

EASTERN SPINY SOFTSHELL TURTLE



Scientific Name:	<i>Apalone spinifera spinifera</i>	<i>Apalone spinifera spinifera</i>
Class:	Reptilia	<i>apalos</i> = soft or tender
Order:	Testudines	<i>spinatus</i> = with spines
Family:	Trionychidae	<i>ferentis</i> = bearing
Genus:	Apalone	
Species:	spinifera	
Subspecies:	spinifera (Eastern)	

Description

- Adult males are smaller than females and vary between 12.2-23.5 cm in carapace length; females are between 18-43.2 cm;
- The only freshwater turtle in Canada with a leathery, flexible carapace;
- The flat carapace is olive-grey to brown with a yellow border, edged in black, around its margin. Males retain black spots while females have a camouflage-like pattern;
- Small tubercles (spines) on edge of carapace by the neck;
- Carapace is smooth in females; covered with tiny spines in males;
- Plastron is yellowish-white;
- Very long neck and only turtle in Canada with a tubular 'pig-like' snout;
- Feet are webbed and legs have yellow streaks.

Feeding

- They feed primarily on invertebrates, fish, crayfish and may eat aquatic vegetation.

Breeding

- Females mature after 10 years;
- Breeding occurs in the spring, usually in deep water;
- Nests are built in sandy or gravel areas from May to July depending on the spring temperatures;
- Females lay a single clutch of 10-40 round, white, hard-shelled eggs;
- Hatchlings emerge in August and September and are 3-4 cm in length;

- The temperature of the egg within the nest does not determine the gender of a

hatchling.

Habitat

They are generally found in lakes and rivers with soft, sandy bottoms and abundant aquatic vegetation. They prefer waterways with sandbars or mudflats.

Distribution

- *Ontario:*



- *Canada:* Small and very isolated populations in southwestern Ontario and western Quebec.
- *USA:* Found in the eastern United States, and as far south as Texas.

Interesting Facts and Behaviour

- Often buries itself in sand or mud to hide from predators or ambush prey;
- Usually found in water, but often bask communally on riverbanks or sides of streams;
- They can get almost half the oxygen they need while underwater through their skin (in a similar process to skin respiration in frogs);
- Hibernate under water in mud.

Status

The eastern spiny softshell turtle is designated as a threatened species provincially in Ontario. It was designated as a threatened species by **COSEWIC** in 1991. Latest population estimates show that there are probably less than 2,500 eastern spiny softshells in Ontario and possibly less than 100 in Quebec. **REPORT SIGHTINGS OF THIS TURTLE TO THE TORONTO ZOO OR ANOTHER CONSERVATION AUTHORITY.**

Conservation Concerns

- Traditionally collected for food;
- Often caught on fishing lines;
- Ontario is the northern edge of range;
- Collisions with boats;
- Poor water quality.

PAINTED TURTLE



Midland Painted Turtle



Western Painted Turtle

Scientific Name:	<i>Chrysemys picta</i>	
Class:	Reptilia	
Order:	Testudines	
Family:	Emydidae	
Genus:	Chrysemys	<i>Chrysemys picta</i>
Species:	picta	<i>chryseos</i> = golden or superb (in reference to the colour)
Subspecies:	marginata (Midland), bellii (Western)	<i>pictus</i> = painted

Description

- The midland subspecies ranges from 11.5-14 cm in carapace length. Females are larger than males;
- The western subspecies ranges from 9-18 cm in carapace length. Females are larger than males;
- The western subspecies is the largest of the three subspecies in Canada (the third is the eastern painted turtle. It lives in southeastern Canada);
- The painted turtle has a broad, smooth and flat, olive to brownish-grey carapace (midland and western subspecies have orange-red margins);
- It has a yellow plastron with a large, central blotch, normally more pronounced in the western subspecies;
- The neck, legs and tail of both subspecies have yellow and red stripes;
- The painted turtle has a yellow patch behind each eye. Males have very long nails on the front feet.

