

## Program List

To assist you in planning your visit, the programs currently available at Lake St. George are listed below. Please note the academic level for which the program is designed, and the time of year during which the program operates. Daytime programs are two and a half hours in length and evening programs are one and a half hours, unless otherwise indicated. A short description of each program can be found on the following pages. During your planning session, we would be pleased to discuss program adaptations, or new programs that would meet your educational needs.

|  |          |         |  |          |         |
|--|----------|---------|--|----------|---------|
| <b>Understanding Healthy Watersheds</b>                  |          |         | Development Dilemma – Town Hall Meeting    | All year | I/S     |
| Fish Management  | May–Oct  | J/I/S   | Eco-footprint                              | All year | P/J/I   |
| Lake Appreciation *                                      | May–Oct  | P/J     | Environmental Impact Studies               | All year | I/S     |
| Lake Ecology *   | May–Oct  | J/I/S   | Stewardship Project **                     | All year | J/I/S   |
| Oak Ridges Moraine Study                                 | All year | I/S     | <b>Recreation and Active Living Skills</b> |          |         |
| Plankton Survey  | May–Oct  | Gr.8+   | Canoeing *                                 | May–Oct  | J/I/S   |
| Pond Study #   | Sp       | P/J     | Cross-country Skiing #                     | W        | J/I/S   |
| Shoreline Vegetation Survey *                            | Sp/Su/F  | I/S     | Group Dynamics #                           | All year | P/J/I/S |
| Watersheds   | All year | J/I/S   | Mini Olympics #                            | All year | P/J/I/S |
| Wetland Wonders and Wanders                              | May–Oct  | I/S     | Nature Hike #                              | All year | P/J/I/S |
| <b>Understanding Biodiversity and Greenspaces</b>        |          |         | Snowshoeing #                              | W        | J/I/S   |
| Animal Ecology #   | All year | P/J/I   | Wilderness Survival Skills #               | All year | J/I/S   |
| Bird Study #   | Sp/F/W   | P/J/I/S | <b>Nature Appreciation and Awareness</b>   |          |         |
| Getting the Dirt on Soils                                | Sp/Su/F  | P/J/I/S | Dry Print Art (1–1.5 hours) #              | All year | P/J/I/S |
| Insect Study   | Sp/Su/F  | P/J/I   | Hemp Bracelets (1 hour) #                  | All year | J/I/S   |
| Instincts for Survival #                                 | All year | P/J/I/S | Nature Art                                 | All year | P/J/I/S |
| Rocks and Minerals                                       | Sp/Su/F  | J/I     | Nature Photography                         | All year | J/I/S   |
| Tree Identification                                      | Sp/Su/F  | P/J/I/S | Plaster Animal Sculptures **               | All year | J/I/S   |
| <b>Geographic Inquiry and Skills</b>                     |          |         | Tree Medallions (1 hour) #                 | All year | P/J/I/S |
| Air Photo Interpretation                                 | Sp/Su/F  | I/S     | <b>Evening Programs</b>                    |          |         |
| Colour Map Orienteering                                  | All year | I/S     | Astronomy                                  | F/W      | J/I/S   |
| Cooperative Orienteering #                               | All year | P/J/I/S | Bat Program #                              | May–Oct  | P/J/I/S |
| Find Your Way Mapping # (45 min.)                        | All year | P/J/I/S | Campfire and Campfire Leadership #         | All year | P/J/I/S |
| Geocaching   | All year | I/S     | Clue Murder Mystery # (1 hour)             | All year | J/I/S   |
| Introduction to GPS                                      | All year | I/S     | Current Environmental Issues (1 hour)      | All year | P/J/I/S |
| Photo Orienteering #                                     | All year | J/I/S   | Eco-Jeopardy #                             | All year | J/I/S   |
| Treasure Hunt #  | All year | P/J     | Environmental Stock Exchange               | All year | J/I/S   |
|  |          |         | Evening Hike #                             | All year | P/J/I/S |
| <b>History and Cultural Studies</b>                      |          |         | Frog Watch                                 | Sp/Su    | J/I/S   |
| Cemetery Study **  | Sp/Su/F  | J/I     | Legends of Lake St. George                 | All year | J/I/S   |
| Coueurs de Bois  | All year | J/I     | Owl Prowl #                                | All year | P/J/I/S |
| Native Studies   | All year | J/I     | Scavenger Hunt # (1 hour)                  | All year | P/J/I/S |
| Sugar Bush Demonstration (1 hour)                        | March    | P/J/I/S | Wide Games/Recreation #                    | All year | P/J/I/S |
| <b>Sustainable Communities: Action and Understanding</b> |          |         | Winter Recreation # (tubing and broomball) | W        | P/J/I/S |

