

Trying to save a slippery creature

CARLING - It's summer vacation time in Ontario and outdoor enthusiasts across the province are flocking to cottages and campgrounds of Georgian Bay, drawn by the area's remote islands, sparkling water, and wind-swept pines. Yet despite the hundreds of thousands of cottagers who'll visit the area, relatively few will encounter its most misunderstood resident: the Eastern Massasauga Rattlesnake. The Eastern Massasauga Rattlesnake is Ontario's only venomous snake. Growing to approximately 75 centimetres in length, this heavy-bodied snake is characterized by a segmented rattle at the tip of its tail, vertical eye pupils, and heat-sensitive

pits located between each eye and nostril. The pits are used to detect the snake's prey, small mammals, which are killed by a venom consisting of specialized digestive enzymes, injected through small, hollow fangs. Over the last two centuries, agricultural development and urbanization have greatly reduced the range of the Massasauga. In the United States the species is now considered endangered, threatened or of 'special concern' in all 10 states in which it is found. In Canada, the Massasauga was once found throughout much of southwestern Ontario; now only four isolated populations remain, and it is desig-

nated as a threatened species.

In Ontario, rattlesnake conservation involves the coordinated efforts of a group of dedicated scientists, wildlife managers, educators and park staff, for example, as part of a research partnership between the Ministry of Natural Resources and Carleton University, graduate student Christ Parent is studying the effects of human disturbance on Massasaugas in Killbear Provincial Park. This is an important conservation issue, as the province's largest remaining Massasauga populations occur on the Bruce Peninsula and the Eastern shore of Georgian Bay areas that

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Snakes get deluxe treatment at Killbear Provincial Park

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are increasingly used for outdoor recreation activities.

To determine whether differences in activity patterns and habitat use exist between snakes found in areas frequented by humans and those found in relatively undisturbed areas, 25 Killbear Park Massasaugas have been implanted with miniature radio transmitters. Each transmitter weighs about as much as two quarters and emits a unique signal that allows Mr. Parent to track the snakes on a daily basis and establish their activity periods, home range sizes, habitat use and pat-

terns of movement. To determine information of growth rates, population structure and population size, rattlesnakes are also captured, measured, weighed and injected with microchips for individual identification. Finally, free-ranging rattlesnakes are subjected to standardized human approaches and their responses carefully documented. By comparing results from different sections of the park Mr. Parent will be able to determine what effect humans have on the snakes.

The research is supported by the National Science and Engineering

Research Council, the Environmental Youth Corps, Carleton University, the Ontario Ministry of Natural Resources and the Endangered Species Recovery Fund, which is sponsored by the World Wildlife Fund Canada and Environment Canada.

Killbear Provincial Park is demonstrating to the world that people and rattlesnakes can safely co-exist, and that, given the opportunity, people truly appreciate the opportunity to participate in the conservation of a threatened species — even a venomous snake.