

Groups working together to promote conservation of rattlesnake

SEGUIN • Seguin Township is working with Killbear Provincial Park, the Salmon Lake Ratepayers Association and the Toronto Zoo on a unique project to promote the conservation of the threatened Eastern Massasauga Rattlesnake. At their March 20 meeting, members of Seguin Township Council voted unanimously to contribute \$200 for the construction of two "Please Brake for Snakes" signs. These signs will be erected on Seguin Township property in locations with a documented history of rattlesnake road mortality.

The project, which aims to raise public awareness and reduce the incidence of rattlesnake road mortality, was initiated by Bruce Morden, a member of the Salmon Lake Ratepayers Association. Bruce learned about Eastern Massasauga Rattlesnakes at a workshop at the Toronto Zoo and became concerned after observing several of the snakes killed on roads near his home. When he saw "Please Brake for Snakes" signs posted in Killbear provincial Park, he was determined to obtain similar signs for his neighbourhood.

"Georgian Bay is one of the last areas in the world where Eastern Massasauga Rattlesnakes can still be found. I think those of us who are fortunate enough to live in this area have a special responsibility to help look after them," says Bruce.

The Eastern Massasauga

Rattlesnake 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. While humans are occasionally bitten by rattlesnakes, the threat of snakebites is often exaggerated. Eastern Massasauga Rattlesnakes are shy and unaggressive, and when discovered almost always retreat while rattling. In fact, only two people have ever died from rattlesnake bite in Ontario, both more than 30 years ago. Neither victim sought proper medical attention.

Over the last two centuries, the Eastern Massasauga Rattlesnake has declined significantly due to habitat destruction and human persecution. In nine of the ten American states in which the snake occurs, more than 50 per cent of all populations have been extirpated. Similarly, up to half of the snake's original range has been lost in Ontario, the only Canadian province in which the species is found. The largest of Ontario's four remaining populations occur on the Eastern shore

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of Georgian Bay, where their long-term viability is threatened by

develoment. Killbear Provincial Park is increasingly recognized for its efforts to study and

protect the Eastern Massasauga Rattlesnake. Research on the park's rattlesnake population began in 1992. Rattlesnakes are captured, measured, weighed, and given a unique marking so they can be identified if later recaptured. Females are also examined by ultrasound to determine whether they are pregnant, and if so, the number of young they are carrying. A number of rattlesnakes have also been surgically implanted with radio transmitters. This allows park staff to track the snakes' day-to-day movements and determine their activity periods. habitat use and patterns of movement. Small blood samples are also collected from each snake for DNA analysis.

The information gained from this research has allowed park managers to develop innovative strategies that aid in the snake's conservation. For example, concerns over the effects of road mortality have been highlighted because in the course of the park's research, as many rattlesnakes have been killed on park roads as have been

killed by natural predators. As a result, four "Please Brake for Snakes" signs were posted in Killbear Provincial Park in 1995.

The Seguin Township project came together when Chris Parent, the biologist conducting rattlesnake research in Killbear Provincial Park agreed to provide Bruce with the "Please Brake for Snakes" design, and spoke at the March 20, 2000 meeting of Seguin Township Council in support of Bruce's proposal. Together with a letter of support from the President of the Salmon Lake Ratepayers Association, Richard Garland, and a commitment from Bob Johnson, the curator of amphibians and reptiles at the Toronto Zoo to fund the \$100 cost of producing the signs, Council authorized the posting of the signs and agreed to contribute to their funding.

"It was an easy decision," says Seguin Township Reeve George Stivins. "We are pleased to be able to help local residents who are working towards the conservation of a threatened species."

The official unveiling of the "Please Brake for Snakes" signs will be held on Saturday May 27, 2000 at 11 a.m. on Blue Lake Road in Seguin Township. The reeve and several Seguin Township councillors will be in attendance, as will representatives from the Salmon Lake Ratepayers Association and Killbear Provincial Park.