



Lake Simcoe
Region
Conservation
Authority

Scanlon Creek

Day Education Programs

at the
Scanlon Creek Nature Centre



Dear Teacher,

Your class is scheduled to visit the Scanlon Creek Nature Centre. Scanlon Creek is a beautiful, 282 hectare conservation area owned and operated by the Lake Simcoe Region Conservation Authority. The Nature Centre provides outdoor programming for school children from kindergarten through high school, with programs that have been designed to bring the Ontario Curriculum to life.

This package has been put together to help you plan your day trip. It includes:

1. A checklist to help you plan your trip.
2. A parent's permission form and equipment list to send home with your students.
3. A copy of our health form – Health information for each student needs to be available at the Nature Centre. Existing forms may be brought, or our health form may be copied and filled out by each student. NOTE: These forms remain with the visiting teacher and are returned to the school at the end of the day.
4. A map to Scanlon – Please give a copy to your bus driver to facilitate a timely arrival. Advise the bus driver that upon entering the park they should follow the signs to the Day Programs, not the Overnight Programs.
5. A program selection form – A day at Scanlon Creek Nature Centre consists of two half-day programs or one all day program. A detailed list of our programs and program descriptions are included in this package. You can also find them online at www.scanloncreek.ca. Fill in your program selections and fax or email them back to us as soon as possible so we can begin preparing for your arrival.

If you have any questions or special concerns, please don't hesitate to contact us! We can be reached by phone: (905) 775-6341, by fax: (905) 775-1723, or by email: edbookings@lsrca.on.ca. We're looking forward to your visit!

Sincerely,

Dan Williams
Manager of Educational Services
Lake Simcoe Region Conservation Authority
Email: d.williams@lsrca.on.ca

Scanlon Creek Nature Centre

FIELD TRIP PLANNER

- _____ Read Information Package.
- _____ Select program(s), then fax your Program Selection Form to (905) 775-1723 or email it to edbookings@lsrca.on.ca well in advance of your visit.
- _____ Book your bus and let the bus company know that a five hour instructional block is required. Give map included in this package to your bus driver on the day of your trip.
- _____ Send out permission form and parent information sheet.
- _____ Organize adult supervisors. A minimum of 2 adults (other than the teacher) are required and sometimes more are necessary for certain programs. Scanlon Staff will advise you if more supervision is needed for the program you have chosen.
- _____ Discuss program and expectations for the day with your class.
- _____ Promote boomerang lunches. Remind students that any litter from their lunches will be sent home with them at the end of the trip.
- _____ The water at Scanlon is safe and tested weekly. Students may bring their own refillable water bottle.
- _____ Review appropriate outdoor footwear and clothing; programs run rain, mud, snow or shine.
- _____ Check for students with health concerns (i.e., EpiPens, puffers, etc.) Check the expiry date on both EpiPens prior to your field trip. **Students who require EpiPens must have TWO in-date with them.** Please make sure of this requirement **before** leaving the school.
- _____ **Bring permission forms and Parent Contact phone numbers!**
- _____ Have a great day!!

Dear Parent/Guardian:

Your child will be visiting **Scanlon Creek Nature Centre** on _____.

Students will be participating in Outdoor Education Programs that are directly linked to expectations in *The Ontario Curriculum*. Most activities will be conducted outside; therefore it is important that students are dressed suitably for outdoor activities. The following guidelines will help you choose appropriate clothing for each season. Please check the weather report on the evening prior to the trip for specific conditions.

Fall (Sept. & Oct)	Winter (Nov. thru March)	Spring (April thru June)
○ sun hat & sunscreen	○ winter boots	○ sun hat & sunscreen
○ closed toe shoes	○ winter jacket	○ closed toe shoes
○ sweater/sweat shirt	○ snow/ski pants	○ light, long pants
○ light, long pants	○ warm hat	○ light jacket
○ light jacket	○ waterproof (nylon)	○ cool/wet weather: boots,
○ cool/wet weather: boots,	mittens, extra socks	rain coat & pants
rain coat & pants	○ long sleeved sweater/	○ <u>non-spray</u> insect repellent
○ warm hat/gloves	fleece jacket	(mid- May to June)
○ extra socks	○ dress in layers	○ extra socks

Please make sure that your child has a good breakfast on the day of the trip, as s/he will need extra energy for our active programming. Scanlon Creek promotes boomerang lunches. Please send your child’s food in reusable containers and be aware that all uneaten food and packaging will be returning home with your child. We recommend sending two drinks (in re-usable containers) and a nutritious lunch. Please keep in mind that Scanlon Creek strives to be a nut and peanut-free facility. Do not send any food items with nuts or peanuts.

Children and adults who require an EpiPen®, must bring TWO in-date EpiPens® on this trip. Participants who do not follow this policy will be asked to remain at school.

Please indicate if you are able to volunteer on the field trip. Thank you for your support!

Sincerely, _____ Classroom Teacher

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I give permission for _____ to travel by school bus to the Scanlon Creek Nature Centre on _____.

Parent/Guardian’s signature: _____.

Parent/Guardian’s contact phone number for the day of the field trip: _____.

Yes, I can volunteer to help supervise the students on this field trip.

Scanlon Creek Nature Centre

HEALTH FORM

This form must be completed by all visitors – both adults and children – to the Nature Centre.

Date of visit: _____ Name of School or Group: _____

Participant's surname: _____ Given name: _____

Home Address _____ Phone No: _____

Family Doctor _____ Phone No: _____

Participant's Health Card Number (Optional) _____

Emergency Contact in Case of Illness (i.e., relative, friend, neighbour):

Name: _____ Relationship: _____

Phone No. _____ Business No. _____ Cell No. _____

PERSONAL MEDICAL HISTORY

Is the participant currently taking any medication of which we should be aware? _____

If yes, please describe details should help be required: _____

Does the participant have any medical condition which could affect their full participation in the Nature Centre's programs? _____ If yes, please give details below and discuss the details with the Nature Centre's staff prior to participation in programs: _____

Does the participant have any allergies? If yes, give a detailed list of allergies, reactions and medical attention required: _____

Date of last tetanus shot: _____

I hereby authorize a Scanlon Creek representative to secure such medical advice and services as may be deemed necessary for my child's health & safety.

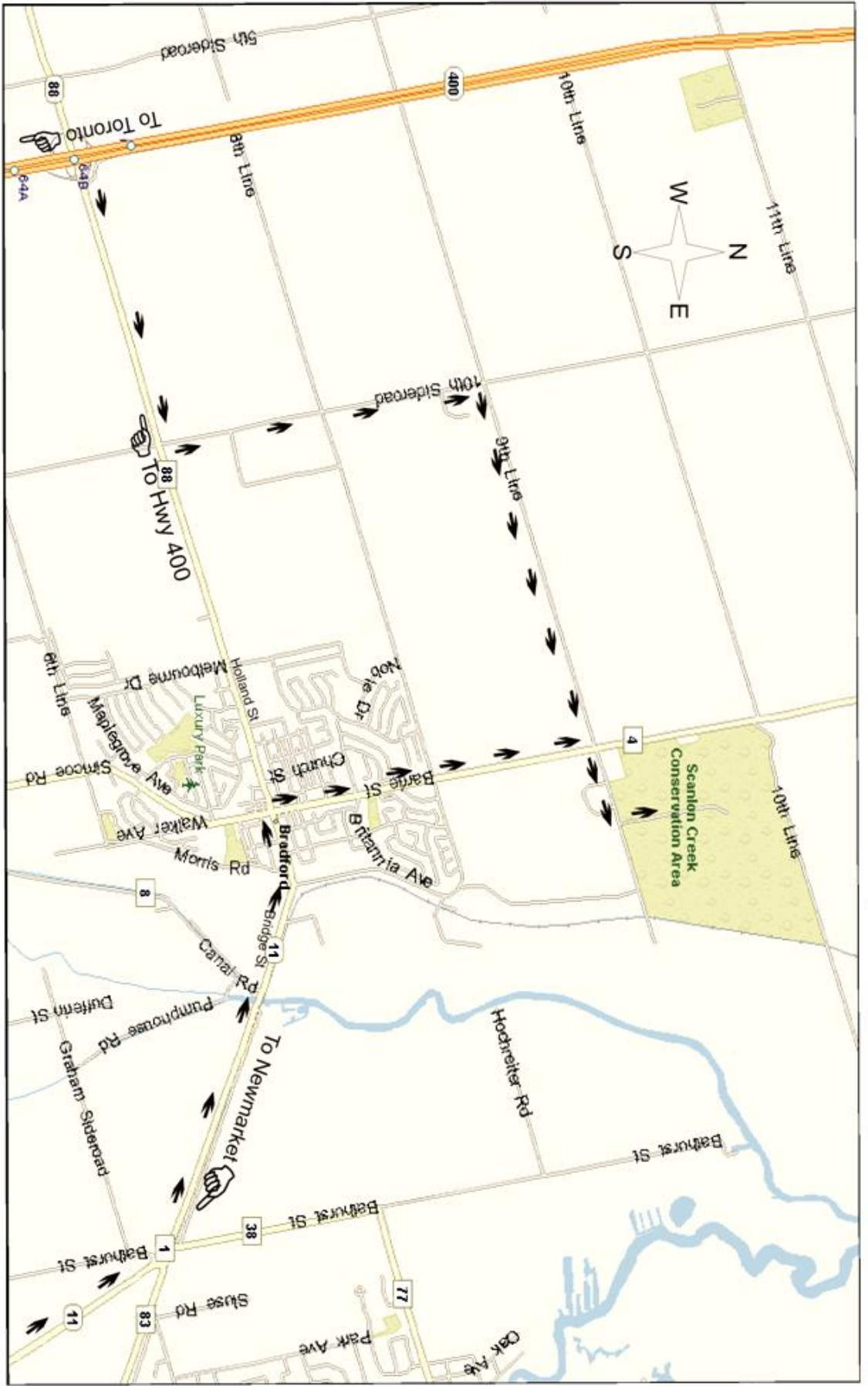
Signature of adult participant or child's parent or guardian:

Date: _____

Important!

If the participant requires an epipen, he/she must have 2 current epipens with them during this field trip.

Scanlon Creek Location Map



From Hwy 400

1. Exit at Hwy 88 and travel east to the 10th sideroad.
2. Turn left (north) on the 10th sideroad and continue to the 9th Line.
3. Turn right (east) on 9th Line and continue across County Rd 4 (formerly Hwy 11).
4. Watch for Scanlon Creek Conservation area sign and turn left (north) into the driveway.

