

A REMNANT POPULATION OF EASTERN MASSASAUGA RATTLESNAKES AT OJIBWAY PRAIRIE, WINDSOR, ONTARIO.

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ABSTRACT

An isolated population of eastern massasauga rattlesnakes (*Sistrurus catenatus catenatus*) is found in remnant prairie areas of Windsor, Ontario. Population status and decline is described. Programmes at the Ojibway Nature Centre designed to protect this population include live rattlesnake displays, public education programmes and research projects.

INTRODUCTION

Throughout much of their range in the United States, massasauga rattlesnakes are found in wet prairies (Bushey, 1978). This is their preferred habitat at Windsor, Ontario where a small population exists in the vicinity of the Ojibway prairie. Although this species is widespread in southern Michigan, the closest extant colony in Ontario is found in the Wainfleet Bog near Port Colborne.

At the time of European settlement, about 50 square kilometres of what is now southwest Windsor and adjacent LaSalle was vegetated by tallgrass prairie and oak savannah. This is a region of sandy soils overlaying thick deposits of clay. Presently, the only natural areas remaining in this region consist of scattered parks and a few undeveloped sites. Rattlesnakes were probably common throughout the area until the late 1940's.

PRESENT STATUS

The Ojibway Prairie Provincial Nature Reserve (65 ha) and adjacent Tallgrass Prairie Heritage Park (16 ha) contain the only protected habitat for rattlesnakes. Unfortunately, no rattlesnakes have been reported here since the mid 1970's despite a few relocation attempts by local residents.

In recent years, rattlesnake records have been received from an area of less than five square kilometres (Figure 1). Excluding reports from residences and roads, all sightings are contained within two natural areas: Spring Garden Prairie and Sandwich West/LaSalle Woodlot.

The Spring Garden Prairie is located in Windsor and has received designation as a Provincial ANSI (Area of Natural and Scientific Interest) by the Ministry of Natural Resources. It is also considered an Environmentally Significant Area by the Essex Region Conservation Authority. The majority of this 140 hectare area is privately owned, and no major development pressure is anticipated in the near future.

Sandwich West Woodlot, located in LaSalle is designated as an Environmentally Significant Area by the Essex Region Conservation Authority. This 235 hectare area is privately owned by approximately 250 landowners. Portions of the ESA have recently been rezoned for residential development and the future of this site is unclear.

At their closest proximity these two sites are about one kilometre apart. Snakes are typically found resting under flat boards, metal or discarded roofing material. Occasionally snakes have been found basking in sunlit clearings. Recorded habitat ranges from wet sedge meadows, wet to wet-mesic prairie and early successional fields. Recorded dates range from May 3 to October 8, with the majority of snakes being found in late July and August (Figure 2).

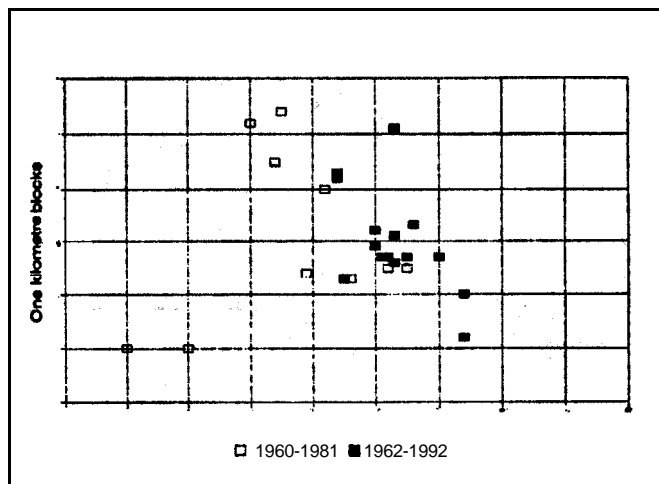


Figure 1. Distribution of Sightings. Ojibway Prairie Complex, Windsor, Ontario.

Loss of habitat, road traffic and indiscriminate killing are major causes of the species decline in the Windsor area. We have 43 confirmed records, ten of which were killed on residential property or roads.

PROTECTION EFFORT

The Ojibway Nature Centre, operated by Windsor Department of Parks and Recreation, maintains a live display of massasauga rattlesnakes. One male rattlesnake has been retained at the Nature Centre for ten years.

Rattlesnakes and eastern fox snakes (*Elapha vulpina gloydi*) are regularly featured in the Centre's environmental programmes offered to schools and park visitors. Adult education programmes are also offered regularly. In 1992 a flyer was distributed to local residents describing the massasauga rattlesnake and requesting all sightings be reported to the Nature Centre (Figure 3). Detailed records of all sightings are maintained at the Nature Centre including photo documentation of dorsal patterns. Scale clipping and colour marking were initiated in 1992. Future plans include radio telemetry and translocation studies.

