

EcoLinks 2015

EcoLinks Conference 2015: May 11 – Terra Cotta, Ontario

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Learn new strategies, skills, and activities for integrating environmental education into your teaching practice

Join us at Ecolinks 2015 for a chance to:

- Participate in hands-on workshops by educators, for educators
- Learn new skills to engage youth in learning for, about, and in the environment
- Try classroom-ready activities and resources to teach literacy, numeracy, geography, science, math and the arts through an environmental sustainability lens
- Network and brainstorm with other educators

Ecolinks welcomes:

- All classroom teachers (K-12) interested in integrating more environmental education into their teaching practice
- Outdoor and environmental educators
- Early childhood educators, administrators, and homeschoolers

Space is limited – Reserve now to secure your spot!

Conference fee of \$60 includes workshops, refreshments, lunch, and OSEE membership for 2015-2016. Online registration is open at www.osee.ca.

Ecolinks 2015 takes place...

Monday May 11, 2015 9:00 AM – 5:00 PM at Jack Smythe Field Centre & Terra Cotta Conservation Area. The site is located at 14592 Winston Churchill Boulevard, Terra Cotta, Ontario.

Ecolinks is organised by the Ontario Society for Environmental Education (OSEE). OSEE is the OTF-recognised subject association for all educators interested in the integration of environmental topics into curriculum.

Ecolinks 2015 is being offered in partnership with the **Peel District School Board Field Centres** and **Credit Valley Conservation**. Thank you to both organisations for generously providing a venue for this conference.

Photos courtesy of Dalila Seckar and OSEE members



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9:40 AM – 10:30 AM

Healthy Soils for a Healthy Life

Primary - Junior - Intermediate - Senior - General Interest/
Personal Development

Outdoors / Meet in ORANGE Workshop Room

This is the UN International Year of Soils. The Ontario Curriculum notes the organic component of soil as being a mere fraction. While technically this is true, microorganisms in soil have such a huge role to play in healthy plant growth, it can be said that soil itself is a living thing. Treating soil as a living thing helps us to understand the importance of its role, as far more than just a medium for plants. Composting processes and soil analysis will be discussed, including weedy indicators of soil types.

Sunday Harrison
Green Thumbs, Growing Kids

Oil Sands Quicksand: Teaching Controversial Issues in the 21st Century

Intermediate - Senior

Indoors / GREEN Workshop Room

GreenLearning.ca's (always free) Oil Sands Education Dialogue (OSD) program tackles one of Canada's major challenges - helping students understand the importance and challenges of Alberta Oil Sands development. Instead of loud debates, mis/disinformation, and intractable opinions, our online OSD program facilitates informed dialogue and positive collaboration between students and classes. This is critical thinking in an authentic context. Two programs in development will be profiled. Our Hearing Simulation is a two-week online simulation in which students take on and research the role of a stakeholder in a Hearing regarding a company's application of an oil sands development. Our Price of Oil module helps students grapple with the implications of changes in the price of oil through carefully chosen current research and decision-making.

Dick Holland
GreenLearning Canada

10:50 AM – 11:40 AM

Plotting Pollinators with Quadrat Frames

Junior - Intermediate - Senior

Indoors and Outdoors / ORANGE workshop room

How do scientists estimate and monitor biodiversity in different environments? There are many methods — making plant tallies, tagging and tracking wildlife with a GPS, sampling organisms in shallow ponds or streams — but all involve some element of using parts to represent the whole. It would be impractical, impossible even, for scientists to count every insect in a field; instead, they select several small plots, study them intensively and then extrapolate their findings. In this session, we will assemble simple, portable quadrat frames, learn about different protocols for selecting plots within a larger sampling site, conduct a field study to estimate pollinator population density and debrief by discussing our observations. In response to requests from teachers looking for ways to integrate outdoor and experiential education into their everyday lessons, EcoSpark developed Nature Academy — a PD and coaching program that provides upper elementary and secondary school teachers with the knowledge, field skills and follow-up support needed to do exactly that. The Plotting Pollinators with Quadrat Frames activity is borrowed from the two-day *Our Urban Pollinators* workshop.

