

CREATING AND IMPROVING TURTLE HABITAT

Turtle Nesting Behaviour

Different species of turtles are active at different times during the year. Depending on the species and the weather, eggs can be laid anytime from mid-May to early July. Again, depending on the species and the weather, hatchlings can emerge from late August to early October. Ponds, both natural and artificial and other water bodies provide important habitat for many turtle species. However, not all ponds are created equal and there are some simple things that can be done to increase the attractiveness of a pond to turtles.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Gestation time		
Snapping Turtle			Best time for spring maintenance								Best time for fall maintenance		80-90 days		
Blanding's Turtle															
Spotted Turtle															73-83 days
Spiny Softshell															60-75 days
Wood Turtle															
Northern Map Turtle															
Eastern Musk Turtle															
Midland Painted Turtle													60-90 days*		
			Egg-laying time period		*hatchlings can overwinter in the nest and emerge in spring										
			Hatching time period												

Enhancing a Pond for Turtles



Add Sunning Locations – Turtles are cold-blooded (poikilothermic) and need to increase their body temperature by basking in the sun. Adding floating logs or boards provides excellent sites for turtles to sun themselves on warm days and increases the chance of observing them. By anchoring logs away from shore, turtles will have more protection from predators.

Grade the Banks – Some former irrigation ponds have steep-sided banks. Grading these banks can help make it easier for turtles to enter and exit the pond. It also creates a larger shallow zone that young turtles like to inhabit.



Plant Native Vegetation – Young turtles frequent the shallow, heavily vegetated edges of a pond. Plant these areas with native plants and avoid mowing the vegetation around the pond. Keep it natural! This will provide the cover that young turtles need to hide from predators such as raccoons. For irrigation ponds, allowing some or all pond edges to become naturalized is very helpful.



Fun fact: Midland Painted Turtles produce a sort of anti-freeze which prevents the formation of ice in their cells.

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Create a Turtle Nesting Site

Turtles like to lay their eggs in sand or gravel that is free from vegetation and other obstructions. Sometimes they travel great distances in search of a suitable location and this can bring them into contact with predators, roads, and other deadly obstacles or hazards. Similarly, the hatchlings have to deal with the same threats when they make the trip back to the safety of the water. These hazards can be reduced by strategically creating safe nesting sites for turtles in suitable locations.



Site Selection – Select south-facing sites near wetlands or water bodies with well drained soils and an open canopy. Avoid siting nest structures along linear features, such as roads, paths and pond edges since predators often hunt along these routes.

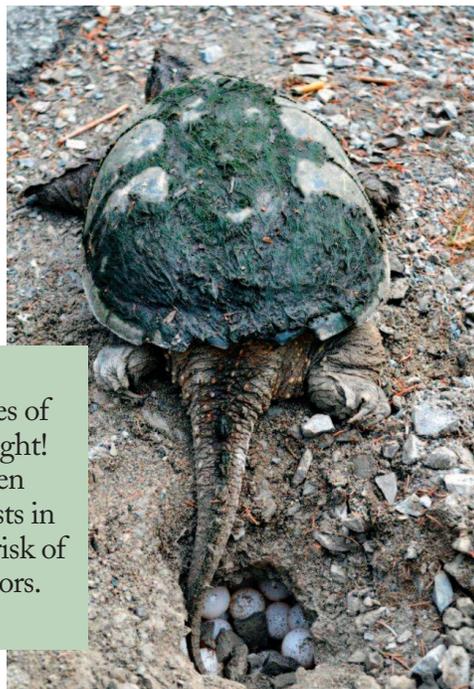
Create a Base Layer – Create a base layer or mound with a minimum depth of 30cm of sand. The area should have a minimum diameter of 4 to 6 metres although size can be variable.

Weed Barrier – Install a barrier to weed growth, such as landscaping fabric or other suitable material, on top of the base layer.

Add Nesting Substrate – Add sand or a sand/gravel mixture to a depth of at least 30 or 40cm. A large mound will provide multiple angles and microclimates for nesting. Clay, fine sediments and large gravel should not be used.



Fun fact: many species of turtles are active at night! Hatchlings will often emerge from their nests in the dark, limiting the risk of being seen by predators.



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Maintaining a Turtle Nesting Site

It is important to keep your turtle nesting mound(s) in the condition preferred by turtles. The presence of vegetation on a turtle mound can prevent its use for nesting or be harmful to any eggs that have been laid. Incubation temperatures can decrease due to lack of sun hitting the surface of the mound. Therefore, a mound without vegetation means warmer temperatures for the eggs, which may result in a higher success rate of hatchlings. Growing plant roots are a concern to turtle eggs as they can pierce through the shell, affecting the development of hatchlings. Heavy root infestations can also make it harder for hatchlings to dig out of the nest when trying to emerge.

- It is important to avoid compaction of the substrate. Gently raking or scruffing the surface manually in the fall and/or in the spring can be beneficial.
- Remove any plants and large cobble while raking the material.
- Removal of vegetation should be done in **early** spring (March and April) and should be done by hand or with a rake.
- Maintenance can also be done in **late** fall (November and December) with caution - Many hatchlings can overwinter in the nest and emerge in the spring.
- Clearing the area around the mound can reduce encroachment of the mounds from shrubs and other plants.
- Periodically visit the nesting mounds throughout the spring/summer/fall season to assess for drought, flooding or other threats.

Surveying a Turtle Nesting Site

The best time to survey the turtle mounds for use is in the spring when turtles are laying their eggs and in the fall when hatchlings emerge.

During the spring (late May to early June), the best time to monitor is in the evening, between 6 p.m. and 9 p.m. Observe the mound and surrounding area as well for any turtles. Be sure to stay quiet and watch from a distance to avoid disturbing the turtles.

During the fall (mid-August to mid-October), observations can be made at any time of the day, following the same guidelines as spring surveying. Hatchlings will emerge at any time, usually on warm days or after a rain. The movement of some hatchlings can stimulate the movement of others.



Long Point Basin Land Trust protects important natural habitats in the central Carolinian Region in southern Ontario. It promotes conservation through outreach, research, habitat restoration, and species at risk recovery projects. For more information and to report reptile sightings, visit www.longpointlandtrust.ca

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