

Ontario Benthos Biomonitoring Network (OBBN) Training Course Spring 2018

A course co-hosted by Conservation Ontario, the
University of Waterloo and the Ontario Ministry of
Environment and Climate Change

9-11 May 2018

University of Waterloo
200 University Ave W, Waterloo, ON
N2L 3G1

Instructors:

Chris Jones¹,
Sarah Sinclair²

¹Ontario Ministry of Environment and Climate Change, Dorset
Environmental Science Centre

²Conservation Ontario

In partnership with:



COURSE ANNOUNCEMENT

The Ontario Benthos Biomonitoring Network (OBBN), which is coordinated by the Ontario Ministry of the Environment and Climate Change, is an aquatic macroinvertebrate biomonitoring network for Ontario's lakes, streams, and wetlands.

This course covers biomonitoring theory, sampling methods, benthic-invertebrate identification, and bioassessment calculations. The training is recommended for anyone interested in using benthic macroinvertebrates to monitor streams or lakes using provincially standardized methods. Participants demonstrating proficiency are awarded a certificate of network membership.

The course will be held by OBBN-certified trainers over three consecutive days, and will include a field practicum. It is being offered as a segment of a University of Waterloo field ecology course, in the hope of ensuring a diverse group of participants, including University of Waterloo students and others from outside the university community. Space is limited. Advance registration is required.

Instructors:

Chris Jones is the Ontario Ministry of the Environment and Climate Change's benthic-invertebrate-biomonitoring scientist. His research is aimed at improving biomonitoring methods by better characterizing reference conditions for Ontario's waterbodies, deriving biocriteria (numerical pass/fail thresholds) for biomonitoring indices, and understanding sources of variation in benthic community composition. Chris is an SFS-certified taxonomist, and coordinates Ontario's Benthos Biomonitoring Network (a province-wide, lake-, stream-, and wetland-biomonitoring collaboration). He is also a student in Laurentian University's Boreal Ecology Ph.D. Program.



Sarah Sinclair is posted at the Dorset Environmental Science Centre as Conservation Ontario's Biomonitoring Technician. Sarah is an SFS-certified taxonomist. She oversees the OBBN's quality-assurance program by checking taxonomic identifications and enumerations for hundreds of samples each year. She is a graduate of Fleming College in the Ecosystem Management program.





Personal Gear List:

A variety of field and laboratory equipment, as well as Protocol Manuals and assorted hand-outs will be provided; however students are encouraged to be as self-sufficient as possible. Students having access to waders and a microscope are particularly advised to bring these items to the course.

Suitable outdoor clothing, appropriate for the season is further suggested, as is sunscreen, insect repellent, rain wear, and a warm hat and gloves.

Hospitality:

Registrants are responsible for their own meals and lodging.

Course Fee: \$350 (plus HST and registration service fee)

Registration Process:

Register on-line at:

https://www.regonline.com/MAY_2018_OBBN_Training_Course

Contact Sarah Sinclair for further information: (705) 766-2427 or

OBBN@ontario.ca



AGENDA

DAY 1

Time*	Topics
08:30-09:00	Sign-In
09:05-09:25	Welcome; Purpose and format of Course; Goals for Day 1
09:25-09:45	Background OBBN Components, Principles, and Status Update
09:45-10:15	Bioassessment Study Designs and Biocriteria
10:25-11:30	OBBN Methods
11:30-12:00	Protocol Question and Answer
12:00-13:00	Lunch (gather sampling equipment)
13:00-15:30	Sampling: Laurel Creek and pond
15:40-17:30	Process samples to obtain 100-count sample

DAY 2

Time*	Topics
09:00-09:10	Goals for Day 2
09:10-10:30	Introduction to benthic macroinvertebrate identification (27-group level; slide show)
10:30-10:40	Break
10:40-12:00	The major groups of benthic macro-invertebrates (demonstration using Dorset reference collection)
12:00-13:00	Lunch
13:00-17:00	Practice identification skills and use of keys

DAY 3 (morning session)

Time*	Topics
09:00-10:00	Review
10:00-12:00	Standard OBBN certification quizzes

DAY 3 (afternoon session, optional)

Time*	Topics
13:00-15:00	Demonstration: statistical concepts and calculations involved in a bioassessment -Matching reference and test sites -Summarizing composition with indices -Evaluating test-site condition

*Timeslots are approximate.

Course Location:

