

Highlands Outdoor Education Centre – PROGRAM OUTLINE Gr. 7 2017/2018

Note: Proper footwear, rubber boots (for Farm and Pond 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 SUGGESTED FOR ALL PROGRAMS (we suggest 1 adult per 8 students).

1. Patterns in Physical Geography (Physical Patterns in a Changing World) – indoor/outdoor – Fall/Spring

Students will identify the factors, that produce patterns in physical geography through a series of dynamic, interactive demonstrations. They then proceed outside to the Niagara Escarpment, overlooking the Nottawasaga River Watershed to identify and map natural physical features and designated human land uses, commercial, agricultural and recreational. Students will use a GPS unit to record the elevation at selected locations.

2. Bus Tour to Walker Aggregates Quarry (Natural Resources) – indoor/outdoor – Fall/Spring

After an introduction on 'how humans acquire, manage, and use natural resources', students will visit a working rock quarry (mining), Walker Aggregates Quarry (3 minutes away). During this tour, students will see firsthand, a mining operation and the ways in 'which technology has affected our use of natural resources with respect to their management, extraction, processing and marketing'.

Your School bus transportation is required to stay with your group for the whole day in order to transport the students to the Quarry. On site, a guide from Walker Aggregates will join us on the bus to give an informed account of the operations and to answer any questions.

3. Survival on the Niagara Escarpment (Interactions in the Environment) – 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.

4. Farm, Pond and Forest (Interactions in the Environment)- outdoor- Fall/Spring

Using a hands-on approach, students will explore a variety of ecosystems, including a working mini-farm, active Beaver Pond and a forest floor. Students will study the interactions between living organisms and their environment including links between biotic and abiotic elements. Students will also explore sustainability, limiting factors and human influence.

5. Forestry (Interactions in the Environment and Natural Resources) – indoor/outdoor – Fall/Spring

Students will focus on a forest ecosystem, investigating the interactions between the biotic and abiotic components. Students will also participate in conducting a forest inventory as used by ACER (Association of Canadian Educational Resources – www.acer-acre.org. www.measureup.ca). This will include an overview of plot design, identifying trees, measuring diameter and height. Clinometers, diameter tapes, id charts and recording sheets are supplied.

6. Wayfaring (Map Work – no Compass) – indoor/outdoor – ALL YEAR

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

7. Compass Orienteering – indoor/outdoor – ALL YEAR

Students will be introduced to how a compass works then use the compass to plot a short, basic four point course. This course will then be mapped (sketched) and shared with another group. Program adapted to the ability of the students.

8. Team Dynamics – outdoor or indoor– Fall/Spring

This program consists of co-operative games that promote leadership, trust, verbal/non-verbal communication, problem solving and team skills.

9. 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) they will need to survive the winter.

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