### Legend:

# Also offered on weekends      Sp Spring      Su Summer      F Fall      W Winter      *Last updated January 2013*  
 \* Requires separate permission form      P Primary      J Junior      I Intermediate      S Senior  
 \*\* Additional fee applies



## Program Descriptions

Please note: Adaptations can be made to the programs to suit specific group needs.

### UNDERSTANDING HEALTHY WATERSHEDS

#### Fish Management

After reviewing the importance of fish to both human and natural systems, learners will participate in folding, placing and hauling in our 80-metre-long seine net. Our learners will transport fish to the holding tanks for analysis and, using I.D. keys, will identify and draw a variety of fish species. Learners will then be encouraged to participate in collecting other data, such as weight, length, special identification marks, relative age, health, etc. Finally, learners will employ methods of 'gentle release' back into Lake St. George.

*Curriculum connections: Science & Technology: Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment; Grade 8 – Water Systems Geography: Grade 7 – Natural Resources; Science: Grades 9 to 12*

#### Lake Appreciation

Through an introductory discussion, students are acquainted with the formation of glacial kettle lakes like Lake St. George, and encouraged to brainstorm the characteristics of a healthy lake. Students will then have the opportunity to either take a leisurely tour of the lake on the pontoon boat or they will be led in a fish-netting activity at the shore. Both of these activities are meant to be a fun, short

introduction to the aquatic ecology of Lake St. George.

*Curriculum connections: Science & Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity*

#### Lake Ecology

Through an introductory discussion, students are acquainted with the formation of glacial kettle lakes like Lake St. George. Students are encouraged to brainstorm the characteristics of a healthy lake and then measure those variables to determine the health of Lake St. George. They will also learn safety aspects of being on the water, as a large component of the program is spent on the lake within the safety of a pontoon boat. Students will record data that will allow them to create a profile of the lake. They will perform chemical tests on water samples, and will graph and interpret results.

*Curriculum connections: Science & Technology: Grade 8 – Water Systems; Geography: Grade 7 – Natural Resources, Themes of Geographic Inquiry, Patterns in Physical Geography, Grade 8 – Patterns in Human Geography; Science: Grades 9 to 12*

#### Oak Ridges Moraine Study

Participants will learn about the formation of the Oak Ridges Moraine. The importance of the moraine to the movement and quality of groundwater will be highlighted using a

groundwater model. During a hike on the Lake St. George property, students will also be introduced to some of the moraine's unique features and fragile habitats such as the beautiful kettle lake which the Field Centre's property surrounds. Activities may also include discussion or role play to enlighten students about threats to the moraine and the interest groups involved in its protection.

*Curriculum connections: Science & Technology: Grade 8 – Water Systems; Geography: Grade 7 – Natural Resources, Themes of Geographic Inquiry, Patterns in Physical Geography, Grade 8 – Patterns in Human Geography*

#### Plankton Survey

In this introduction to aquatic microbiology, students will use plankton nets, sieves, etc., to collect plankton samples from the littoral zone of Lake St. George. After a brief review of aquatic food webs, slide preparation and microscope basics, students will identify various phytoplankton and zooplankton of Lake St. George.

*Curriculum connections: Science and Technology: Grade 8 – Cells, Water Systems. Science: Grades 9 to 12*

#### Pond Study

Participants will become acquainted with the characteristics of healthy pond ecosystems. They will brainstorm the types of invertebrates and

vertebrates found in ponds and learn how these animals are adapted to their ecological niche. Participants will then collect pond organisms and sketch, identify and describe each according to methods of breathing, locomotion and feeding.

*Curriculum connections: Science & Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity*

### Shoreline Vegetation Survey

Students are introduced to the importance of natural shoreline vegetation in maintaining a healthy aquatic ecosystem. Students are taught to identify common aquatic plants and then, usually by canoe, they will explore and map the shoreline of Lake St. George.

