A Field Guide to Fort Erie's Turtles, Snakes, Frogs and Toads







Assistance for this project was provided by Environment Canada

Help protect species at risk from disappearing by recording where you find them.



When you hike in Fort Erie, keep a record of the date and location of your sightings of toads, frogs, turtles and snakes.



Checklists are in the envelope on the inside back cover.



www.bertmillernatureclub.org

Fort Erie Checklist	3
Turtle Species of Fort Erie	
*Blanding's Turtle	4
Midland Painted Turtle	5
Northern Map Turtle	6
Red-eared Slider Turtle	7
Snapping Turtle	8
*Spotted Turtle	
*Wood Turtle	
Snake Species of Fort Erie	
Dekay's Brownsnake	11
*Milksnake	12
*Eastern Hog-nosed Snake	13
*Smooth Greensnake	14
*Eastern Foxsnake	15
*Red-bellied Snake	
Eastern Gartersnake	17
* Eastern Ribbonsnake	
Northern Watersnake	19
Frogs and Toad Species of Fort Erie	
* American Bullfrog	
American Toad	
*Fowler's Toad	
*Gray Treefrog	
Green Frog	24
Northern Leopard Frog	
*Pickerel Frog	26
Western Chorus Frog	
Spring Peeper	
Wood Frog	29
Terminology/Glossary	
Who to Report Species at Risk to	
Acknowledgements	32

	SPECIES NAME	ONTARIO STATUS	FORT ERIE STATUS	LOCATION DATE FOUND
*	Blanding's Turtle	threatened	rare	*
•	Midland Painted Turtle	ok	common	
J	Northern Map Turtle	special concern	no reported sightings	
	Red-eared SliderTurtle	introduced	rare but increasing	
	Snapping Turtle	concern	declining	
*	Spotted Turtle	endangered	rare and declining	*
*	• Wood Turtle	endangered	likely extirpated	*
	Dekay's Brownsnake	ok	no reported sightings	
*	^e Milksnake	ok	declining now rare	*
*	Eastern Hog-nosed Snake	threatened	declining now very rare	*
*	Smooth Greensnake	ok	likely extirpated	*
*	Eastern Foxsnake	endangered	no reported sightings	*
*	Red-bellied Snake	ok	very rare	*
	Eastern Gartersnake	ok	common	
*	Eastern Ribbonsnake	special concern	very rare	*
	Northern Watersnake	ok	declining now rare	
*	American Bullfrog	ok	declining now rare	*
	American Toad	ok	common	
*	Fowler's Toad	endangered	declining	*
*	Gray Treefrog	ok	rare	*
	Green Frog	ok	common	
	Northern Leopard Frog	ok	common	
*	Pickerel Frog	ok	very rare	*
	Western Chorus Frog	ok	common	
	Spring Peeper	ok	declining	
	Wood Frog	ok	declining	

* report location and provide a photograph to info@bertmillernatureclub.org

high domed carapace

black to grayish-brown carapace with yellowish spots or streaks

protruding eyes

bright yellow chin and throat

yellow plastron with dark blotches

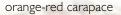
flexible grooved hinge to protect head and legs



* Blanding's Turtle Emydoidea blandingii

ONTARIO STATUS threatened

Bright yellow chin and neck. Faint spotting on a high domed carapace. Mature at about age 25. Found in shallow lakes, ponds and wetlands with clean water and mucky bottoms. Look for them basking on rocks or logs. Size: 12.5-18 cm



neck, legs and tail striped with red and yellow

yellow plastron with central blotch or shadow, variable in darkness





Midland Painted Turtle

Chrysemys picta marginata



Lower neck, shell edges and legs have red markings. No orange or reddish spot behind the eye. Smooth olive to brownish-grey carapace. Found in ponds, marshes, lakes and slow-moving creeks, that have a soft bottom. Look for them basking on shorelines or on logs and rocks that stick out of the water. Size: 11.5 - 14 cm slightly raised keel down centre of shell

rear margin of carapace serrated

yellow spot behind each eye

yellow plastron

olive green to brownish carapace numerous fine yellow line on carapace, resembling contour lines on a map

