of Snapping Turtle on Cape Breton Island at Intervale Road, Huntington (Mira River watershed), Cape Breton County (Figure 4).

Bleakney (1958) and Gilhen (1984) discussed the zoogeography of the herptiles of Nova Scotia in the context of land connections to the islands of the Gulf of St. Lawrence during the postglacial period. Evidence for a land connection from Cape Breton Island to mainland Nova Scotia during that period (~13 000–8000 years ago) is well documented (Shaw *et al.* 2002). Another freshwater turtle, Wood Turtle (*Glyptemys insculpta*), has long been recognized as a native species on Cape Breton Island (Gilhen 1984). Based on current understanding of the distribution and ecology of Snapping Turtle in both eastern Canada and elsewhere, we conclude that it (along with Wood Turtle), arrived in Cape Breton via a land bridge during the postglacial period and is native to Cape Breton Island (Power and Gilhen 2018). Therefore, we are adding Snapping Turtle to the herpetofauna of Cape Breton Island, Nova Scotia. We present an updated taxonomic list (after Crother 2008) of amphibians and reptiles of Cape Breton Island, Nova Scotia, Canada (Table 1).



**FIGURE 1.** Adult Snapping Turtle (*Chelydra serpentina*) searching for a nest site at Intervale Road, Huntington, Cape Breton County, Nova Scotia, on 25 June 2014. Photo: Terry Power.



**FIGURE 2.** Centre of the known distribution of Snapping Turtle (*Chelydra serpentina*) in the Mira River watershed on Cape Breton Island, Nova Scotia, Canada. Map of Nova Scotia by Nick Deagle, Nova Scotia Department of Natural Resources. Contains information licensed under the Open Government Licence – Nova Scotia.



**FIGURE 3.** Juvenile (13-year-old) Snapping Turtle (*Chelydra serpentina*) observed at Petersfield Provincial Park, Cape Breton County, Nova Scotia on 24 July 2013. Photo: Terry Power.



**FIGURE 4.** a. The first documented nest of Snapping Turtle (*Chelydra serpentina*) on Cape Breton Island, excavated on 12 July 2006 at Intervale Road, Huntington (Mira River watershed), Cape Breton County with MacKinnon Lake (a tributary of Salmon River) in the background; b. The same nest. Photos: Terry Power.

**TABLE 1.** Updated taxonomic list of amphibians and reptiles of Cape Breton Island, Nova Scotia, Canada (styled as in Crother 2008).

## CAUDATA — SALAMANDERS

*Notophthalmus* Rafinesque, 1820 — EASTERN NEWTS*Notophthalmus viridescens viridescens* (Rafinesque, 1820) — Red-spotted Newt*Ambystoma* Tschudi, 1838 — MOLE SALAMANDERS*Ambystoma laterale* Hallowell, 1856 — Blue-spotted Salamander*Ambystoma maculatum* (Shaw, 1802) — Spotted Salamander*Hemidactylum* Tschudi, 1838 — FOUR-TOED SALAMANDERS*Hemidactylum scutatum* (Temminck and Schlegel in Von Siebold, 1838) — Four-toed Salamander*Plethodon* Tschudi, 1838 — WOODLAND SALAMANDERS*Plethodon cinereus* (Green, 1818) — Eastern Red-backed Salamander

## ANURA — FROGS

*Anaxyrus* Tschudi, 1845 — NORTH AMERICAN TOADS*Anaxyrus americanus americanus* (Holbrook, 1836) — Eastern American Toad*Pseudacris* Fitzinger, 1843 — CHORUS FROGS*Pseudacris crucifer* (Weid-Neuwied, 1838) — Spring Peeper*Lithobates* Fitzinger, 1843 — AMERICAN WATER FROGS*Lithobates clamitans* (Latreille, 1801) — Green Frog*Lithobates clamitans melanota* (Rafinesque, 1820) — Northern Green Frog*Lithobates palustris* (LeConte, 1825) — Pickerel Frog*Lithobates pipiens* (Schreber, 1782) — Northern Leopard Frog*Lithobates septentrionalis* (Baird, 1854) — Mink Frog*Lithobates sylvaticus* (LeConte, 1825) — Wood Frog

## SQUAMATA — SNAKES

*Storeria* Baird and Girard, 1853 — NORTH AMERICAN BROWNSNAKES*Storeria occipitomaculata* (Storer, 1839) — Red-bellied Snake*Storeria occipitomaculata occipitomaculata* (Storer, 1839) — Northern Red-bellied Snake*Thamnophis* Fitzinger, 1843 — NORTH AMERICAN GARTERSNAKES*Thamnophis sirtalis* (Linnaeus, 1758) — Common Gartersnake*Thamnophis sirtalis pallidulus* Allen, 1899 — Maritime Garter Snake*Diadophis* Baird and Girard, 1853 — RING-NECKED SNAKES*Diadophis punctatus* (Linnaeus, 1766) — Ring-necked Snake*Diadophis punctatus edwardsii* (Merrem, 1820) — Northern Ring-necked Snake*Ophedrys* Fitzinger, 1843 — GREEN SNAKES*Ophedrys vernalis* (Harlan, 1827) — Smooth Greensnake

## TESTUDINES — TURTLES

*Chelydra* Schweigger, 1812 — SNAPPING TURTLES*Chelydra serpentina* (Linnaeus, 1758) — Snapping Turtle*Glyptemys* Agassiz, 1857 — SCULPTURED TURTLES*Glyptemys insculpta* (LeConte 1830) — Wood Turtle*Dermodochelys* Blainville, 1816 — LEATHERBACK SEA TURTLES*Dermodochelys coriacea* (Vandelli, 1761) — Leatherback Sea Turtle\*

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**Acknowledgements**

We thank Andrew Hebda, Curator of Zoology, Kim Franklin, and Katherine Ogden, Collections, Nova Scotia Museum of Natural History, for assistance during the preparation of this manuscript. We thank Nick Deagle, Nova Scotia Department of Natural Resources, for the creation of the map.

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Received 29 November 2017

Accepted 5 February 2018