

# In Our Watershed Environmental outdoor education PROGRAM GUIDE

Outdoor and Classroom Curriculum Linked Programs 2019-2020



Healthy watersheds for today and tomorrow.

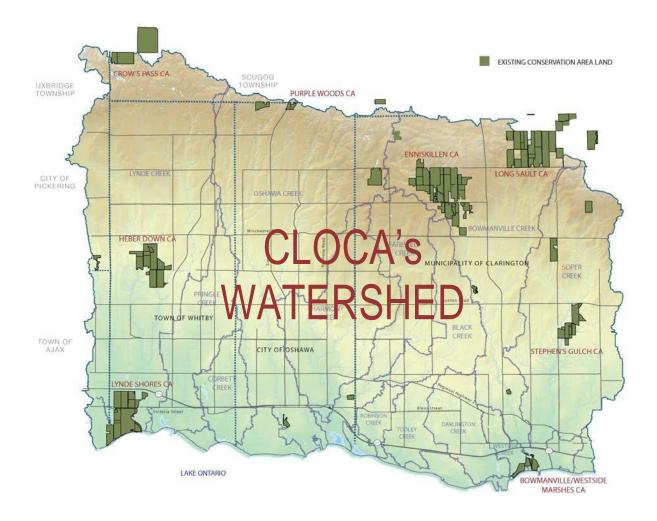












# ABOUT US

Central Lake Ontario Conservation (CLOCA) is a local community based environmental organization. We were established in 1958 and are committed to protecting, preserving and enhancing the watershed.

# **OUR VISION**

Healthy watersheds for today and tomorrow.

# **OUR MISSION**

Advancing watershed health through engagement, science, and conservation.

# OUR FOCUS

To share our watershed story, to inspire our community to be watershed champions, and to take action for real change.

# ENVIRONMENTAL EDUCATION PROGRAMS

The goal for our environmental education programs is to communicate, educate and inspire. Within this guide, you will find programs designed around the Ontario Curriculum Expectations. Most of our programs are offered at local conservation areas, but some are offered in-school. Customized programs are available by request.

# FOR MORE INFORMATION CONTACT

Cathy Grant, Education Instructor Tel: (905) 579-0411 x108 Fax: (905) 579-0994 Email: cgrant@cloca.com www.cloca.com

# BOOKING YOUR PROGRAM

- 1. Choose the desired program(s) from this guide based on the grade(s) you teach.
- 2. Pick the Conservation Area (where applicable). You can check out our conservation areas and maps online at www.cloca.com.
- 3. Select a specific time and date for your trip (an alternative date or two is encouraged)
- 4. **Register for your trip** online at <u>www.cloca.com</u> or email or call Cathy Grant, Education Instructor, at cgrant@cloca.com or 905-579- 0411 x108.
- 5. Have the following information available: school name, address and postal code, phone number, teacher's name, preferred dates, grade, number of students, and program requested.
- 6. **Book the bus**. In most cases, we can accommodate 60 students at one time (Geodash Program excluded).
- 7. Ensure appropriate dress and supervision. Supervising adults are not permitted to bring younger children on the trip. Ratio varies with grade and program. Extra fees apply for additional parents.
- Bring payment and signed agreement with you on the day of your program. Payment MUST be made on the day of the trip by cheque (payable to CLOCA), cash or visa/mastercard (by calling 905-579-0411). CLOCA K-8 programs are HST exempt.

# APPROPRIATE DRESS

The outdoors is an enjoyable place to learn any time of year, especially if you are prepared and properly dressed. Programs run rain or shine, so please check the forecast and plan ahead.

Teach your students how to dress for long periods of time outdoors including layering clothing for cool days and rain coats, splash pants, and rubber boots for wet days. Being prepared for the winter includes layers of clothing, winter coats, hats, scarves, mittens, snow pants, and winter boots. Insect repellent, sun hats, water bottles, and sunscreen are important on hot days.

# "IN OUR WATERSHED" PROGRAM COSTS

- **\$7.00/student for half day** (\$125 min.)
- \$11.00/student for full day (\$200 min.)
- \$3.50/student for In-School Programs
- **\$4.00 Sugar Bush Tours** (\$75 min.) Additional \$\$ for Sugar Bush Tour with pancake lunch option

#### Cancellation Fee: \$25.00

(for reasons other than weather)

#### DOING IT ON YOUR OWN

All of our Conservation Areas are available to classes wishing to conduct their own outdoor programs. Teachers are requested to call Central Lake Ontario Conservation during office hours for permission. Booking fees may apply.



