# Get Them OUTSIDE!

**Secondary School** Field Trip Guide



### **INSPIRE STUDENTS**

### THROUGH FXPI ORATION WITH TRCA

Welcome to Toronto and Region Conservation Authority's School Programs Guide. Packed with exceptional out-of-classroom and in-school experiences, this guide is the key to your class's best field trip ever.

As Ontario's largest provider of out-of-classroom learning, since 1953 our curriculum-linked experiences have connected students of all grades to the nature, ecology and cultural heritage of the Greater Toronto Area in ways that you can't replicate in the classroom.

With nine (9) education centres and learning destinations located across the Greater Toronto Area, our hands-on experiences are delivered in some of the most spectacular natural spaces and unique cultural heritage buildings our region has to offer. And through our innovative partnerships with area school boards, we make sure our that visits are safe, fun, affordable, and most importantly, that your students learn from our expert teachers, conservationists and scientists first-hand.

So come join us – we are here to help you help your students have the best field trip ever.

### Sincerely,



**Darryl Gray** Director, Education and Training Toronto and Region Conservation Authority

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### **GRADE AND CURRICULUM LINKS**

Look for the following symbols next to the program descriptions.



Gr. 9 Geography



Gr.11-12 Biology



Gr. 12 Recreation and **Fitness Leadership** 

Level 1-5

ESL and/or ELD



Gr. 9-10 **Science** 



**Food and Nutrition** 



Gr. 9-12 **Healthy Active** Living Education



Gr. 11 Environmental Science



Physical, World, Geomatics, Geographics, Canadian and World Issues and/or the **Environment and** Resource Management



