



Hamilton
Conservation
Authority

A Healthy Watershed for Everyone

2019 - 2020

Program Guide & Booking Information

Outdoor Environmental Education

Secondary Schools

Grades 9 – 12



Phone: (905) 627-1233 Fax: (905) 627- 9722

Email: hcaenvd@conservationhamilton.ca

*Connect your class to the out of doors through year round outdoor
Environmental Education Programs offered by the Hamilton Conservation Authority.*



BOOKING REQUEST: 2019-2020

OUTDOOR ENVIRONMENTAL EDUCATION FIELD TRIPS

**Complete Booking Request Form and submit by either Fax or Email to:
Environmental Education Program Coordinator, Hamilton Conservation Authority**

Fax: 905-627- 9722 Phone: 905-627-1233 Email: hcaenvd@conservationhamilton.ca

Note:

- Effective January 1, 2020 Program Cost: **\$350** (plus HST) for a half-day, 2 hour program. Based on a maximum of 30 students per class.
- Additional per person fee in effect for classes exceeding the maximum class size
- A \$50 non-refundable deposit (payable by credit card) is required at the time of booking with the balance due two weeks prior to your booking date

SCHOOL			
SCHOOL ADDRESS			
TEACHER CONTACT & EMAIL			
SCHOOL PHONE & EXTENSION			
GRADE(S)			
NUMBER OF STUDENTS <i>Additional fees apply for classes exceeding the maximum class sizes.</i>			
ENVIROMENTAL EDUCATION PROGRAM CHOICE (ex. Wildlife Ecology) <i>Please select a back-up program</i>	First Choice	Second Choice	
	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	
OUTDOOR ACTIVE PROGRAM CHOICE (Ex. Capture the Flag) <i>Please select a back-up program.</i>	First Choice	Second Choice	
	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	
DATE CHOICES <i>(Indicate your preferred dates)</i>	Date Choice #1	Date Choice #2	Date Choice #3
	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
STUDENTS REQUIRING SPECIAL CONSIDERATION <i>Please let us know of any students requiring special consideration. We will try to modify our programs accordingly.</i>			

- x **PLEASE NOTE:**
- x **(IIHFWLYH-DQXDU\$URUJDP&RVWLV** (plus HST) per class for a half day, two hour program (maximum 30 students)
- x **Cancellation Policy:** A cancellation fee of \$150 will apply if the school cancels the trip less than three weeks (15 office days) prior to the scheduled field trip and does not re-schedule the date within the same school year.
- x Program participants are expected to dress appropriately for the weather & outdoor conditions.
- x For safety reasons sandals, moccasins or thin, flat shoes are not recommended. Wear running shoes or hiking boots.
- x While we make every effort to accommodate students with special needs, it is not always possible given our rugged terrain.



PRE-TRIP TEACHER INFORMATION

- A *Booking Confirmation*, along with *Directions* and *Pre-Trip Information* will be sent via email within three business days of receiving your booking request.
- A \$50 non-refundable deposit (*payable by credit card*) is required at the time of booking.
- Payment of balance owing (*payable by credit card*) is due two weeks prior to your visit.
- Our programs run rain or shine. During inclement weather, programs will be modified with a greater portion of the program conducted indoors.
- In extreme weather, HCA staff will contact schools in advance to make alternative arrangements.
- Program participants are encouraged to bring litter-less lunches. Supervision during the lunch break is the responsibility of the classroom teacher.

Our Education Team Will:

- Schedule, contact and confirm class field trips to the Dundas Valley Centre using email.
- Provide teachers with a **Trip Confirmation Letter** and **Pre-Trip Preparation Information**.
- Lead the programs, with the active assistance and support of the classroom teacher and volunteers in attendance.
- Inform teachers by telephone of the possibility of program cancellation (ie) due to extreme weather.
- Provide program instruction, equipment, first aid & emergency communications.



SECONDARY PROGRAMS

ENVIRONMENTAL EDUCATION PROGRAM GUIDE 2019-2020

Note: Each program is approximately 2 hours in length

Specialist High Skills Majors: The Environment

- All programs support requirements for the *Specialist High Skills Majors Program*. Note: Certificates are available for students that successfully complete the SHSM course requirements at an additional cost.

