

UNIT 4

CONSERVATION

**Explore Challenges and
Innovative Approaches to Protecting the
Eastern Massasauga Rattlesnake**



Conservation

Activity 1.1: Cottagers Debate

Science and Technology - Life Systems

Grade 7, Interactions within Ecosystems

Language Arts - Oral and Visual Communication

Grade 7

Activity 1.2: Public Relations Executive

Science and Technology - Life Systems

Grade 4, Habitats and Communities

Grade 7, Interactions within Ecosystems

Language Arts - Oral and Visual Communication

Grade 4

Grade 7

Activity 1.3: The Round Up Debate

Science and Technology - Life Systems

Grade 7, Interactions Within Ecosystems

Language Arts - Writing

Grade 7

Language Arts - Oral and Visual Communication

Grade 7

Activity 1.4: Let Your Creative Juices Flow!

A fun activity for all grades!

Activity 1.5: Rattlesnake Poster Campaign

A fun activity for all grades!



ACTIVITY 1.1

COTTAGERS DEBATE

Have students research and provide information on the plight of the massasauga rattlesnake in Ontario. They can then prepare a debate using the information included in this package as well as anything else that they may discover in cottage magazines, newspapers, and library books. Some suggested roles are outlined below.

Cottager #1

You own a cottage along Georgian Bay. You have recently spent a lot of time and money converting it into a second home. You are now planning to remove the natural vegetation and rocks surrounding the home to plant sod. You want all snakes killed, or at least moved far away, because they might harm your children and pets.

Cottager #2

You own a small cottage in a semi-isolated area of Bruce Peninsula. You enjoy the natural beauty and serenity of the area. There is a lot of wildlife around your cottage. These include butterflies, birds, deer, and sometimes even black bears. You have recently taken up photography to capture these beautiful creatures on film. Although you respect the wildlife, you are afraid of the rattlesnakes because of the many false stories you have heard (they chase you; you will get bitten; rattlesnakes will avenge the death of their mates).

Park Warden

Your job is to protect the plants and animals of a large park along Georgian Bay. Camping, hiking, and boating are the main activities in this park. People are angry because last week a camper was bitten by a rattlesnake. After being taken to the hospital, doctors stated his life was not in danger (though he received medical treatment). Your investigation into the incident revealed that the person went outside late at night without shoes or a flashlight and stepped on the rattlesnake. This person did not follow the basic safety precautions outlined in park literature and posted on signs. You understand that rattlesnakes are an important part of your park's ecosystem and are protected along with all other plants and animals.

Local Politician

Cottagers and tourists bring a lot of revenue into your town, particularly during the summer months. You feel the recent negative publicity surrounding a rattlesnake bite in a local park may deter visitors and deprive your town of tourist dollars. You want all the snakes captured and moved somewhere else. If that fails you think the snakes should be killed. You also do not think newspapers should publish stories about snakes, whether positive or negative.

Cottage Association President

You have spent every summer in the Georgian Bay area and you notice that many people dislike rattlesnakes. You do some research on the snake and this is what you find:

- Snakes are wary of people.
- Snakes rattle their tails as a warning that they are near and that you are getting too close - NOT as a sign that they are going to attack.
- In all snakebite cases in the area, people were only bitten when they got too close or if they purposely agitated the snake. Massasaugas are naturally shy creatures, and will avoid humans.
- Snakes are part of the natural ecosystem in the area.

- Rattlesnakes are a legally protected threatened species.
- The massasauga mainly preys upon small rodents, particularly mice.
- Rattlesnakes must remain within their home range; relocated massasauga rattlesnakes may die over the winter as a result of lack of a hibernation den. Moving them out of the area is not an option.

ACTIVITY 1.2

PUBLIC RELATIONS EXECUTIVE

Rattlesnakes have an "image problem". It is true that massasauga rattlesnakes have venom. However, given the millions of people that live in and visit rattlesnake habitat, bites rarely occur. Among the few bite cases in Ontario, only two deaths have occurred in the history of this province and both were over thirty years ago. In both of these incidents, proper medical treatment was not administered. This evidence suggests that massasauga rattlesnakes do not seek to bite people. Since massasauga have only enough venom to kill small prey, they often will not inject venom when they bite large animals, such as humans. Even if venom is injected, proper medical care will ensure survival. In many cases, antivenom is not required as part of the treatment. Annually, many people die from bee stings, being struck by lightning, dog attacks, hitting a deer on a highway, or drowning. There are no annual records of deaths due to massasauga rattlesnake bites.

Despite the evidence suggesting that rattlesnakes are shy creatures, many people still kill them on sight. With this in mind, design a media campaign promoting protection and respect for the massasauga rattlesnake. Posters, radio commercials, television advertising, and newspaper and magazine ads are all potential campaign tools. Be creative and have fun! The completed work can be displayed around the school and community to raise awareness and help save the threatened massasauga rattlesnake.