Gr. 12 Canada: History, **Identity and Culture** 

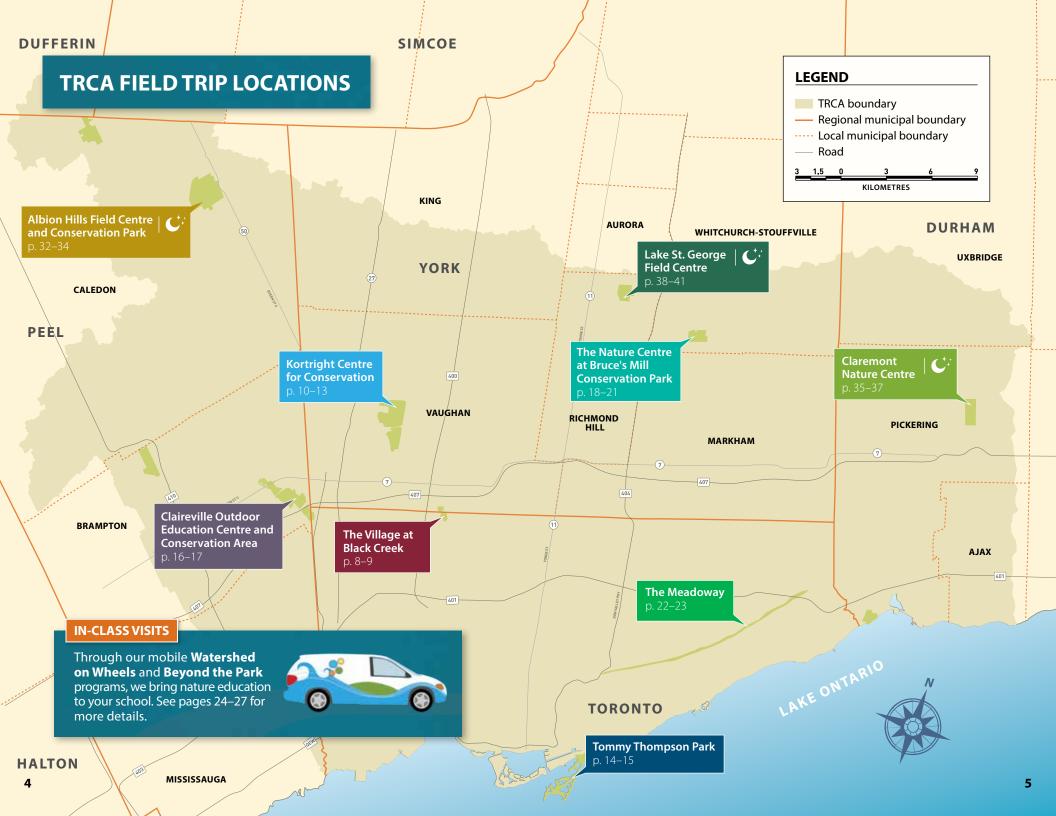
Gr. 12 Earth & Space



Local, outdoor environment required



SHSM certification







# DAY PROGRAMS

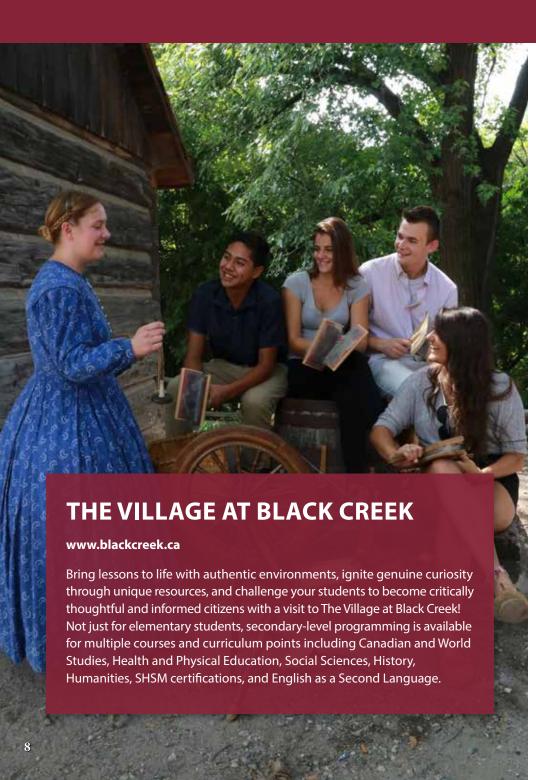
TRCA's education centres specialize in delivering engaging, curriculum-linked, outdoor, environmental, cultural, and historical programs in authentic, real-world settings. TRCA is also proud to bring nature education right to your classroom through our in-class programs that are tailored to meet the needs of your specific class. Choose from a range of secondary-level programs that cover Science, Canadian and World Studies, Physical Education, SHSM Certifications, Social Sciences and Humanities: find the perfect field trip to complement your classroom.

Single-day field trips are available at:

- The Village at Black Creek
- Kortright Centre for Conservation
- Tommy Thompson Park
- Claireville Outdoor Education Centre
- The Nature Centre at Bruce's Mill
- The Meadoway
- Your school (led by TRCA's Education Team)

# The Village at Black Creek | -X





### **BUILDING A COMMUNITY** Grade 9 to 12, ESL

Explore the village as you travel to trades shops and houses and discover the many challenges that faced communities in the 19<sup>th</sup> century. Study various perspectives on the economic and social realities of the day. Learn about survival and how to build a community.





Duration: Half day (1.5 hours) or Full day (3.5 hours including lunch) Available: April to December

### **TEAM BUILDING: GREAT VILLAGE BAKE OFF & AMAZING CHASE**

Grade 9 to 12

Some skills never go out of style! The Village's new interactive team building program promotes perseverance, responsibility, helpfulness, respect, and positivity. Enjoy fun and learning against the backdrop of the heritage Village. In groups, students decipher a historical recipe and take part in an exciting scavenger hunt throughout The Village!







Duration: Full day (3.5 hours, including lunch break) Available: Year-round

### **SOCIETY AND CHANGE** Grade 9 to 12

Enter the world of Confederation-era Canada. Interpret, analyze and evaluate Canada's past through the eyes of women, children, and the various religious and ethnic groups that contributed to our country's development.



Duration: Half day (1.5 hours) or full day (3.5 hours, including lunch) Available: April to December

### SHSM: TRADES SKILLS Grade 9 to 12

In this three-hour workshop, students participate in a variety of activities related to the skilled trades of the past, including weaving, spinning, typesetting, and tin work.

The workshop is followed by an interactive tour of The Village trades buildings.

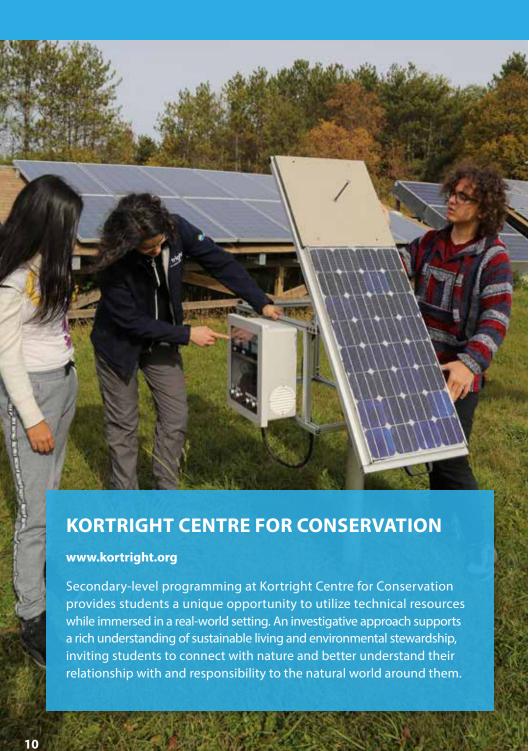




Duration: Half day (1.5 hours) or Full day (3.5 hours, including lunch) Available: April to December

# **Kortright Centre for Conservation**





### **ARCHETYPE SUSTAINABLE HOUSE TOUR** Grade 9 to 12

The Archetype Sustainable House is a Leadership in Energy and Environment Design (LEED) platinum-rated demonstration home showcasing new and innovative, green technologies. Through an interactive, guided tour, students learn about sustainability, energy efficiency, resource use, water conservation, indoor air quality, solar and wind energy, geothermal heating and cooling, rain water harvesting, and careers in the green energy technology industry.







Duration: Half day (2 hours) Available: Year-round

### **CLIMATE CHANGE** Grade 9 to 12

Students discover the impact of their choices on the environment. This in-depth program includes an interactive, guided tour of the LEED Archetype Sustainable House where students learn about new and innovative green technologies, sustainable citizen practices and how they can apply these practices in their everyday life. Students are introduced to the concepts of the greenhouse effect and natural cycles affected by climate change.







