



Draft Workshop Descriptions

PLEASE NOTE:

Coffee, snacks and networking will begin at 9:00 AM while those on the early morning paddle are out on the water. The full program begins at 9:45 AM at Main Street Landing. The optional early morning paddle will begin at the Community Sailing Center at 8:30 AM. A complete agenda will be sent the week of August 7th with options to register for specific sessions.

Morning Sessions

A. Macroinvertebrates

Dichotomous Keys: Language and Logic for Identifying Unfamiliar Animals and Plants

When you approach keys as a treasure hunt, and understand the logic behind them, you can identify what you have in your hand by answering one question at time. But not all keys are created equal. We'll take a look at different styles of keys, practice identifying a few plants and animals, and try making a key of our own. Whether you like linear thinking or loop-the-loops, you'll learn which keys belong in your library and which should be in your backpack.

B. Aquatic Invasive Species

The Aquatic Hitchhikers Guide to the Lake Champlain Basin

Take a closer look at some of the 50 nonnative and invasive species that have made the Lake Champlain Basin their new home. Explore the challenges and emerging threats they pose to native aquatic species. This session will explore the Earth and Human activity NGSS thread through exploration and identification of aquatic invasive species.

C. Plankton 101

Discovering Drifters: The Secret Lives of Plankton

Glimpse beneath the surface of the lake to discover the secret world of the microscopic creatures below! This session, aimed at the plankton novice, will provide an opportunity to participate in collecting plankton from the lake; using microscopes to identify species; and constructing a model plankton along with an understanding of their important role in our lives! An introduction to plankton-specific vocabulary, habitat, adaptations, and equipment will make this session accessible to all. Hands on games and activities, ready for the classroom or school yard, will incorporate further learning about life cycles, neutral buoyancy, and the great importance of these tiny creatures!

D. Science of Sailing:

Experiment with sail size to determine a sail's effect(s) on a sailboat. Given specific conditions, is there an optimal sail size? This session is geared for elementary school teachers.

Afternoon sessions descriptions on next page →

Draft Workshop Descriptions (continued)

Afternoon Sessions

E. *The Archaeology of Fishing in the Champlain Valley: Hands-on Local Artifacts and Methods*

Examine a variety of fishing-related artifacts recovered from a site near the confluence of Otter Creek and Lake Champlain, try out genuine Akwesasne-crafted fishing spear and fish trap (that students can replicate), and learn stories about prehistoric as well as more recent Native American fishing practices in our region.

F. *Science of Sailing:*

Did you know that sailboats fly? Discover and explore the many forces acting on a sailboat. This session is geared for highschool teachers.

G. Stormwater Bike Ride

Racing Runoff: Following the Flow of Urban Stormwater

Urban areas are a significant contributor to the deposition of phosphorus in Lake Champlain. In the city when rain water hits impervious surfaces such as roofs, roads, driveways, and sidewalks the water runs off quickly carrying with it pollutants that ultimately ends up in our waterways. Take a bike tour to explore Burlington's green infrastructure, stops along the way include bump out street curbs, rain gardens, and gravel wetlands. BYOBIKE.

H. Cyanobacteria:

Is that a bloom?

Each year cyanobacteria blooms develop in some parts of Lake Champlain. Learn about the health concerns, how to recognize cyanobacteria, the causes and conditions that favor blooms, how to distinguish them from other lake phenomena, and how to report your findings. The session will include classroom time and a trip to the water to assess conditions.

I. *Exploring Lake Champlain through Multimedia Inquiry*

Basing ourselves in current research and findings about Lake Champlain, we'll develop interview questions and head out along the waterfront to ask people about their experiences and interactions with the lake. We'll acquire and refine skills with digital audio recording technology and simple media-making tools; meet and engage people; and create audio or multimedia products from our interviews that can be used as tools for learning, sharing, and understanding the community's relationship with the lake. These same methods can be used by students of all ages - in brief or in depth - to learn about and explore issues through their own communities and the people around them. Participants can bring their own devices or borrow equipment from the Vermont Folklife Center (mobile phones, tablet/iPads, mac or android devices all welcome).