

APPENDIX 3

REPTILES AND AMPHIBIANS

1986

REPTILES AND AMPHIBIANS

Waterloo Region, particularly the southern section, has some excellent reptile and amphibian habitats. Areas of spring seepage, clean ponds and lakes provide suitable habitats for some nationally and provincially significant species, such as Blanding's Turtle, Queen Snake and Pickerel Frog. The numbers and variety of herpetofauna is declining, some quite rapidly, owing to various factors. The Yellow-spotted Salamander is listed as regionally significant only. However, its eggs, which are laid in spring, are very sensitive to acid rain and it is becoming more and more scarce throughout its total range. Bullfrogs are also on the decline. Snake populations have been greatly reduced owing to people's unwarranted fear and subsequent negative response.

Observing reptiles and amphibians during the summer field season is difficult as many species, mostly salamanders, are in aestivation (summer hibernation). They are best observed during spring mating season when they are mobile. Chorus frogs, peepers and treefrogs are small, secretive creatures that are difficult to see. However, they are often heard and easily identified in the spring when they are calling.

Status of herpetofauna in Waterloo Region was determined from the reports "Status of Herptiles in Canada", "An Evaluation System for Wetlands of Ontario South of the Precambrian Shield", both Ministry of Natural Resources publications, and from "Waterloo Region Herpetofauna Survey" by George Francis and Craig Campbell (1983).

NAME	E.S.A. #	STATUS
Family <u>Cryptobranchidae</u>		
Mudpuppy (<u>Necturus maculosus</u>)	Found in rivers	Regional
Family <u>Ambystomatidae</u>		
Jefferson Salamander (<u>Ambystoma jeffersonianum</u>)	52, 56 59	National
Blue-spotted Salamander (<u>Ambystoma laterale</u>)	"found at 10 Regional sites" (Francis & Campbell 1983) 58	Common
Yellow-spotted Salamander (<u>Ambystoma maculatum</u>)	17, 27, 52, 59 65, 33	Regional
Triploid (Tremblay's) Salamander (<u>Ambystoma</u> X <u>tremblayi</u>)	67	Regional
Triploid (Silvery) Salamander (<u>Ambystoma</u> X <u>platineum</u>)	17, 34, 38, 52, 59	National
Family <u>Salamandridae</u>		
Red-spotted Newt (<u>Notophthalmus viridescens</u>)	27, 52	Regional
Family <u>Plethodontidae</u>		
Eastern Redback Salamander All-red phase (<u>Plethodon cinereus</u>)	Found at many sites 5	Common National
Four-toed Salamander (<u>Hemidactylium scutatum</u>)	52	National "should be watched" (Bowman MS 1978)
Family <u>Bufonidae</u>		
American Toad (<u>Bufo americanus</u>)	Found at almost every site	Common

Family Hylidae

Spring Peeper (<u>Hyla crucifer</u>)	Commonly heard in spring	Common
Gray Treefrog (Tetraploid) (<u>Hyla versicolor</u>)	Commonly heard in spring	Common
Striped Chorus Frog (<u>Pseudacris triseriata</u>)	Commonly heard in spring	Common

Family Ranidae

Bullfrog (<u>Rana catesbeiana</u>)	48,49,	Regional
Mink Frog (<u>Rana septentrionalis</u>)	26,46	Regional
Green Frog (<u>Rana clamitans</u>)	Found at most wet sites	Common
Wood Frog (<u>Rana sylvatica</u>)	Found at most sites	Common
Northern Leopard Frog (<u>Rana pipiens</u>)	Found at most wet sites	Common
Pickerel Frog (<u>Rana pulustris</u>)	10,37,39,44,45,46,61,67,68	Provincial

Family Chelydridae

Snapping Turtle (<u>Chelydra serpentina</u>)	Found in lakes/ponds 33,57	Common
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Family Emydidae

Painted Turtle (<u>Chrysemys picta</u>)	Found in lakes/ponds	Common
Blanding's Turtle (<u>Emydoidea blandingi</u>)	23,46,47,48,49,52	National

Family Scincidae

Five-lined Skink (<u>Eumeces fasciatus</u>)	27	Regional
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Family Colubridae

Northern Water Snake
(Nerodia sipedon)

45,46,52,61,67

Regional

Queen Snake
(Regina septemvittata)

38,51,62

National

Brown (Dekay's) Snake
(Storeria dekayi)

68,24,38

Thought
to be
common;
however,
difficult
to find.