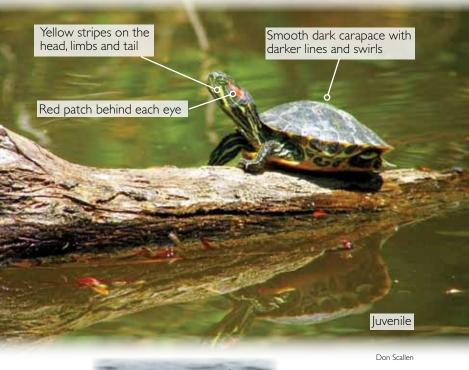


*Northern Map Turtle

Graptemys geographica

Side of head has many small lines. Yellowish spot behind the eye. Line ONTARIO STATUS special concern FORT ERIE STATUS no reported sightings

patterns in scutes. Flattened carapace. Found in large rivers and lakes with slow-moving water and a soft bottom and high quality water. Look in the upper Niagara River, eastern Welland River and Chippawa channel areas. Male size: 9-16 cm Female size: 18 - 28 cm





Red-eared Slider Turtle

ONTARIO STATUS introduced FORT ERIE STATUS rare but increasing

Graptemys geographica

Orange or reddish spot behind the eye. Shell edges may have reddish markings. Non-native species. Do NOT release into wild. Found in the same kind of habitat as the Midland Painted Turtle. There is the potential for displacement of native turtles and disease transfer into wild populations. Size: 20-33 cm young turtles - three longitudinal keels old turtles - almost smooth



long tail with dinosaur-like scales

carapace light brown to black

brown head, limbs and tail

yellowish crossshaped plastron



Snapping Turtle Chelydra serpentina

Brown head, tail, limbs. Black, olive or brown carapace, serrated at back, may be

ONTARIO STATUS concerned FORT ERIE STATUS declining

covered in algae. Dinosaur-like tail. Found in slow moving water with a soft mud bottom and dense aquatic plants found along rivers, estuaries, shorelines and wetlands. They are found in developed areas such as golf course ponds, irrigation canals, storm water ponds and drains. Mature at age 15-20 years. Size: 20-36 cm smooth black carapace with bright yellow or orange spots

males have brown eyes and tan chin females have orange eyes and yellow chin

> head, tail and limbs are grey to black with yellow spots

inside of limbs are orange plastron yellow-orange with large dark irregular blotch on each scute



*Spotted Turtle Clemmys guttata



Bright yellow or orange spots on smooth, <u>rare and declining</u> black carapace. Blotches or spotting on the head, no lines. Inside limbs orange. Found in small, shallow bodies of water, such as bogs, marshes, fens, coastal wetlands and small ponds Size: <14 cm



* Wood Turtle Glyptemys insculpta

Tan, grayish brown or brown carapace. Central ridge has pyramidal pattern of ONTARIO STATUS endangered FORT ERIE STATUS likely extirpated

ridges and grooves. Dark gray to solid black head. Neck, chin and legs are orange to brick red. Found in rivers and streams with a medium rate of flow and having deep pools, undercut muddy banks, log piles and a bed of sand or gravel. Look in fields, meadows, swamps and bogs. Mature around age 20. Size: 20-24 cm







Dekay's Brownsnake Storeria dekayi

2 rows of dark spots along light

ONTARIO STATUS ok FORT ERIE STATUS no reported sightings

coloured stripe along back. Light grey-brown to red. Similar in size to gartersnakes. Found in forests, wetlands, forest clearings, edge habitats, urban areas, under logs, rocks, boards, leaves and other cover. Size: 22-33 cm cream, tan or light gray

scales smooth anal scale single

belly whitish with black checkerboard pattern

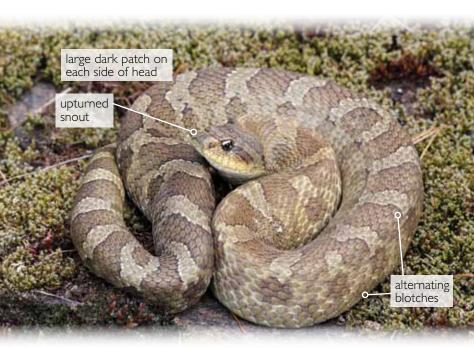
red or dark brown blotches bordered in black





*Milksnake Lampropeltis triangulum

Y-shaped blotch or marking behind the head. Two-toned coloration, combining pale grey or beige with dark-brown blotches. Found in rocky outcrops, fields and forest edges as well as around barns. Size: 61-90 cm







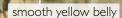
*Eastern Hog-nosed Snake

Heterodon platiminos

threatened FORT ERIE STATUS declining now very rare Thick body, wide neck. Alternating blotches down back and sides with light background of various colours: yellow, tan, olive, brown, gray, black or reddish-brown. White belly with dark patches. May be entirely black or dark gray.