*Curriculum connections: Science: Grades 9 to 12 – Health & Physical Education, Grades 7 to 12*

### Watersheds

This program begins with a general review of the water cycle through an indoor game. Students are then introduced to the concept of a watershed and why it is important to maintain healthy watersheds. They will identify on a map the watershed in which they live and, using a groundwater model, they will see a demonstration of underground water movements. Outside, students will tour the property while discussing the parts and natural features of a watershed, land use patterns, and the effects of such things as urban development. Water quality testing may also be conducted.

*Curriculum connections: Science & Technology: Grade 7 – Interactions in the Environment, Grade 8 – Water Systems; Geography: Grade 7 – Natural Resources, Themes of Geographic Inquiry, Patterns in Physical Geography, Grade 8 – Patterns in Human Geography*

### Wetland Wonders and Wanders

Participants will learn about the formation of the four main types of wetlands that can be found in southern Ontario. They will be introduced to a system that is used for evaluating wetlands and will have an opportunity to practice this system in the field when they visit several natural and constructed wetlands on the Lake St. George property. Water samples may be collected for examination of invertebrate populations or analysis using Hach water chemistry kits. Emphasis

will be placed on the importance of wetlands and their conservation from ecological, social, and economic perspectives.

*Curriculum connections: Science & Technology: Grade 7 – Interactions in the Environment, Grade 8 – Water Systems; Geography: Grade 7 – Natural Resources; Science – Biology: Grades 9 and 10*

## UNDERSTANDING BIODIVERSITY AND GREENSPACES

### Animal Ecology

This program introduces participants to the basics of animal ecology, including such concepts as ecosystem, habitat and the provision of basic needs, trophic levels, food webs, energy transfer and predator/prey relationships. Concepts can be reinforced through discussion, written responses in booklets, and active outdoor Project WILD simulations. Learners will have an opportunity to participate in a guided nature hike to look for animals and their evidence. An emphasis is placed on the impacts of humans on wildlife, and what participants can do to protect, maintain and enhance animal habitats in their own communities.

*Curriculum connections: Science & Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment*

### Bird Study

Learners will gain an understanding of, and appreciation for the many species of birds that live and migrate through this part of southern Ontario. Participants are introduced to bird adaptations with hands-on research indoors. They will also learn the basics of identification, noting that sounds, sizes, shapes, colours, and habitats can all aid in bird classification. Field investigations will utilize bird guides and binoculars, as participants experience a birding expedition around the property. With the change of seasons, certain bird management activities can be incorporated into the lesson such as winter bird feeding or spring/fall nesting box maintenance and monitoring.

*Curriculum connections: Science and Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity*

### Getting the Dirt on Soils

Students will be introduced to the basics of soil science. An introduction will deal with soil formation and profile development, as well as soil composition (abiotic and biotic). Field work will involve a comparative site study of selected soils within the Lake St. George property. Soil samples may be collected for testing using Lamotte soil chemistry kits. Emphasis will be placed on the importance of soil conservation and healthy soils from ecological, social and economic perspectives throughout the program.

*Curriculum connections: Science and Technology: Grade 3 – Soils in the Environment*

### Insect Study

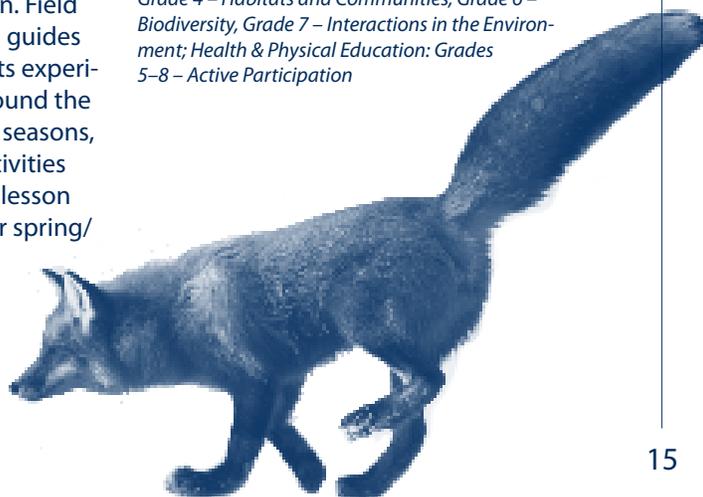
The fascinating world of insect life will be introduced to the participants. Simple field guides and keys will be used to identify and classify species encountered on a hike of selected habitats on the property.

