

A large, semi-transparent image of a beetle, likely a water penny larva, is centered on the page. The beetle is dark brown with lighter spots on its back and legs.

# Ontario Benthos Biomonitoring Network (OBBN) Training Course Spring 2017

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

25-27 April 2017

Dorset Environmental Science Centre  
(1026 Bellwood Acres Road, Dorset, Ontario)

Instructors:

Chris Jones<sup>1</sup>,  
Sarah Sinclair<sup>2</sup>

<sup>1</sup>Ontario Ministry of Environment and Climate Change, Dorset  
Environmental Science Centre

<sup>2</sup>Conservation Ontario

## 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.

The course will cover 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 will be awarded a certificate of OBBN membership.

The course will be led by OBBN-certified trainers over three consecutive days, and will include a field practicum.

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. There are local accommodations nearby such as the Nordic Inn and The Moose B & B in Dorset. There is one grocery store in Dorset and a couple of restaurants. There is also the option of staying in either Bracebridge or Huntsville. These towns provide additional amenities, but result in a daily commute of between 30 and 45 minutes.

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

### **Registration Process:**

We can accommodate up to 30 students. Registration is first-come-first-served.

Register on-line at:

[https://www.regonline.com/APRIL\\_2017\\_OBBN\\_Training\\_Course](https://www.regonline.com/APRIL_2017_OBBN_Training_Course)

Contact Sarah Sinclair for further information: (705) 766-2427 or [obbassistant@gmail.com](mailto:obbassistant@gmail.com).



# **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: Paint Lake Tributary and Paint lake
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:



Google Maps view of Dorset Environmental Science Centre