



A Healthy Watershed for Everyone



In partnership with the Hamilton Wentworth District School Board

2019-2020

Program Guide & HWDSB Booking Information

Outdoor Environmental Education

Programming for 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.



DUNDAS VALLEY BOOKING REQUEST: 2019 - 2020

OUTDOOR ENVIRONMENTAL EDUCATION FIELD TRIPS

Complete Booking Request Form. Keep a copy & submit by Fax or Email to:

Environmental Education Program Coordinator, Hamilton Conservation Authority

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

Note:

- Select one half day program from the **Environmental Education Programs** listings.
- Choose one half day program from the **Outdoor Active Program** listings.
- All trips are **CATEGORY 1**, with the exception of *Water Related Activities which are Category 2*
- Maximum group size for Intermediate / Senior is 2 classes with a maximum of 50 students
- An email **Confirmation & Teacher Information Package** will be sent out once the field trip has been confirmed.

SCHOOL		
TEACHERS NAMES		
SCHOOL PHONE & EXTENSION		
TEACHER CONTACT & EMAIL		
GRADE <i>Two classes/same grade</i>		
NUMBER OF STUDENTS (2 Classes) <i>Intermediate/Senior: Maximum 50</i>		
STUDENTS REQUIRING SPECIAL CONSIDERATION <i>Please let us know of any students requiring special consideration. We will try to modify our programs accordingly.</i>		
ENVIRONMENTAL EDUCATION PROGRAM SELECTION <i>(EXAMPLE – Birds of Prey)</i>	First Choice <input type="text"/>	Second Choice <input type="text"/>
OUTDOOR ACTIVE PROGRAM SELECTION <i>(EXAMPLE – WIDE GAMES)</i>	First Choice <input type="text"/>	Second Choice <input type="text"/>
MONTH PREFERRED		

PLEASE NOTE:

- **All program participants are expected to dress appropriately for the weather & outdoor conditions**
- *Inclement Weather:* During inclement weather a greater portion of our programs will be modified with more time conducted indoors.
- For safety reasons sandals, moccasins or thin flat shoes are not recommended. Wear running shoes or hiking boots.
- While we make every effort to accommodate students with special needs, it is not always possible given our rugged terrain.

Cancellation Policy: A cancellation fee of \$150 per school per day will apply if the school cancels the trip less than 15 office days prior to the scheduled field trip, and does not re-schedule the date within the next 4 weeks (Winter storms are exempt)



2019- 2020 School Year

Outdoor Environmental Education Programs

Interactive Outdoor Environmental Education

Connect your students with the outdoors through the outdoor environmental education programs.

DUNDAS VALLEY OUTDOOR EDUCATION FIELD TRIPS:

PROGRAM LOCATION:

- Dundas Valley Conservation Area, 650 Governors Road, Dundas, Ontario

PROGRAM COST:

- Cost is \$670 for two half-day (*two hour*) programs per class.
- ***This cost is covered by the Hamilton Wentworth District School Board in partnership with the Hamilton Conservation Foundation.***

TRANSPORTATION:

- Schools are required to make their own transportation arrangements.

GROUP SIZES:

- **Secondary:** 2 classes with a maximum of 50 students

INCLEMENT WEATHER:

- ***Program participants are expected to dress appropriately for the weather and outside conditions.***
- During inclement weather programs will be modified and a greater portion of the programs will be conducted indoors.
- All programs continue rain, snow, or shine. In **extreme** weather forecasting, HCA staff will contact the school in advance to make alternative arrangements and re-schedule the date.

BOOKING PROCEDURES

- Complete the following **2019 - 2020 Dundas Valley Booking Request** form. Fax or return by email.
- Teachers will be emailed a ***Trip Confirmation Letter*** and ***Pre-Trip Preparation Information*** with all the details pertaining to the field trip once a trip date has been finalized.

2019 - 2020 School Year

Outdoor Environmental Education at the Dundas Valley Conservation Area

Teacher Information:

- Select **one** half day ***Environmental Education Program*** (Program Guide)
- Select **one** half day ***Outdoor Active Program*** (Program Guide)
- Arrange for adult volunteers to assist on the day (*Intermediate/Senior 1:15*)
- Arrange bus transportation.
- Supervise class, maintain discipline and actively participate in all activities throughout the trip, including supervision at lunch
- Advise HCA Education Team of any students requiring special consideration; such as extreme allergies, behavioral or mobility issues.
- For safety reasons, sandals, moccasins or thin flat shoes are not recommended, wear running shoes or hiking boots.
- **Program participants are expected to dress appropriately for the weather & outdoor conditions.**

HCA Outdoor Education Staff Will:

- Schedule, contact and confirm class field trips to the Centre – via Email.
- Provide teachers with a ***Trip Confirmation Letter*** and ***Pre-Trip Preparation Information***.
- Inform teachers by telephone of the possibility of program cancellation/rescheduled trip due to forecasted extreme weather conditions.
- Teach the outdoor education programs, with the active assistance and support of the classroom teacher and volunteers in attendance.