Duration: Half Day (2 hours) Available: Year-round

### **GPS MAPPING AND GEOCACHING** Grade 9, 10, and 12

Students participate in the ultimate challenge to complete a geocaching activity around Kortright Centre for Conservation's property by programming GPS units with appropriate waypoint coordinates. Fun and interactive outdoor exercises preface the challenge so as to introduce users to GPS functionality and allow them to practice and hone their skills.





Duration: Full day (4 hours) Available: Year-round

# **Kortright Centre for Conservation**



### **HABITAT ANALYSIS** Grade 9 to 12

Using a variety of instruments, students conduct an analysis of two distinct natural habitats and study the biotic and abiotic elements of each ecosystem using thermometers, moisture meters, sling psychrometers, and anemometers. Through this study, students explore the concepts of interactions within the ecosystems, mutualism, amensalism, commensalisms and parasitism. Finally, a determination of the limiting factors that influence biotic populations and their distribution will be made.







Duration: Half day (2 hours) Available: April to mid-November

#### **LOW ROPES AND TEAM BUILDING** Grade 9 to 12

Challenge your students to discover their personal strengths with this special, hands-on program. Participants develop group skills such as cooperation, communication, trust, problem solving, planning, and leadership. Our facilitators are trained to provide students with an exciting and rewarding experience.





Duration: Half day (2 hours) or Full day (4 hours) Available: Team Building: Year-round | Low Ropes: April to November





### **RIVER SYSTEMS** Grade 9 to 12

Focusing on safety and accuracy, students strap on hip waders to collect, record and calculate data, creating a profile of the Humber River. Maps and watershed experts are consulted to support an understanding of watersheds, followed by a hike to the stream where students measure various geographical and watershed features. The data collected by students is used to calculate average depth (m), current speed (m/sec), cross-sectional area (m2) and discharge of the river.









Duration: Half day (2 hours) Available: Late April to October

### WILDERNESS SURVIVAL (SHSM) Grade 9, 11, and 12

Students work in cooperative teams to understand and practise basic survival techniques in the outdoors. Each team is challenged to construct a shelter, build a fire and boil water. The program emphasizes a leave-no-trace philosophy and how to plan and prepare for a safe and successful outdoor experience.





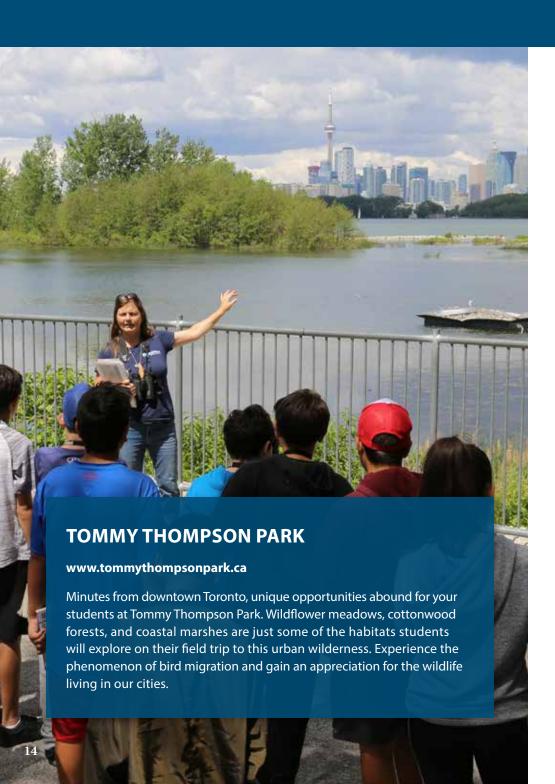


Duration: 2 hours Available: Year Round

Additional programs including elementary-level programming can be found at www.kortright.org/education

# **Tommy Thompson Park**





### **INVESTIGATING BIRD DIVERSITY** Grade 9 to 12

Students are immersed in the phenomenon of bird migration and develop a deeper understanding of the importance of healthy ecosystems in urban wilderness settings. They learn how to identify bird species and custom-adjust binocular settings before setting out on Tommy Thompson Park trails to document observed bird species. Students are actively engaged in honing their observation and data collection skills as they focus on the anatomical characteristics of birds.











Duration: Half day (2 hours)\* or full day (4 hours) Available: Year-round

\*The half day option of this program is available mornings only.

### **INVESTIGATING INVASIVE SPECIES** Grade 9 to 12

An ongoing concern for ecosystem biodiversity and health is the presence of invasive species. In this program, students learn to identify on-site plant and animal invasive species and the strategies they use for taking over a space; understand the role humans play both in spreading invasive species and protecting against it; and take part in a habitat restoration tour of Tommy Thompson Park to learn about our specific tactics to manage the invasive species in the park. Concepts of ecosystem sustainability and ecological balance are also addressed. *If season and species management* conditions align, invasive species removal may be included in the program.











Duration: Half day (2 hours) Available: Spring, Summer, Fall

### **CUSTOM PROGRAMS** Grade 9 to 12

Bring your students to Tommy Thompson Park for a simple nature walk, habitat exploration, restoration tour, or birding hike! We also offer real-world challenges and problem-solving strategies for you to incorporate into classroom learning. We'd love to share the wonders of Toronto's Urban Wilderness with you and your group!