*Curriculum connections: Science and Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment*

### Instincts for Survival

Learners will be involved in a simulation of predator-prey relationships while they play an active, outdoor food web game. After an introduction to set the parameters of the simulation, participants will assume the role of specific animals that are attempting to survive. Follow-up discussions involve the learner in gaining an understanding of animal ecology, as well as the impact of human activities on wildlife populations.

*Curriculum connections: Science & Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment; Health & Physical Education: Grades 5–8 – Active Participation*



## Rocks and Minerals

This program is one that uses a series of both indoor and outdoor activities to introduce students to the characteristics and properties of Ontario's rocks and minerals, and the importance of metals and mining. Students will have the opportunity to investigate and test the physical properties of mineral samples, and discuss environmental impacts of mineral extraction.

*Curriculum connections: Science & Technology: Grade 4 – Rocks and Minerals*

## Tree Identification

Participants will brainstorm the uses of trees by people and natural ecosystems. They will discuss characteristics that can be used to identify trees, and then create their own key using a combination of new and familiar terminology. In the field, participants will go on a self-guided tour with a map and apply their identification key to selected tree species.

*Curriculum connections: Social Studies: Grade 4 – Canada's Provinces, Territories, and Regions; Science & Technology: Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment; Geography: Grade 7 – Natural Resources, Grade 8 – Economic Systems*

## GEOGRAPHIC INQUIRY AND SKILLS

### Air Photo Interpretation

Each participant will receive an air photograph and learn how to 'read it,' by interpreting the subtle differences between various shapes, tones and textures. During a hike, staff will aid learners in identifying the various habitats and vegetation types, ensuring that the students are able to extrapolate information for areas that are not actually visited on the hike. After returning to the Field Centre, learners will transfer data taken during the hike to a base line drawing, effectively creating their own map.

*Curriculum connections: Geography: Grade 7 – Themes of Geographic Inquiry, Patterns in Physical Geography, Grade 8 – Patterns in Human Geography*

### Colour Map Orienteering

This is a more physically demanding and competitive orienteering challenge that sees the students traveling

in small teams with a map throughout the Lake St. George property, searching for check points.

*Curriculum connections: Geography: Grade 7 – Themes of Geographic Inquiry, Patterns in Physical Geography; Health & Physical Education Grades 5–8 – Active Participation*

### Cooperative Orienteering

This is an excellent program to introduce participants to orienteering, while helping them to develop both basic map reading skills and group cooperative skills. Participants are divided into 12 teams and each team is provided with a map of the dorm-to-dorm area of the Field Centre. Each team will need to locate and punch 12 orienteering controls. The challenge is that any given map only shows the location of one control, so to be successful in the activity, teams must cooperate by sharing information. The goal is to achieve the highest class score possible by combining the scores from each of the 12 teams.

*Curriculum connections: Geography: Grade 7 – Themes of Geographic Inquiry, Patterns in Physical Geography; Health & Physical Education: Grades 5–8 – Active Participation*

### Find Your Way Mapping

This is a short activity conducted early during a group's visit that helps participants to become familiar with the dorm-to-dorm area of the property. Working in small teams, participants use a sketch map to visit various lettered locations and then match the letters with clues found on the back of the map. The letters in the correct spots reveal the name of a person who is important to Lake St. George.

### Geocaching

Learners will use the handheld GPS units provided to find geocache sites on the property. Review of basic screen navigation, waypoint input and following the compass screen will be completed before the teams leave 'home base.' Participants will also review use of a compass and a map of the area which will accompany them during their challenge. May the best team win!

*Curriculum connections: Geography: Grade 7 – Themes of Geographic Inquiry, Patterns in Physical Geography; Health & Physical Education: Grades 5–8 – Active Participation, Grade 9 – Geography of Canada*

## Introduction to GPS

Students are first introduced to Global Positioning System (GPS) by means of a PowerPoint presentation. They will learn how this satellite-based technology works, what it can be used for and how it relates to topographical maps. They will also gain experience using the Universal Transverse Mercator (UTM) coordinate system. Outside, students will be shown how to use handheld GPS units to navigate. The program culminates with an advanced orienteering challenge that has students working cooperatively in small teams, using GPS units to navigate to checkpoints. *GPS GreenCheck Certification (full day) is available for an additional fee.*