# **KINDERGARTEN**

#### **EXPLORING IN NATURE** (2 hours)

While on a walk, students will use their senses to discover the natural world around them. Through hands-on investigation, explanation, activities, and stories, students will gain an understanding of the natural world including how plants and animals change with the seasons. Students may also have the opportunity to explore a pond habitat with dip-nets, explore using hand held magnifiers or focus on insects in various habitats.

Location: Enniskillen, Heber Down (fall/spring), Purple Woods (fall/spring), or Lynde Shores (fall/spring) Curriculum Connections: Personal & Social Development; Science & Technology -Natural Environment, Free Exploration

#### **NATURE ART** (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

Location: Enniskillen (Oct-Feb.) or Purple Woods (Oct-Dec) Curriculum Connections: Personal & Social Development; Science & Technology -Natural Environment, Free Exploration

#### IN YOUR BACKYARD (In-school, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, or animals). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, schools **must be within CLOCA watershed** and have access to a natural area. Curriculum Connections: Personal & Social Development; Science & Technology -Natural Environment, Free Exploration

#### WINTER'S COMING: NATURE Walk WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

#### Location: Enniskillen (Nov-Dec)

Curriculum Connections: Personal & Social Development; Science & Technology -Natural Environment, Free Exploration

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

#### Location: Enniskillen (Jan-Feb)

Curriculum Connections: Personal & Social Development; Science & Technology; Health & Physical Activity

#### SNOWSHOEING (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

#### Location: In-school, schools must be within CLOCA watershed.

Curriculum Connections: Personal & Social Development; Science & Technology; Health & Physical Activity

#### SUGAR BUSH TOUR (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April)

Curriculum Connections: Personal & Social Development; Science & Technology -Natural Environment





#### **EXPLORING LIVING THINGS IN NATURE (2 hours)**

While on a walk, students will use their senses to discover the natural world around them. Through hands-on investigation, explanation, activities, and stories, students will gain an understanding of the natural world including how plants and animals change with the seasons. Depending on location students may also have the opportunity to explore our learning furs and skulls, investigate insects in different habitats, or explore a pond habitat with dip-nets.

Location: Enniskillen, Heber Down (fall/spring), Purple Woods (fall/spring), or Lynde Shores (fall/spring) Curriculum Connections: Science & Technology –Needs & Characteristics of Living Things, Daily & Seasonal Changes

#### LAST WHISPERS OF FALL (2 hours)

What do animals do when it's cold? We invite you and your students to explore with us our forests and meadow as we learn about animal winter survival strategies including hibernation, migration, and adaptations. Our learning furs are always a favourite!

Location: Enniskillen (Oct-Dec) or Purple Woods (Oct-Dec) Curriculum Connections: Science & Technology –Needs & Characteristics of Living Things, Daily & Seasonal Changes

#### **NATURE ART** (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

Location: Enniskillen (Oct-Feb) or Purple Woods (Oct-Dec.) Curriculum Connections: Science & Technology –Needs & Characteristics of Living Things, Daily & Seasonal Changes

#### IN YOUR BACKYARD (In-school, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, or animals). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, **schools must be within CLOCA watershed** and have access to a natural area. Curriculum Connections: Science & Technology –Needs & Characteristics of Living Things, Daily & Seasonal Changes

# WINTER'S COMING: NATURE WALK WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

#### Location: Enniskillen (Nov-Dec)

Curriculum Connections: Science & Technology –Needs & Characteristics of Living Things, Daily & Seasonal Changes

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

#### Location: Enniskillen (Jan-Feb)

Curriculum Connections: Health & Physical Activity; Science & Technology –Needs & Characteristics of Living Things, Daily & Seasonal Changes

#### SNOWSHOEING (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

#### Location: In-school, schools must be within CLOCA watershed.

Curriculum Connections: Health & Physical Activity

#### SUGAR BUSH TOUR (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April)

Curriculum Connections: Science & Technology –Needs & Characteristics of Living Things, Daily & Seasonal Changes





#### EXPLORING ANIMAL CLUES IN NATURE (2 hours)

While on a walk, students will use their senses to discover clues left by local wild animals. Through hands-on investigation, explanation, activities, and stories, students will gain an understanding of animals' life cycles and adaptations including how animals change with the seasons. Students may also have the opportunity to explore our learning furs and skulls, investigate insects in different habitats, or explore a pond habitat with dip-nets, search for animal tracks and scat.

Location: Enniskillen, Heber Down (fall/spring), Purple Woods (fall/spring), or Lynde Shores (fall/spring) Curriculum Connections: Science & Technology –Growth & Changes in Animals, Air & Water in the Environment

# LAST WHISPERS OF FALL (2 hours)

What do animals do when it's cold? We invite you and your students to explore with us our forests and meadow as we learn about animal winter survival strategies including hibernation, migration, and adaptations. Our learning furs are always a favourite!

Location: Enniskillen (Oct-Dec) or Purple Woods (Oct-Dec) Curriculum Connections: Science & Technology –Growth & Changes in Animals, Air & Water in the Environment

#### **NATURE ART** (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

Location: Enniskillen (Oct-Feb) or Purple Woods (Oct-Dec) Curriculum Connections: Science & Technology –Growth & Changes in Animals, Air & Water in the Environment

#### IN YOUR BACKYARD (In-school, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, or animals). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, **schools must be within CLOCA watershed** and have access to a natural area. Curriculum Connections: Science & Technology –Growth & Changes in Animals, Air & Water in the Environment

# WINTER'S COMING: NATURE WALK WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

Location: Enniskillen (Nov-Dec)

Curriculum Connections: Science & Technology –Growth & Changes in Animals, Air & Water in the Environment

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

#### Location: Enniskillen (Jan-Feb)

Curriculum Connections: Health & Physical Activity; Science & Technology –Growth & Changes in Animals, Air & Water in the Environment

#### SNOWSHOEING (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

Location: In-school, **schools must be within CLOCA watershed**. Curriculum Connections: Health & Physical Activity

(see next page)

#### **SUGAR BUSH TOUR** (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April) Curriculum Connections: Social Studies –Traditions & Celebrations



# **GRADE 3**

#### **EXPLORING PLANTS IN NATURE** (2 hours)

From trees to mosses, students will become familiar with a variety of plants in their local environment. While on a hike, students will explore the parts of a plant, seed production, the needs of a plant, plant uses by Indigenous Peoples, and the importance of native versus non-native plants. This program includes hands on exploration with magnifying glasses.

Location: Enniskillen, Heber Down (fall/spring), Purple Woods (fall/spring), or Lynde Shores (fall/spring) Curriculum Connections: Science & Technology –Growth & Changes in Plants, Soils in the Environment

#### **NATURE ART** (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

Location: Enniskillen (Oct-Feb) or Purple Woods (Oct-Dec) Curriculum Connections: Science & Technology –Growth & Changes in Plants, Soils in the Environment

#### **IN YOUR BACKYARD** (In-school, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, or animals). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, schools must be within CLOCA watershed and have access to a natural area. Curriculum Connections: Science & Technology –Growth & Changes in Plants, Soils in the Environment

#### WINTER'S COMING: NATURE WALK WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

Location: Enniskillen (Nov-Dec) Curriculum Connections: Science & Technology –Growth & Changes in Plants

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

#### Location: Enniskillen (Jan-Feb)

Curriculum Connections: Health & Physical Activity; Science & Technology –Growth & Changes in Plants, Soils in the Environment

#### SNOWSHOEING (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

Location: In-school, schools must be within CLOCA watershed.

Curriculum Connections: Health & Physical Activity

#### SUGAR BUSH TOUR (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

#### Location: Purple Woods (March - April)

Curriculum Connections: Social Studies –Early Settlements in Upper Canada; Science & Technology –Growth & Changes in Plants, Soils in the Environment





#### **EXPLORING HABITATS & COMMUNITIES (2 hours)**

During a guided walk, students will have a chance to explore various habitats, from wetlands to forests, found in our Conservation Areas. Magnifying glasses will be used by students to discover how local animals are adapted to their habitat and interconnected within their community. Students may also have the opportunity to explore our learning furs or a pond habitat with dip-nets.

Location: Enniskillen, Heber Down (fall/spring), Purple Woods (fall/spring), Lynde Shores (fall/spring) Curriculum Connections: Science & Technology –Habitats & Communities

#### COYOTE CACHE SURVIVAL GAME (2 hours)

Your class will be transformed into a population of coyotes as students work together in packs to find a den site, avoid the lurking cougars, and collect enough food to feed their new pups. This interactive role-playing game will introduce students to the diet, adaptations, and vocalizations of this common wildlife species. Food chains and human impacts will be discussed. Students may also have the opportunity to explore various habitats through a guided hike.

Location: Enniskillen (all year) or Heber Down (fall/spring)

#### WETLAND HABITAT DISCOVERY (2 hours)

As students engage in wetland exploration using dip-nets, they will discover the diversity and adaptations of animals that live in our pond habitat. Human impacts, food chains, interrelationships, wetland habitats, and the importance of wetlands will be explored through various outdoor activities and games.