Feeding

- Omnivorous;
- Eats aquatic plants, frogs, small fish and aquatic invertebrates;
- Feeds when the water temperature is above 15°C.

Breeding

- Individuals in northern populations may need 5 years to mature;
- Breeding occurs May-early June, when the temperature is 8°C or warmer;
- Nesting takes place in May to June. The nest is usually within 60 m of a body of water;
- Females produce a single clutch of white, oval, smooth-shelled eggs (3-14 eggs for the midland subspecies, 3-20 for the western subspecies);
- Hatchlings usually overwinter in the nest and emerge the following spring. They can survive temperatures as low as -9°C;
- The temperature of the egg in the nest determines the gender of hatchling.

Habitat

These turtles inhabit ponds, marshes, lakes and creeks with slow moving water, preferring water bodies with soft bottoms and abundant basking sites. Vegetation is required for feeding and cover.

Distribution



- *Ontario:*
- *Canada:* Three subspecies occur in Canada. The midland subspecies occurs in southern Ontario and Quebec and the range of the western subspecies extends from western Ontario to British Columbia. The eastern subspecies occurs in southeastern Canada;
- *USA:* Found throughout much of the eastern and mid-western United States with some scattered populations in the western region.

Interesting Facts and Behaviour

- No set home range. They will seek out best conditions available;
- Adults use muddy bottoms of permanent water bodies, or semi-permanent water bodies if there is adequate precipitation in the fall, to hibernate;
- Bask in large groups on logs, rocks or floating vegetation.

Status

Painted turtle is not designated at risk provincially in Ontario or by **COSEWIC**.

Conservation Concerns

- Vulnerable to traffic mortalities due to frequently crossing roads;
- Loss of habitat;
- An increase in natural predators due to human activities;
- Predation by raccoons and coyotes (abundant due to garbage disposal, cornfields, etc).

SPOTTED TURTLE



Scientific Name:	<i>Clemmys guttata</i>
Class:	Reptilia
Order:	Testudines
Family:	Emydidae
Genus:	Clemmys
Species:	guttata

Clemmys guttata
klemmys = tortoise
guttatus = spotted or speckled

Description

- Adults average 9-11.5 cm in carapace length;
- Black carapace with small, bright yellow or orange spots, which fade as the animal ages. Carapace is very smooth, lacking keels or serrations;
- Plastron is yellow-orange with large black blotches on each scute or can be completely black;
- Males have a tan or black chin and brown eyes; females have a yellow to orange chin and yellow to orange eyes;
- Head, neck, limbs and tail are grey to black with yellow spots.

Feeding

- Omnivorous, feeds in water;
- Main food items include snails, aquatic insects and vegetation at the edge of a wetland.

Breeding

- Females reach maturity in 12-20 years;
- Breeding occurs throughout the season and females are capable of storing sperm until it is needed for fertilizing the eggs;
- Nests are dug in May or June, usually in a sunny location to help the eggs develop faster;
- Female lays 3-8 soft, white, leathery eggs in May or June. Eggs hatch in the fall;
- The temperature of the egg within the nest determines the gender of a hatchling.

Habitat

Though these turtles prefer quiet water, they spend considerable time on land in the spring. They are found in bogs, marshes and soft-bottomed lakes. They **aestivate** and lay eggs on land.

Distribution



- *Ontario:*
- *Canada:* Limited to southern Ontario and southwestern Quebec.
- *USA:* From Lake Michigan to the Atlantic coast and southward to Florida.

Interesting Facts and Behaviour

- Most active in early spring and are often seen basking in the sun in shallow, still waters;
- Aestivate in the summer to avoid the hot dry weather;
- Hibernate in sheltered sites under water.

Status

The spotted turtle is designated as a vulnerable species provincially in Ontario. It was designated as a species of special concern by **COSEWIC** in 1991.

Conservation Concerns

- Kept commercially as pets;
- Traffic mortalities;
- Aquatic corridors drained;
- Due to loss of wetlands, populations are now becoming isolated from one another, preventing **gene flow** between populations.