*Curriculum connections: Geography: Grade 7 – Themes of Geographic Inquiry, Patterns in Physical Geography; Health & Physical Education: Grades 5–8 – Active Participation, Geography: Grades 9,11, and 12.*

### Photo Orienteering

In this more advanced orienteering activity, learners have the opportunity to develop their compass and map-reading skills. Working in small teams, they will be given a photograph of a particular spot on the property. The team must travel to this spot, take a compass bearing, and mark the location on a map using a specific symbol. The team then returns to a check-in destination where they receive points and a new photograph. Learners aim to complete as many photographs as possible in the time allotted, while maintaining the highest accuracy in their compass and map work.

*Curriculum connections: Geography: Grade 7 – Themes of Geographic Inquiry, Patterns in Physical Geography; Mathematics: Grades 5–8 – Geometry & Spatial Sense; Health and Physical Education: Grades 5–8 – Active Participation*

### Treasure Hunt

"Arrgh matey!" Participants are told a legend about pirate activity on the Lake St. George property. They learn that a treasure chest and partial map have been uncovered, but that the key to unlock the chest has yet to be located. Participants work to complete the 'pirate's map,' while learning to use a grid coordinate system, legend with symbols and compass directions. Working in four groups, they then use the map in conjunction with written

clues to travel the property in search of keys. The correct key will open the chest and reveal treasure of immeasurable value!

*Curriculum connections: Social Studies: Grade 4 – The Provinces and Territories of Canada*

## HISTORY AND CULTURAL STUDIES

### Cemetery Study

At first glance, cemeteries are often considered places of peace, places of mystery and places of sadness. This study looks at the research value of visiting a cemetery. By reading headstones, students can collect information and look for trends such as the age at death, year of death and month of death. Symbolism as it changes throughout defined periods in history will also be reviewed. When weather conditions permit, students will be encouraged to create rubbings from the headstones. The history of Lake St. George can also be explored through this visit. *Please note that there is an additional fee for bus transportation to and from the cemetery.*

*Curriculum connections: Social Studies: Grade 3 – Early Settlers in Upper Canada, Grade 5 – Early Civilizations, Grade 6 – First Nations Peoples and European Explorers; History: Grade 7 – New France, Grade 8 – British North America*

### Coueurs de Bois

This program introduces participants to the lifestyle of the “Runners of the Woods,” the early French settlers who traded with the First Nations Peoples for furs. After a brief introduction to their history and a discussion of the importance of the beaver pelt, learners participate in an orienteering and bartering activity that simulates a season as a Coueurs de Bois. Learners’ abilities to use their maps and make good trades will determine their success as a Coueurs de Bois.

*Curriculum connections: Social Studies: Grade 6 – First Nations Peoples and European Explorers; Geography: Grade 7 – Themes of Geographic Enquiry; History: Grade 7 – New France; Health & Physical Education: Grades 5–8 – Active Participation*

### Native Studies

Students will learn about the history of Canada’s First Peoples, including their migration from Northeast Asia,

some Native cultural features and a window into their daily life as suggested through examination of actual artifacts. The outdoor component may include activities that simulate the important traditions of hunting, gathering and trading, the use of fire bows, baking bannock (bread) over a fire and/or Native games.

*Curriculum connections: Social Studies: Grade 3 – Early Settlers in Upper Canada, Grade 5 – Early Civilizations, Grade 6 – First Nations Peoples and European Explorers*

### Sugar Bush Demonstration

Although the Lake St. George property does not contain a large Sugar Maple forest, students will be shown how to set taps on several maple trees and be introduced to some of the historical aspects of maple sugaring.

*Curriculum connections: Social Studies: Grade 6 – First Nations Peoples and European Explorers; Geography: Grade 7 – Natural Resources*





### SUSTAINABLE COMMUNITIES: ACTION AND UNDERSTANDING

#### Development Dilemma – Town Hall Meeting

Students, have your say! A mock town hall meeting will have all participants defending their position on a hypothetical development opportunity here at Lake St. George. They will need to research an assigned role (e.g., homeowners, developers, business leaders and environmental activists) so that they can portray and defend their position on this development, as well as question others about their position. Students will have timed speeches and, in the end, decide as a group if the proposed development should continue. Teachers, be ready to assume the role of moderators!