These efforts are showing positive results. Each year more calls are received from local residents who have learned to call the Nature Centre before taking drastic action on a snake in their yard.

LITERATURE CITED

Bushey, C. L. 1978. Man's effect upon a colony of *Sistrurus c. catenatus* (Ref.) in northeastern Illinois (1834-1975). Proceedings of the Fifth Midwest Prairie Conference. Iowa State University, Iowa. pp 96-103.

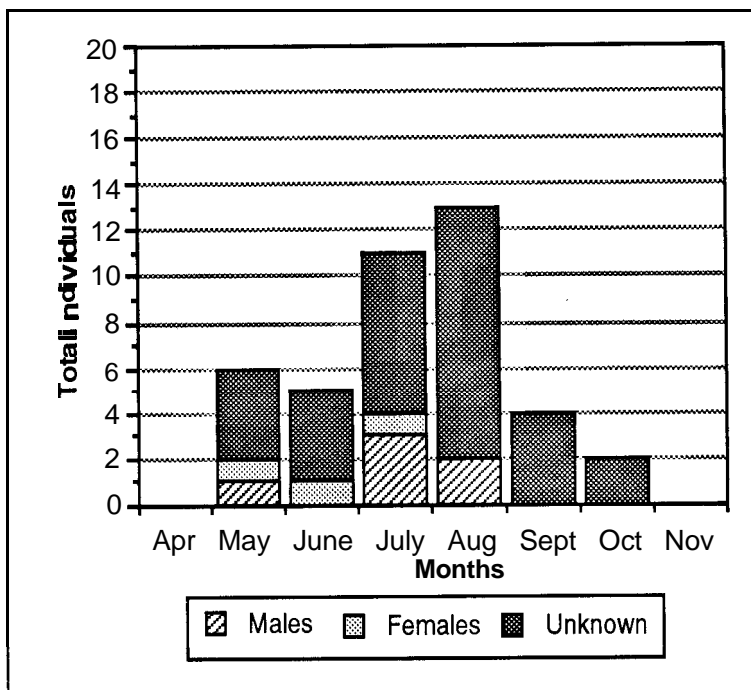
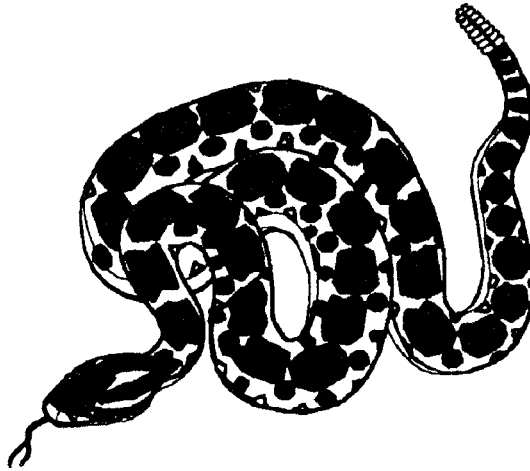


Figure 2. Dates of occurrence (N=41) Ojibway Prairie Complex, Windsor, Ontario,

THE EASTERN MASSASAUGA RATTLESNAKE

The Eastern Massasauga Rattlesnake is Ontario's only venomous snake. This small rattlesnake is found near Georgian Bay and in two small areas in southwestern Ontario: the Wainfleet Bog and here in Windsor. It is becoming increasingly rare in North America and is now endangered throughout its range. Our small population of these snakes is in jeopardy due to indiscriminant killing and habitat loss. These snakes are quite timid and pose no threat to people IF THEY ARE LEFT ALONE. The risk of snake bite is highly overrated. More people die from bee stings or lightning strikes.



The snake can be identified by its short (2 to 3 feet), thick, grey body. There are dark blotches down the middle of its back and along the sides of its body. The head of the snake is a thick diamond with black stripes. The most distinguishable feature of this snake is the stubby rattle on the end of its tail. Any snake with a pointed tail is not a rattlesnake. The Fox Snake is often mistaken for a rattlesnake as one of its defense mechanisms is to vibrate its pointed tail in dry grass and make a rattle noise.

The Eastern Massasauga Rattlesnake is endangered and protected by law under the Fish & Game Act. Sightings of this snake are quite rare. It is very important that any sightings of this snake, past or present, are reported to the Nature Centre in order to upkeep scientific records of the snakes' locations. If you do see this snake on your property, DO NOT KILL IT. Instead contact us here at the Nature Centre.

If you have any further questions or concerns, please feel free to call or visit us at:

Ojibway Nature Centre
Windsor Department of Parks & Recreation
5200 Matchette Road
966-5852