Directions

1. Exit Hwy 404 onto Green Lane heading West.
2. Turn right (north) onto Hwy 11 and continue into Bradford to main intersection (Holland St & Barrie St.)
3. Turn right (north) onto Barrie St. (County Rd. 4) and continue to 9th Line.
4. Turn right (east) onto 9th Line and continue to Scanlon Creek Conservation Area sign and turn left (north) into driveway.

From Newmarket (Hwy 404)

Scanlon Creek Nature Centre

9th Line Bradford West Gwillimbury
Ph. (905) 775-6341, Fax (905) 775-1723

Nature Centre Program Selections

Please fill out the following information and fax to (905) 775-1723 or email to d.williams@lsrca.on.ca as soon as possible. Thank you.

School Name: _____
Contact Teacher: _____ **Email:** _____
Phone #: _____ **Fax#:** _____
Visit Date: _____ **# of Students:** _____ **Grade:** _____

Program Choices:

At Scanlon Creek Nature Centre we have half day programs and full day programs. Refer to the program guide in this package to help you choose appropriate activities for your students.

Please choose **two** half day programs OR **one** full day program for your visit.

Half day Programs

1. _____

2. _____

Full Day Program

In the box beside each program choice, please indicate the degree of prior knowledge that students have in the programs selected: **I** for Introduction, **C** for Current Unit or **R** for Review.

Educational Concerns:

Please let us know your specific educational goals for your visit, or if your class has any special needs we should know about.

Bus Arrival/Departure:

Bus schedules impact the length of time available for programming with your students. It helps if we know in advance what the bus schedule will be for your visit so we can adjust programming accordingly.

Bus Arrival time _____ **Bus Departure time** _____

(Please let the bus company know that a 5 hour block of instructional time is required for your field trip)

Thank you for taking the time to fill out this page and faxing/emailing it to us. We are looking forward to your visit!

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Air and Water in the Environment

Grade: 2

Length: half day

Seasons: all

In the classroom, students explore the properties and characteristics of air and water by watching and taking part in a series of investigations. They will also examine how we use air and water in our daily lives. Outside, students will continue to build their understanding by investigating sources of water, observing weather conditions, and to explore how moving air and water generates energy. Finally, the students take part in a fun and active water cycle game, role-playing the life of a water molecule.

Curriculum Connections:

Grade 2

Science – Air and Water in the Environment

- 2.1 Follow established safety procedures during investigations.
- 2.2 Investigate the characteristics of air and its uses.
- 2.3 Investigate the characteristics of water and its uses.
- 2.4 Investigate the stages of the water cycle.
- 2.5 Investigate water in the natural environment.
- 2.6 Use appropriate science and technology vocabulary.
- 2.7 Use a variety of forms to communicate information.
- 3.1 Identify air as a gaseous substance that surrounds us and whose movement we feel as wind.
- 3.2 Identify water as a clear, colourless, odourless, tasteless liquid that exists in three states and is necessary for the life of most plants and animals.
- 3.3 Describe ways in which living things including humans depend on air and water.
- 3.4 Identify sources of water in natural and built environments.
- 3.5 Identify the three states of water in the environment and show how they fit into the water cycle when the temperature of the surrounding environment changes.
- 3.6 State reasons why clean water is an increasingly scarce resource in many parts of the world.

Amazing Race - Scanlon Style

Grades: 7, secondary

Length: half day OR full day programs available

Seasons: all

The Amazing Race is a modified orienteering activity that has teams of three working together to find 21 controls. Along the way they encounter roadblocks and detours that incorporate forestry skills as the challenges.

Curriculum Connections:

Grade 7

Science – Interactions in the Environment

- 2.1 Follow established safety procedures for investigating ecosystems.
- 2.4 Use appropriate science and technology vocabulary, including sustainability, biotic, ecosystem, community, population, and producer, in oral and written communication.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them.
- 3.3 Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem.
- 3.4 Describe the transfer of energy in a food chain and explain the effects of the elimination of any part of the chain.
- 3.7 Explain why an ecosystem is limited in the number of living things that it can support.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

Grade 9

Scientific Investigation Skills

- A1.2 Uses sampling instruments.
- A1.5 Conducts inquiries.
- A1.6 Gathers data... from other sources.
- A1.12 Uses appropriate... units of measure.

Career Exploration

- A2 Identify and describe a variety of careers related to the fields of science: forester, ecologist, stewardship.

Developing Skills of Investigation and Communication

- B2.3 Investigates... into how human activity affects soil composition or soil fertility, and explains the impact on the sustainability of the ecosystem.

- B2.5 Investigates the effect of human activity on the populations of terrestrial ecosystems, including the removal of plants, animals or natural developments.

Understanding Concepts

- B3.1 Compares and contrasts biotic and abiotic characteristics of sustainable and unsustainable ecosystems.
- B3.3 Describes the limiting factors of ecosystems.
- B3.5 Identifies various factors related to human activity that have an impact on ecosystems, how these factors affect the equilibrium and survival of ecosystems, the impact of forestry, and the clearing of forest for farming or development.

An Animal for All Seasons

Grade: 2

Length: half day

Seasons: all

This program focuses on investigating the distinct characteristics of animals related to appearance, behaviour, growth and change. Students will study a variety of animals and identify similarities and differences among them. With the help of visual displays and some animal friends, students will learn which features distinguish insects, fish, reptiles, amphibians, birds, and mammals. Simulation games familiarize students with the kinds of techniques animals use to find food, avoid predators and survive the changing seasons.

Curriculum Connections:

Grade 2

Science – Growth and Changes in Animals

- 2.0 Investigate similarities and differences in the characteristics of various animals.
- 2.2 Observe and compare physical characteristics.
- 2.3 Investigate ways in which animals adapt to their environment.
- 2.8 Use a variety of forms for communication - charts & diagrams.
- 3.1 Describe the major physical characteristics of different classes of animals.
- 3.2 Describe adaptations for food gathering, movement and survival.
- 3.3 Describe ways that animals are helpful.
- 3.4 Describe ways in which animals are harmful.

Aquatic Adventures

Grades: K, 1, 2, 4, 6, 7, secondary

Length: half day

Seasons: fall and spring

Students survey the diversity of life found in a stream or pond. Using long handled dipnets students search rocks, plants and the stream bottom for life. Once the animals are captured, identification keys are used to identify and classify the animals. They also study adaptations animals have developed to survive in their aquatic habitat, and discuss how a healthy aquatic environment can be maintained.

Curriculum Connections:

Kindergarten

Personal and Social Development

- C. Demonstrate independence, self-regulation, and a willingness to take responsibility in learning and other activities.
- E. Identify and use social skills in play and other contexts.
- F. Demonstrate an awareness of their surroundings.

Language

- A. Communicate by talking, listening and speaking to others for a variety of purposes and in a variety of contexts.

Science and Technology

- A. Demonstrate an awareness of the natural environment through hands-on investigations, observation, questioning and sharing of findings.
- B. Conduct simple investigations through free exploration, focused exploration and guided activity.
- C. Demonstrate an understanding of care for the natural world.
 - 1. Describe natural occurrences using their own observations and representations.
 - 2. Sort and classify groups of living and non-living things in their own way.
 - 3. Describe patterns and cycles in the natural world.
 - 4. Pose questions and make predictions and observations.
 - 5. Communicate results and findings from individual and group activities.
 - 8. Demonstrate an awareness of local and natural habitats through exploration and observation.
 - 9. Participate in environmentally friendly activities.

Health and Physical Activity

- B. Participate willingly in a variety of activities that require both large and small muscles.

Grade 1

Science – Needs and Characteristics of Living Things

- 2.2 Investigate the basic needs of living things.
- 2.3 Investigate and compare the physical characteristics of a variety of plants and animals.
- 3.1 Identify environment as the area in which something lives.
- 3.4 Describe the characteristics of a healthy environment.
- 3.5 Describe how showing care and respect for all living things helps maintain a healthy environment.

Grade 2

Science – Growth and Changes in Animals

- 2.2 Observe and compare the physical and behavioral characteristics of a variety of animals including insects.
- 2.3 Investigate the life cycle of a variety of animals.
- 2.4 Observe and compare changes in appearance and activity as animals go through their life cycle.
- 2.5 Investigate ways in which animals adapt to their environment or to changes in their environment.
- 3.1 Identify and describe major physical characteristics of different types of animals (e.g. insects, mammals, reptiles).

Grade 4

Science – Habitats and Communities

- 2.5 Use appropriate science and technology vocabulary including habitat, population, community, adaptation and food chain in oral and written communication.
- 3.1 Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life.
- 3.3 Identify factors that affect the ability of plants and animals to survive in a specific habitat.
- 3.4 Demonstrate an understanding of community as a group of interacting species sharing common habitats.
- 3.5 Classify organisms including humans, according to their role in a food chain.
- 3.6 Identify animals that are carnivores, herbivores or omnivores.
- 3.7 Describe structural adaptations that allow plants and animals to survive in specific habitats.

Grade 6

Science – Biodiversity

- 2.1 Follow established safety procedures for outdoor activities and field work.
- 2.2 Investigate the organisms found in a specific habitat and classify them according to a classification system.
- 2.4 Use appropriate science and technology vocabulary including classification, biodiversity, community, interrelationships, vertebrate, invertebrate, stability, characteristics and organism in oral and written communications.
- 3.1 Identify and describe distinguishing characteristics of different groups of plants and animals and use these characteristics to further classify various plants and animals.

- 3.2 Demonstrate an understanding of biodiversity as the variety of life on earth, including variety within each species, among species and among communities and the physical landscapes that support them.
- 3.4 Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities.
- 3.5 Describe interrelationships within species and between species.

Grade 7

Science – Interactions in the Environment

- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem and describe the interactions between them.
- 3.3 Describe the roles and interactions of producers, consumers and decomposers within an ecosystem.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

Grade 9

Scientific Investigation Skills

- A1.2 uses sampling instruments
- A1.5 conducts inquiries
- A1.6 gathers data... from other sources
- A1.12 uses appropriate... units of measure

Career Exploration

- A2 Identify and describe a variety of careers related to the fields of science: forester, ecologist, Conservation Lands Planner, watershed stewardship.

Developing Skills of Investigation and Communication

- B2.1 Use appropriate terminology: diversity, ecosystem, sustainability watershed, abiotic, biotic.

Understanding Concepts

- B3.1 Compares and contrasts biotic and abiotic characteristics of sustainable and unsustainable ecosystems.
- B3.3 Describes the limiting factors of ecosystems.
- B3.5 Identifies various factors related to human activity that have an impact on ecosystems, including how these factors affect the equilibrium and survival of ecosystems: impact of forestry, clearing of forests for farming or development.