2018-2019 HCA Environmental Education Team:

- Sandra Root H.B., Ph.Ed.,B.Ed, M.Sc.Ed.; HCA Environmental Education Specialist
- James O'Neill, Environmental Education Program Coordinator
- Fiona Van Wissen B.A., B.Ed., HCA Environmental Instructor
- Elizabeth Watson–Morlog, Hon. B.P.E., B.Ed., HCA Environmental Instructor



2019 – 2020 ENVIRONMENTAL EDUCATION SECONDARY PROGRAM GUIDE LISTINGS

SECONDARY: Grades 9 – 12

Notes:

- Please select **one** *Environmental Education Program* and **one** *Outdoor Active Program*
- These programs are recommended for Grades 9 – 12
- Each program is approximately 2 hours in length

Environmental Education Programs:

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. *Fall Winter Spring*

Forest Ecology

Learn how to identify local deciduous and coniferous trees. Collect data on tree height, width and species to determine the health of a forest ecosystem. Learn about the importance of forests in our everyday lives and understand key terms such as sustainability, renewable resources and silviculture systems. Determine limiting factors that affect sustainability.

Curriculum Links: Science & Technology: Sustainable Ecosystems; Human Activity; Climate Change. *Fall, Winter or Spring*

Wildlife Ecology

Explore the relationships between *biotic (living)* and *abiotic (nonliving)* components in a natural environment. Understand the key components of selected ecosystems; including niche, camouflage, and predator/prey relationships.

Curriculum Links: Science & Technology: Sustainable Ecosystems; Human Activity; Climate Change. *Fall, Winter, Spring*

Human Impact on Biodiversity (Gr 9 & 10)

Students will explore the positive and negative impacts of biotic and abiotic factors on biodiversity of a natural environment. They will learn how to identify invasive species, assist with removal, collect data and assess the effects of human impact on the biodiversity of the natural environment.

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



Environmental Education Programs: Continued...

Conservation Projects

Through good watershed stewardship practices, the Hamilton Conservation Authority works hard to improve wetland habitat and protect sources of water. This is an opportunity for students to participate in selected hands-on ecological restoration projects. Projects are seasonal and may include:

- Planting of native trees & shrubs
- Construction of brush piles, nesting boxes and feeding stations
- Rain Garden & Rain Water Harvesting Projects
- Removal of Invasive Species

Curriculum Links: Science & Technology Life Systems Health & Physical Education: Active Participation, Fall, Winter or Spring

Stream Ecology: (Gr 11 & 12) Category 2

**Note: In order to minimize environmental impacts on the streams, the number of in-stream aquatic programs 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 Mgmt.; Climate Change. Fall / Spring

OUTDOOR ACTIVE PROGRAMS: Health and Physical Education

- 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

Bruce Trail Hike: Dundas Valley Conservation Area

Level of ability is intermediate. Allow 2 hours.

This guided hike follows the Bruce Trail as it winds through the Dundas Valley Conservation Area. Within the park, the Bruce Trail passes through stream valleys, shady deciduous forests, old apple orchards, meandering above and below the Niagara Escarpment. Full or Half Day Hike options available.

Curriculum Links: Science & Technology Life Systems Health & Physical Education: Active Participation, Fall, Winter or Spring

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.

Curriculum Links: Science & Technology Life Systems Health & Physical Education: Active Participation, Fall, Winter or Spring



OUTDOOR ACTIVE PROGRAMS: *Continued*

Snowshoe Expedition: *Weather Permitting (Now a Category 1 field trip)*

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. **All program participants require winter boots.**

Please select a backup program in the event of unsuitable snow conditions.

Curriculum Links: *Science & Technology Life Systems Health & Physical Education: Active Participation, Winter - Weather Permitting*

Wide Games:

The following activities & games make use of large forest and field areas, encouraging students to work together co-operatively & strategize. Choose from one of the following activities. Please be aware that in many instances, the terrain is rugged and proper footwear is required.

Risk!

A team game of strategy based on the Board Game of **Risk**. The goal of the game is to take over and occupy all of the territories while making sure that your own territories are well defended.

Curriculum Links: *Science & Technology Life Systems; Health & Physical Education: Active Participation, Fall, Winter, Spring*

Survival of the Fittest:

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

Curriculum Links: *Science & Technology Life Systems; Sustainable Ecosystems & Human Activity; Health & Physical Education: Active Participation, Fall, Winter or Spring*

Capture the Flag:

The goal of this game is for each team to strategize on how to seek out and capture the flag of the other team while keeping their own flag safe.

Curriculum Links: *Health & Physical Education: Active Participation, Fall, Winter or Spring*

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.

Curriculum Links: *Health & Physical Education: Active Participation, Fall, Winter or Spring*