Kendal Gerard
EcoSpark / Nature Academy

Planting the Seed for School Gardens

Primary - Junior - Intermediate

Indoors / GREEN workshop room

We know school gardens can be an important part of learning but how can we make that happen given all the rules and regulations that exist in education? How do we ensure gardening is actually something that will promote cross-curricular learning for all grades? Through our experiences with Roseville Community Garden, we can talk about how this is happening and how we overcame these challenges.

Kathryn Markham-Petro, Marshall Bourque & Michelle Papineau
St. Clair College

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1:50 PM – 2:40 PM

Exploring Schoolyard Biodiversity through DNA Barcoding

Primary - Junior - Intermediate - Senior

Indoors and Outdoors / ORANGE Workshop Room

Since 2013, the Biodiversity Institute of Ontario (BIO) has teamed up with multiple schools and thousands of students across Canada to explore insect diversity in their schoolyards through DNA barcoding, a genetic technique for identifying organisms. Using a Malaise trap, a small tent-like apparatus, each school has collected hundreds of insect specimens. Participants will be introduced to different insect trapping methods, and will learn how to set-up and monitor insect traps. Participants will find out how DNA barcoding data can be used to enhance their own environmental education programs. Join us to discover how your class can be a part of this exciting program!

Vanessa Breton & Emily Berzitis *Biodiversity Institute of Ontario*

Hands-On Activities for a Very Popular Planet

Primary - Junior

Indoors / GREEN Workshop Room

What does it mean to share the world's natural resources and global environment with seven billion other people? Find out at this hands-on session that builds students' understanding of how we, as humans, shape the Earth's landscapes and climate across the globe. The presenters will outline age-appropriate approaches to address some of the issues of living in a world of seven billion people, such as resource use and environmental stewardship. Specifically, they will engage participants in hands-on activities that explore some of the fundamentals of human-environment interactions, including carrying capacity and understanding cause-and-effect relationships in nature. Activity themes include land use, renewable and nonrenewable resource use and an introduction to the concepts of sustainability. A variety of activity formats aim for inclusiveness for students with different learning styles. All participants will receive activity scripts and information on how the activities meet provincial content standards for several disciplines.

Cindy Smith & Karen Nolan
Seneca College

From Field to Fork to Disposal: Knowing our Food System

Intermediate - Senior - General Interest/ Personal Development

Indoors / BLUE Workshop Room

What are the impacts of our food choices? In this workshop, participants will explore the components of the food system, incorporating various ways to differentiate instruction. In small groups, participants will then choose a food item and critically analyze the environmental impact of the item's food system, paying close attention to the system's inputs and outputs. As a group, we will discuss various ways to incorporate food system education (food literacy) into various educational settings.

Coreen Jones
EcoSource

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3:00 PM – 3:50 PM

On the Fly: Teaching River Conservation through Fly Fishing

Intermediate - Senior

Indoors and Outdoors / ORANGE Workshop Room

Deep currents of river conservation flow through the practice of fly fishing. In the workshop we'll learn the basics of fly fishing, explore the relationship between river, fish, fly, and the landscape, and tie a fly to take home. We'll also pose meaningful questions about teaching conservation in the classroom and the role of experiential education in forming young environmental leaders.

Andrew Kett & Pat Kelly
Credit Valley Conservation

* Workshop runs from 3:00 – 5:00 PM

Growing STEM Skills using Outdoor Maths

Primary - Junior

Indoors and Outdoors / GREEN Workshop Room

Students often wonder about math- what's it good for? Why should I learn it? As a discipline, mathematics offers unique skills to help understand the environmental issues our world is facing. By investigating math concepts outdoors, students can make connections between math and science concepts, in a variety of content areas, and in the real world. This session will provide you with tools and activities to explore environmental problems and solutions that are a part of students' everyday world.