Biodiversity and Succession

Grades: 6, 7, secondary

Length: half day

Seasons: fall and spring (frost free ground is needed for soil sampling)

In this program, students use a simple biological sampling technique, the transect, to study the diversity of living things found within a variety of biological communities in the park. The class sets up 6 to 8 parallel transects in an old field, new growth forest and climax forest. Along the way, students identify various kinds of plants and animals using biological classification keys. Soil is sampled for colour and for organisms, and slope measurements are taken to assess erosion susceptibility. The gathered data can be used for further graphing and data analysis activities when the students return to their home school.

Curriculum Connections:

Grade 6

Science – Biodiversity

- 2.1 Follow established safety procedures for outdoor activities and field work.
- 2.2 Investigate the organisms found in a specific habitat and classify them according to a classification system.
- 3.1 Identify and describe distinguishing characteristics of different groups of plants and animals.
- 3.4 Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities.

Grade 7

Science – Interactions in the Environment

- 2.1 Follow the established safety procedures for investigating ecosystems.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem and describe the interactions between living organisms and their environment.
- 3.6 Distinguish between primary succession and secondary succession.

Geography - Patterns in Physical Geography

- Explain how natural vegetation patterns result from the interaction of several factors including climate, landforms, soil types and competition for available nutrients.

Grade 9

Science – Sustainable Ecosystems - Scientific Investigation Skills

- A1.2 uses sampling instruments
- A1.5 conducts inquiries
- A1.6 gathers data... from other sources

Developing Skills of Investigation and Communication

B2.5 Investigates the effect of human activity on the populations of terrestrial ecosystems, including the removal of plants, animals or natural developments.

Understanding Concepts

B3.1 Compares and contrasts biotic and abiotic characteristics of sustainable and unsustainable ecosystems.

B3.3 Describes the limiting factors of ecosystems.

Cartography Workshop

Grades: 4, 7, 8, secondary

Length: half day

Seasons: all

Students use a compass, measuring tape and observations to record the position of distinctive features along an assigned section of trail. The recorded data is used to produce a map which displays the relative position of these landmarks. The maps must include the appropriate elements of a good map, including: scale, legend, compass

Curriculum Connections:

Grade 4

Social Studies – Canada’s Provinces, Territories and Regions

- Use cardinal and intermediate directions, pictorial and non-pictorial symbols scale, and colour to locate and display geographic information on various maps.
- Create and use a variety of thematic maps of Canada’s physical features.
- Prepare various forms of maps, using symbols and legends, to display places, transportation routes, and boundaries.

Grade 7

Geography – Themes of Geographic Inquiry

- Locate and use relevant information from a variety of primary and secondary sources.
- Create and use maps for a variety of purposes.

Grade 8

Geography – Patterns in Human Geography

- Create and use a variety of maps for specific purposes.

Secondary

Geography of Canada – Grade 9

Methods of Geographic Inquiry and Communication

- use the methods and tools of geographic inquiry to locate, gather, evaluate, and organize information about Canada’s natural and human systems;
- analyse and interpret data gathered in inquiries into the geography of Canada, using a variety of methods and geotechnologies;
- communicate the results of geographic inquiries, using appropriate terms and concepts and a variety of forms and techniques.

Cemetery Studies: Exploring our Past

Grades: 7, 8

Length: half day

Seasons: all

These programs provide the students with a perspective of the local community through the study of Mount Pleasant Cemetery which borders Scanlon Creek Conservation Area. Students are able to trace the growth of the town from its mainly rural, British roots through to the diverse, modern community of today. Two different studies are offered:

1. Cemetery Compass Tour: A self-guiding tour through the cemetery. Students work in small groups with a worksheet and a compass which guide them through the cemetery to ten different grave sites. At each gravestone, students answer questions based on information found on the stone and then set a compass bearing to locate the next stone they need to visit.
2. Cemetery Study: A more traditional approach to information collection in the cemetery. Students work in small groups to research a variety of topics: age-related death rates, gender-related death rates, causes of death, changing demographics of the south Simcoe area and histories of individual families. Each small group works co-operatively to gather information, then use data processing and graphing skills to present their information.

Curriculum Connections:

Grade 7

History – British North America

- Outline the reasons for the early settlement of English Canada.
- Use a variety of primary and secondary sources to locate relevant information about how early settlers met the challenges of the new land.
- Analyse, synthesize, and evaluate historical information.
- Construct and use a wide variety of graphs, charts, diagrams, maps, and models to organize and interpret information.

Grade 8

History - Canada: A Changing Society

- Describe the factors contributing to change in Canadian society.
- Describe the social and working conditions of Canadians around the beginning of the twentieth century.
- Use a variety of primary and secondary sources to locate relevant information.
- Analyse, synthesize, and evaluate historical information.

Geography – Migration

- Describe the effects that migration has had on the development of Canada.
- Locate relevant information from a variety of primary and secondary sources.

Co-operation Challenge

Grades: 5, 6, 7, 8, secondary

Length: half day

Seasons: all

Students participate in a variety of group problem solving tasks of gradually increasing difficulty and complexity. The emphasis of the program is the growth of group dynamics skills: communication, co-operation, co-ordination, organization, respect, trust and safety.

Curriculum Connections:

All Grades

Health and Physical Education – Living Skills

- 1.1 Use self awareness & self-monitoring skills to help them understand their strengths and needs, take responsibility for their actions, recognize sources of stress, and monitor their progress as they participate in physical activities, develop movement competence, and acquire knowledge skills related to healthy living.
- 1.2 Use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge skills related to healthy living.
- 1.3 Communicate effectively, using verbal and non-verbal means, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge skills related to healthy living.
- 1.4 Apply relationship and social skills as they participate in, develop movement competence, and acquire knowledge skills related to healthy living.
- 1.5 Use a range of critical and creative thinking processes to assist them in making connections, planning and setting goals, analyzing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education.

Language – Oral Communication

Oral communication skills are important because they play a central role in students' learning in all areas of the curriculum. Students listen and speak in order to understand and explore ideas and concepts, identify and solve problems, organize their experience and knowledge, express and clarify their thoughts, feelings and opinions and convey information. Listening and speaking skills are also essential for co-operative learning activities and for social interaction at home, at school and in the community.

Cross-country Skiing

Grades: 4 through Secondary

Length: half day

Season: winter (requires appropriate snow conditions)

Cross-country skiing is a great way to get students outside and enjoying the park in the winter! Students are taught basic skiing skills, such as the diagonal stride, double poling, turning, stopping and safe falling, within a fun, game-like atmosphere. Once skills are taught, we tour the park using trails which present the students with an appropriate challenge.

Curriculum Connections:

All Grades

Health and Physical Education – Active Living

- A1. Participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity.
- A2. Demonstrate an understanding of the importance of being physically active, and apply physical fitness concepts and practices that contribute to healthy, active living.
- A3. Demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.
 - A1.1 Actively participate in a wide variety of program activities, according to their capabilities, while applying behaviours that enhance their readiness and ability to take part.
 - A1.2 Demonstrate an understanding of factors that contribute to their personal enjoyment of being active, as they participate in a wide variety of individual and small-group activities and lead-up games.
 - A3.1 Demonstrate behaviours and apply procedures that maximize their safety and that of others during physical activity.

Health and Physical Education – Movement Competence

- B1. Perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities.
- B2. Apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

Energy Workshop

Grade: 5

Length: half day

Seasons: all (indoor program)

Energy choices are becoming increasingly important. Making greater use of renewable and alternative sources and conserving energy are options that students need to know about to sustain the current standard of living and ensure adequate energy supplies for the future. Students will participate in a hands-on learning laboratory that includes workstations featuring solar cars, wind generators, storage devices, energy transfers and the processes of conservation.

Curriculum Connections:

Grade 5

Science – Conservation of Energy and Resources

- 1.1 Analyse the long-term impacts on society and the environment of human uses of energy and natural resources, and suggest ways to reduce these impacts.
- 1.2 Evaluate the effects of various technologies on energy consumption, and propose ways in which individuals can improve energy conservation.
- 2.1 Follow established safety procedures for using tools and materials.
- 2.2 Use scientific inquiry/research skills to investigate issues related to energy and resource conservation.
- 2.3 Use technological problem-solving skills to design, build, and test a device that transforms one form of energy into another, and examine ways in which energy is being “lost” in the device.
- 2.4 Use appropriate science and technology vocabulary, including energy, heat, light, sound, electrical, mechanical, and chemical, in oral and written communication.
- 3.1 Identify a variety of forms of energy and how that energy is used.
- 3.2 Identify renewable and non-renewable sources of energy.
- 3.3 Describe how energy is stored and transformed in a given device or system.
- 3.4 Recognize that energy cannot be created or destroyed but can only be changed from one form to another.
- 3.5 Explain that energy that is apparently “lost” from a system has been transformed into other energy forms that are not useful to the system.

Exploring Energy

Grade: 1

Length: half day

Seasons: all

Everything that happens is a result of using some form of energy. Students will explore and identify different ways in which energy is used everyday, especially by living things as a means of survival. Students will be involved in classroom experiments, outdoor investigations, and a variety of games. They will also develop an understanding that they have a variety of choices when using energy, and that these choices should be made responsibly.

Curriculum Connections

Grade 1

Science: Energy in our Lives

- 2.0 Investigate how different types of energy are used in daily life
- 3.0 Demonstrate an understanding that energy is something that is needed to make things happen and that the sun is the principal source of energy on earth.
- 2.1 Follow established safety procedures during investigations
- 2.2 Investigate how the sun affects the air, land and water
- 2.6 Investigate how the sun's energy allows humans to meet their basic needs, including the need for food
- 2.7 Uses appropriate science and technology vocabulary
- 3.1 Demonstrate an understanding that energy is what makes the things they do or see happen
- 3.2 Demonstrate and understanding that the sun, as a principal source of energy, warms the air, land and water; is a source of light and makes it possible to grow food
- 3.3 Identify food as a source of energy for themselves and other living things
- 3.4 Identify everyday uses of various sources of energy
- 3.5 Demonstrate an understanding that humans get the energy resources they need from the world around them

Fascinating Forests

Grades: 6, 7, secondary

Length: half day

Seasons: all

In this program, students visit many forest communities within Scanlon Creek. Through games, soil sampling and exploration, they study the complex relationships that exist between the biotic (animals and plants) and abiotic (non-living) elements in the forest ecosystem. We will also highlight the role of the Conservation Authority's forestry and stewardship departments in maintaining sustainable ecosystems.

Curriculum Connections:

Grade 6

Science – Biodiversity

- 3.2 Demonstrate an understanding of biodiversity as the variety of life on earth, including variety within each species of plant and animal, among species of plants and animals in communities, and among communities and the physical landscapes that support them.
- 3.3 Describe ways in which biodiversity within species is important for maintaining the resilience of those species.
- 3.4 Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities.
- 3.5 Describe interrelationships within species, between species, and between species and their environment, and explain how these interrelationships sustain biodiversity.
- 3.7 Explain how invasive species reduce biodiversity in local environments.