*Curriculum connections: Science: Biology – Grade 9, Environmental Science – Grade 11; Canada and World Studies: The Environment and Resource Management – Grade 12*

#### Eco-footprint

This program introduces students to the concept of an ‘ecological footprint.’ Through discussion, they will identify the various streams of waste produced by our daily activities.

Then, during an information scavenger hunt, students will discover how Lake St. George manages five different waste streams. Eco-footprint calculators are available to teachers for follow-up back in the classroom.

*Curriculum connections: Geography: Grade 7 – Natural Resource; Science & Technology: Grade 8 – Systems in Action*

#### Environmental Impact Studies

This highly academic and integrated program will encourage participants to use their analytical skills and decision-making abilities to successfully determine the effects of urbanization on the natural community. After a brief introduction to the site, participants will use base mapping skills, data collection skills, research abilities and powers of observation to gain sufficient knowledge to determine the impact of human activities. Participants may be required to hypothesize on the effects of road construction, increased home or cottage building, farming impacts or the consequences of golf course maintenance. Presentations (written or oral) are at the discretion of the visiting staff.

*Curriculum connections: Science: Biology – Grade 9, Environmental Science – Grade 11; Canada and World Studies: The Environment and Resource Management – Grade 12*

#### Stewardship Project

Choose from a variety of hands-on stewardship projects such as trail maintenance, tree planting, and the building of bird, butterfly or bat boxes. Availability will depend upon the particular time of year, as well as the specific projects currently underway at the Field Centre. Students will be introduced to the specific project and its benefits, and have explained all procedures and safety information. They will then work in small groups to complete their project. *Some projects may involve an additional fee for materials.*

### RECREATION AND ACTIVE LIVING SKILLS

#### Canoeing

This program provides an introduction to the basics of lake-water canoeing. Students will learn about the parts of a canoe, choosing an appropriate paddle, and the safety equipment that is required. Instructors will then demonstrate how to properly get into

a canoe, basic strokes and necessary steps for a safe canoeing experience. Students will have an opportunity to practice their skills as they paddle around the lake basin. Instructors are certified by the Ontario Recreational Canoeing and Kayaking Association (ORCKA) and lifeguards are present for the duration of the program. All equipment, including personal floatation devices, will be provided.

*Curriculum connections: Health and Physical Education: Grades 4–12*

### Cross-country Skiing

Learners will be introduced to the essentials of cross-country skiing. An indoor session touches on the history of the sport, equipment requirements, proper sizing, and safety considerations. Skis, boots and poles are then distributed, followed by a group lesson which will present a step-by-step progression of the techniques that will allow the learner to enjoy a cross-country ski on the property. Learners are encouraged to incorporate cross-country skiing into a healthy, active lifestyle.

*Curriculum connections: Health & Physical Education: Grades 4–8 – Fundamental Movement Skills, Active Participation*

### Group Dynamics

Learners work in groups to solve a variety of defined challenges. Team success depends upon a combination of cooperation, communication, and physical and mental efforts from all individuals. Each group dynamic is designed to build a cooperative group spirit and, at the same time, instill self-confidence in the learner and mutual respect for team-mates. This program may include Low Ropes Challenge Course activities.

*Curriculum connections: Health & Physical Education: Grades 4–8 – Fundamental Movement Skills, Active Participation*

### Mini Olympics

Participants will enjoy taking part in a variety of non-traditional Olympic events. The class will be divided into teams, with each team choosing a name and cheer or slogan. A brief indoor period is given for teams to create their own flag and then the games begin! Weather pending, activities are

run at a combination of indoor and outdoor locations, and may include water-based events. Games focus less on skill and athletic ability but, rather, are designed to be a bit ‘goofy’ while encouraging cooperation and fun.

*Curriculum connections: Health & Physical Education: Grades 12*

### Nature Hike

Touch, taste and smell each season as a member of our staff leads students on a hike through the different habitats on the property. Students may also participate in games and active simulations taken from the *Project Wild Activity Guide*.

*Curriculum connections: Science & Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment*

### Snowshoeing

In this program, the learner is introduced to the basic skills of snowshoeing. An introduction covers the history of the snowshoe, as well as the essential techniques needed to enjoy a snowshoeing trail walk. This program is most dependent upon suitable snow conditions.