Found in sandy habitats, dunes and beaches along the Lake Erie shoreline. Size: 40 cm - >1 m

smooth green scales



pale yellow upper lip

*Smooth Greensnake

Opheodrys vernalis

Upper body is a rich solid emerald green. White or pale yellow belly and upper lip. Young snakes are darker in colour. No lines. Will climb trees. Found in prairies, meadows, fields, wetland edges, forest clearings and open woodlands often under cover, ONTARIO STATUS such as logs, rocks and boards. FORT ERIE STATUS Size: 30,5-51 cm likely extirpated

* report sightings

ok





*Eastern Foxsnake Pantherophis gloydi

Yellow underneath the head and

ONTARIO STATUS endangered FORT ERIE STATUS no reported sightings

red-brown on top. Dark bars in-between, behind and below the eyes. Yellowish-brown body. Dark blotches down the back. Row of alternating smaller blotches along each side. Belly is yellow with black checkering. Found in unforested habitats such as shorelines, prairies, savannahs, rock barrens and wetlands. Size: 85 cm - 1.7 metres



reddish-brown to gray-brown in colour

3 light brown or yellow spots on neck which may fuse as a collar





*Red-bellied Snake Storeria occipitomaculata

Reddish or deep-orange belly scales. No ring behind the head. Found in forest edge habitat, fields and meadows with lots of ground cover, such as logs, rocks, scrap piles and building foundations. Size: 20-25.5 cm



belly yellowish-green

may have dark scales or spots between rows giving it a checked appearance

black, green or brown with 3 yellow stripes





Eastern Gartersnake Thamnophis sirtalis sirtalis

Black, green or brown with 3 yellow stripes on upper body. Yellow cheeks. First yellow line adjacent to belly scales does not enter the fourth row of scales. Found in wetlands, hedgerows, moist forests, ravines, urban areas and agricultural fields. Size: 44-66 cm distinct white half-moon spot in front of each eye

belly yellowish-green

dark green to black with 3 yellow stripes may have brown colouring on sides of belly





very rare

*Eastern Ribbonsnake Thamnophis sauritus septentrionalis

Striped upper body. White spot in front of the eye, and white cheeks. First yellow line adjacent to belly scales enters the fourth row of scales. Found close to water, such as wetlands and the shorelines of forested lakes and rivers. Size: 44.5 - 56 cm

reddish-brown squarish blotches with dark outline

gray-brown to dark gray in colour

> belly cream with irregular rows of reddish half moon crescents

older individuals pattern may be less pronounced



Adopt-A-Pond Programme



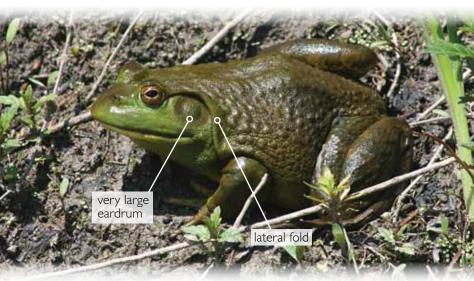
ok

FORT ERIE STATUS declining now rare

Northern Watersnake Nerodia sipedon sipedon

Various shades of brown. Rust-coloured blotches on belly scales. Appears black when wet. Found near or in permanent body of

fresh water including lakes, rivers, wetlands, as well as under rocks or basking on rocks or logs. Size: 61-106.5 cm







* American Bullfrog Lithobates catesbeianus

Skin is pale green to dark greenish brown. Belly is creamy white. Variable dark mottling on the back or underside. Adult males have pale to bright yellow chins in breeding season. Very large tympani (eardrums) always larger than the eyes. Lateral folds wrap downward around the tympani. During mating season from mid-June to late July listen for a deep and resonant 'jug-o-rum' coming from large permanent waterbodies. Look in smaller ponds and vegetation along a shoreline. Size: grows up to 17 cm

ONTARIO STATUS

ok

FORT ERIE STATUS

declining now rare





American Toad Anaxyrus americanus

Large, squat toad with brown, reddish or olive skin. Dark blotches containing one to two spots or 'warts' of various colours. Belly



is white with dark spots. Poison glands in the skin. During mating season, late March-June, listen for a trill up to 30 seconds long, preceded by a single, slightly lower introductory note coming from shorelines, streams, shallow ponds and ditches. Look in mown grass and gardens to heavily forested areas. Size: grows to about 11 cm







To listen to the calls of frogs and toads visit https://www.naturewatch.ca/english/frogwatch/on

* Fowler's Toad Anaxyrus fowleri

Large yellow, green or brown toad with a light stripe down the middle of the back Large dark blotches, each of which has three or more bumps (warts). White belly lacking dark spots. Poison glands in the skin. Calls begin in April but breeds from mid to late May into June. Listen for sound like a crying baby or a nasal 'waaa' for 2-5 seconds from rocky pools, creek outlets in sandy beach areas, sand bottom pools and ponds backwater marshes. Look in lakeshore habitats. Size: grows to about 5-8 cm. Females are larger than males.





* Gray Treefrog Hyla versicolor

ONTARIO STATUS ok FORT ERIE STATUS rare

Warty' green, brown or gray skin with blotches on the back. Large dark large suction-cup-like toe pads. White patch under eyes. Bright yellow-orange under thighs. During mating season at night in late spring into late summer listen for a short flute-like trill, from permanent water in or near forested habitats. It hides in tree holes, under bark, in rotten logs, and under leaves and tree roots. Size: grows to about 6 cm



Green Frog Lithobates clamitans

Skin may be green, bronze, brown or even blue, or a combination of colours. Belly is white with darker lines or spots and occasionally has a yellow tinge. Hind legs have dark banding and there may be



irregular spotting on the back. Typically is green on the upper lip. Males have a bright yellow throat. Large frog with large, distinct tympani (eardrums). Males: tympani are noticeably larger than the eye. Females: tympani are about the same size as the eyes. During mating season from late May to August listen for either a single 'Gunk', like the sound of a loose banjo string or a single call with several less vigorous repeats 'GUNK, gunk-gunk-gunk' coming from shallow, permanent waterbodies such as springs, swamps, brooks, ponds and lakes. Size: up to 10.8 cm





Northern Leopard Frog

Lithobates pipiens

Skin is green or brown with dark, rounded, light-edged random spots.

ONTARIO STATUS ok FORT ERIE STATUS common

Prominent dorsolateral folds (folds of skin running down each side of the back). White belly that occasionally has a yellowish tinge. During mating season from mid to late spring listen for a low snore followed by several low grunts sometimes it sounding like a finger rubbed on a wet balloon coming from permanent ponds and wetlands. Size: adults are usually 5 - 9 cm

* Pickerel Frog

Lithobates palustris

Smooth, tan skin. Often has yellow or orange coloration in the groin area. Prominent bronze dorsolateral folds (folds of skin running down each side of the back). Two or, rarely, three parallel rows of dark, squarish spots run down the back

between the dorsolateral folds. During mating season from mid to late spring, listen for a call is a low nasal snore some-

ONTARIO STATUS ok FORT ERIE STATUS very rare

what like the mooing of a cow coming from ponds and streams with stable water temperatures, like springs and cold seepages. Look for it in damp fields and meadows. Size: can grow to almost 9 cm







To listen to the calls of frogs and toads visit https://www.naturewatch.ca/english/frogwatch/on

Western Chorus Frog Pseudacris triseriata ONTARIO STATUS ok FORT ERIE STATUS common

Skin is smooth and varies in colour from green-gray to brown. A dark stripe runs through the eye and a white stripe along the upper lip. 3 dark stripes down the back. In some, the stripes are broken into dots, dashes or small blotches. During mating season in March-April listen for a sound like running a fingernail along the teeth of a comb from shallow temporary pools in open fields, ditches and woodlands. Look for it in forest openings around woodland ponds, damp meadows, marshes, bottomland swamps, temporary ponds in open country, and urban areas. Size: up to 4 cm





Spring Peeper Pseudacris crucifer

ONTARIO STATUS ok FORT ERIE STATUS declining

Skin is tan or light brown in colour.

Darker X-shaped marking on the back. During mating season calls are heard from March-May. Listen for a single, loud, high-pitched peep repeating over and over, coming from temporary woodland ponds. It is found in leaf litter of forested and shrubby upland habitats.Size: up to 3.7 cm

To listen to the calls of frogs and toads visit https://www.naturewatch.ca/english/frogwatch/on





Wood Frog Lithobates sylvaticus

Skin may be reddish, tan or dark brown. A dark blotch on the chest near each

front leg. Belly is white and may have dark mottling. Always has a dark mask under and behind the eyes. Some have a light line down the middle of the back. During mating season from March-April listen for a series of sharp quacks, almost like those of a duck coming from vernal forest pools. It hides in logs, humus and leaf litter or under logs and rocks in moist forests. Size: up to 8 cm in length.