Pat Miller & Bonnie Anderson,
Toronto District School Board & Peel Field Centres

Graphic Novels and Animated Films: Contemporary Approaches to Eco-Art and Visual Storytelling

Junior - Intermediate - Senior - General Interest/ Personal Development

Indoors / BLUE Workshop Room

This interactive and hands-on workshop starts with an overview of the modern context of eco-art as an education tool, with a specific focus on visual storytelling and narrative, through the use of stop motion animation and graphic novels. Les takes the participants on a visual and kinesthetic journey of telling their own environmental autobiography through the medium of animation and graphic novel making. After an introductory group activity and a short presentation, participants will:

- 1) Launch into making a short storyboard, character sheet, background, and characters for their animated film.
- 2) Using the storyboard and character sheets, explore graphic novel making and create a 2-page graphic novel.

Les Luxemburger

* Workshop runs from 3:00 – 5:00 PM

4:10 PM – 5:00 PM

Voices from the Land: An Exploration of Art in Nature

Primary - Junior - Intermediate - Senior

Indoors and Outdoors / GREEN Workshop Room

Voices from the Land is a project that explores the intersections of art, language, culture and the natural world, and celebrates our connections to the land and our relationships with each other. In this interactive workshop, participants will be introduced to the Voices process and participate in a modified version of the full project. Participants will collaborate in small groups to create artwork using natural found materials at the workshop location, and work together to write poetry that gives voice to their piece. Explore your creative side and learn how the Voices process can enhance your teaching practice and connect your students to art, language and their local landscape.

Vicky An
Monarch Teacher Network of Canada & Toronto and Region Conservation

Ecolinks 2015 - Conference Schedule

	Program	ORANGE Workshop Room	GREEN Workshop Room	BLUE Workshop Room
9:00 – 9:30	<i>Arrival & Registration - - - Refreshments & Exhibitors in RED Classroom</i>			
9:30 - 9:40	<i>Conference welcome in the RED classroom</i>			
9:40 – 10:30	Session 1	Healthy Soils for a Healthy Life <i>Green Thumbs Growing Kids</i> P-J-I-S Outdoors	Oil Sands Quicksand: Teaching Controversial Issues in the 21st Century <i>GreenLearning Canada</i> I-S Indoors	/
10:30 – 10:50	<i>Coffee Break: Refreshments & Exhibitors in RED Classroom</i>			
10:50 – 11:40	Session 2	Plotting Pollinators with Quadrat Frames <i>EcoSpark / Nature Academy</i> J-I-S Indoors and Outdoors	Planting the Seed for School Gardens <i>St. Clair College</i> P-J-I Indoors	/
11:40 – 12:00	<i>Travel to Terra Cotta Conservation Area</i>			
12:00 – 1:20	<i>Lunch/AGM at Terra Cotta Conservation Area</i>			
1:20 – 1:50	<i>Travel back to Jack Smythe Field Centre</i>			
1:50 – 2:40	Session 3	Exploring Schoolyard Biodiversity through DNA Barcoding <i>Biodiversity Institute of Ontario</i> P-J-I-S Indoors & Outdoors	Hands-On Activities for a Very Popular Planet <i>Seneca College</i> P-J Indoors	From Field to Fork to Disposal: Knowing our Food System <i>EcoSource</i> I-S Indoors
2:40 – 3:00	<i>Coffee Break: Refreshments & Exhibitors in RED Classroom</i>			
3:00 – 3:50	Session 4	On the Fly: Teaching River Conservation through Fly Fishing <i>Credit Valley Conservation</i> I-S Indoors & Outdoors	Growing STEM Skills using Outdoor Maths <i>Pam Miller and Bonnie Anderson</i> P-J Indoors and Outdoors	Graphic Novels and Animated Films: Contemporary Approaches to Eco-Art and Visual Storytelling <i>Les Luxemburger</i> J-I-S Indoors
3:50 – 4:10	Break		<i>Break</i>	
4:10 – 5:00	Session 5		Voices from the Land: An Exploration of Art in Nature <i>Monarch Teacher Network of Canada & Toronto and Region Conservation</i> P-J-I-S Indoors & Outdoors	