Location: Enniskillen (fall/spring) or Heber Down (fall/spring) Curriculum Connections: Science & Technology –Habitats & Communities

#### **ORIENTEERING WITH MAP AND COMPASS** (2 hours)

After learning the basics of compass use, students will be given an aerial orthophoto map and the opportunity to explore the conservation area's orienteering course. Each orienteering course is composed of hidden markers that can only be found by carefully using the map and compass.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Science & Technology –Habitats & Communities

#### WATERSHED WALK WITH PROJECT WILD GAMES (2 hours)

As they explore different habitats through a guided hike, students will gain an appreciation of the importance of a healthy watershed and how their actions impact the ecology of their local watershed. Project WILD based games and activities will give students the opportunity to become familiar with populations, food chains and human impacts on natural communities. The goal of this interactive program is to encourage students to become more ecologically aware citizens.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Science & Technology –Habitats & Communities

#### **NATURE ART** (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

Location: Enniskillen (Oct-Feb) or Purple Woods (Oct-Dec) Curriculum Connections: Science & Technology –Habitats & Communities

#### **IN YOUR BACKYARD** (In-school, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, or animals). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, **schools must be within CLOCA watershed** and have access to a natural area. Curriculum Connections: Science & Technology –Habitats & Communities

#### WINTER'S COMING: NATURE WALK WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

#### Location: Enniskillen (Nov-Dec)

Curriculum Connections: Science & Technology –Habitats & Communities

(see next page)

# **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

Location: Enniskillen (Jan-Feb)

Curriculum Connections: Health & Physical Activity; Science & Technology – Habitats & Communities

#### SNOWSHOEING (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

Location: In-school, schools must be within CLOCA watershed.

Curriculum Connections: Health & Physical Activity

#### **SUGAR BUSH TOUR** (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April) Curriculum Connections: Science & Technology –Habitats & Communities





# WATERSHED HIKE WITH PROJECT WILD GAMES (2 hours)

As they explore natural communities through a guided hike, students will gain an appreciation of the importance of a healthy watershed and learn how their actions impact the ecology of their local watershed. Project WILD based games and activities will give students the opportunity to become familiar with ecological relationships and human impacts on those relationships. The goal of this interactive program is to encourage students to become more ecologically aware citizens.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity

#### COYOTE CACHE SURVIVAL GAME (2 hours)

Your class will be transformed into a population of coyotes as students work together in packs to find a den site, avoid the lurking cougars, and collect enough food to feed their new pups. This interactive role-playing game will introduce students to the diet, adaptations, and vocalizations of this common wildlife species. Food chains, conservation, and human impacts will be discussed. Students may also have the opportunity to explore various habitats through a guided hike.

Location: Enniskillen (all year) or Heber Down (fall/spring)

#### WETLAND HABITAT DISCOVERY (2 hours)

As students engage in wetland exploration using dip-nets, they will discover the diversity and adaptations of animals that live in our pond habitat. Human impacts, food chains, interrelationships, wetland habitats, and the importance of wetlands will be explored through various outdoor activities and games.

Location: Enniskillen (fall/spring) or Heber Down (fall/spring) Curriculum Connections: Health & Physical Activity

#### **ORIENTEERING WITH MAP AND COMPASS** (2 hours)

After learning the basics of compass use, students will be given an aerial orthophoto map and the opportunity to explore the conservation area's orienteering course. Each orienteering course is composed of hidden markers that can only be found by carefully using the map and compass.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity

#### **GEODASH** (2 hours)

This program will introduce students to the world of GPS and Geocaching. Students will learn the technology behind GPS, the limitations of this technology, and how to use a hand-held GPS. Students will then have the opportunity to apply their knowledge by completing a navigation course. They will use a set of preloaded waypoints to find hidden markers encrypted with Morse code and will need to find all the markers to decipher the puzzle.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity

#### **NATURE ART** (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

Location: Enniskillen (Oct-Feb) or Purple Woods (Oct-Dec) Curriculum Connections: Health & Physical Activity

#### **IN YOUR BACKYARD** (In-school, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, or animals). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, **schools must be within CLOCA watershed** and have access to a natural area. Curriculum Connections: Health & Physical Activity

#### WINTER'S COMING: NATURE WALK WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

Location: Enniskillen (Nov-Dec) Curriculum Connections: Health & Physical Activity

(see next page)

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

Location: Enniskillen (Jan-Feb) Curriculum Connections: Health & Physical Activity

#### SNOWSHOEING (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

Location: In-school, schools must be within CLOCA watershed.

