

Nova Scotia Species At Risk Beneficial Management Practice Series

Version 1, February 2022

Wood Turtle

Glyptemys insculpta

STATUS

Threatened

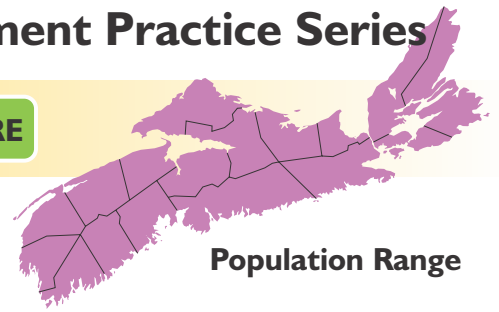


Threatened



AGRICULTURE

Low numbers found throughout much of Nova Scotia.



Population Range



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Carapace (back): dark grey; orange markings when wet



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Plastron (belly): yellowish; small black blotches



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Hatchling

SPECIES DESCRIPTION

- The Wood Turtle has a sculpted shell that is dark grey to brown, with yellow markings when wet.
- The underside of the throat, tail and limbs are orange to red in colour.
- Adults are 16-21 cm long.

- Hatchlings are light brown-grey and about the size of a toonie.
- They do not mature until about 15+ years of age. They are omnivores, eating foods such as worms, slugs, strawberries, etc.

HABITAT DESCRIPTION

- The three key components of Wood Turtle habitat include a stream or river, a sandy nesting area, and a forested or vegetated area.
- They prefer hard-bottomed streams and rivers composed of sand or gravel and avoid clay or muck-bottomed areas. They are not typically found in ponds and wetlands, but may make use of these habitats, particularly in cases where they are located near a river or stream.
- They will make use of both rivers and small streams, ranging from about 2-20 metres wide; they may also use agricultural ditches.
- When on land, they utilize riparian areas with low growing vegetation, alder stands, forests, and hay or other agricultural fields.
- They may spend extended periods of time (days to weeks) on land during the summer months; they typically remain within a couple hundred metres of water, although they will occasionally travel further.
- Females lay their eggs in sand bars along rivers and other sandy-gravel areas such as roads, driveways, road sides or burrow pits in June.
- Similar to other turtle species in Nova Scotia, they will often return to the same nesting area year after year.
- Wood Turtles overwinter in rivers and streams in areas that will not freeze solid. They will often make use of submerged woody debris or undercut banks for overwintering.

Examples of Wood Turtle habitat in the Annapolis Valley, Nova Scotia:



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Riparian area and cropland used for corn/soy.



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Riparian area and fallow field on a former orchard.

KEY TERMS

Riparian Area

The area next to streams/rivers/lakes/wetlands/etc. These areas can be periodically flooded and are transitional lands between a body of water and drier upland areas.

Buffer:

A natural or managed strip of vegetation around a natural feature(s) that is left covered in trees/shrubs/grasses/etc, to protect the target feature(s) from surrounding land uses.

THREATS

- Mortality from vehicles and agricultural machinery.
- Habitat loss and degradation such as increasing development along rivers, watercourse alterations, farm expansion, and deforestation along riparian zones.
- Alterations or degradation to the streambank by livestock and machinery can destroy nesting habitat and overwintering sites.
- Disturbance due to recreational activities.
- Nest predation: human activities, such as food waste disposal, have led to increased predator populations. This in turn increases the risk of nest predation.
- Illegal collection/poaching.

HOW YOU CAN HELP (BENEFICIAL PRACTICES)

- Learn to identify Wood Turtles and report all observations (see contact information below).
- Establish and/or expand riparian buffer areas adjacent to areas used for agriculture. If possible, leave a buffer of 30 metres along watercourses; smaller buffer widths are also beneficial.
- Limit livestock access to streams. Fencing is an effective way to keep livestock away from rivers and streams and maintain nesting beaches that may be used by turtles.
- Avoid working in potential nesting habitat during the nesting season, mid-May to early July. If you observe a nest being laid, mark this area so it can be avoided by equipment or vehicles.
- Avoid expanding operations into or altering areas of nesting habitat. Wood Turtles will return to the same area to nest from year to year.
- Avoid storing food waste or other materials that might attract predators such as raccoons near potential Wood Turtle habitat.
- If mowing or haying, raise mower blades to a height of 17 cm (6.7 inches) to reduce the risk of striking Wood Turtles that may be present in fields.
- Avoid mowing in areas known to support Wood Turtles if possible.
- Delay the first cut of hay until after July 15 to avoid the time when Wood Turtles are most active. Wood Turtles may continue to use terrestrial habitats in August and September.
- If using equipment in fields during the active season is necessary, start work from the center of the field and use a back-and-forth approach, or large circular pattern, to avoid concentrating fleeing animals in the center of fields where they may be at risk.
- Mowing in low gear or at slow speeds may allow turtles and other wildlife to react and move out of the field.
- Fields farthest from rivers and brooks should be cut first, while those closest to the river should be left to the last.
- If mowing will be required in a field, establish your mowed area when turtles are inactive (October-April). This will allow for easier visual detection of Wood Turtles when maintaining the mowed area through their active season.
- If you know your field supports Wood Turtles, consider late-season crop varieties or late maturing cultivars that require harvest in October rather than August.
- Keep your eyes open for turtles on roads.
- Do not disturb or handle a turtle unless it is in immediate danger. If you must move a turtle (eg. a turtle found on a road), place it nearby in the direction it was travelling.

REPORT SIGHTINGS

When possible, report any of your observations of species at risk. Details such as time, date, location (Geographic or UTM coordinates) as well as photos are valuable additions to all reports.

Contact: 1-866-727-3447, speciesatrisk.ca/sightings, sightings@speciesatrisk.ca AND the Nova Scotia Department of Natural Resources and Renewables, biodiversity@novascotia.ca.

Project Partners



Environment and
Climate Change Canada

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A Wood Turtle found foraging in a cornfield.

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A female Wood Turtle digging a nest

TO LEARN MORE

To learn more about the Wood Turtle or other species at risk, view the **Species at Risk in Nova Scotia, Identification & Information Guide, 2nd Edition** available online at <http://www.sarguide.speciesatrisk.ca/> or download the “Species at Risk Reporting” app from the Google Play store.

MacGregor, M., & Elderkin, M. (2003). Protecting and conserving wood turtles: A stewardship plan for Nova Scotia. Biodiversity Program, Wildlife Division, Nova Scotia Department of Natural Resources.

Wood Turtle Strides, Biodiversity Landowners Guide.
<http://www.farmbiodiversity.ca/strides/>

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