Grade 7

Science – Interactions in the Environment

- 2.1 Follow established safety procedures for investigating ecosystems.
- 2.4 Use appropriate science and technology vocabulary, including sustainability, biotic, ecosystem, community, population, and producer, in oral and written communication.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them.
- 3.3 Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem.
- 3.4 Describe the transfer of energy in a food chain and explain the effects of the elimination of any part of the chain.
- 3.7 Explain why an ecosystem is limited in the number of living things that it can support.

- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

Grade 9

Scientific Investigation Skills

- A1.2 uses sampling instruments
A1.5 conducts inquiries
A1.6 gathers data... from other sources
A1.12 uses appropriate... units of measure

Developing Skills of Investigation and Communication

- B2.5 Investigates the effect of human activity on the populations of terrestrial ecosystems, including the removal of plants, animals or natural developments.

Understanding Concepts

- B3.1 Compares and contrasts biotic and abiotic characteristics of sustainable and unsustainable ecosystems.
B3.3 Describes the limiting factors of ecosystems.
B3.5 Identifies various factors related to human activity that have an impact on ecosystems, including how these factors affect the equilibrium and survival of ecosystems: impact of forestry, clearing of forests for farming or development.

Find-A-Bug Orienteering

Grades: 1, 2, 3

Length: half day

Seasons: all

Students begin their explorations by using insect models to learn the characteristics of insects. Next, the children are introduced to the parts of a map and how to use a map to find various locations. The students progress to a specially designed course where they will be able to use their new-found mapping skills, such as recognizing symbols, using a legend, estimating distances, keeping a map oriented, using a compass rosette and landmarks, and problem-solving to find our “hidden” insects all around the park. As the students travel from point to point, they will discover some interesting facts about our local insect species.

Curriculum Connections:

Grade 1

Social Studies – Canada and World Connections: Developing Map & Globe Skills

- Make and read simple models and maps of familiar areas in their community.
- Use non-standard units to measure distance on a map.
- Demonstrate an understanding of scale, that is, give the reasons for using small objects to represent large ones on a map.

Grade 2

Social Studies – Canada and World Connections: Developing Map & Globe Skills

- Use symbols, colour and cardinal directions on maps.
- Use legends and recognize pictorial symbols on simple maps.
- Use cardinal directions when locating and recording information.

Grade 3

Social Studies – Canada and World Connections: Developing Map & Globe Skills

- Consult map legends when looking for selected features.

Future of Scanlon Forest

Grades: 7, secondary

Length: full day

Seasons: all

In this role-playing activity, students take on the roles of local citizens living near a large natural area called “Scanlon Forest”. The visiting teachers play the role of a task force which has been appointed to advise the government on planning for the future of the forest. The students will be organized into small special interest groups concerned about the forest’s use (e.g. cottagers, farmers, ecologists, hunters, miners, etc) Each interest group will sway the task force to their point of view. Throughout the day, the students conduct a series of investigations to gather information from the forest to support their cause. As a follow-up back at school each interest group will make a presentation at a town hall meeting. The task force will attempt to synthesize the information into a balanced report to the government and community.

Curriculum Connections:

Grade 7

Science – Interactions in the Environment

- 1.2 Analyse the costs and benefits of selected strategies for protecting the environment.
- 2.1 Follow established safety procedures for investigating ecosystems.
- 2.3 Use scientific_inquiry/research skills to investigate occurrences that affect the balance within a local ecosystem.
- 2.4 Use appropriate science and technology vocabulary.
- 2.5 Use a variety of forms to communicate with different audiences and for a variety of purposes.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem and describe the interactions between them.
- 3.5 Describe how matter is cycled within the environment and explain how it promotes sustainability.
- 3.6 Distinguish between primary and secondary succession.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.
- 3.9 Describe Aboriginal perspectives on sustainability and describe ways in which they can be used in habitat and wildlife management.

Grade 9

Science – Sustainable Ecosystems – Scientific Investigation Skills

- A1.2 Uses sampling instruments
- A1.5 Conducts inquiries
- A1.6 Gathers data... from other sources

- A1.11 Communicates ideas, plans, procedures, results, and conclusions orally, in writing, using a variety of formats e.g. presentations, debates, simulations.
- A1.12 Uses appropriate units of measure.

Career Exploration

- A2 Identify and describe a variety of careers related to the fields of science: forester, ecologist, Conservation Lands Planner, watershed stewardship.

Developing Skills of Investigation and Communication

- B2.1 Use appropriate terminology: diversity, ecosystem, sustainability watershed, abiotic, biotic.
- B2.2 Interprets qualitative and quantitative data.

Understanding Concepts

- B3.1 Compares and contrasts biotic and abiotic characteristics of sustainable and unsustainable ecosystems.
- B3.3 Describes the limiting factors of ecosystems.
- B3.5 Identifies various factors related to human activity that have an impact on ecosystems, including how these factors affect the equilibrium and survival of ecosystems: impact of forestry, clearing of forest for farming or development.

Getting the Dirt on Soil

Grade: 3

Length: full day in spring and fall; half day indoor program in winter

During this program students investigate the world of soils as scientists in the 'laboratory' checking out soil recipes, texture, drainage characteristics and natural inhabitants and as explorers 'in the field' study of the soil as it's found in the real world of agriculture, forests and fields. Both sections, though independent, are designed to complement each other and enhance the students' understanding of this substance called 'soil'. Students are also introduced to the amazing soil machine that allows them to do in one day what Mother Nature requires hundreds of years to do. The day is concluded with the legendary "Mystery of Scanlon Creek" where the students solve a 'crime' using their new-found soils knowledge.

Curriculum Connections:

Grade 3

Science – Soils in the Environment

- 3.1 Identify and describe different types of soils.
- 3.2 Identify additives that might be in soil but cannot always be seen.
- 3.3 Describe the interdependence between living and non-living things that make up the soil.
- 2.2 Investigate the components of soil from various areas and explain how the different amounts of these components in a soil sample determine how the soil can be used.
- 2.3 Use scientific inquiry and knowledge skills to determine which types of soil will sustain life.
- 2.5 Use appropriate science and technology vocabulary in oral and written communication.
- 2.1 Follow established safety procedures during investigations.
- 1.2 Assess the impact of human action on soils and suggest ways in which humans can affect soils positively or prevent harmful effects on soil.

GPS at Scanlon Creek

Grades: 6,7,8, secondary

Length: half day

Seasons: all

This demonstration and hands-on training will introduce students to the new, exciting sport of "geocaching", which uses digital handheld units to connect to and navigate with the Global Positioning System of orbiting satellites. Students will acquire a basic knowledge of how GPS works, how to use a GPS device and then use their GPS units to seek and record various waypoints, and to discover the secret location of a Prize Cache! After successful completion of the course, students will have the opportunity to find one of Scanlon's hidden geocaches. Courses and geocaches vary depending on the skill and experience of your students.

PREREQUISITE: In order to participate in this program, students need to have map and compass skills.

Curriculum Connections:

All Grades

Health and Physical Education - Living Skills

- 1.2 Use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge skills related to healthy living.
- 1.4 Apply relationship and social skills as they participate in, develop movement competence, and acquire knowledge skills related to healthy living.
- 1.5 Use a range of critical and creative thinking processes to assist them in making connections, planning and setting goals, analyzing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education.

Health and Physical Education - Active Living

- A1 Participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity.
- A3 Demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

Habitats and Communities

Grade: 4

Length: half day

Seasons: all

Through the use of animal-related simulation games and visits to a variety of habitats in the park, students learn about the adaptations that animal and plant species have developed to survive in their habitat. Students will identify and classify species and study the relationships that exist between animals and plant species. They will also study the relationship between these species and humans.

Curriculum Connections:

Grade 4

Science – Habitats and Communities

- 1.1 Analyse the positive and negative impacts of human interactions with natural habitats and communities, taking different perspectives into account, and evaluate ways of minimizing the negative impacts.
- 1.2 Identify reasons for the depletion or extinction of a plant or animal species, evaluate the impacts on the rest of the natural community, and propose possible actions for preventing such depletions or extinctions from happening.
- 2.2 Build food chains consisting of different plants and animals, including humans.
- 2.3 Use scientific inquiry/research skills to investigate ways in which plants and animals in a community depend on features of their habitat to meet important needs.
- 2.5 Use appropriate science and technology vocabulary, including habitat, population, community, adaptation, and food chain, in oral and written communication.
- 3.1 Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life.
- 3.2 Demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers and then to consumers.
- 3.3 Identify factors that affect the ability of plants and animals to survive in a specific habitat.
- 3.4 Demonstrate an understanding of a community as a group of interacting species sharing a common habitat.
- 3.5 Classify organisms, including humans, according to their role in a food chain (e.g., producer, consumer, decomposer).
- 3.6 Identify animals that are carnivores, herbivores, or omnivores.
- 3.7 Describe structural adaptations that allow plants and animals to survive in specific habitats.
- 3.10 Describe ways in which humans are dependent on natural habitats and communities.

Hug-a-Bug

Grades: K, 1, 2, 4,

Length: half day

Seasons: fall and spring

Go on an insect safari! Using a number of different techniques, students collect insects in a variety of habitats. Identification keys and field guides will be utilized to name and classify the insects. Students explore insect adaptations and diversity and also learn about the positive and negative roles insects play in their lives.

Curriculum Connections:

Kindergarten

Personal and Social Development

- C. Demonstrate independence, self-regulation, and a willingness to take responsibility in learning and other activities.
- E. Identify and use social skills in play and other contexts.
- F. Demonstrate an awareness of their surroundings.

Language

- A. Communicate by talking, listening and speaking to others for a variety of purposes and in a variety of contexts.

Science and Technology

- A. Demonstrate an awareness of the natural environment through hands-on investigations, observation, questioning and sharing of findings.
- B. Conduct simple investigations through free exploration, focused exploration and guided activity.
- C. Demonstrate an understanding of care for the natural world.
 - 1. Describe natural occurrences using their own observations and representations.
 - 2. Sort and classify groups of living and non-living things in their own way.
 - 3. Describe patterns and cycles in the natural world.
 - 4. Pose questions and make predictions and observations.
 - 5. Communicate results and findings from individual and group activities.
 - 8. Demonstrate an awareness of local and natural habitats through exploration and observation.
 - 9. Participate in environmentally friendly activities.

Health and Physical Activity

- B. Participate willingly in a variety of activities that require both large and small muscles.

Grade 1

Science – Characteristics and Needs of Living Things

- 2.3 Investigate and compare the physical characteristics of a variety of plants and animals.
- 3.5 Describe how showing respect for living things to help maintain a healthy environment.
- 3.6 Identify what living things provide for other living things.