Curriculum Connections: Health & Physical Activity

#### **SUGAR BUSH TOUR** (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April) Curriculum Connections: Health & Physical Activity





#### **BIODIVERSITY IN NATURE** (2 hours)

While walking through different habitats, students will have the opportunity to explore and appreciate the diversity of living things while recognizing the roles and interactions of individual species. Students will also be introduced to local invasive species and learn how humans impact biodiversity. There may also be the opportunity to explore our learning furs or a pond habitat with dip-nets.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Science & Technology –Biodiversity

#### COYOTE CACHE SURVIVAL GAME (2 hours)

Your class will be transformed into a population of coyotes as students work together in packs to find a den site, avoid the lurking cougars, and collect enough food to feed their new pups. This interactive role-playing game will introduce students to the characteristics of this common wildlife species as well as its natural community. Biodiversity, conservation and human impacts will be discussed. Students may also have the opportunity to explore the biodiversity at Enniskillen Conservation Area through a guided hike.

Location: Enniskillen (all year) or Heber Down (fall/spring)

#### ALIEN INVADERS: IMPACTING BIODIVERSITY (2 hours)

While walking through different habitats, students will discover the difference between native, non-native and invasive species. Students will be introduced to various local invasive species and learn how these alien invaders are impacting habitats as well as the characteristics that enable them to become such incredible trespassers. Depending on the season, this program may include garlic mustard (invasive species) removal.

Location: Enniskillen (fall/spring), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Science & Technology –Biodiversity

#### **ORIENTEERING WITH MAP AND COMPASS** (2 hours)

After learning the basics of compass use, students will be given an aerial orthophoto map and the opportunity to explore the conservation area's orienteering course. Each orienteering course is composed of hidden markers that can only be found by carefully using the map and compass.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity

#### **GEODASH** (2 hours)

This program will introduce students to the world of GPS and Geocaching. Students will learn the technology behind GPS, the limitations of this technology, and how to use a hand-held GPS. Students will then have the opportunity to apply their knowledge by completing a navigation course. They will use a set of preloaded waypoints to find hidden markers encrypted with Morse code and will need to find all the markers to decipher the puzzle.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity

#### WATERSHED WALK WITH PROJECT WILD GAMES (2 hours)

As they explore natural communities through a guided hike, students will gain an appreciation of the importance of a healthy watershed and learn how their actions impact the ecology of their local watershed. Project WILD based games and activities will give students the opportunity to become familiar with ecological interrelationships and human impacts on those relationships. The goal of this interactive program is to encourage students to become more ecologically aware citizens.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity; Science & Technology –Biodiversity

#### **NATURE ART** (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

Location: Enniskillen (Oct-Feb) or Purple Woods (Oct-Dec) Curriculum Connections: Health & Physical Activity; Science & Technology –Biodiversity

#### **IN YOUR BACKYARD** (**In-school**, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, animals, invasive species, or biodiversity). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, **schools must be within CLOCA** watershed and have access to a natural area. Curriculum Connections: Health & Physical Activity; Science & Technology –Biodiversity

# WINTER'S COMING: NATURE WALK WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

Location: Enniskillen (Nov-Dec)

Curriculum Connections: Health & Physical Activity; Science & Technology -Biodiversity

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

Location: Enniskillen (Jan-Feb) Curriculum Connections: Health & Physical Activity; Science & Technology –Biodiversity

#### **SNOWSHOEING** (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

Location: In-school, schools must be within CLOCA watershed.

Curriculum Connections: Health & Physical Activity

#### SUGAR BUSH TOUR (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April) Curriculum Connections: Health & Physical Activity; Science & Technology –Biodiversity





#### **INTERACTIONS IN NATURE (2 hours)**

While walking through different ecosystems, students will have the opportunity to explore and appreciate the interactions that exist between various abiotic and biotic elements. Students will be introduced to local invasive species and learn how humans impact the environment. There may also be the opportunity to explore a pond habitat with dip-nets.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Science & Technology –Interactions in the Environment; Geography –Physical Patterns in a Changing World, Natural Resources around the world: Use and Sustainability

# COYOTE CACHE SURVIVAL GAME (2 hours)

Your class will be transformed into a population of coyotes as students work together in packs to find a den site, avoid the lurking cougars, and collect enough food to feed their new pups. This interactive role-playing game will introduce students to the diet, adaptations, and vocalizations of this common wildlife species. Food chains, conservation and human impacts will be discussed. Students may also have the opportunity to explore various ecosystems through a guided hike.

