



# Activity Station Descriptions

## BIODIVERSITY AND SPECIES AT RISK

| ACTIVITY                         | SUMMARY   | CURRICULUM LINKS  |
|----------------------------------|---|---|
| Barn Owl Survivor                | An interactive, energetic game to teach students the difficulty a species has to survive. Owls try to feed their many owlets while avoiding contaminated food sources and even a low abundance of food. Survival of the fittest is not just a saying!   | Grade 7 - Science and Technology (Interactions in the Environment)  |
| Biodiversity Jenga               | Students will learn about the interconnectedness and intricate relationships between species and their ecosystem through a game of Jenga. This activity will lead into the discussion of the pressures on ecosystems within the Carolinian Life Zone, leading to their instability.   | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Building for Bees                | Students will learn about the importance of bees as pollinators, and will examine threats to their food supply and overall health. Students will also have the opportunity to become urban planners to create their own city. Students will develop a basic understanding of how different land uses can impact pollinator habitat.   | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Chestnut or Chestnut?            | Students will conduct soil tests to determine the suitability of various locations to see if they would be a suitable site for planting the American Chestnut tree, a species at risk.  | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| It's Good to be Different        | Students will look at how the biodiversity within individual species and within communities is important for their resiliency. Students will become different tree species of a forest and discover that having diversity helps maintain health within a forest ecosystem when faced with adverse conditions such as disease and pests.   | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Monarch Migration Madness        | Students learn the many factors causing the decline of the Monarch Butterfly population and why they are currently listed as a Species of Concern both provincially and federally. By becoming a Monarch Butterfly themselves, they will experience the impact of habitat loss, deforestation and the obstacles faced during the longest and largest insect migration in North America. | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Slimy or Scaly?                  | Students get a closer look and feel of the many reptiles and amphibians of the Carolinian Life Zone. Often mistaken and once thought as being in the same class of animals, students will look at the characteristics of these two separate classes and learn how they differ from one another.   | Grade 6 - Science and Technology (Biodiversity)   |
| Species Invaders                 | Students will discover how invasive species impact a Carolinian forest by outcompeting natural species for food and space through a fun adaptation of the game musical chairs.  | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Turtles in Trouble               | Students get a closer look at Ontario's turtle species, including those species that are at risk. Students will learn about the different species and the threats to their survival.  | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Web of Life                      | Students will learn the importance of biodiversity when they interact as a living component of a forest web. Students will see the implications on the entire forest ecosystem when one species is lost, no matter what the size.   | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Where Have all the Species Gone? | Students learn the many factors causing a species to decline in Ontario. As a species at risk they will have to determine if they can out-survive their many threats such as habitat loss and habitat fragmentation in an active game.  | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |

## CLIMATE CHANGE

| ACTIVITY               | SUMMARY  | CURRICULUM LINKS   |
|------------------------|--|--|
| Carbon Cycle Shuffle   | Students will act out a model of the carbon cycle as a relay race. The model explores the balance of carbon on Earth by manipulating the carbon producers (e.g. cars, homes factories) and carbon sinks (e.g. trees, shrubs, grasses). Sponges will be used to represent carbon and students will play their roles by moving the sponges from the atmosphere into sinks and from sinks back to the atmosphere. | Grade 6 - Science and Technology (Electricity and Electrical Devices)<br><br>Grade 7 - Science and Technology (Interactions in the Environment)                                |
| Climate Change Puzzler | Students will examine a variety of objects to determine how they are metaphors for the causes of climate change and the impacts resulting from it. They will work together to discover how they are contributing to climate change and changes they can make in their everyday lives to reduce their impact.   | Grade 6 - Science and Technology (Electricity and Electrical Devices)<br><br>Grade 7 - Science and Technology (Interactions in the Environment), Geography (Physical Patterns) |
| Ecological Footprint   | Students will actively explore the concept of what is meant by an ecological footprint. Students will represent an average Canadian footprint of 8.8 hectares/person by playing the role of a contributing factor and standing on a representative footprint. Students will brainstorm ways to reduce their ecological footprint by changing their behaviour.  | Grade 6 - Science and Technology (Electricity and Electrical Devices)<br><br>Grade 7 - Science and Technology (Interactions in the Environment), Geography (Natural Resources) |
| Mission Possible       | Students will learn about climate change and gain a better understanding of how their actions, no matter how small, can be beneficial. They will work together to run errands and discover methods that will help minimize their impact on the environment.  | Grade 7 - Science and Technology (Interactions in the Environment)   |

## STEWARDSHIP AND CONSERVATION

| ACTIVITY                 | SUMMARY  | CURRICULUM LINKS  |
|--------------------------|--|---|
| A Bird's Eye View        | Students get an up close look at the different birds of prey found in the Carolinian Life Zone. They will observe and learn how the different features of these birds help them in their habitat.                                | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Nature's Drinking Straws | Student will participate in a relay race to see how much water a tree actually moves within 5 minutes. They will also take a closer look at how important the root systems of trees are protecting our water and soil resources. | Grade 7 - Science and Technology (Interactions in the Environment)  |
| Seed to Tree             | Students will learn about the entire process of growing trees from seed. Students will collect and test the viability of seed from different seed sources.   | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Slip Sliding Away        | Using a model, students will compare the effects of water erosion on bare soil and soil that is stabilized by planted trees. Students will also examine how different land uses or cropping practices can impact erosion rates.  | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Stewardship Swap         | Focusing in on five species at risk found in the Carolinian Zone, students will learn the threats they face and the role they can take in helping to promote their recovery.   | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment) |