Grade 2

Science – Growth and Changes in Animals

- 1.1 Identify positive and negative impacts that animals have on humans.
- 1.2 Identify positive and negative impacts different kinds of human activity have on animals and the environment.
- 2.2 Observe and compare the physical and behavioral characteristics of insects
- 2.3 Investigate the life cycle of a variety of animals.
- 2.4 Observe and compare changes in appearance and activity of animals as they go through a complete life cycle.
- 2.5 Investigate ways in which animals adapt to their environment.

Grade 4

Science – Habitats and Communities

- 3.4 Demonstrate an understanding of a community as a group of interacting species sharing a common habitat.
- 3.5 Classify organisms, including humans, according to their role in a food chain (e.g., producer, consumer, decomposer).
- 3.6 Identify animals that are carnivores, herbivores, or omnivores.
- 3.7 Describe structural adaptations that allow plants and animals to survive in specific habitats.

- 3.3 Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem.
- 3.7 Explain why an ecosystem is limited in the number of living things that it can support.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

Images in the Park

Grades: 5, 6, 7, 8

Length: half day

Seasons: all

Students are given a brief perspective on how to use photography to express themselves creatively and to share their feelings about nature through this medium. The difference between using a camera for snapshots and for photographic art is shown by looking at a variety of artists' photographic works and discussing the way colour and black & white imagery, line, perspective, etc. are used. The students then go for a short hike to several locations in the park and, using provided digital cameras, take photographs expressing their own creative view. Back in the building, students select one of their photos to be printed in black & white. Using coloured pencils, they then colourize certain aspects of their print in order to impact the viewer's interpretation of their work.

Curriculum Connections:

All Grades:

Visual Arts

D1.2 Demonstrate an understanding of composition, using selected principles of design to create art works on a theme or topic.

Traditional Winter Games

Grades: 2, 6
Length: half day
Season: winter

Students explore how climate and landscape have influenced the culture of Canada's far northern peoples by participating in a variety of activities and games inspired by Inuit traditions.

Curriculum Connections:

Grade 2

Social Studies – Traditions and Celebrations

- Identify the contributions Aboriginal culture has made to our lives.

Science – Growth and Change in Animals

- 2.2 Observe and compare the physical and behavioral characteristics of a variety of animals.
- 2.3 Investigate the life cycle of a variety of animals.
- 2.5 Investigate ways in which animals adapt to their environment or to changes in their environment.

Science - Air and Water in the Environment

- 3.3 Identify ways in which changes in weather affect living things.

Grade 6

Social Studies – First Nation Peoples

- Describe characteristics of pre-contact First Nation cultures across Canada, including their close relationships with the natural environment.

Kicksledding

Grades: 5, 6, 7, 8, Secondary

Length: half day

Season: winter (requires appropriate snow conditions)

Kicksledding will make you discover the pleasure of winter. Millions of Scandinavians have enjoyed kick sleds for hundreds of years. Kicksleds could be best described as a chair on runners that is powered by the driver like a scooter. It's a fun way to exercise and enjoy the many trails within the park.

Curriculum Connections:

All Grades

Health and Physical Education - Active Living

- A1 Participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity.
- A2 Demonstrate the importance of being physically active, and apply physical fitness concepts and practices that contribute to healthy, active living.
- A3 Demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

Health and Physical Education - Movement Competence

- B1 Perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in physical activities.
- B2 Apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

Life Below Zero

Grades: K, 1, 2, 3, 4

Length: half day

Season: winter

Considering that we live with ice and snow for a good part of the year, most of us know very little about it. Where do creatures go when the snow flies? How do milkweed, dragonflies, frogs, birds and bees survive until spring? What do deer, squirrels, rabbits and fish do to stay active through the coldest, bleakest days? How do they manage? Find out by exploring Life Below Zero. Students will participate in a variety of grade appropriate activities and games to allow them to acquire knowledge about habitat, adaptations & ecological principals, develop an appreciation of life in frozen environments and foster responsible human actions.

Curriculum Connections:

Kindergarten

Personal and Social Development

- C. Demonstrate independence, self-regulation, and a willingness to take responsibility in learning and other activities.
- E. Identify and use social skills in play and other contexts.
- F. Demonstrate an awareness of their surroundings.

Language

- A. Communicate by talking, listening and speaking to others for a variety of purposes and in a variety of contexts.

Science and Technology

- A. Demonstrate an awareness of the natural environment through hands-on investigations, observation, questioning and sharing of findings.
- B. Conduct simple investigations through free exploration, focused exploration and guided activity.
- C. Demonstrate an understanding of care for the natural world.
 - 1. Describe natural occurrences using their own observations and representations.
 - 2. Sort and classify groups of living and non-living things in their own way.
 - 3. Describe patterns and cycles in the natural world.
 - 4. Pose questions and make predictions and observations.
 - 5. Communicate results and findings from individual and group activities.
 - 8. Demonstrate an awareness of local and natural habitats through exploration and observation.
 - 9. Participate in environmentally friendly activities.

Health and Physical Activity

- B. Participate willingly in a variety of activities that require both large and small muscles.

Grade 1

Science – Needs and Characteristics of Living Things

- 2.2 Investigate the basic needs of living things.
- 2.3 Investigate and compare the physical characteristics of a variety of plants and animals.
- 3.1 Identify environment as the area in which something lives.
- 3.4 Describe the characteristics of a healthy environment.
- 3.5 Describe how showing care and respect for all living things helps maintain a healthy environment.

Grade 2

Science – Growth and Changes in Animals

- 2.2 Observe and compare the physical and behavioral characteristics of a variety of animals including insects.
- 2.3 Investigate the life cycle of a variety of animals.
- 2.4 Observe and compare changes in appearance and activity as animals go through their life cycle.
- 2.5 Investigate ways in which animals adapt to their environment or to changes in their environment.
- 3.1 Identify and describe major physical characteristics of different types of animals (e.g. insects, mammals, reptiles).

Grade 3

Science – Growth and Changes in Plants

- 2.4 Investigate ways in which plants adapt or react to their environment.
- 3.3 Identify the changes that different plants undergo in their life cycle.
- 3.5 Describe ways in which humans use plants for food, shelter medicine, etc.
- 3.6 Describe ways in which plants and animals depend on each other.
- 3.8 Identify examples of environmental conditions that may threaten plant and animal survival.

Grade 4

Science – Habitats and Communities

- 1.2 Identify reasons for the depletion or extinction of a plant or animal species, evaluate the impacts on the rest of the natural community, and propose possible actions for preventing such depletions or extinctions from happening.
- 2.2 Build food chains consisting of different plants and animals, including humans.
- 2.3 Use scientific inquiry/research skills to investigate ways in which plants and animals in a community depend on features of their habitat to meet important needs.
- 3.1 Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life (e.g., food, water, air, space, and light).
- 3.2 Demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers and then to consumers.
- 3.3 Identify factors that affect the ability of plants and animals to survive in a specific habitat.

- 3.4 Demonstrate an understanding of a community as a group of interacting species sharing a common habitat.
- 3.5 Classify organisms, including humans, according to their role in a food chain (e.g., producer, consumer, decomposer).
- 3.6 Identify animals that are carnivores, herbivores, or omnivores.

Lost!

Grades: 5,6,7

Length: half day

Seasons: all

Students role-play being lost in a remote Ontario forest. Before nightfall (a time limit set by our staff person), the students must construct a shelter to contain their group's heat, help make a community fire, make hot chocolate and cope with the elements. This program excels at promoting group problem solving and co-operation, as students work together and determine how to construct simple devices to accomplish their goals.

Curriculum Connections:

Grade 5

Science – Forces Acting on Structures and Mechanisms

- 2.3 Use scientific inquiry/research skills to investigate how structures are built to withstand forces.
- 2.4 Use technological problem-solving skills to design, build, and test a frame structure that will withstand the application of an external force.
- 3.1 Identify internal forces acting on a structure, and describe their effects on the structure.
- 3.2 Identify external forces acting on a structure, and describe their effects on the structure.
- 3.4 Describe forces resulting from natural phenomena that can have severe consequences for structures in the environment, and identify structural features that help overcome some of these forces.

Grade 7

Science – Heat in the Environment

- 2.1 Follow established safety procedures for using heating appliances and handling hot materials.
- 2.3 Use technological problem-solving skills to identify ways to minimize heat loss.

Science – Form and Function

- 2.1 Follow established safety procedures for using tools and handling materials.
- 2.3 Investigate the factors that determine the ability of a structure to support a load.
- 2.4 Use technological problem-solving skills to determine the most efficient way for a structure to support a given load.
- 3.4 Distinguish between external forces and internal forces acting on a structure.
- 3.5 Describe the role of symmetry in structures.
- 3.6 Identify and describe factors that can cause a structure to fail.

All Grades

Health and Physical Education – Living Skills

- 1.2 Use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities,

- develop movement competence, and acquire knowledge skills related to healthy living.
- 1.3 Communicate effectively, using verbal and non-verbal means, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge skills related to healthy living.
 - 1.4 Apply relationship and social skills as they participate in, develop movement competence, and acquire knowledge skills related to healthy living.
 - 1.5 Use a range of critical and creative thinking processes to assist them in making connections, planning and setting goals, analyzing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education.

Orienteering

Grades: 3,4, 5, 6, 7, 8

Length: half day

Seasons: all

Students develop their spatial sense and their graphical literacy skills in our fun, competitive orienteering course. This program teaches the skills necessary to read and interpret a variety of maps, including symbol recognition, estimation, map orientation and problem solving. A progression of grade-appropriate orienteering courses, ranging from schoolyard level to large scale, allows students to be successful in finding specific locations or control points within the park.

Curriculum Connections:

Grade 4

Social Studies – Canada and World Connections

- Use cardinal and intermediate directions, pictorial and non-pictorial symbols, scale, and colour to locate and display geographic information on various maps.
- Use number and letter grids to locate places on base maps and road maps, and in atlases.
- Prepare various forms of maps, using symbols and legends, to display places, transportation routes, and political boundaries.

Grade 5

Social Studies – Canada and World Connections

- Construct and read a variety of maps, graphs, diagrams, and/or models to display and interpret information for specific purposes.

Grade 6

Social Studies – Canada and World Connections

- Use base maps and a variety of information sources to sketch the relative position of places.
- Create maps using shading/colour to show details of the physical characteristics of regions.
- Use special-purpose maps to find specific geographic information.

Grade 7

Geography – Themes of Geographic Inquiry

- Create and use maps for a variety of purposes.

Grade 8

Geography – Patterns in Human Geography

- Create and use a variety of maps for specific purposes.