Redbelly Snake
(Storeria occipitomaculata)

46,47,38

Thought
to be
common;
however,
difficult
to find.

Common Garter Snake
(Thamnophis sirtalis)

Found at many sites

Common

Eastern Ribbon Snake
(Thamnophis septentrionalis)

17,46,48,61

Regional

Smooth Green Snake
(Opheodrys vernalis)

✓
38,47,61,65

Regional

Milk Snake
(Lampropeltis triangulum)

69,38

National
"should
be watched"
(Bowman
MS 1978)

APPENDIX 4

MAMMALS

MAMMALS IN WATERLOO REGION

Mammals are an important part of the ecosystem, especially the food chain. They are predators and prey. They also help in the dispersal of seeds and, by their burrowing, help with aeration of the soil. Man has greatly influenced mammalian populations directly by trapping, poisoning and shooting, and indirectly by agriculture which greatly reduces and alters the habitat for many species.

In Waterloo Region, there are 45 species of mammals. Many of them are secretive and nocturnal, hence, they are seldom seen. Owing to the restrictions of our field work, i.e., length of time in each area, time of day and the season, few species were observed. In order to correctly assess mammal populations, trapping and nocturnal searches during the correct time of year would have to be carried out.

A study has been done on the habitats, habits, numbers and distributions of all mammals in Waterloo. The report is titled "Mammals of Waterloo and South Wellington Counties" (1972) by C. A. Campbell et al.

For this report, only significant species have been listed, accompanied with location data.

SIGNIFICANT MAMMALS IN WATERLOO

NAME	E.S.P.A. #	STATUS
Family <u>Didelphiidae</u>		
Virginia Opossum <u>Didelphis virginiana</u>	38	Rare
Family <u>Soricidae</u>		
Masked Shrew <u>Sorex cinereus</u>		General
Smoky Shrew <u>Sorex fumeus</u>	10	Rare
American Water Shrew <u>Sorex palustris</u>	2	Rare
Family <u>Talpidae</u>		
Hairy-tailed Mole <u>Parascalops breweri</u>	31,49,53	Rare
Family <u>Mustelidae</u>		
Long-tailed Weasel <u>Mustela frenata</u>	26	Scarce
American Mink <u>Mustela vison</u>	22,37,38,39,41,49	Scarce
Family <u>Canidae</u>		
Coyote <u>Canis latrans</u>	29,39	Scarce
Family <u>Felidae</u>		
Lynx <u>Lynx canadensis</u>	39	Occasional
Bobcat <u>Lynx rufus</u>	11 (hypothetical)	Rare

Family Sciuridae

Northern Flying Squirrel <u>Glaucomys sabrinus</u>	23, 63	Rare
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Family Castoridae

American Beaver <u>Castor canadensis</u>	30, 39, 55	Scarce
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Family Muridae

Southern Bog Lemming <u>Synaptomys cooperi</u>	38	Rare
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Gapper's Redback Vole <u>Clethrionomys gapperi</u>	11	Rare
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Family Erethizontidae

Porcupine <u>Erethizon dorsatum</u>	2, 11	Scarce
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Family Leporidae

Snowshoe Hare <u>Lepus americanus</u>	2, 11, 17, 22, 39	Scarce
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Other mammals found in Waterloo Region, sources: Craig Campbell and 1983 field season. Unless otherwise stated they are common.

Bats: Big Brown Little Brown Red (rare)	Hare, European Jumping Mouse, Meadow	Raccoon Rat, Norway
Cottontail	Mole, Star-nosed	Shrew, Short-tailed
Deer, White-tailed	Mouse: Deer House White-footed	Skunk, Striped
Ferret (rare) alien		Squirrels: Gray American Red
Foxes: Red Gray (rare) Arctic (rare)	Muskrat Nutria (rare) alien	Vole, Meadow Weasel, Short-tailed (scarce) Woodchuck