
Snakes in Prairie and Grassland Ecosystems



SNAKES IN PRAIRIE AND GRASSLAND ECOSYSTEMS

Moderated by Karen Cedar

DISCUSSION SUMMARY

Three speakers presented during this session. Mr. Dave Mauger from Illinois spoke about "Population Characteristics and Seasonal Activity of *Sistrurus catenatus catenatus* in Will County, Illinois: Implications for Management and Monitoring." Mr. Thomas P. Wilson from Illinois spoke about "Home Range and Habitat Use of *Sistrurus catenatus catenatus* in eastern Will County, Illinois." Ms. Erin Pocock and Ms. Karen Cedar from the Ojibway Prairie Complex in Windsor, Ontario spoke about "Setting Fires and Saving Rattlers - Managing an Urban Prairie."

Effects of Burning

The following observations of a Missouri prairie were provided:

- about a third to a half of the prairie has been burned every two or three years since 1979
- burn dates are usually one week to ten days before emergence and usually before April 1
- less than ten dead rattlesnakes have been found, most often after a late burn
- no predation events have been observed
- overall snake populations are higher than ever
- mark/recapture data have been obtained from snakes that are caught immediately after a burn, the following fall, the next year, as well as three years later

It was suggested that there is research need, perhaps to put transmitters into snakes either right before fall entering the hibernation period or immediately after emergence during a burn year, and note the survivorship of those animals. A participant noted that the smaller the site, the more careful managers should be as one or two mortalities could be very damaging to a population of 20 or 40 individuals. Additionally it might be wise to establish criteria so that a substantial area is always left unburned.

Effects of Relocation on Snakes

Several observations were made with respect to relocated snakes:

In Killbear Provincial Park they have found that if you move a snake 100 metres it usually does not come back. However, occasionally they do. There is a particular snake that they have been radio tracking for four years. The snake hibernates in Killbear, then leaves

the park and can be found around the cottages that border the park. On two occasions the snake has been discovered by cottagers, who have asked that it be removed from the property. The snake has been moved 100 to 150 metres, and there has been no impact on the snake who just continues on in his routine. In Sturgeon Bay Provincial Park a cottager asked for a rattlesnake to be removed from their deck. This rattlesnake was moved approximately 200 metres. The next day it was back at the cottage. This time the snake was moved approximately 400 metres and it returned within two days. The snake was then moved about 600 metres and did not return to the property.

In Georgian Bay Islands National Park rattlesnakes have been recorded traveling almost a kilometre within 24 hours. However, a translocation study which moved rattlesnakes outside of a kilometre resulted in the death of all moved snakes. Based on that study it seems prudent to advise people not to move rattlesnakes outside of their home range, and that they must stay within a kilometre. In fact, based on research done at Killbear Provincial Park it seems that even if a snake is moved only a few metres from where it has been noticed, it is rarely seen there again as they are so very cryptic.

Issues Concerning Relocating Snakes

There are many issues surrounding the idea of relocating rattlesnakes including overstocking a carrying capacity, translocating disease and genetic problems, and moving snakes outside of their home range, forcing them to rediscover brood sites and hibernation sites. Many of these can result in mortality.

Areas of suitable habitat should be researched extensively to determine what other snakes are doing there, what their survivorship and brood capacities are, where they are hibernating, etc. Research on fox snake populations may provide useful information as they are an associate of massasauga rattlesnakes.