All Grades

Health and Physical Education - Active Living

- A1 Participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity.
- A3 Demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

Health and Physical Education - Living Skills

- 1.2 Use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge skills related to healthy living.
- 1.3 Communicate effectively, using verbal and non-verbal means, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge skills related to healthy living.
- 1.5 Use a range of critical and creative thinking processes to assist them in making connections, planning and setting goals, analyzing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education.

Raindrops to Watersheds

Grades: 7, 8

Length: half day

Seasons: all

Water is one of our most valuable resources. Through experimentation, investigation, and field work, students will develop their understanding of how water is recycled and reused, and managed. They will also better understand our need to protect this non-renewable and fragile resource.

Curriculum Connections:

Grade 7

Science – Interactions in the Environment

- 2.1 Follow established safety procedures for investigating ecosystems.
- 2.4 Use appropriate science and technology vocabulary, including sustainability, biotic, ecosystem, community, population, and producer, in oral and written communication.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them.
- 3.3 Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem.
- 3.4 Describe the transfer of energy in a food chain and explain the effects of the elimination of any part of the chain.
- 3.7 Explain why an ecosystem is limited in the number of living things that it can support.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

Geography – Natural Resources

- Describe how humans acquire, manage, and use natural resources, and identify factors that affect the importance of those resources.
- Use a variety of resources and tools to gather, process, and communicate geographic information about the distribution, use, and importance of natural resources.
- Describe positive and negative ways in which human activity can affect resource sustainability and the health of the environment.

Grade 8

Science – Water Systems

- 2.1 Follow established safety procedures when using water testing equipment.
- 2.3 Test water samples for various chemical characteristics - pH, salinity.
- 2.4 Use scientific inquiry/ research skills to investigate a water issue.
- 2.6 Use appropriate vocabulary such as water table, aquifer, salinity, etc.

- 3.1 Investigate the various states of water on the earth's surface, their distribution, relative amounts and circulation and the conditions under which they can exist.
- 3.2 Demonstrate an understanding of the watershed as a geographic unit and explain how it relates to water management and planning.
- 3.3 Explain how human and natural factors cause changes in the water table.
- 3.5 Explain changes in the atmospheric conditions caused by the presence of bodies of water.

Rockhounds

Grade: 4

Length: half day (indoors) or full day (indoor/outdoor)

Seasons: all

As “rock hounds”, students will examine different types of rocks and minerals, and learn about their characteristics and properties through a series of lab experiments. They will discover that rocks and minerals are useful for many things and that their characteristics help determine their use. By examining the processes of erosion, transportation and deposition, students will develop an understanding of the changing landscape and the ways wind, water and ice reshape it. Rock hounds will explore ways in which humans can both prevent changes to the landscape and adapt to these changes.

Curriculum Connections:

Grade 4

Science – Rocks and Minerals

- 2.1 Follow established safety procedures for working with tools and equipment.
- 2.2 Use a variety of tests to identify the physical properties of minerals.
- 2.3 Use a variety of criteria (colour, luster, texture) to classify common rocks and minerals.
- 2.5 Use appropriate science and technology vocabulary including hardness, colour, luster, and texture.
- 3.1 Describe the difference between rocks and minerals and explain how these differences determine how they are used.
- 3.2 Describe the properties (colour, luster, streak, hardness, transparency) that are used to identify minerals.
- 3.3 Describe how igneous, sedimentary and metamorphic rocks are formed.
- 3.4 Describe the characteristics of the three types of rock.
- 1.1 Assess the social and environmental costs and benefits of using objects made from rocks and minerals.
- 1.2 Analyse the impact on society and the environment of extracting and refining rocks and minerals for human use.

Runners Of The Woods

Grades: 6, 7

Length: full day

Seasons: all

Discover what life was like for the Coureur de Bois in a role-playing game that takes your class back in time. As “runners of the woods”, students must navigate through “uncharted wilderness”, harvest rich furs and then trade them at Scanlon Creek’s trading post for the supplies they will need to survive the coming winter. Map reading skills are developed and used as we examine the roles that fur traders and natives played in shaping our country.

Curriculum Connections:

Grade 6

Social Studies – First Nation Peoples and European Explorers

- Identify technological developments and cultural factors that assisted and promoted the exploration of North America.
- Describe the expansion of European influence through the founding of the first trading posts and explain how the fur trade served the interests of both the Europeans and the First Nation peoples.
- Identify the results of contact for both the Europeans and the First Nation peoples.
- Identify and explain differing opinions about the positive and negative effects of early contact between European and First Nation peoples.
- Explain how cooperation between First Nation groups and early European explorers benefited both groups.
- Explain how differences between First Nation peoples and early European explorers led to conflicts between the two groups.

Grade 7

History – New France

- Explain why people came to live in New France and describe the impact of European immigration on First Nation settlements.
- Identify & explain examples of conflict & cooperation between the French & First Nations, & between the French & English fur traders.
- Use a variety of primary & secondary sources to locate relevant information about how early settlers met the challenges of the new land.
- Compare and contrast past and present attitudes to the fur industry.
- Compare the attractions and drawbacks for French Canadians in choosing life on a farm versus life in the church or in the woods.

Scanlon Ecosystems

Grades: 6, 7, secondary

Length: half day

Seasons: all

Through games, activities and observations in a variety of ecosystems students will learn that ecosystems consists of communities of plants and animals that are dependent on each other as well as non-living parts of the environment. Students will have a first-hand opportunity to appreciate the biodiversity of living things while recognizing the roles and interactions of individual species within the whole. Students will realize that humans have many impacts on the environment.

Curriculum Connections:

Grade 6

Science – Biodiversity

- 2.1 Follow established safety procedures for outdoor activities and field work.
- 2.2 Investigate the organisms found in a specific habitat and classify them according to a classification system.
- 3.1 Identify and describe the distinguishing characteristics of different groups of plants and animals, and use these characteristics to further classify various kinds of plants and animals.
- 3.2 Demonstrate an understanding of biodiversity as the variety of life on earth, including variety within each species of plant and animal, among species of plants and animals in communities, and among communities and the physical landscapes that support them.
- 3.3 Describe ways in which biodiversity within species is important for maintaining the resilience of those species.
- 3.4 Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities.
- 3.5 Describe interrelationships within species, between species, and between species and their environment, and explain how these interrelationships sustain biodiversity.
- 3.7 Explain how invasive species reduce biodiversity in local environments.

Grade 7

Science – Interactions in the Environment

- 2.1 Follow established safety procedures for investigating ecosystems.
- 2.4 Use appropriate science and technology vocabulary, including sustainability, biotic, ecosystem, community, population, and producer, in oral and written communication.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them.

- 3.3 Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem.
- 3.4 Describe the transfer of energy in a food chain and explain the effects of the elimination of any part of the chain.
- 3.7 Explain why an ecosystem is limited in the number of living things that it can support.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

Grade 9

Scientific Investigation Skills

- A1.2 uses sampling instruments
- A1.5 conducts inquiries
- A1.6 gathers data... from other sources
- A1.12 uses appropriate... units of measure

Career Exploration

- A2 Identify and describe a variety of careers related to the fields of science: forester, ecologist, Conservation Lands Planner, watershed stewardship.

Developing Skills of Investigation and Communication

- B2.1 Use appropriate terminology: diversity, ecosystem, sustainability watershed, abiotic, biotic.

Understanding Concepts

- B3.1 Compares and contrasts biotic and abiotic characteristics of sustainable and unsustainable ecosystems.
- B3.3 Describes the limiting factors of ecosystems.
- B3.5 Identifies various factors related to human activity that have an impact on ecosystems, including how these factors affect the equilibrium and survival of ecosystems: impact of forestry, clearing of forests for farming or development.

Seasonal Celebrations

Grades: K, 1, 2, 3

Length: half day

Seasons: all (content varies by season)

Come enjoy the changes that occur with each new season in the park. Students will learn about the many plants and animals that make Scanlon Creek their home and learn about their adaptations to survive the changing conditions in their environment. A variety of games and activities will help students appreciate the changing seasons.

Curriculum Connections:

Kindergarten

Personal and Social Development

- C. Demonstrate independence, self-regulation, and a willingness to take responsibility in learning and other activities.
- E. Identify and use social skills in play and other contexts.
- F. Demonstrate an awareness of their surroundings.

Language

- A. Communicate by talking, listening and speaking to others for a variety of purposes and in a variety of contexts.

Science and Technology

- A. Demonstrate an awareness of the natural environment through hands-on investigations, observation, questioning and sharing of findings.
- B. Conduct simple investigations through free exploration, focused exploration and guided activity.
- C. Demonstrate an understanding of care for the natural world.
 - 1. Describe natural occurrences using their own observations and representations.
 - 2. Sort and classify groups of living and non-living things in their own way.
 - 3. Describe patterns and cycles in the natural world.
 - 4. Pose questions and make predictions and observations.
 - 5. Communicate results and findings from individual and group activities.
 - 8. Demonstrate an awareness of local and natural habitats through exploration and observation.
 - 9. Participate in environmentally friendly activities.

Health and Physical Activity

- B. Participate willingly in a variety of activities that require both large and small muscles.

Grade 1

Science – Daily and Seasonal Changes

- 3.3 Describe changes in the amount of heat and light throughout the day and the seasons.
- 3.4 Describe characteristics of the four seasons.
- 3.5 Describe changes in the appearance and behaviour of living things that are adaptations to seasonal changes.
- 3.6 Describe how humans prepare for and/or respond to seasonal and daily changes.

Science – Needs and Characteristics of Living Things

- 2.2 Investigate and compare the basic needs of living things.
- 2.3 Investigate the physical characteristics of a variety of plants and animals.
- 3.5 Describe how showing care and respect for all living things help to maintain a healthy living environment.

Grade 2

Science – Growth & Change in Animals

- 2.2 Observe and compare the physical and behavioral characteristics of a variety of animals including insects.
- 2.5 Investigate ways in which animals adapt to their environment or to changes in their environment.

Air and Water in the Environment

- 3.3 Identify ways in which changes in weather affect living things.

Grade 3

Science – Growth & Changes in Plants

- 2.4 Investigate ways in which plants adapt or react to their environment.
- 3.3 Identify the changes that different plants undergo in their lifecycle.
- 3.5 Describe ways in which humans use plants for food, shelter medicine, etc.
- 3.6 Describe ways in which plants and animals depend on each other

Sensing for Survival

Grades: K, 1

Length: half day

Seasons: all

Young children have an inherent curiosity about nature. This program takes advantage of that curiosity by beginning a study of a variety of living things, including humans. Through a variety of sensory activities in the field and forest, students will investigate the basic needs and characteristics of living things and observing their similarities and differences. By exploring the diversity of the animal kingdom, students will learn how different animals see, hear, smell, taste and feel and how they use their senses to find food and survive.