## FOREST ECOSYSTEMS AND INTERACTIONS

| ACTIVITY               | SUMMARY  | CURRICULUM LINKS   |
|------------------------|--|--|
| Carolinian Pursuit     | Covering topics in all of the themes of Carolinian Forest Festival, students will test their knowledge in a game show style activity. Students will form two teams and answer questions in a competition to see which teams can answer the most correct answers.   | Grade 7 - Science and Technology (Interactions in the Environment)<br><br>Grade 7 - Geography (Patterns in Physical Geography) |
| Don't Be Cavity Free   | Students will learn the value and importance of cavity trees to the forest ecosystem. In this activity, students will take a closer look at a cavity tree within the forest and learn how they are formed and who uses them. They will learn that humans have a role to play in valuing and protecting cavities as well as a role in creating human-made cavities. | Grade 7 - Science and Technology (Interactions in the Environment)   |
| Down But Not Out       | Through active exploration, students become aware of the importance of fallen timber as providing critical habitat in a forest ecosystem with an emphasis on producers, consumers and decomposers.   | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment)      |
| I Spy with My Bird Eye | How many birds can you spy in the Carolinian forest today? Using binoculars, challenge your classmates to find, observe and identify common Carolinian bird species!   | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment)      |
| Marvelous Mammals      | Students will learn to ID common mammal species found within the Carolinian Life Zone by examining their identifying features: furs, skulls and scat.  | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment)      |
| Oh! Possum             | Students will learn that a forest habitat provides food, water, shelter and space for all living things. Using a common Carolinian mammal, opossum, students will learn the importance of these habitat requirements, its dependence on them for survival and the concept of carrying capacity.  | Grade 7 - Science and Technology (Interactions in the Environment)   |
| Old Growth             | Students will learn that a forest is not just trees, but has a diversity of components and layers of life. Students will look at the components of an old growth forest and have to identify them based on the functions they provide to a forest ecosystem.   | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment)      |
| Race to Succession     | Students will explore how habitat characteristics change over time and how changes in habitat affect the types of organisms using it. Students will role play as a species of the forest and race to their correct phase of succession based on their individual habitat requirements.   | Grade 6 - Science and Technology (Biodiversity)<br><br>Grade 7 - Science and Technology (Interactions in the Environment)      |
| Tune In                | Students will use their senses to tune in to their immediate surroundings and develop an awareness of characteristics that help with classification of species.  | Grade 6 - Science and Technology (Biodiversity)  |

## FOREST RESOURCES

| ACTIVITY                         | SUMMARY   | CURRICULUM LINKS  |
|----------------------------------|---|---|
| Dwindling Dwellings              | Students will learn that human activities have altered the natural environment, reducing and fragmenting the amount of habitat remaining. Reducing the amount and size of habitat has altered and upset the balance and interactions within that ecosystem. Students will look at the implications and act out the effects of a reduced habitat size between a predator and its prey in a forest habitat. | Grade 6 - Science and Technology (Biodiversity)<br>Grade 7 - Science and Technology (Interactions in the Environment) |
| Forest Feast                     | Students will learn about the wide range of foods and medicinal plants available in the Carolinian forest and how they were used by the First Nations people.   | Grade 6 - Social Studies (Heritage and Identity)  |
| Forest Products                  | Students will look at a variety of everyday products used in our homes and schools to determine what products come from the forest.   | Grade 7 - Geography (Natural Resources)   |
| Harvest Time                     | Equipment used in the forest harvest industry, both past and present, will be on display for students to observe.   | Grade 7 - Geography (Natural Resources)   |
| How Sweet It Is                  | Students will learn about maple syrup and honey production in the Carolinian Life Zone and how they were used by the First Nations people.  | Grade 6 - Social Studies (Heritage and Identity)  |
| Leave Your Mark                  | In celebration of Canada 150 and the Festival's 10 <sup>th</sup> anniversary, students will learn about forests across Ontario and Canada, and their importance to Canadians. Students will each leave their mark as part of a tribute art piece.   | Grade 7 - Geography (Natural Resources)   |
| Measuring Up                     | Students will learn different forestry management skills needed to determine what trees should be harvested from a woodlot. They will learn that cutting trees as a renewable resource requires careful identification, measuring and marking of trees.   | Grade 6 - Math (Measurement)<br>Grade 7 - Geography (Natural Resources), Math (Measurement)                           |
| T.S.I (Tree Scene Investigation) | Students will use their observation skills and tree identification keys to identify different tree species within a Carolinian forest. Students will look at the different parts of the tree to help them determine species type in a fun activity where they become tree detectives.   | Grade 6 - Science and Technology (Biodiversity)   |
| Why the Beaver?                  | Students will learn about why the beaver is our national symbol. Through an interactive simulation they will show how the value of beaver pelts drew European expansion into what is now Canada and how the Voyageurs had an indelible impact on our nation both geographically and culturally.   | Grade 7 - Understanding Historical Context  |