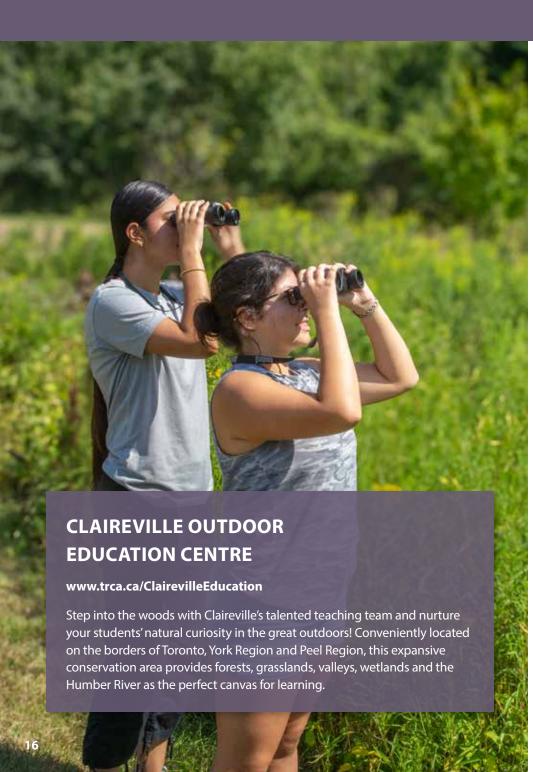


Duration: Half day (2 hours) or Full day (4 hours) Available: Year-round

Additional programs including elementary-level programming can be found at www.tommythompsonpark.ca/education

### **Claireville Outdoor Education Centre**





#### **TEAM BUILDING** Grade 9 to 12

This special program allows participants to develop group skills such as working together, sharing ideas, trust, problem solving, patience and leadership. Through a series of cooperative games and challenges, students will work in small groups to successfully accomplish tasks while learning the value of effective communication and leadership.



Duration: Half day (2 hours)

Available: September to November and April to June

#### **ENVIRONMENTAL IMPACT STUDY** Grade 9 to 11

This integrated program will encourage participants to use their analytical skills and decision-making abilities to successfully determine the effects of urbanization on the natural community.

After a brief introduction to the site, participants will use basic mapping skills, data collection skills, research abilities, and powers of observation to gain sufficient knowledge to determine the impact of human activities.

Participants will compare two or more wetland ecosystems based on biotic and abiotic factors and hypothesize what has contributed to their restoration or decline.





Duration: Half day (2 hours)

Available: September to November and April to June

### **GPS AND GEOCACHING** Grade 9 to 12

Students explore the history of navigation and GPS technology, learn how to use a GPS unit, and then hit the trails to find geocaches placed at Claireville using our GPS units!

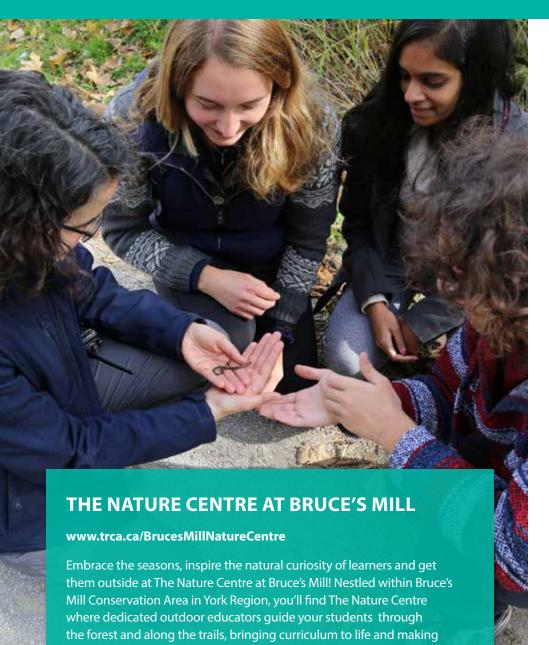




Duration: **Half day (2 hours)**Available: **Year-round** 

# The Nature Centre at Bruce's Mill





lasting memories.

### **ENVIRONMENTAL ACTION** Grade 9 to 12

Step into the role of real conservation scientists. During this immersive outdoor experience, students will take part in meaningful, hands-on activities that make a difference for local ecosystems. Students can help restore habitats by removing invasive species, planting native vegetation, or preparing seeds to grow back at school. Or they can take a guided hike to collect data that contributes to real conservation research databases.

Depending on the season, students could be listening for frog calls, identifying bird species, observing local wildlife, or studying native plants. Along the way, they'll discover why community science matters and leave inspired with practical ways to continue helping the environment at home and at school.







Duration: **Half day (2 hours) or Full day (4 hours)**Available: **Mid-April to October** 

### **GPS** Grade 9

Did you know that GPS is an acronym for Global Positioning System? In this program, students are introduced to the history of mapping and GPS technology, how this technology works, and what its uses are today. Students learn how to use handheld GPS units and a map to navigate, before setting out in smaller groups to race to as many geocache destinations as possible!





Duration: Half day (2 hours) or Full day (4 hours) Available: Mid-April to November

### The Nature Centre at Bruce's Mill

### **WATERSHEDS** Grade 9

Dive deeper into the water cycle with this program! After a review of the water cycle, we introduce the concept of a watershed, locate which watershed your school is in, and explore why and how to maintain good watershed health. While hiking around the property, students explore the parts and natural features of a watershed, the types of land use and their effects, and the mitigation measures we can all take to help our watersheds.