Curriculum Connections:

Kindergarten

Personal and Social Development

- C. Demonstrate independence, self-regulation, and a willingness to take responsibility in learning and other activities.
- E. Identify and use social skills in play and other contexts.
- F. Demonstrate an awareness of their surroundings.

Language

- A. Communicate by talking, listening and speaking to others for a variety of purposes and in a variety of contexts.

Science and Technology

- A. Demonstrate an awareness of the natural environment through hands-on investigations, observation, questioning and sharing of findings.
- B. Conduct simple investigations through free exploration, focused exploration and guided activity.
- C. Demonstrate an understanding of care for the natural world.
 - 1. Describe natural occurrences using their own observations and representations.
 - 2. Sort and classify groups of living and non-living things in their own way.
 - 3. Describe patterns and cycles in the natural world.
 - 4. Pose questions and make predictions and observations.
 - 5. Communicate results and findings from individual and group activities.
 - 8. Demonstrate an awareness of local and natural habitats through exploration and observation.
 - 9. Participate in environmentally friendly activities.

Health and Physical Activity

- B. Participate willingly in a variety of activities that require both large and small muscles.

Grade 1

Science – Needs and Characteristics of Living Things

- 2.2 Investigate and compare the basic needs of humans and other living things.
- 2.3 Investigate and compare the physical characteristics of a variety of plants and animals.
- 2.5 Investigate the five sense organs and explain how those characteristics help animals, including humans, meet their needs and explore the world around them.
- 2.6 Use appropriate science vocabulary.
- 3.3 Identify the location and function of major parts of the body including sense organs.

Similarities and Differences

Grade: 6

Length: half day

Seasons: all

Students spend the indoor part of this program studying, recording information and drawing animal artefacts such as skulls, preserved animal specimens and plaster casts of animal tracks. From these specimens, the students are not only able to learn about the many different animals but also learn to observe and describe the differences and similarities among species. This demonstrates the different ways in which animals can be classified and gives the students an understanding of the diversity of living things. The outside portion of this program takes classification into the plant world, as students use their powers of observation to record the similarities and differences that exist between different tree species. Upon their return to the classroom, they use this information to make a dichotomous key for identifying these trees.

Curriculum Connections:

Grade 6

Science – Biodiversity

- 2.1 Follow established safety procedures for outdoor activities and field work.
- 2.2 Investigate the organisms found in a specific habitat and classify them according to a classification system.
- 2.3 Use scientific inquiry/research skills to compare the characteristics of organisms within the plant or animal kingdoms.
- 2.4 Use appropriate science and technology vocabulary, including classification, biodiversity, natural community, interrelationships, vertebrate, invertebrate, stability, characteristics, and organism, in oral and written communication.
- 3.1 Identify and describe the distinguishing characteristics of different groups of plants and animals, and use these characteristics to further classify various kinds of plants and animals.

Snowshoeing

Grades: Grade 4 - Secondary

Length: half day

Season: winter (appropriate snow conditions required)

Snowshoeing is a quiet, traditional way to explore the wonders of winter within Scanlon Creek Conservation Area. Students investigate the different styles of snowshoes developed by native people in various parts of Canada, and learn techniques to snowshoe safely through a variety of terrains. Students' skills can be tested with various games and challenges.

Curriculum Connections:

All Grades

Health and Physical Education - Active Living

- A1 Participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity.
- A2 Demonstrate the importance of being physically active, and apply physical fitness concepts and practices that contribute to healthy, active living.
- A3 Demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

Health and Physical Education - Movement Competence

- B1 Perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in physical activities.
- B2 Apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

Species at Risk

Grades: 4, 6, 7, secondary

Length: half day

Seasons: all

This activity develops students' empathy for endangered species in Ontario and throughout the world, as well as helping them to understand the threats that some of our present practices impose upon wildlife. During a simulation exercise, students assume the role of either an endangered animal or a reason for depletion of these animals. As the game is played, students will begin to realize how human activities affect wildlife. The follow up includes a discussion regarding the problems faced by wildlife on a daily basis. Students will leave the program thinking about how they can help reduce these pressures and in the process, better understand the environment in which they live.

Curriculum Connections:

Grade 4

Science – Habitats and Communities

- 1.1 Analyse the positive and negative impacts of human interactions with natural habitats and communities, taking different perspectives into account, and evaluate ways of minimizing the negative impacts.
- 1.2 Identify reasons for the depletion or extinction of a plant or animal species, evaluate the impacts on the rest of the natural community, and propose possible actions for preventing such depletions or extinctions from happening.
- 2.3 Use scientific inquiry/research skills to investigate ways in which plants and animals in a community depend on features of their habitat to meet important needs.
- 3.1 Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life.
- 3.3 Identify factors that affect the ability of plants and animals to survive in a specific habitat.
- 3.8 Explain why changes in the environment have a greater impact on specialized species than on generalized species.

Grade 6

Science – Biodiversity

- 3.2 Demonstrate an understanding of biodiversity as the variety of life on earth.
- 3.4 Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities.
- 3.5 Describe interrelationships within species, between species, and between species and their environment, and explain how these interrelationships sustain biodiversity.
- 3.7 Explain how invasive species reduce biodiversity in local environments.

Grade 7

Science – Interactions in the Environment

- 2.3 Use scientific inquiry/research skills to investigate occurrences that affect the balance within a local ecosystem.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them.
- 3.3 Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem.
- 3.7 Explain why an ecosystem is limited in the number of living things that it can support.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

Grade 9

Science – Sustainable Ecosystems – Scientific Investigation Skills

- A1.11 Communicates ideas, plans, procedures, results, and conclusions both orally and in writing, using a variety of formats, e.g. presentations, debates, simulations

Career Exploration

- A2 Identify and describe a variety of careers related to the fields of science: natural heritage technician, biologist, ecologist, watershed stewardship

Developing Skills of Investigation and Communication

- B2.1 Use appropriate terminology: extinct, extirpated, endangered, threatened, introduced species, etc.
- B3.3 Describes the limiting factors of ecosystems.
- B3.5 Identify various factors related to human activity that have an impact on ecosystems e.g. introduction of invasive species, poaching, pesticide misuse, habitat destruction.

Sugaring Off

Grades: K, 1, 2, 3, 4

Length: half day

Season: late February – Early April

Come and enjoy the first taste of spring in the sugarbush at Scanlon Creek. Students will participate in the activities of early settlers as they learn to identify maples, tap the trees, gather tinder and kindling, and boil down the sap. After their hard work students may enjoy the taste of syrup on a waffle or pancake. (This is the half day version of our popular full day “Spring Tonic” program.)

Curriculum Connections:

Kindergarten

Personal and Social Development

- C. Demonstrate independence, self-regulation, and a willingness to take responsibility in learning and other activities.
- E. Identify and use social skills in play and other contexts.
- F. Demonstrate an awareness of their surroundings.

Language

- A. Communicate by talking, listening and speaking to others for a variety of purposes and in a variety of contexts.

Science and Technology

- A. Demonstrate an awareness of the natural environment through hands-on investigations, observation, questioning and sharing of findings.
- B. Conduct simple investigations through free exploration, focused exploration and guided activity.
- C. Demonstrate an understanding of care for the natural world.
 - 1. Describe natural occurrences using their own observations and representations.
 - 2. Sort and classify groups of living and non-living things in their own way.
 - 3. Describe patterns and cycles in the natural world.
 - 4. Pose questions and make predictions and observations.
 - 5. Communicate results and findings from individual and group activities.
 - 8. Demonstrate an awareness of local and natural habitats through exploration and observation.
 - 9. Participate in environmentally friendly activities.

Health and Physical Activity

- B. Participate willingly in a variety of activities that require both large and small muscles.

Grade 1

Science – Needs and Characteristics of Living Things

- 2.2 Investigate the basic needs of living things.
- 2.3 Investigate and compare the physical characteristics of a variety of plants and animals.
- 3.5 Describe how showing care and respect for all living things helps maintain a healthy environment.

Grade 2

Social Studies – Traditions and Celebrations

- Understand that traditions are passed down from parents & grandparents.
- Identify the contributions that native & pioneer cultures have made to our community.
- Participate in a celebration that reflects the Canadian heritage and identity.

Grade 3

Science – Growth and Change in Plants

- 1.1 Assess ways plants are important to humans and other living things.
- 1.2 Assess the impact of different human activities on plants, and list actions they can engage in to minimize harmful effects and enhance good effects.

Social Studies – Pioneer Life

- Explain how pioneers used natural resources.
- Describe the influence of Aboriginal people on the pioneer's way of life.
- Compare tools used by pioneers to today's tools.
- Compare past & present techniques of processing products e.g. maple syrup.

Grade 4

Science – Habitats and Communities

- 3.3 Identify factors that affect the ability of plants and animals to survive in a specific habitat.
- 3.7 Describe structural adaptations that allow plants and animals to survive in specific habitats.
- 3.10 Describe ways in which humans are dependent on natural habitats and communities.

Social Studies – Canada's Provinces, Territories and Regions

- Identify natural resources necessary to create Canadian products and the provinces from which they originate (e.g. trees, maple syrup/sugar, Ontario & Quebec)

Walking in a Winter Wonderland

Grades: K, 1, 2, 3, 4

Length: full day

Season: winter

Come celebrate the changing weather and the approaching holiday season! Students enjoy a full day of activities that reflect early Canadian holiday traditions. Pioneer and medieval games will be played outdoors. Decorations from various cultures celebrating winter holidays will be made. Students will decorate a tree for birds and animals with edible ornaments. A hike and campfire will round out the day.

Curriculum Connections:

Kindergarten

Personal and Social Development

- C. Demonstrate independence, self-regulation, and a willingness to take responsibility in learning and other activities.
- E. Identify and use social skills in play and other contexts.
- F. Demonstrate an awareness of their surroundings.

Language

- A. Communicate by talking, listening and speaking to others for a variety of purposes and in a variety of contexts.

Science and Technology

- A. Demonstrate an awareness of the natural environment through hands-on investigations, observation, questioning and sharing of findings.
- B. Conduct simple investigations through free exploration, focused exploration and guided activity.
- C. Demonstrate an understanding of care for the natural world.
 - 1. Describe natural occurrences using their own observations and representations.
 - 2. Sort and classify groups of living and non-living things in their own way.
 - 3. Describe patterns and cycles in the natural world.
 - 4. Pose questions and make predictions and observations.
 - 5. Communicate results and findings from individual and group activities.
 - 8. Demonstrate an awareness of local and natural habitats through exploration and observation.
 - 9. Participate in environmentally friendly activities.

Health and Physical Activity

- B. Participate willingly in a variety of activities that require both large and small muscles.