*Curriculum connections: Health & Physical Education: Grades 4–8 – Fundamental Movement Skills, Active Participation, Grade 6 – First Nations Peoples and European Explorers*

### Wilderness Survival Skills

Working in a cooperative team situation, learners will understand and practice some important aspects of basic survival techniques in the outdoors. Each team will be challenged to construct a small cooking fire and/or shelter from natural materials. Key elements of this lesson stress a ‘no-trace’ camping philosophy, as well as the safety aspects of preparation and planning for a successful outdoor experience.

*Curriculum connections: Science & Technology: Grade 5 – Forces Acting on Structures and Mechanism; Health & Physical Education: Grades 4–8 – Active Participation*

## NATURE APPRECIATION AND AWARENESS

### Dry Print Art

Using natural materials collected outside, participants will create designs

while thinking about artistic principles such as shape, pattern and texture. These designs are then transferred to special paper through exposure to light and a developing agent. By adding finishing touches such as frames, young artists create a unique souvenir to take home. Some creative writing in the form of poetry may also be incorporated into the final product.

*Curriculum connections: The Arts – Visual Arts: Grades 4–8*

### Hemp Bracelets

The craze is still alive! Participants will work with natural hemp cord to make a bracelet, key chain or zipper pull. They are taught how to knot the hemp to create either a spiral or flat appearance, as well as how to add beads in different arrangements to create a personal touch. Upon completion, young artists have a unique souvenir to take home.

### Nature Art

Young artists are encouraged to look at the environment from a different perspective. Learners are introduced to different styles and techniques used to create impressions of nature. A combination of sketching, imprinting, creative writing, water colours and other techniques can be explored. Participants produce great souvenirs of the outdoor experience.

*Curriculum connections: The Arts – Visual Arts: Grades 3–8*

### Nature Photography

Learners will be introduced to, and develop awareness of, six key concepts in photography: lighting, colour, natural framing, rule of thirds, perspective and people in nature. These concepts will then be further explored through viewing a slideshow, solidifying the learners’ understanding of these key ideas. After a brief introduction to the Field Centre’s cameras, groups of four will share a camera to take several photos, which will be printed and returned for follow-up.

*Curriculum connections: The Arts – Visual Arts: Grades 4–8*

### Plaster Animal Sculptures

Explore your creative side in 3-D! Students will have the opportunity to try their hand at sculpting a creature using a four-step approach. The process involves sketching, forming with aluminum foil, plastering and painting. Each participant is then able to take home their masterpiece as a souvenir. *There is an additional fee for materials.*

*Curriculum connections: The Arts – Visual Arts: Grades 4–8*

### Tree Medallions

Participants will create their own medallions made from 'tree cookies.' First, they will design and sketch nature-themed pictures and creative expressions of their name on paper. Their work is then transferred to tree cookies using pencil crayons. Finishing touches include the addition of a lacquer to protect their work and gimp to allow the medallion to be worn around the neck.

*Curriculum connections: The Arts – Visual Arts: Grades 4–8*

## EVENING PROGRAMS

### Astronomy

Learn the legends of the night sky! In this program, learners will embrace both the science and the mysteries of a starry night. Elements of the celestial world will be introduced, as well as the stories that help learners remember various constellations. With a clear evening, star-gazers will be able to take a short hike to view the night sky.

*Curriculum connections: Science & Technology: Grade 6 – Space*

### Bat Program

The evening begins with a question and answer period that helps to debunk myths surrounding bats. A video presentation introduces some of the world's interesting bat species, and highlights the importance of bats and threats to their survival, while an active game simulates how bats navigate and find food by echolocation. Specific information will be provided regarding the natural history of common Ontario bats. The program will end with an exciting evening walk to see Little Brown Bats.

*Curriculum connections: Science & Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment*

### Campfire and Campfire Leadership

Many groups enjoy the tradition of ending their visit with us at the campfire circle. This evening program will provide participants with the skills, techniques and resources needed to lead a successful, fun-filled and inclusive campfire. Participants will prepare, practice and deliver one or more campfire components such as an opening, poems, skits, songs, stories and games. They will also have an opportunity to roast marshmallows and reflect on their trip. An emphasis is placed on safety considerations. *Please remember to bring your own marshmallows.*

### Clue Murder Mystery

Participate in an environmental murder mystery based on the board game *Clue!* Student detectives will work together in small groups to come up with a strategy and use the process of elimination in determining who committed the crime, where the crime was committed and what type of weapon was used.