Duration: Half day (2 hours) or Full day (4 hours) Available: Late April to October

### **WILDERNESS SURVIVAL** Grade 9 to 10

Do you ever wonder what to do if you are lost in the outdoors? This program introduces students to basic survival techniques and the necessary safety preparations before putting them into practice. Students work in teams to build a small fire and a shelter to fit their group.



Duration: Half day (2 hours) or Full day (4 hours) Available: Mid-April to November

### **TEAM BUILDING** Grade 9 to 12

Looking for ways to build positive relationships between your students this school year? In this program, students work together to complete various challenges that encourage them to share ideas, trust each other, and practise their leadership and patience skills.





Duration: Half day (2 hours) Available: Year-round



# **The Meadoway**



### **HUMAN IMPACT ON NATURAL SPACES** Grade 9 to 12

Experience a positive human impact story of meadow restoration right in front of you! Tour The Meadoway and learn about project challenges like invasive species, the roles humans may play in spreading or halting their spread, and discuss meadow restoration strategies. Depending on the season, invasive species removal or seed collecting may be included in the program.











Duration: Half day (2 hours)
Available: Spring, Summer, Fall

### **CUSTOM PROGRAMS** Grade 9 to 12

Bring your students to The Meadoway for a simple nature walk, ecosystem exploration, restoration tour, or other program content that aligns with what you're teaching in the classroom.

We'd love to share the wonders of The Meadoway with you and your group!







Duration: Flexible Available: Year-round



### **WATERSHED ON WHEELS**

Free In-School Programs for Public Schools in York, Peel and Toronto

### **CLEAN WATER CLEAR CHOICES** Grade 8 to 11

A classroom experiment gets students thinking about different water filtration methods. Working in teams, they attempt to clean polluted water using miniature versions of water filtration items that represent equipment found in municipal waste water treatment facilities.







Duration: Half day (2 hours) Available: Year-round

### **MORAINE MATTERS** Grade 9, 11, and 12

Secondary-level students learn about the Oak Ridges Moraine as a critical habitat, a diverse ecosystem, and a valuable resource used for many human activities. This program can be delivered in the classroom or on a field trip (during the months of September and October). Please inquire for further details regarding the field trip extension.









Duration: One class period Available: Year-round

### **COPING WITH CLIMATE CHANGE Grade 10**

This important program investigates the science and politics of climate change. Students play a fast-paced Cap and Trade game examining one way humans are trying to mitigate climate change through political and legal tools. Students are then challenged to discover actions they can take to help reduce the impact of global warming.



Duration: One class period Available: Year-round



### **BEYOND THE PARK**

### **In-School Programs**

We bring the experience to your class! For school groups who would love to learn about environmental and nature-themed topics, but can't make it to one of our Education Centres, we will send a park instructor to you!

### MICROPLASTICS IN LAKE ONTARIO (Toronto only) Grade 9 to 12

Discover microplastics, a significant environmental issue affecting aquatic ecosystems across the globe. Participants will analyze terrestrial samples from Toronto's shorelines and aquatic samples from the Toronto harbour. Through an in-depth presentation and hands-on exploration, participants will gain an appreciation of the impacts of our daily plastics use and discuss approaches to being part of the solution. Microscopes and sediment sorting sieves provided.





Duration: **One class period**Available: **Year-round** 

### URBAN ADAPTATIONS (Peel Region only) Grade 9 to 12

The urban ecosystem is a unique space where humans and our structures are closely linked to the air, water, land, and animals that also call these cities home! How have plants and animals adapted to these urban landscapes and how can we adapt to a changing climate, ensuring these spaces are healthy for generations to come!





Duration: **One class period**Available: **Year-round** 

### **CUSTOM PROGRAMS**

If you'd like our environmental educators to come to your school, but want a specific topic covered, let us know. We'd love to work with you to create a hands-on environmental education program unique to your group!



Duration: **Flexible**Available: **Year-round** 



Additional programs including elementary-level programming can be found at www.trca.ca/in-class-visits









# EARN 2 CREDITS DOING REAL ARCHAEOLOGY THIS SUMMER

- Earn an IDC4 and a co-op credit working on an archaelogical site
- Multi-week course, accommodations and meals included
- Online pre-course component

Located at Claremont Nature Centre

www.trca.ca/BoydFieldSchool

In collaboration with

A program of









# Specialist High Skills Major Certifications with TRCA!

SHSM support available for all sectors:

- Sector-specific certifications (over 25 certifications available!)
- S.P.C.E-I.C.E. training (TRCA's Ontario Certified Teachers will facilitate the training)
- Sector partnership for environment sector
- SHSM programs are also available at our overnight centres (complete multiple certifications over 2 or 3 days)