Send a sample of your work to the Toronto Zoo. We may include it in our newsletter "Rattlesnake Tales."

ACTIVITY 1.3

THE ROUNDUP DEBATE

Read the following paragraph to students:

A local cottage community has called a town meeting over a serious issue. The area is known for its local populations of rattlesnakes. Many people in the community are fearful of these creatures. A local group has proposed a "Rattlesnake Roundup." These roundups are an annual event in some areas of the United States. In Ontario's past there have been bounties placed on rattlesnakes. Even park rangers have killed and advised others to kill rattlesnakes. The goal of the roundup is to generate town income for charities by having snake hunters collect rattlesnakes living in the wild in order to rid the area of these pests. People come to "learn" about the snakes while participating in various different activities.

The snakes are then brought to an arena, or outside area. Snakes are caught months in advance and kept in very inhumane conditions in anticipation of the event. Event activities involve cruelty such as decapitation, burning, and skinning of live snakes. Death is slow and painful in the name of "education." Many people even bring their young children to witness this spectacle, teaching them that the snake is a creature to be feared, and not tolerated.

There has been public outcry about the idea of the roundup because of issues surrounding animal rights and cruelty to animals, as well as safety issues surrounding the handling of venomous snakes. To address the issue, the community council has called a meeting in which a panel has been set up. This panel of three will listen to all of the arguments and make a decision.

Now compose a panel of student "Council Members."

The rest of the class will be given a role from the list below. This exercise can be done in pairs or alone, depending on student numbers. Each will research and write a two-page argument based on their role. They will then present their argument to the panel and have a time limit of between 2 and 5 minutes to present their aspect of the issue.

After all of the parties have presented their arguments, the panel will make its decision. The panel will explain to the class how they came to their decision.

NOTE TO EDUCATORS:

You may be surprised to learn that a bounty was placed on rattlesnakes in the Peterborough area—an area well outside the range of the massasauga rattlesnake. After a person had an encounter with a snake that was mistakenly identified as a rattlesnake (most likely a milk snake), local experts offered a bounty to rid the area of rattlesnakes.

As told by a local person who witnessed the event, the result was that hundreds of harmless snakes were killed by burning, clubbing or decapitating. Most of the snakes did not look anything like a rattlesnake. Not only did this bring fear of all snakes to the area, no one learned to identify what a rattlesnake actually looked like! Furthermore, there were never any rattlesnakes found in the area, which was well outside the range of the massasauga. In reality, residents had nothing to fear.

List of Speakers:

Mayor of the township

Worried about town finances (all visitors bring tourist dollars), and safety concerns in the community.

Member of group wishing to organize the roundup

Concerned about financial contributions--tourist money raised by the roundup-- which can then be used to help the community and make improvements (i.e. money for the local hospital, schools...).

Chamber of Commerce member

Tourism and financial interests.

Local Conservation Authority

Worried about the impact of rattlesnake hunts on local ecosystems (capture methods, habitat destruction, and release into unsuitable areas) and the snake populations themselves.

Federation of Ontario Naturalists' member

Worried about the impact a rattlesnake hunt will have on local ecosystems, food chains. All snakes seem to suffer when people act out of fear and without correct information. The Federation of Ontario Naturalists is trying to purchase more land to protect this and other species as well as the habitat that sustains them.

Ministry of Natural Resources

Concerned about threats to the local populations of rattlesnakes and other snakes. Concerned about the illegal killing of a threatened species.

Snake Hunter

Interested in the financial gains made possible by the roundup, as well as the "educational" purpose of the event. Has "fun" hunting snakes, which she considers to be of no value in the wild.

Animal Rights Activist/Worker

Worried about cruelty to the snakes, lack of respect for the snake as a living animal, violence expressed by the intentional killing of snakes. Concerned about the fact that children are exposed to these forms of cruelty, and the misinformed, negative attitudes displayed by adults towards snakes. Also concerned with people disturbing snake habitats, and local ecosystems.

Health Care Worker

Safety concerns related to the number of snakebites that could occur at this event.

Cottage Association President

Concerned with public safety about rattlesnakes.

Community members

Concerned about the safety at roundups.

Snake ecologist

Concerned about the effects of a round up on snake populations, and the survivability of the species in the wild. Also worried about the possibility of snakes becoming extirpated, since evidence suggests that snakes removed from their habitat do not survive (even if released again).