### Current Environmental Issues

Students will enjoy this one-hour program focused on a current environmental topic. Through presentations, activities and discussions, students will have the opportunity to explore a current environmental issue. Groups may choose from such topics as climate change, invasive species, water conservation, renewable energy, habitat loss through development and others.

### Eco-Jeopardy

Modeled after the popular television game show, participants will be divided into teams and challenged in a fun and interactive manner to answer environmentally themed questions. Categories include such topics as wildlife, water, waste minimization, energy and climate change, and are meant to raise awareness of human impacts on the environment.

### Environmental Stock Exchange

This activity shows students that public opinion and environmental issues can have an impact on business. Participants will realize that decision-making can be risky, even with some knowledge in subjects like the stock market.

### Evening Hike

Participants will have the opportunity to enjoy the Lake St. George property under the cover of darkness while on a guided hike. They will use their senses to the best of their abilities and develop an appreciation for the specialization of the nocturnal world. With consideration given to theme, weather and time, possible activities include owl-calling, solo walks/sits, moon mints, chalk-sketching, colour-vision testing, astronomy investigations, evening games, sound/smell recognition, and/or storytelling. By experiencing a variety of safe activities, it is hoped that some of the fears associated with the darkness will be relieved.

*Curriculum connections: Science & Technology: Grade 6 – Space; Health & Physical Education: Grades 4–8 – Active Participation*

### Frog Watch

The evening begins with story-telling as a means of introducing learners to the role that amphibians play as indicators of environmental health. After learning to identify the calls of common Ontario frog species, participants will hike to a wetland and monitor frog populations by collecting data on calls heard there. By submitting this information to the *FrogWatch Ontario* website, participants will also contribute to data on global climate changes. An emphasis is placed on the importance of wetlands, including biodiversity and protection.

*Curriculum connections: Science & Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment*

### Legends of Lake St. George

A slideshow introduces participants to the history and influence of the St. George family, specifically Henri Quetton de St. George, the first resident of the property and after which the site is named. The histories of other

families who once resided here, such as Davies and Snively, are also told. Participants will learn of the purchase of the property by Toronto and Region Conservation and the subsequent opening of the Lake St. George Field Centre in 1979. The program then leads into an outdoor storytelling hike describing “strange happenings” that have occurred around the property over the years.

### Owl Prowl

The evening begins with an introduction to common owls found throughout Ontario, Canada and specifically at Lake St. George. Participants learn about owl adaptations through games and a video, and investigate the diet of a barn owl by conducting a pellet dissection. Participants also learn which owl species are at risk in Canada as they discuss threats to owl survival such as habitat loss and pollution, and what actions they can take to protect these magnificent creatures. The evening culminates in a hike into the forest to call and listen for owls.

*Curriculum connections: Science & Technology: Grade 4 – Habitats and Communities, Grade 6 – Biodiversity, Grade 7 – Interactions in the Environment*

### Scavenger Hunt

Participants work cooperatively in small teams to collect everything on their Scavenger Hunt sheet, including information and non-living items from nature. This activity provides a great opportunity for participants to have fun and be active outdoors, while gaining familiarity with the dorm-to-dorm area of the Lake St. George property, and some of its plants and animals.

*Curriculum connections: Health & Physical Education: Grades 4–8 – Fundamental Movement Skills, Active Participation*

### Wide Games/Recreation

Participants will have an active and enjoyable set of both indoor and outdoor games and challenges to bring out the best in any group! Field Centre staff will customize challenges based on the areas of focus identified by the group leader. Activities may span the areas of group/cooperative, athletic/sport, trust, recreational or just plain fun!

*Curriculum connections: Health & Physical Education: Grades 4–8 – Fundamental Movement Skills, Active Participation*

### Winter Recreation (tubing and broomball)

A highlight of a winter visit! Participants will have several chances to travel down a small hill on a rubber inner-tube, either alone or in groups of two or three. They will also have an opportunity to play broomball—a spin on hockey that uses a broom and a ball rather than a stick and a puck—and is played on a gravel surface instead of ice. Both activities are done in a safe and cooperative manner, encouraging participants to have fun, be active and enjoy nature in winter.

*Curriculum connections: Health & Physical Education: Grades 4–8 – Fundamental Movement Skills, Active Participation*

*Last updated January 2013*