Find a complete list at

www.trca.ca/shsm







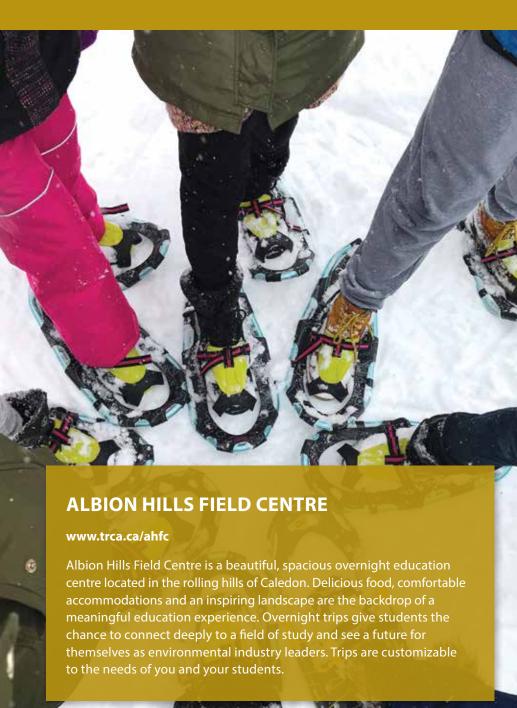
# OVERNIGHT PROGRAMS

TRCA's educational overnight programming offers an exciting and distinctive opportunity for students to learn and grow, both as individuals and as a member of the class. With access to unique environmental and geographic resources such as forest and wetlands as well as endless hiking and skiing trails, students are provided with the backdrop to build confidence, develop leadership skills and bond with one another. All excursions are curriculum-linked, customized to your group's specific needs, and delivered by our passionate and knowledgeable Ontario Certified Teachers (OCT).

Secondary-level overnight field trips are available at: **Albion Hills Field Centre** (Caledon), **Claremont Nature Centre** (Pickering), and **Lake St. George Field Centre** (Richmond Hill)

### **Albion Hills Field Centre**





### **BIKE THE HILLS** Day program Grade 9 to 12

Bikes and Helmets provided! This program will introduce new or experienced riders to off-road cycling skills and safety considerations that are important when biking in natural areas. Students will connect with nature through games, activities, and a group bike ride that will be delivered by instructors trained on Cycling Ontario's HopOn curriculum. All biking equipment will be provided.



Duration: **2.5 hours** 

Available: Year-round, depending on ground conditions

### **LEADERSHIP & ACTIVE LIVING** OVERNIGHT TRIP PACKAGE Grade 9 to 12

Experience all the outdoor adventure Albion Hills has to offer while learning leadership skills and bonding as a class. Students learn techniques and safety guidelines for a variety of activities such as cross-country skiing, fat biking and snow-shoeing while learning about healthy active lifestyles. Group dynamics and leadership skills are taught on our low ropes course and during campfire. Students will have opportunities to begin lifelong practices that improve wellbeing and mental health through mindfulness and self-reflection exercises throughout the trip.



Duration: **1.5 – 2.5 days**Available: **Year-round** 

### SHSM/S.P.C.E.-I.C.E CERTIFICATION OVERNIGHT TRIP PACKAGE

Grade 11 and 12

Bring your SHSM students to Albion Hills for a three-day, two-night visit to complete multiple certifications while bonding as a group and spending time together in a beautiful nature setting. Choose from a variety of certificate offerings including Leadership, Emergency Management and Preparedness, GPS/Map/Compass and S.P.C.E. I.C.E. Training. In the evening, explore the trails on a guided evening hike and relax in front of the campfire.

Duration: **1.5 – 2.5 days**Available: **Year-round** 

### **Claremont Nature Centre**





### **INTRODUCTION TO GPS** Grade 9, 11, and 12

Students are introduced to the Global Positioning System (GPS) and its relation to topographic maps and compasses, emphasizing the UTM coordinate system. Practical use of the GPS unit is provided through an outdoor geocaching game.





Duration: **Half day (2 hours)**Available: **Year-round** 

### **GROUP DYNAMICS** Grade 9 to 12

Using Albion's low ropes course, students work in groups to solve a variety of defined challenges. Team success depends upon a combination of cooperation, communication and physical and mental efforts from all individuals. Each group dynamic is designed to build a cooperative group spirit and instill self confidence in the learner, and mutual respect for team-mates.



Duration: **Half day (2 hours)** Available: **Year-round** 

Additional programs including SHSM, and elementary-level programming can be found at www.trca.ca/ahfc



www.trca.ca/cnc

Let the Claremont forest be your students' opportunity to connect with the land, themselves and each other - all while engaging in customizable environmental programming. Our pan-abode log cabin boasts an open-concept lounge to bird-watch out of the sun, or to cozy up near the wood-burning fireplace at the end of a brisk day. Let our experienced team of Ontario Certified Teachers work with you prior to your trip to create your ideal itinerary and then seamlessly take the lead upon your arrival to curate a memorable experience for staff and students!

Programs available as day or overnight trips.



### **STREAM STUDY** Grade 9 to 12

Through observation, measurement, experimentation, and collection of biological and physical data, students examine the stream environment. Evaluation and analysis of the data allows learners to hypothesize about the viability of the stream to support cold water fish species (e.g. trout).