Zoo Curator

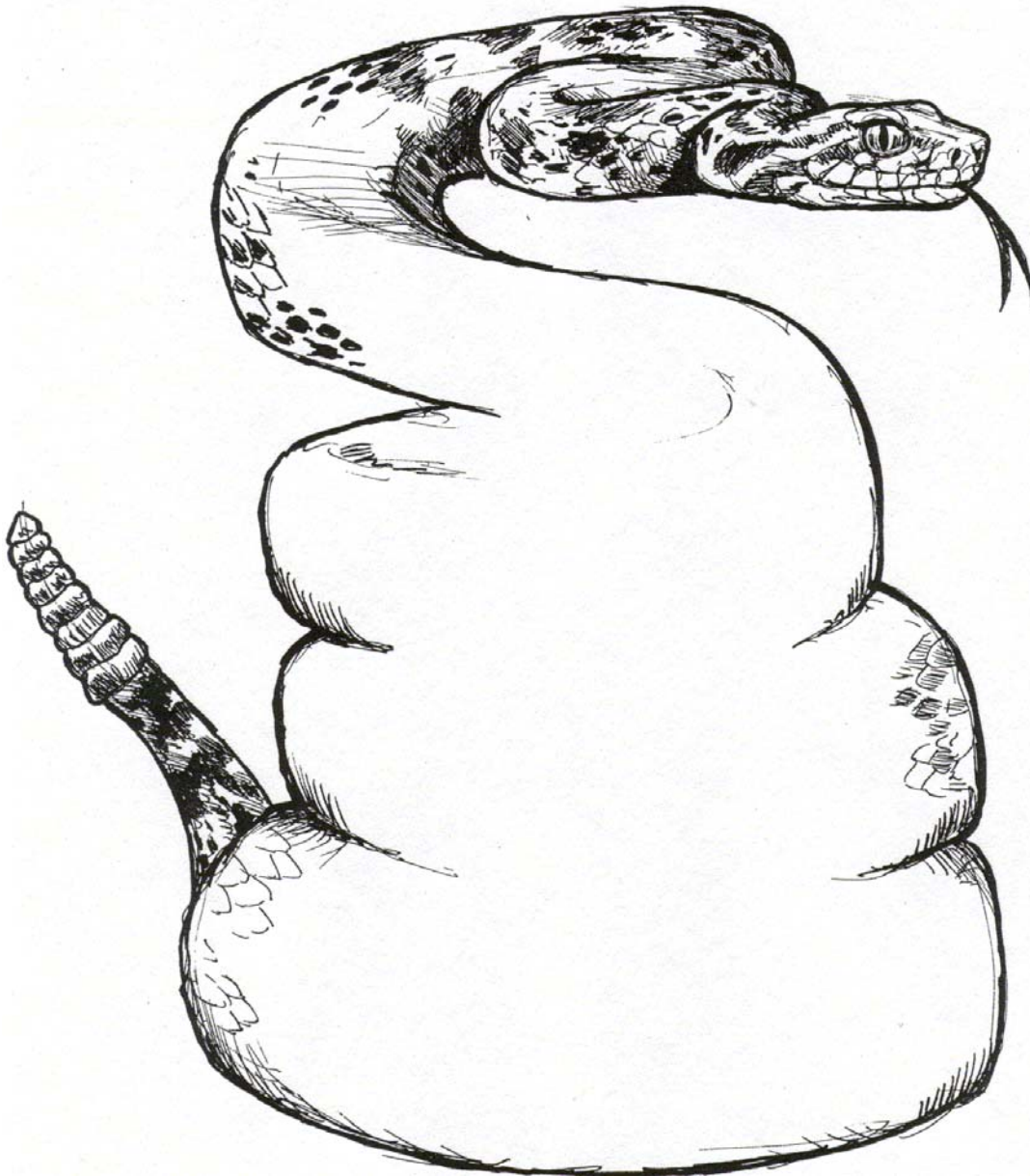
Concerned that all snakes are viewed with negative images and that people do not have the correct information to decide how they will live with snakes. From your experience with snakes under controlled conditions, you have highly valid explanations for behaviour. This results in new positive attitudes towards snakes. You invite participants to accompany a zoo field trip to see snakes in the wild or to meet a shy snake at a zoo workshop.

ACTIVITY 1.4

LET YOUR CREATIVE JUICES FLOW!

Cross-Curricular

Compose your own snake poem, story, or picture book. Try to remember everything that you have learned about snakes as you write. This is a great opportunity to explore different writing styles, while integrating factual information and imagination. You can write the final draft of your poem or story on the shape below. This shape could also be used as a stencil to create a snake shaped book.



ACTIVITY 1.5

RATTLESNAKE POSTER CAMPAIGN

Cross-Curricular

The massasauga rattlesnake is in trouble in Ontario. Habitat destruction and the relentless persecution of this snake by humans are the main problems. Part of the solution resides in public education.

Posters can be an effective tool since they are versatile and can be viewed by people in classrooms, grocery stores, on the street, in libraries, or at the zoo.

Design a poster to help save the eastern massasauga rattlesnake. Choose a target audience and develop the poster accordingly. Design a slogan and/or logo. Include a conservation message.

Once the poster is completed, compare it with the posters designed by the Zoo that are included in this education package.

Send the final products to the Zoo. We would love to see your work! We may even publish your conservation poster in "Rattlesnake Tales."

Remember to spell **MASSASAUGA** correctly!