Habitat Analysis

Evaluate the sustainability of two natural communities by analyzing the biotic and abiotic elements in each. Determine how these factors influence the relationships between organisms. Discuss the limiting factors that affect the distribution of biotic populations.

Curriculum Links: Science & Technology: Sustainable Ecosystems; Human Activity; Climate Change

Forest Ecology

Learn how to identify deciduous and coniferous trees of the area... Collect data on tree height, width and species to determine the health of a forest ecosystem. Discover the importance of forest ecology in our everyday lives. Investigate limiting factors that affect sustainability.

Curriculum Links: Science & Technology: Sustainable Ecosystems; Human Activity; Climate Change.

Wildlife Ecology

Explore the relationship between biotic (living) and abiotic (nonliving) components in an environment. Understand the importance of various ecosystems, niche and their key components. Participate in activities to explore concepts such as; camouflage predator/prey relationships. Gain knowledge about local animal species. Curriculum Links: Science & Technology: Sustainable Ecosystems; Human Activity; Climate Change.

Stream Ecology: *Healthy Streams, Healthy Communities (Gr 11 & 12 only)*

***Note:** In order to minimize environmental impacts on the streams, the number of in-stream aquatic program is limited by our ecologist.

Through active participation in sampling and inventory techniques, students will conduct an analysis of an aquatic environment. Students will collect Benthic Macro invertebrates (BMI's) from a shallow stream to determine stream quality. Identify key BMI's that may indicate various pollution levels of a stream. Students will use a dichotomous key to identify species and gain an understanding of aquatic indicator species.

Curriculum Links: Science & Technology: Sustainable Ecosystems; Human Activity; Resource Management; Climate Change. *Fall / Spring*

Conservation Projects:

An opportunity for students to participate in hands-on stewardship and conservation projects. Projects are seasonal and may include: planting of native trees & shrubs; establishment of a rain garden; creation of brush shelters to improve wildlife habitat.

Curriculum Links: *Science & Technology Life Systems Health & Physical Education: Active Participation*

- Planting of native trees & shrubs
- Construction of brush piles, nesting boxes and feeding stations
- Rain Water Harvesting & Rain Garden Project
- Pollinator Garden
- Removal of Invasive Species
- Note:** Projects vary according to need and season



OUTDOOR ACTIVE PROGRAM SELECTIONS: 2019-2020

- Select one or more of the following Outdoor Active Programs
- Each program selection is approximately 2 hours in length.
- Curriculum Links: Health & Physical Education: Active Participation.
- All hikes meet *SHSM* requirements.

BRUCE TRAIL HIKES:

Dundas Valley: This hike follows the Bruce Trail as it winds through the Dundas Valley Conservation Area. Along the way the Bruce Trail passes through stream valleys, shady deciduous forests, old apple orchards, as it meanders above and below the Niagara Escarpment. Level of ability is intermediate. Allow a minimum of 2 hours. Full or Half Day Hike options available

OUTDOOR ACTIVE:

Get Oriented!! An Introduction to Orienteering

Students are introduced to the basics of orienteering, including; parts of a compass, use of a compass to find direction, and map reading. Skills will be a put to the test as students use a map and compass to navigate their way through a designated area.

Snowshoe Trek

Learn the basics of snowshoeing. Find out which style of snowshoe you prefer - Traditional or Hi -Tech. Challenge yourself as we explore the great outdoors. Winter only – weather permitting.

WIDE GAMES:

These games make use of large forest and field areas, encouraging students to strategize and work together co-operatively. Choose from one of the following activities:

Capture the Flag

The goal is for each team to seek out and capture the flag of the other team while protecting their own flag.

Alpha Wolf

The Alpha is the lead animal in any pack. Teams attempt to locate the Alpha in order to improve their clan's strength. An adaptation of this game is to avoid capture of the Alpha and keep your own clan safe.

Survival of the Fittest

A predator/prey role playing game. The objective - to survive! The challenge – to avoid predators, and other dangers in order to survive. The search is on for the basic necessities of life!

Risk!

A team game of strategy based on the board game of Risk. Working in teams, the goal is to take over and occupy all of the territories while making sure that your own territories are well defended.