To listen to the calls of frogs and toads visit https://www.naturewatch.ca/english/frogwatch/on

ONTARIO STATUS ok

FORT ERIE STATUS

declining

Terminology/Glossary

Anal Scale - Scale just infront of the cloacal opening of snakes which can either be single or divided

Barbels - Fleshy projections of skin growing under the mouth of turtle

Carapace - The hard upper shell of a turtle

Cloacal Opening - The opening to the cloaca, which serves as the collective opening for reproductive, intestinal and urinary tracts

Eustachian tube openings - Openings in the mouth that lead to tubes that connect to the middle ear to equalize air pressue

External Nares - Nostrils - Anterior openings for the entry or exit of air

Glottis - The opening from the mouth into the respiratory system

Keeled Scales - Snakes' scales that have a ridge down the center making them rough to the touch

Labial Scales - Scales that border the mouth opening of snakes, much like lips

Longitudinal Keel - A raised ridge along the centre of a turtle's shell

Maxillary Teeth - Sharp teeth in the maxilla of a frog's mouth that function in holding captured prey

Plastron - Protective covering on the underside (ventral side) of a turtle, made up of plates called scutes

Plastron Hinge - A joint in the plastron of a turtle allowing it to close or bend to protect legs and/or head

Scutes - Thickened, bony plates on a turtle's shell

Tympanic Membrane - The eardrum - receives sound waves

Vomerine Teeth - Small projections in the top of a frog's mouth that function in holding captured prey

REPORT SPECIES AT RISK SIGHTINGS TO

Bert Miller Nature Club

www.bertmillernatureclub.org Submit your sightings on line to Fort Erie's local nature club

OTHER AGENCIES TO REPORT TO

Ontario Ministry of Natural Resources (Ontario Natural Heritage Information Centre)

http://www.mnr.gov.on.ca/en/Business/Species/index.html? CSB icname=specialinitiatives (COSSARO) Click on the Species at Risk tab.

Government of Canada

www.cosewic.gc.ca The Committee on the Status of Endangered Wildlife in Canada (COSEWIC)

Ontario Nature

http://www.ontarionature.org/protect/species/herpetofaunal_atlas.php Download Ontario Nature's new Apple iPhone and Google Android app is for anyone who wishes to contribute to the making of Ontario Nature's Reptile and Amphibian Atlas.

Toronto Zoo

http://www.torontozoo.com/adoptapond/ Opportunities to participate in a variety of citizen scientist programs.

Royal Ontario Museum

www.rom.on.ca

Acronyms

COSSARO: The Committee on the Status of Species at Risk in Ontario consists of people with expertise in scientific disciplines or Aboriginal Traditional Knowledge.

COSEWIC: The Committee on the Status of Endangered Wildlire in Canada is a committee of experts that assesses and designates which wildlife species are in some danger of disappearing from Canada.

SAR: Species At Risk designation resulted fro the Species at Risk Acot (SARA). It is a federal law with three main goals:

- to prevent endangered or threatened species from becoming extinct or extirpated
- to help in the recovery of endangered, threatened and extirpated species; and
- to manage species of special concern to help prevent them from becoming endangered or threatened.

http://www.pc.gc.ca/eng/nature/eep-sar/itml.aspx



Photographic Acknowledgements

Joe Crowley

Herpetology Species at Risk Specialist, Species at Risk Branch, Ontario Ministry of Natural Resources Unless otherwise indicated, all photographs are courtesy of Joe Crowley.

Acknowledgements of Assistance

Dawn Pierrynowski

Bert Miller Nature Club, Fort Erie, Ontario, Canada Brett Ruck

Yvonne Hopkins

Tim Seburn Bert Miller Nature Club, Fort Erie, Ontario, Canada

Toronto Zoo Adopt-A-Pond Ontario Nature Reptile and Amphibian Atlas



Pat Grace





Lynda Ruegg



Help protect species at risk from disappearing by recording where you find them.

When you hike in Fort Erie, keep a record of the date and location of your sightings of turtles, snakes, frogs and toads. Checklists are inside.



www.bertmillernatureclub.org

BertMiller





