



*Community partnerships promoting energy & water conservation,
waste reduction, pollution prevention and urban greenspaces*

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Feb 2010

Benthic Biomonitoring Training Course

EcoSuperior Environmental Programs will host a Benthic Biomonitoring training course in Thunder Bay. This course is for people who are interested in using benthic macroinvertebrates to monitor streams and lakes using the harmonized protocols developed by the Ontario Benthos Biomonitoring Network. Participants demonstrating proficiency can become certified OBBN partners.

The Ontario Benthos Biomonitoring Network (OBBN) is an aquatic macro-invertebrate biomonitoring network for Ontario's lakes, streams, and wetlands developed by Ontario Ministry of the Environment and Environment Canada (Ecological Monitoring and Assessment Network).

Traditionally there has been an individualistic approach to biomonitoring in Ontario, with little communication between practitioners. This lack of coordination has limited the application of biomonitoring, chiefly due to an inability to share data, and a lack of consistent training. The OBBN aims to standardize methods (while maintaining limited options that recognize differences in partner expertise and financial resources), enable data sharing between partners, automate assessments, and provide training.

The Benthic Biomonitoring Training Course will be held by OBBN-certified trainers over two consecutive days, and will include a fieldwork component. The registration fee of \$150.00 will cover lunches, refreshments and limited equipment. Registration forms and agenda follow.

BENTHIC BIOMONITORING TRAINING COURSE

Hosted by EcoSuperior Environmental Programs

Contact: Lucie Lavoie (807) 624-2143 luciel@ecosuperior.org

Certified by the Ontario Benthos Biomonitoring Network

<http://www.svca.on.ca/download/benthos/index.htm>

Purpose

This is a training course for people who are interested in using benthic macroinvertebrates to monitor streams and lakes using the harmonized protocols developed by the Ontario Benthos Biomonitoring Network. Participants demonstrating proficiency can become certified OBBN partners.

Instructors

Lucie Lavoie, EcoSuperior Environmental Programs

Lucie has worked for the last decade with EcoSuperior on various public education campaigns. She is currently coordinating Protect Our Streams- a program to encourage good management of watercourses, and Study Our Streams- a benthic biomonitoring program that involves citizen monitors.

Dr. Ken Deacon, Deacon's Bioconsulting

Ken is an aquatic entomologist with a PhD from Canterbury University in Christchurch, New Zealand. He has taught courses in aquatic entomology for the last 20 years at Lakehead University in Thunder Bay, and presently works as a consultant.

AGENDA

Day One

Time	Topic	Instructor
09:00	Welcome, introductions, purpose of course	L. Lavoie K. Deacon
09:10	Background <ul style="list-style-type: none">a. The Need for Biomonitoringb. Benthos as Indicatorsc. Complementarity of Stressor- and Effect-based Monitoringd. OBBN Components and Principlese. OBBN Implementation Update	L. Lavoie
09:40	Biocriteria and the Reference Condition Approach <ul style="list-style-type: none">a. Need for Biocriteriab. Definition of Reference Sitec. Criteria for 'minimally impacted' sitesd. OBBN Reference Site Sampling Strategye. Examples	L. Lavoie
10:20	Break	

Time	Topic	Instructor
10:30	Protocol <ul style="list-style-type: none"> a. Concept of Balancing Standardization and Flexibility b. Collection Procedures For Lakes, Streams, Wetlands (highlight sampling unit, collection procedure, replication/sub-sampling) c. Processing Methods d. Archiving e. Habitat Characterization 	L. Lavoie
12:00	Lunch (provided)	
12:30	Drive to Lake location	
13:00	Lake Sampling (in groups) <ul style="list-style-type: none"> a. Select Sampling Locations b. Collect and Preserve Benthos c. Characterize Habitat 	L. Lavoie K. Deacon
14:00	Return to Workshop venue	
14:15	OBBN Coarse-level Benthos Identification: Part 1-Slide Show	K. Deacon
15:45	Sample Processing (~100 animal counts with abundance estimation; bucket method; release at end of day)	
16:30	End of Day 1	

Day Two

Time	Topic	Instructor
08:30	Review agenda and Housekeeping Feedback on Field Notes	L. Lavoie
08:35	Drive to River location	
8:45	River Sampling (in groups) <ul style="list-style-type: none"> a. Select Sampling Reach b. Establish Transect Locations c. Collect and Preserve Benthos d. Characterize Habitat 	K. Deacon L. Lavoie
10:00	Break and return to workshop venue	
10:10	OBBN Coarse-level Benthos Identification: Part 2 Demonstrate Reference Collection (project on-screen)	K. Deacon
12:00	Lunch	
12:30	Stream Sample Processing (~100 animal counts with abundance estimation; bucket method) Identify and Tally Benthos from Stream Samples	
14:30	OBBN Data processing	L. Lavoie
15:00	Break	
15:10	Certification Test	
16:15	Wrap- Up and discussion	

Benthic Biomonitoring Training Course
Registration Form

Thunder Bay, ON, Confederation College May 25 & 26, 2010

Name: _____

Affiliation: _____

Address: _____

Phone: _____

Email: _____

I have included payment of \$150.00 for course fee, lunches and refreshments.

Please invoice me.

Please forward to:

EcoSuperior Environmental Programs at FAX 807-622-0005
or luciel@ecosuperior.org

Mail Payments to:

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