Location: Enniskillen (all year) or Heber Down (fall/spring) Curriculum Connections: Science & Technology – Interactions in the Environment

# ALIEN INVADERS: IMPACTING ECOSYSTEMS (2 hours)

While walking through different habitats, students will discover the difference between native, non-native and invasive species. Students will be introduced to various local invasive species and learn how these alien invaders are impacting habitats as well as the characteristics that enable them to become such incredible trespassers. Depending on the season, this program may include garlic mustard (invasive species) removal.

Location: Enniskillen (fall/spring), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Science & Technology – Interactions in the Environment

#### STREAM ECOSYSTEMS AND COMMUNITIES (2 hours)

Using dip-nets and measuring equipment, students will explore the biotic and abiotic elements and interactions in our dynamic stream ecosystem. They will develop an understanding of the role streams play in a watershed and how pants, animals, insects, and people depend on healthy stream systems every day. Erosion, flood control, and pollution will also be discussed. Students should come prepared with rubber boots. In the event of high water, a pond ecosystem will be explored instead.

Location: Heber Down (fall/spring)

Curriculum Connections: Science & Technology - Interactions in the Environment; Geography -Natural Resources

#### **ORIENTEERING WITH MAP AND COMPASS** (2 hours)

After learning the basics of compass use, students will be given an aerial orthophoto map and the opportunity to explore the conservation area's orienteering course. Each orienteering course is composed of hidden markers that can only be found by carefully using the map and compass.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity

#### **GEODASH** (2 hours)

This program will introduce students to the world of GPS and Geocaching. Students will learn the technology behind GPS, the limitations of this technology, and how to use a hand-held GPS. Students will then have the opportunity to apply their knowledge by completing a navigation course. They will use a set of preloaded waypoints to find hidden markers encrypted with Morse code and will need to find all the markers to decipher the puzzle.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity

#### WATERSHED HIKE WITH PROJECT WILD GAMES (2 hours)

As they explore natural communities through a guided walk, students will gain an appreciation of the importance of a healthy watershed and learn how their actions impact the ecology of their local watershed. Project WILD based games and activities will give students the opportunity to become familiar with interrelationships within natural communities, human impacts on those relationships, and how populations depend on the health of their ecosystems. The goal of this program is to encourage students to become more ecologically aware citizens.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring) Curriculum Connections: Health & Physical Activity; Science & Technology –Interactions in the Environment

#### NATURE ART (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

#### Location: Enniskillen (Oct-Feb) or Purple Woods (Oct-Dec)

Curriculum Connections: Health & Physical Activity; Science & Technology -Interactions in the Environment

#### IN YOUR BACKYARD (In-school, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, animals, invasive species, or biodiversity). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, **schools must be within CLOCA watershed** and have access to a natural area. Curriculum Connections: Health & Physical Activity; Science & Technology –Interactions in the Environment

#### WINTER'S COMING: NATURE WALK WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

Location: Enniskillen (Nov-Dec)

Curriculum Connections: Health & Physical Activity; Science & Technology - Interactions in the Environment

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

Location: Enniskillen (Jan-Feb) Curriculum Connections: Health & Physical Activity; Science & Technology – Interactions in the Environment

#### **SNOWSHOEING** (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

Location: In-school, **schools must be within CLOCA watershed**. Curriculum Connections: Health & Physical Activity

#### **SUGAR BUSH TOUR** (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April)

Curriculum Connections: Health & Physical Activity; Science & Technology – Interactions in the Environment



# GRADE 8

#### STREAM ECOSYSTEMS AND COMMUNITIES (2 hours)

Using dip-nets and measuring equipment, students will explore the biotic and abiotic elements and interactions in our dynamic stream ecosystem. They will develop an understanding of the role streams play in a watershed and how pants, animals, insects, and people depend on healthy stream systems every day. By organizing our stream's macroinvertebrates according to their pollution tolerance level, students will gain an understanding of bioindicators. Factors that affect local water quality including erosion and pollution will be discussed. Students should come prepared with rubber boots. In the event of high water, a pond ecosystem will be explored instead.

#### Location: Heber Down (fall/spring)

Curriculum Connections: Science & Technology -Water Systems

#### COYOTE CACHE SURVIVAL GAME (2 hours)

Your class will be transformed into a population of coyotes as students work together in packs to find a den site, avoid the lurking cougars, and collect enough food to feed their new pups. This interactive role-playing game will introduce students to the diet, adaptations, and vocalizations of this common wildlife species. Food chains, conservation and human impacts will be discussed. Students may also have the opportunity to explore various ecosystems through a guided hike.

