

ACTIVITY #2: TURTLE IDENTIFICATION



TOPIC

What are some unique characteristics of the various Ontario turtle species?

BACKGROUND INFORMATION

For detailed information regarding Ontario turtles, see Turtles of Ontario Fact Sheets (pages 10-26) or “Turtles of Ontario” poster, or see web page www.torontozoo.com/adoptapond.

MATERIALS

Student work sheet (included)

Turtles of Ontario Fact Sheets (pages 10-26). Assign one turtle species to each expert group.

METHOD

Jigsaw: The class should be divided into small groups of five students, numbering each individual student from one to five. The teacher should make a copy of the fact sheets (pages 10-26). The teacher should assign a specific turtle species to each “expert group” and distribute the corresponding fact sheet to each group. Using the chart provided, each student, within each working group, will fill out the information for their assigned turtle. Once this task is completed, students will move into their “home group” of students with the same assigned number. Each student will present their findings to the rest of their home group, ensuring that all group members complete the work sheet for all the turtles that have been assigned.

The teacher should make copies of the Turtle Identifier Cards (pages 37-40) and black out the turtle names. The teacher should then distribute one set of cards to each home group of students. For all the turtles that have been assigned, students will then be asked to determine the names of the species pictured on each card. They can use their completed work sheets to identify the species on each card.



ACTIVITY #2: TURTLE IDENTIFICATION: Student Work Sheet

	Blanding's Turtle	Northern Map Turtle	Common Musk Turtle	Common Snapping Turtle
Distribution in Canada				
Habitat				
Description				
Feeding				
Status				
Conservation Concerns				
Interesting Facts				



ACTIVITY #2: TURTLE IDENTIFICATION: Student Work Sheet

	Eastern Spiny Softshell Turtle	Painted Turtle	Spotted Turtle	Wood Turtle
Distribution in Canada				
Habitat				
Description				
Feeding				
Status				
Conservation Concerns				
Interesting Facts				



ACTIVITY #2: TURTLE IDENTIFICATION: Answer Sheet

	Blanding's turtle	Northern map turtle	Common musk turtle aka: Stinkpot	Common snapping turtle
Distribution in Canada	-southern Ontario -western Quebec -Nova Scotia	-Great Lakes/St. Lawrence watershed -southern Ontario -Quebec	-southern Ontario -Quebec, near the Ottawa River	-occurs from Maritimes to southern Saskatchewan -parts of southern Alberta & New Brunswick
Habitat	-highly productive water -soft-bottomed -dense aquatic vegetation	-larger rivers & lakes -slow-moving, high quality water -soft-bottomed	-rivers, lakes & ponds -slow moving water -soft-bottomed -shallow areas	-shallow ponds, rivers, streams, canals & lakes -slow-moving water -soft-bottomed -plenty of vegetation
Description	-12.5-18 cm -carapace: smooth, domed, black to grey-brown with yellow streaks/spots -plastron: black or yellow with dark blotches, hinged -chin & throat are yellow -bulging eyes	-males: 9-15.9 cm -females: 18-27.3 cm -carapace: oval with serrated back edge, slightly raised keel, olive green with yellow lines resembling map -plastron: yellow -head & limbs light yellow & dark stripes -yellow spot behind each eye	-5.1-11.5 cm -carapace: domed, smooth, light olive to black in colour -plastron: small, yellow-brown, single hinge -single stripe above & below eye on both sides of head -chin & throat covered in barbels	-20.3-36 cm -carapace: light brown to black, young turtles have raised keels -plastron: yellowish, very small & cross-shaped -two barbels on chin, neck is covered with rounded tubercles -serrated tail dinosaur-like, same length as carapace
Feeding	-omnivorous -crayfish, insects, fish, frogs, plants	-molluscs, insects, fish carrion, plant material	-omnivorous, often scavenging -bottom feeders -algae, carrion, small invertebrates, fish eggs, minnows, tadpoles	-omnivorous, often scavenging -fish, invertebrates, plants, toads, frogs salamanders, tadpoles, small turtles, snakes, young waterfowl, small mammals, carrion
Status	-Ontario population not designated at risk in Ontario or by COSEWIC -Nova Scotia population designated as threatened by COSEWIC in 1993	-not designated at risk provincially in Ontario -designated as a species of special concern by COSEWIC in 2002	-not designated at risk provincially in Ontario -designated as a threatened species by COSEWIC in 2002	-not designated as a species at risk provincially in Ontario or by COSEWIC
Conservation Concerns	-abandons nesting & basking sites if disturbed -traffic mortalities -high nest predation -loss of wetland habitat	-shoreline development destroys nesting habitats -vulnerable to water pollution (dependent on molluscs) -traffic mortalities	-occasionally caught by anglers using minnows or worms on hooks -habitat loss & fragmentation	-traffic mortalities -sometimes considered human food delicacy -persecuted due to misinformation on its perceived threat to people, & game animals
Interesting Facts	-camouflaged carapace looks like duckweed -can live to 25 years, some say 70 -hibernates underwater in mud	-females begin eating after eggs are laid (usually July) -home range size greater for females than males -adults hibernate & bask communally -basking important for development of eggs in females	-nicknamed Stinkpot because of musky odour produced when handled -nocturnal -rarely leaves water -may climb trees or branches overhanging water -very aggressive -Ontario's smallest turtle	-rarely leave water -aggressive on land because of vulnerability due to small plastron -releases foul-smelling liquid from glands under carapace -world's largest snapping turtle (32 kg) was once housed at Toronto Zoo.