Grade 1

Science – Daily and Seasonal Changes

- 3.3 Describe changes in the amount of heat and light throughout the day and the seasons.
- 3.4 Describe characteristics of the four seasons.
- 3.5 Describe changes in the appearance and behaviour of living things that are adaptations to seasonal changes.
- 3.6 Describe how humans prepare for and/or respond to seasonal and daily changes.

Science – Needs and Characteristics of Living Things

- 2.2 Investigate and compare the basic needs of living things.
- 2.3 Investigate the physical characteristics of a variety of plants and animals.
- 3.5 Describe how showing care and respect for all living things help to maintain a healthy living environment.

Grade 2

Science – Growth and Changes in Animals

- 2.2 Observe and compare the physical and behavioral characteristics of a variety of animals including insects.
- 2.5 Investigate ways in which animals adapt to their environment or to changes in their environment.

Science – Air and Water in the Environment

- 3.3 Identify ways in which changes in weather affect living things.

Social Studies – Traditions and Celebrations

- Identify the contributions Aboriginal culture has made to our lives/

Grade 3: Growth and Changes in Plants

- 2.4 Investigate ways in which plants adapt or react to their environment.
- 3.3 Identify the changes that different plants undergo in their lifecycle.
- 3.5 Describe ways in which humans use plants for food, shelter medicine, etc.
- 3.6 Describe ways in which plants and animals depend on each other.
- 3.8 Identify examples of environmental conditions that may threaten plant and animal survival.

Grade 4

Science – Habitats & Communities

- 2.3 Use scientific inquiry/research skills to investigate ways in which plants and animals in a community depend on features of their habitat to meet important needs.
- 3.1 Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life.
- 3.2 Demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers and then to consumers.
- 3.3 Identify factors that affect the ability of plants and animals to survive in a specific habitat.

Water Quality Bio-Indicators

Grades: 7, 8, secondary

Length: half day

Seasons: fall, spring

The health of an aquatic ecosystem can be determined by the presence/absence and abundance of different types of aquatic animals. Students will collect aquatic life from several different spots along Scanlon Creek and identify them in the classroom using microscopes, magnifying glasses and dichotomous keys. By checking their lists of creatures with a biotic index chart, students will be able to assess the water quality of Scanlon Creek.

Curriculum Connections:

Grade 7

Science – Interactions in the Environment

- 2.1 Follow established safety procedures for investigating ecosystems.
- 2.4 Use appropriate science and technology vocabulary.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them.
- 3.3 Describe the roles and interactions of producers, consumers and decomposers within an ecosystem.
- 3.7 Explain why an ecosystem is limited in the number of living things that it can support.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

Grade 8

Science – Water Systems

- 2.1 Follow established safety procedures for the use of apparatus and chemicals.
- 2.3 Test water samples for a variety of chemical characteristics (e.g., pH, salinity, chlorine).
- 2.4 Use scientific inquiry/research skills to investigate local water issues.
- 2.6 Use appropriate science and technology vocabulary in oral and written communication.
- 2.7 Use a variety of forms to communicate with different audiences and for a variety of purposes.
- 3.2 Demonstrate an understanding of the watershed as a fundamental geographic unit, and explain how it relates to water management and planning.

Grade 9

Science – Sustainable Ecosystems – Scientific Investigation Skills

- A1.2 Uses sampling instruments
- A1.5 Conducts inquiries
- A1.6 Gathers data... from other sources
- A1.11 Communicates ideas, plans, procedures, results, and conclusions, both orally and in writing, using a variety of formats e.g. presentations, debates, simulations.
- A1.12 Uses appropriate units of measure.

Career Exploration

- A2 Identify and describe a variety of careers related to the fields of science: water quality technician, aquatic ecologist, watershed stewardship.

Developing Skills of Investigation and Communication

- B2.1 Uses appropriate terminology: diversity, ecosystem, sustainability watershed, abiotic, biotic.
- B2.2 Interprets qualitative and quantitative data.
- B2.4 Conduct investigations into how human activity affects water quality, e.g., changes to watersheds resulting from deforestation or land development.

Understanding Concepts

- B3.1 Compares and contrasts biotic and abiotic characteristics of sustainable and unsustainable ecosystems.
- B3.3 Describes the limiting factors of ecosystems.
- B3.5 Identifies various factors related to human activity that have an impact on ecosystems, including how these factors affect the equilibrium and survival of ecosystems: impact of forestry, clearing of forests for farming or development, etc.

Web of Life

Grades: 4,6,7

Length: half day

Seasons: all

Students are transformed into herbivores, omnivores, carnivores and elements (fire, flood, drought and disease) as they role play the lives of animals in a food web. By dealing with the problems that a forest animal faces (i.e. avoiding being killed, finding food, water, shelter and a mate), the children gain a healthy respect for all other creatures living on this planet.

Curriculum Connections:

Grade 4

Science – Habitats and Communities

- 1.2 Identify reasons for the depletion or extinction of a plant or animal species, evaluate the impacts on the rest of the natural community, and propose possible actions for preventing such depletions or extinctions from happening.
- 2.2 Build food chains consisting of different plants and animals, including humans.
- 2.3 Use scientific inquiry/research skills to investigate ways in which plants and animals in a community depend on features of their habitat to meet important needs.
- 3.1 Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life.
- 3.2 Demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers and then to consumers.
- 3.3 Identify factors that affect the ability of plants and animals to survive in a specific habitat.
- 3.4 Demonstrate an understanding of a community as a group of interacting species sharing a common habitat.
- 3.5 Classify organisms, including humans, according to their role in a food chain (e.g., producer, consumer, decomposer).
- 3.6 Identify animals that are carnivores, herbivores, or omnivores.

Grade 7

Science – Interactions in the Environment

- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them.
- 3.3 Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem.
- 3.4 Describe the transfer of energy in a food chain and explain the effects of the elimination of any part of the chain.

Weeds, Seeds and Wildflowers

Grade: 3

Length: half day

Seasons: fall and spring

Helicopters, hitchhikers, gliders and stowaways – how do each of these relate to the plant world? After your class has spent a half-day in our Weeds, Seeds and Wildflowers program, they will be able to tell you. This program includes student investigation of plants and their needs followed by a walk in the Park to see how these most vital elements of our global ecosystem live in their own habitats. Programs booked in April, May or June will highlight the myriad wildflowers that thrive in the Scanlon Creek Park while courses booked in September, October or November will take a closer look at how plants produce and distribute their seeds and what happens to them over the winter.

Curriculum Connections:

Grade 3

Science – Growth and Changes in Plants

- 1.1 Assess ways in which plants are important to humans and other living things.
- 1.2 Assess the impact of different human activities on plants.
- 2.1 Follow established safety procedures during investigations.
- 2.2 Observe and compare the parts of various plants.
- 2.4 Investigate ways plants adapt/react to their environment.
- 2.6 Use appropriate science and technology vocabulary.
- 3.1 Describe the basic needs of plants.
- 3.2 Identify the major parts of plants and describe how each part contributes to the plants survival.
- 3.3 Describe the changes that plants undergo in their life cycles.
- 3.4 Describe how plants get energy directly from the sun and how plants help other living things get energy from the sun.
- 3.5 Describe ways in which humans from various cultures use plants for food, shelter, medicine and clothing.
- 3.6 Describe ways plants and animals depend on each other.
- 3.8 Identify examples of environmental conditions that may threaten plant and animal survival.

Winter Adventures

Grades: All

Length: full day

Season: winter (snow required)

Has the cold and snow got you down? Rather than dread winter, come celebrate all this wonderful season has to offer. Our program is guaranteed to change you from a chionophobe to a chionophile. We will look at snow and weather, how living things in the forest survive winter, winter safety and winter recreational activities such as snowshoeing and native games.

Curriculum Connections:

Grade 1

Science – Daily and Seasonal Changes

- 3.3 Describe changes in the amount of heat and light throughout the day and the seasons.
- 3.4 Describe characteristics of the four seasons.
- 3.5 Describe changes in the appearance and behaviour of living things that are adaptations to seasonal changes.
- 3.6 Describe how humans prepare for and/or respond to seasonal and daily changes.

Science – Needs and Characteristics of Living Things

- 2.2 Investigate and compare the basic needs of living things.
- 2.3 Investigate the physical characteristics of a variety of plants and animals.
- 3.5 Describe how showing care and respect for all living things help to maintain a healthy living environment.

Grade 2

Social Studies – Traditions & Celebration

- Identify the contributions Aboriginal culture has made to our lives.

Science – Growth & Change in Animals

- 2.2 Observe and compare the physical and behavioral characteristics of a variety of animals including insects.
- 2.5 Investigate ways in which animals adapt to their environment or to changes in their environment.

Air and Water in the Environment

- 3.3 Identify ways in which changes in weather affect living things.

Grade 3

Science – Growth & Changes in Plants

- 2.4 Investigate ways in which plants adapt or react to their environment.
- 3.3 Identify the changes that different plants undergo in their lifecycle.
- 3.5 Describe ways in which humans use plants for food, shelter medicine, etc.
- 3.6 Describe ways in which plants and animals depend on each other.

- 3.8 Identify examples of environmental conditions that may threaten plant and animal survival.

Social Studies – Pioneer Life

- Identify contributions of Aboriginal peoples to pioneer settlement.

Grade 4

Science – Habitats & Communities

- 2.3 Use scientific inquiry/research skills to investigate ways in which plants and animals in a community depend on features of their habitat to meet important needs.
- 3.1 Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life.
- 3.2 Demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers (plants) and then to consumers (animals).
- 3.3 Identify factors that affect the ability of plants and animals to survive in a specific habitat.

Grade 6

Science – Biodiversity

- 3.2 Demonstrate an understanding of biodiversity as the variety of life on earth, including variety within each species of plant and animal, among species of plants and animals in communities, and among communities and the physical landscapes that support them.
- 3.4 Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities.
- 3.5 Describe interrelationships within species, between species, and between species and their environment, and explain how these interrelationships sustain biodiversity.

Grade 7

Science – Interactions in the Environment

- 2.3 Use scientific inquiry/research skills to investigate occurrences that affect the balance within a local ecosystem.
- 3.1 Demonstrate an understanding of an ecosystem as a system of interactions between living organisms and their environment.
- 3.2 Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them.
- 3.3 Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem.
- 3.7 Explain why an ecosystem is limited in the number of living things that it can support.
- 3.8 Describe ways in which human activities and technologies alter balances and interactions in the environment.

All Grades

Health and Physical Education - Active Living

- A1 Participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity.
- A2 Demonstrate the importance of being physically active, and apply physical fitness concepts and practices that contribute to healthy, active living.
- A3 Demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

Health and Physical Education - Movement Competence

- B1 Perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in physical activities.
- B2 Apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.