Location: Enniskillen (all year) or Heber Down (fall/spring),

#### **ORIENTEERING AND GPS** (2 hours)

This program provides an excellent introduction to maps, compasses, and GPS where students can experience firsthand the pros and cons of different orienteering technologies. After learning the basics of compass use, students will be given an aerial orthophoto map and the opportunity to explore the conservation area's orienteering course. When this ancient technology has been mastered, students will be introduced to the world of GPS and Geocaching. Students will learn the technology behind GPS, the limitations of this technology, and how to use a hand-held GPS. Students will then have the opportunity to apply their knowledge by completing a navigation course. They will use a set of preloaded waypoints to find hidden markers encrypted with Morse code and will need to find all the markers to decipher the puzzle.

Location: Enniskillen (all year) or Heber Down (fall/spring)

#### WATERSHED WALK WITH PROJECT WILD GAMES (2 hours)

As they explore natural communities through a guided hike, students will gain an appreciation of the importance of healthy watersheds and learn how humans impact ecosystems and water quality. Project WILD based games and activities will give students the opportunity to become familiar with interrelationships within our local watersheds, human impacts on those relationships, and how populations depend on the health of their ecosystems. The goal of this interactive program is to encourage students to become more ecologically aware citizens.

Location: Enniskillen (all year), Heber Down (fall/spring), or Purple Woods (fall/spring)

#### **NATURE ART** (2 hours)

With natural objects as their medium and the forest as their studio, students will have the opportunity to collaborate and create as they collect and assemble art with nature, on nature, in nature. This creative opportunity will benefit students of all artistic abilities as it allows for a variety of creative expressions. The program will conclude with a student guided tour of the group's newly created ephemeral gallery.

Location: Enniskillen (Oct-Feb) or Purple Woods (Oct-Dec)

# IN YOUR BACKYARD (In-school, 1 hour)

If you have access to a natural area near your school, then this program is for you. This is a customized program for schools within our watershed. "In Your Backyard" is a great way to introduce students to the natural world around them! Teachers can request specific themes and topics (e.g. habitats, plants, animals, or biodiversity). Schools are requested to book a minimum of 2 morning or 2 afternoon classes.

Location: In-school, schools must be within CLOCA watershed and have access to a natural area.

# WINTER'S COMING: NATURE WALK WITH HOLIDAY CRAFT (2 hours)

Come create and explore with us! In this program, students will make a seasonal craft as well as explore our forests and meadow. Different habitats, animal winter survival strategies, and the importance of conservation will be experienced and discussed on a guided hike with activities.

Location: Enniskillen (Nov-Dec)

Curriculum Connections: Health & Physical Activity; Science & Technology – Interactions in the Environment

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Class sizes limited by number of snowshoes available.

Location: Enniskillen (Jan-Feb)

#### SNOWSHOEING (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 45 small snowshoes (Kindergarten – Grade 3), 30 medium snowshoes (Grade 4-6), and 30 large snowshoes (Grade 7-8).

Location: In-school, schools must be within CLOCA watershed.

#### SUGAR BUSH TOUR (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April)

SECONDARY



#### WATER QUALITY EVALUATION (2 hours)

Using dip-nets and measuring equipment, students will explore the biological, chemical, and physical elements that are indicators of a healthy stream ecosystem. By organizing our pond's macroinvertebrates according to their pollution tolerance level, students will gain an understanding of bioindicators. Students will also have the opportunity to use various measuring instruments to determine our pond's pH, turbidity, substrate depth, and temperature. Students will compare their finds with healthy ranges and evaluate the quality of our pond ecosystem. Erosion and various types of pollution will be discussed. Students should come prepared with rubber boots. In the event of high water, a pond ecosystem will be explored instead.

Location: Heber Down (fall/spring)

# COYOTE CACHE SURVIVAL GAME (2 hours)

Your class will be transformed into a population of coyotes as students work together in packs to find a den site, avoid the lurking cougars, and collect enough food to feed their new pups. This interactive role-playing game will introduce students to the diet, adaptations, and vocalizations of this common wildlife species. Food chains, conservation and human impacts will be discussed. Students may also have the opportunity to explore various ecosystems through a guided hike.

Location: Enniskillen (all year) or Heber Down (fall/spring)

#### ALIEN INVADERS: IMPACTING ECOSYSTEMS (2 hours)

While strolling through different habitats, students will discover the difference between native, non-native and invasive species. Students will be introduced to various local invasive species and learn how these alien invaders are impacting habitats as well as the characteristics that enable them to become such incredible trespassers. Depending on the season, this program may include garlic mustard (invasive species) removal.