ACTIVITY #2: TURTLE IDENTIFICATION: Answer Sheet

	E. spiny softshell	Painted turtle	Spotted turtle	Wood turtle
Distribution in Canada	-southwestern Ontario -western Quebec	-midland: southern Ontario; western: north-western Ontario	-southern Ontario -southwestern Quebec	-Nova Scotia through southern Ontario
Habitat	-lakes & rivers with soft, sandy bottoms -abundant aquatic vegetation -prefers waterways with sandbars or mudflats	-ponds & marshes -soft-bottomed -slow-moving water -abundant basking sites -vegetation required	-bogs, marshes, & soft-bottomed lakes -quiet water -can be terrestrial in the spring	-near soft-bottomed, moving water such as streams, creeks, & rivers -riparian woods, shrub or berry thickets, swamps, open, grassy areas
Description	-male: 12.2-23.5 cm -female: 18.0-43.2 cm -carapace: leathery, flexible, olive-grey to brown with yellow border, edged in black, males have spots & tiny spines, females have camouflage pattern, small tubercles near neck -plastron: yellow-white -very long neck; 'pig-like' snout -feet are webbed, legs have yellow streaks	-midland: 11.5-14 cm -western 9.0-19 cm -carapace: broad, smooth, flat, olive to brownish-grey; has orange-red margins -plastron: yellow with central blotch -neck, legs & tail are striped with yellow & red -yellow patch behind each eye -males have long nails on front feet	-9-11.5 cm -carapace: black with small, bright yellow or orange spots, very smooth, no keels or serrations -plastron: yellow-orange with large black blotches or completely black -males: tan or black chin & brown eyes -females: yellow to orange chin & yellow to orange eyes	-14-20 cm -carapace: rough, heavily sculptured look, serrated marginal scutes & low central keels, brown to greyish-brown to yellow with black flecks -plastron: yellow with black blotch on each scute, v-shaped notch at tail -head & upper limbs are black -neck, lower limbs & other skin range from yellow to yellow-orange to orange-red depending on locality
Feeding	-invertebrates, fish, crayfish, may eat aquatic vegetation	-omnivorous -aquatic plants, frogs, small fish, aquatic invertebrates	-omnivorous -snails, aquatic insects & vegetation	-omnivorous -terrestrial plants, mushrooms, insects, worms
Status	-designated as a threatened species provincially in Ontario -designated as a threatened species by COSEWIC in 1991	-not designated as a species at risk provincially in Ontario or by COSEWIC	-designated as a vulnerable species provincially in Ontario -designated as a species of special concern by COSEWIC in 1991	-designated as a vulnerable species provincially in Ontario -designated as a species of special concern by COSEWIC in 1996
Conservation Concerns	-traditionally collected for food -often caught on fishing lines -collisions with boats -poor water quality	-traffic mortalities -loss of habitat -increase in natural predators, such as raccoons & coyotes due to human activities like garbage disposal, cornfields	-kept commercially as pets -traffic mortalities -aquatic corridors drained -loss of wetlands preventing gene flow between populations	-kept as pets -high nest predation -isolated populations -traffic mortalities
Interesting Facts	-buries itself in sand to hide from predators or ambush prey -bask communally -gets oxygen underwater through skin	-no set territory or range -bask in large groups on logs, rocks or floating vegetation	-most active in early spring -aestivate in summer to avoid hot dry weather	-considered highly intelligent species of turtle -some individuals stomp the ground causing earthworms to surface