

# Grade 5 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 5 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 5 Legend	Science and Technology	Social Studies	The Arts	Health and Physical Education
<ul style="list-style-type: none"> <li>• Program meets one or more specific expectations</li> <li>○ Program meets 4 or more specific expectations</li> <li>□ Program meets 8 or more specific expectations</li> </ul>				
<b>Programs</b>				
Survival on the Niagara Escarpment				•
Wayfaring (Map Work)	□	•		•
Conservation of Energy and Resources	□			
Forces Acting on Structures and Mechanisms	□			
Trappers and Traders		□		•
Cross-country skiing or snowshoeing				•

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

**PROGRAMS:** Full Day: Spring/Fall: \$14.00 each      Half Day: Spring/Fall: \$10.00 each  
 Winter: \$20.00 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 11 km south of Collingwood  
 1182 Conc 10 South, Clearview Township  
 Duntroon, ON, L0M 1H0

**Phone:** (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.5 2017/2018

Note: Proper footwear, rubber boots (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 per 8 students)**

### **1. Survival on the Niagara Escarpment – 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.

### **2. Wayfaring (Map Work) – 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. Conservation of Energy and Resources – indoor – ALL YEAR**

This interactive program is designed to move students through a series of stations: water turbine, wind turbine, calculate wattage used by home electrical appliances, solar panels, compare energy input/output of various types of light bulbs, in order to develop an understanding of the various forms and sources of energy and the ways in which energy can be transformed and conserved. Alternative forms of energy, energy usage, and differences between non-renewable and renewable energy sources are all examined.

### **4. Forces Acting on Structures and Mechanisms – indoor – spring/fall**

Students will develop an understanding of the effect of forces acting on different structures and mechanisms. Rotating through a series of interactive centres, students will investigate: air pressure, compression (using a vice) and tension (using elastics) use of multiple pulleys to lift weights, types of bridges (beam, arch, cantilever, suspension), and types of pillars and beams.

### **5. Trappers and Traders (Full Day Program) – indoor/outdoor – ALL YEAR**

This program combines wayfaring (mapping), problem solving, and team work skills while role playing the life of a fur trader during the 1700's. Students will be required to work together to find "furs" on our wayfaring course, trade their furs for "beaver" money at our fur exchange, then buy items from the trading post, that they will need to survive the winter. Which of your students will survive?

## **General Information**

- Programs must be reserved in advance and are designed as half-day sessions except where indicated, 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