

# Grade 6 Teachers

## Core Curriculum Based Programs – ALL YEAR Highlands O.E.C.

An Experiential Learning Centre on over 100 Acres of Niagara Escarpment,  
a UNESCO World Biosphere Reserve!

Let us help meet your core curriculum needs!

At **Highlands Outdoor Education Centre** your class will have a fun-filled time while you complete specific expectations of the Ontario Grade 6 Curriculum. We offer a great selection of dynamic programs!

Why not make the most out of your trip and combine two half-day programs to create a full day of hands-on experiential learning! During the winter, make one of the two programs Cross-country skiing or snowshoeing.

All programs and activities at **Highlands Outdoor Education Centre** have been cross-referenced to the Ontario Curriculum for your convenience and cover a wide range of both specific and general expectations from strands. All programs incorporate Language requirements through writing, reading, oral and visual communication components that are inherent in all of our on site activities. All programs are dynamic and adaptable to the group.

Bag lunches are always welcome.  
Cold and hot drinks are available for purchase.

Program Curriculum Cross Reference GRADE 6	Science and Technology	Social Studies	The Arts	Health and Physical Education
Legend				
• Program meets one or more specific expectations				
○ Program meets 4 or more specific expectations				
☐ Program meets 8 or more specific expectations				
<b>Programs</b>				
Biodiversity – pond study	☐			•
Wayfaring (Map Work –no compass)		•		○
Compass Orienteering	☐			•
Survival on the Niagara Escarpment	○			•
Electricity and Electrical Devices	☐			
Properties of Air and Principles of Flight	☐			
Cross-country skiing or snowshoeing				•

**Skilled Interpretative Staff – bilingual (French) instructor available on request**  
**Learning Centre – Lunch Room and Washrooms**  
**Facility is Wheel Chair accessible – ATV carrier on site**

**PROGRAMS:** Full Day: Spring/Fall: \$13.50 each      Half Day: Spring/Fall: \$10.00 each  
Winter: \$18.00 each (includes ski/snowshoe rentals)  
(2 Programs –4 Hrs. Instruction)      (1 Program – 2 Hrs. Instruction)

**Teachers and Volunteers – FREE!!**



### Advance Booking is Required!

Highlands Nordic Inc. - located 11km south of Collingwood  
1182 Conc 10 South, Clearview Township  
Box 110, Duntroon, ON, L0M 1H0

**Phone or Fax:** (705) 444-5017 or 1-800-263-5017

**Email:** [hoec@highlandsnordic.ca](mailto:hoec@highlandsnordic.ca)

**Web:** [www.highlandsnordic.ca](http://www.highlandsnordic.ca)

## Highlands Outdoor Education Centre – PROGRAM OUTLINE Gr. 6 2016/2017

Note: Proper footwear, rubber boots (for Biodiversity or rainy days) or closed toed shoes for fall/spring, winter boots for snow season, is essential for students, teachers and parent volunteers to maximize the learning potential and related enjoyment of this program

### **PARENT VOLUNTEERS ARE REQUIRED FOR ALL PROGRAMS (Minimum 1 adult to 8 students).**

#### **1. Biodiversity – outdoor - Fall/Spring**

Students will visit a mini-farm, forest and beaver pond, to catch a variety of living organisms (microscopic and macroscopic) . They will then classify and identify these organisms using a dichotomous key, microscopes and a TV video view finder. Animal skulls will be analysed, focussing on the adaptations of teeth (herbivore, omnivore, carnivore) as will the variations in plant life found in an aquatic habitat. (rubber boots are essential for this program)

#### **2. Wayfaring (Map Work – no compass) – outdoor – ALL YEAR**

Students will participate in a map reading program building on skills learned as they venture through three progressively challenging levels of maps. Students will only advance after successful completion of each stage.

#### **3. Compass Orienteering – outdoor/indoor – ALL YEAR**

Students will learn the basic design and parts of the compass. After reviewing the 360 degrees in a circle, North, South, East and West, students, will use a compass to plot a short, basic four point course. This course will then be mapped (sketched) and shared with another group. Increasingly longer and more complex courses will be plotted and mapped, depending on the level of the students.

#### **4. Survival on the Niagara Escarpment (Biodiversity) – outdoor – ALL YEAR**

Students will play a role in the food chain as it may occur on the Niagara Escarpment. Our version of the survival game shows the interdependence of all organisms within a local forest community. It examines food chains, food webs, and shows the concept of energy flow within an ecosystem. Students will experience both the struggle all organisms on the escarpment must go through, and the impact humans can have on wildlife populations, food chains, and ecosystems.

#### **5. Electricity and Electrical Devices – indoor – ALL YEAR**

Through a series of dynamic workstations, students will use a variety of materials to discover the basics of electricity. Stations include: constructing series and parallel circuits, static electricity, making a battery, energy efficient light bulbs, testing conductors and insulators, testing wattage used by home electrical devices (e.g. hair dryer) and a mini-wind generator.

#### **6. Properties of Air and Principles of Flight – indoor – Fall/Spring**

Students will investigate the principles of flight by: comparing the adaptations of birds to those of planes, experimenting with thrust, drag and trajectory with a water bottle/air rocket, explore pneumatics (air pressure), investigate the properties of air, construct paper airplanes with flaps and rudders , and use a model wind tunnel to discover the effect of drag on different shapes.

## **General Information**

- All Programs must be reserved in advance and are designed as half-day sessions for a minimum of 15 students per program.
- Two half-day programs make an exciting full-day program.
- For December – March, combine one, half-day program, with half-day cross-country skiing or snowshoeing  
– See **Welcome to Winter Programs Flyer**
- Programs run rain or shine (unless extreme weather conditions are forecasted).
- Supervisors are expected to remain with their group throughout the visit (program/lunch) and are responsible for discipline