Duration: Half day (2.5 hours)
Available: Year-round

### **LOW ROPES AND TEAM BUILDING** Grade 9 to 12.

Challenge your students to discover their personal strengths with this special, hands-on program. Participants develop group skills such as cooperation, communication, trust, problem-solving, planning and leadership. Our facilitators are trained to provide students with a rewarding experience while creating memories and building rapport within the student groups





Duration: Half day (2 hours) or Full day (4 hours) Available: Year-round

### NATURE ART: pottery, nature photography, eco-printing

Grade 9 to 12

Let us design a customizable art program to meet your students' needs and skill levels! Whether it's learning different composition techniques before taking beautiful nature photos, collecting natural items to use in eco-prints, collecting clay from Duffins Creek to sculpt with, or simply creating ephemeral art on the land, we use art as a way to help connect students with the world.





Duration: Half day (2.5 hours) Available: Year-round

### **Claremont Nature Centre**



### SECTOR PARTNERED CHALLENGE EXPERIENCES / INNOVATION, CREATIVITY AND ENTREPRENEURSHIP (S.P.C.E. / I.C.E.)

Grades 11 and 12 SHSM students

Let Claremont's Ontario Certified Teachers (OCT) facilitate your S.P.C.E. / I.C.E. training. Our Education Team has been trained by the Ministry of Education to lead any sector through the process of finding real-world solutions to authentic challenges. Using the three gears approach, students explore Empathy & Needs Finding, Ideation & Prototyping and Strategy & Testing, and are provided an opportunity to present their solutions and receive feedback from relevant sector partners. Students will receive a certificate of completion for their portfolio upon successful completion of the certification. We can also be your **Sector Partner** for the environment sector.

Duration: Full day (6 hours) Available: Year-round

#### WINTER RECREATION Grade 9 to 12

Get them outside and enjoying Canadian classics in the snow! Learn about the history of cross-country ski-ing or snow-shoeing before gearing up and having a group lesson to practice new skills. Once learners have successfully completed basic skills training, they are invited to explore the beauty of the Claremont forest with their group and guide.





Duration: Half day (2.5 hours) Available: Winter

#### **GEOCACHING** Grade 9 to 12

Gather your geocaching team and get ready to compete in the Amazing Claremont Quest! Each team is given a GPS device and instructions to help guide them through the forest, meadows and fields while solving puzzles and hitting challenging roadblocks. Students (and teachers!) will be racing against each other and the clock to try and gather the most points and incur the least penalties - may the best team win!







Duration: Half day (2.5 hours) Available: Year-round

# Lake St. George Field Centre 💢 📿





### LAKE ST. GEORGE FIELD CENTRE

www.trca.ca/lsg

Lake St. George Field Centre provides an atmosphere reminiscent of cottage country, nestled within the region's limits. This beautiful kettle lake property is the perfect environment for class bonding and offers unparalleled educational resources including our unique "Floating Classroom", a solar-powered pontoon boat. Extend your students' learning and development through exciting programming with our Ontario Certified Teachers (OCT) in a setting they'll never forget!

Programs available as day or overnight trips

### FISH IN THEIR HABITAT Grade 9 to 12

This program involves catching fish near the shore by setting and hauling a seine net. Students sketch and identify the species present, then collect data such as weight, length, relative age, and overall health. Current issues in fish management such as invasive species and their impacts on fisheries is explored through guided discussion. The program culminates with students gently returning their catch to the lake.





Duration: Half day (2 hours) Available: Spring, Summer, Fall

### **INTRODUCTION TO CANOEING** Grade 9 to 12

This program provides an introduction to lake-water canoeing including the use of proper safety equipment, canoe entry and exit, and basic strokes. Students will practice their skills as they paddle on Lake St. George with ORCKA-trained instructors and certified lifeguards. Please note that students must pass a swim test prior to canoeing.





Duration: Half day (2 hours) Available: Spring, Summer, Fall

### **INTRODUCTION TO GPS** Grade 9, 11 and 12

Students are introduced to the Global Positioning System (GPS) and its relation to topographic maps and compasses, emphasizing the UTM coordinate system. Practical use of the GPS unit is provided through geocaching. Digital files of coordinates are available upon request for further studies.





Duration: Half day (2 hours) Available: Year-round

# **Lake St. George Field Centre**



#### **LAKE ECOLOGY** Grade 9 to 12

### **Pontoon Boat Program**

Students are first acquainted with the glacial formation of kettle lakes like Lake St. George before touring the lake aboard a solar-powered electric pontoon boat. Water samples and data will be collected using a variety of equipment such as digital meters and Water Rangers tests. Students will analyze data, as well as graph and interpret results, to determine the health of the lake.





Duration: **Half day (2 hours)**Available: **Spring, Summer, Fall** 

### **OAK RIDGES MORAINE STUDY** Grade 9 to 12

The Oak Ridges Moraine Study introduces students to the geological formation of the Oak Ridges Moraine and its vital role in maintaining water quality across the Greater Toronto Area. Through hands-on activities and outdoor exploration, students will gain a deeper understanding of this significant landform and its ecological importance. Activities may include demonstrations using a cross-sectional groundwater model, water quality testing or a guided hike where students will observe and discuss key moraine features at Lake St. George.











Duration: Half day (2 hrs) or full day (4 hrs)

Available: Year-round

### **PLANKTON SURVEY** Grade 9 to 11

In this introduction to aquatic microbiology, students will use plankton nets and other equipment to collect samples from the littoral zone of Lake St. George. After a review of plankton taxonomy and microscope basics, students will identify and sketch various phytoplankton and zooplankton obtained from the lake. Images captured using digital microscopes are used for further study in the classroom.