Location: Enniskillen (fall/spring), Heber Down (fall/spring), or Purple Woods (fall/spring)

#### **ORIENTEERING AND GPS** (2 hours)

This program provides an excellent introduction to maps, compasses, and GPS where students can experience firsthand the pros and cons of different orienteering technologies. After learning the basics of compass use, students will be given an aerial orthophoto map and the opportunity to explore the conservation area's orienteering course. When this ancient technology has been mastered, students will be introduced to the world of GPS and Geocaching. Students will learn the technology behind GPS, the limitations of this technology, and how to use a hand-held GPS. Students will then have the opportunity to apply their knowledge by completing a navigation course. They will use a set of preloaded waypoints to find hidden markers encrypted with Morse code and will need to find all the markers to decipher the puzzle.

Location: Enniskillen (all year) or Heber Down (fall/spring)

#### **SNOWSHOEING** (2 hours)

Students will go on a walk through different habitats on snowshoes. During this program, students will develop an appreciation for our natural world and enjoy playing our environmentally themed games. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 30 students.

Location: Enniskillen (Jan-Feb)

#### SNOWSHOEING (In-school, 1 hour)

Discover the schoolyard in a whole new way. Education staff will come to your school for a 1 hour snowshoe experience. Schools are asked to organize a minimum of 2 morning or afternoon classes. This program was made possible by Mountain Equipment Co-op and TD Friends of the Environment Foundation. Limited to 30 students/hour

Location: In-school, schools must be within CLOCA watershed.

#### **SUGAR BUSH TOUR** (Maple Syrup, 1 hour)

Students will travel through time to learn about the history of maple syrup, from its discovery by Indigenous Peoples, to the changes made by European Settlers, to our current methods. Other topics include how trees produce sap, tapping methods, and the importance of the Oak Ridges Moraine. Pancake lunch option available for 10:45am and 1pm programs.

Location: Purple Woods (March - April)

# ALTERNATIVE PROGRAM OPPORTUNITIES

#### SHAPING OUR WATERSHEDS (Schoolwide Program)

The Shaping Our Watersheds program uses an Augmented Reality Sandbox as a hands-on interactive tool to help students understand the importance of water resources. The Augmented Reality Sandbox includes a computer projector and a motion sensing input devise (Kinect 3D Camera) mounted above a box of sand. Colours and contour liens are projected onto the sand. As students interact with the sand, the Kinect detects the changes in the projectors distance to the sand and alters the projected colours and contour lines in real time. A simulation of rainfall happens when an object (like student's hand) is sensed between the projector and the sand. The virtual rain is visualized by the projector as blue, shimmering on the sand that appears to flow down the contours to lower elevations.

Our Augmented Reality Sandbox engages all who dig in the sand to fully appreciate the rain, water flow, creation and destruction of landforms and the interaction between them. It is an excellent visualization tool to teach earth science concepts.

For more information or to book this program please contact Yvonne Storm, ystorm@cloca.com.

# **STREAM OF DREAMS<sup>™</sup>** (Schoolwide Program -Elementary)

This program combines watershed awareness and art to create a long-term message for the community. Through the Stream of Dreams<sup>™</sup> program, students discover the stories of creeks, what makes them healthy, the water cycle, stormwater management and how people impact local waterways. Each student receives a wooden fish to paint. The collective school of fish, is then installed on the schoolyard's chain link fence, reminding the students and the neighborhood, to be good watershed stewards.

For more information or to book this program please contact Cathy Grant, cgrant@cloca.com.

#### DURHAM CHILDREN'S WATERSHED FESTIVAL (Grade 4)

This festival increases the awareness of grade four students concerning water issues and motivates them to become water stewards in their home, classroom and community. Like a giant, outdoor science centre, this festival has 35 hands-on, interactive, curriculum linked activities with watershed based messages relevant to the student's daily lives. Students spend the day at various activity centres, discovering the importance of water in their lives and how their actions affect the watershed in which they live. Hosted on Camp Samac's beautiful grounds, a highlight is watching and cheering for the migrating salmon as they swim up the Oshawa Creek to spawn.

For more information or to book this program please contact Yvonne Storm, ystorm@cloca.com.



For more information, contact: Cathy Grant Outreach Education Instructor Tel: (905) 579-0411 x108 Fax: (905) 579-0994 Email: cgrant@cloca.com www.cloca.com