Note: schools must bring their own microscopes.





Duration: **Half day (2 hours)**Available: **Spring, Summer, Fall** 



### **SHORELINE VEGETATION SURVEY** Grade 9 and 11

Students will be introduced to some basic wetland plant identification and will have an opportunity to survey and map the littoral zone of Lake St. George from canoes. The importance of a natural shoreline to the health of the lake and the human impact on shoreline ecosystems will be examined. *Please note that students must pass a swim test prior to canoeing.* 





Duration: **Half day (2 hours)**Available: **Spring, Summer, Fall** 

### **WETLAND STUDY** Grade 9 and 11

Students will learn about the four main types of wetlands that can be found in southern Ontario. They will be introduced to a wetland evaluation system that they will put into practice when they visit both natural and constructed wetlands on the property. Water samples may be collected for invertebrate examination and/or chemical testing. Emphasis will be placed on the importance and conservation of wetlands.







Duration: **Half day (2 hours)** Available: **Spring, Summer, Fall** 

Additional programs including elementary-level programming can be found at www.trca.ca/lsg

# **Our Overnight Centres**

All three overnight centres provide accommodations in comfortable, climate-controlled dormitory rooms. Teacher rooms have en suite washrooms. Private rooms for students, additional teacher rooms, or non-gendered rooms are available upon request.

The centres provides healthy, fresh meals and snacks prepared on site by our professional cooks in our commercial kitchens. Dietary restrictions will be accommodated and arranged for your group in your pre-trip planning process. Meals will not be repeated during your visit, so everyone can enjoy the variety.

If you have students or colleagues with additional needs, our staff will arrange accommodations. TRCA's overnight education programs are inclusive, culturally responsive and flexible to meet the needs of your students.









### Albion Hills Field Centre, Caledon

Albion Hills Field Centre is a welcoming and spacious chalet-style building, built of cedar and granite, and located within Albion Hills Conservation Park. The fresh and inviting landscape lies within the Humber Headwaters region, part of the environmentally significant Oak Ridges Moraine. The centre sleeps up to 45 students and four teachers.







# **Lake St. George Field Centre,** Richmond Hill

Lake St. George Field Centre is an historic homestead on a beautiful kettle lake. The private access site has multiple buildings, including two dormitories, a dining hall, and a boathouse. The lush and peaceful landscape lies within the Humber Headwaters region, part of the environmentally significant Oak Ridges Moraine. Each dormitory sleeps up to 34 students and four teachers, for a total capacity of 68 students and 8 teachers.

# **Claremont Nature Centre,** Pickering

Claremont Nature Centre is a cedar log building with a spacious lounge, wood-burning fireplace, dining area and classroom near the cold-water streams and meadows in the Duffins Creek watershed. The centre can accommodate up to 54 students and four visiting teachers.









# SECONDARY TEACHER PROFESSIONAL DEVELOPMENT

Expand your teaching toolkit with TRCA's nature-based professional development opportunities. Our courses build skills and knowledge through experiential learning and proven teaching methods.

### Offerings include:

- Teaching and Learning with Monarch Butterflies
- Global Positioning Systems (GPS)
- Paddle and Pedagogy: Experiential Teaching Through Canoeing

Full-day or half-day workshops are offered at fully equipped educational facilities. Certification and/or licencing are available in appropriate areas, upon completion.

For information on programs, dates and locations, visit: www.trca.ca/learning/adult



# GET OUTSIDE with TRCA's Unique Youth Programs

**Girls Can Too** is a successful training program that provides hands-on learning experiences in the environmental and skilled-trades sectors to young women in grades 7–12. From building boardwalks over ephemeral streams to riparian and woodland habitat restoration, participants are provided with hands-on learning opportunities, gain leadership skills, and learn how to contribute to a sustainable environment.

### trca.ca/gct



**TRCA's Youth Council** is designed to give people in the Toronto region aged 16-30 a way to come together to identify important environmental issues and provide the tools to take real action. Council members set their own goals and continue on longer term projects started by previous members.

Initiatives may include organizing environment focused events for youth, providing input on TRCA programs and priorities or raising awareness about specific environmental issues - you decide!

### trca.ca/yc



**Conservation Youth Corps** is a program designed for high school students looking to get their volunteer-hours outdoors. Learn how to safely use equipment and participate in environmental conservation, including monitoring and maintaining newly planted trees, removing invasive species, building and maintaining trails, and more.

trca.ca/cyc



### **OUR EDUCATION CENTRES**

### **Day Programs**

The Village at Black Creek - Toronto
Kortright Centre for Conservation - Vaughan
Tommy Thompson Park - Toronto
Claireville Outdoor Education Centre - Brampton
The Nature Centre at Bruce's Mill - Whitchurch-Stouffville
The Meadoway - Scarborough

### **Overnight Programs**

Albion Hills Field Centre - Caledon

Claremont Nature Centre - Pickering

Lake St. George Field Centre - Richmond Hill

### **In-Class Visits**

**Watershed on Wheels** - Your School **Beyond The Park** - Your School

### **HOW TO REACH US**

for inquiries, bookings, and more information



PHONE: **416-667-6295** *Monday–Friday, 8:30am–4:30pm* 

EMAIL: vservices@trca.ca

WEB: www.trca.ca/learning

