



In lieu of our Annual Lake Monitoring Conference, *Lake Stewards of Maine* will be hosting a series of weekly informational webinars from June through August on a wide range of topics pertaining to Maine Lakes. The sessions will be approximately one hour in length, including an opportunity for Q&A for those who attend the live webinars on the posted calendar date. Pre-registration is required for all who plan to attend. The webinars are open to Maine's citizen lake scientists, as well as the general public.

The live webinars will take place at 4PM on Friday afternoons, beginning on June 5, through August 28, with the exception of the holiday weekend of July 3. All sessions will be recorded, and will be available for future viewing on the Lake Stewards of Maine website (www.LakeStewardsOfMaine.org). The complete season of webinar topics and speakers is shown below.

The Crown Jewel Lakes of Central Maine, and the Threats that They Face

Airing Friday, June 5th, 2020 at 4PM

Presented by Matt Scott, Aquatic Biologist, Emeritus; Maine DEP, Past President of the North American Lake Management Society and Lloyd Irland, PhD; Research Scientist, Author & Consultant

Maine is fortunate to have some of the clearest and cleanest lakes in the nation, several thousand of which are in public domain. However, all our lakes are vulnerable in varying degrees to a growing number of anthropogenic-based threats. We are part of the problem, and we have the ability to be the solution, as well. Matt Scott and Lloyd Irland share their experience and perspective on where we are, how we got here, and what can be done to ensure that our lakes will remain healthy for the enjoyment of future generations.

~ ~ ~ ~ ~

The Influence of A Warming Climate on Aquatic Invaders in Maine Lakes

Airing Friday, June 12th, 2020 at 4PM

Presented by Roberta Hill; LSM Invasive Aquatic Species Director & Aquatic Ecologist

A warming climate will not be beneficial to our lakes. Aquatic invaders that are presently not able to survive in Maine will likely benefit from warmer lakes. Roberta Hill will discuss how the phenomenon of climate change may change our lakes as we know them.

~ ~ ~ ~ ~

Metaphyton in Maine Lakes: What Is It? Should We Be Concerned?

Airing Friday, June 19th, 2020 at 4PM

Presented by Scott Williams; LSM Executive Director & Limnologist

For more than a decade, public anecdotal observation has suggested that metaphyton, aka green cotton candy-like filamentous algae, has been increasing in Maine lakes. But is it – and if it is, should we be concerned? Citizen scientists can play an important role in answering these persistent questions.

~ ~ ~ ~ ~

Citizen Stewards and Maine Lakes: Collaborative Approaches for Sustainable Systems

Airing Friday, June 26th, 2020 at 4PM

Presented by Firooza Pavri, PhD; Professor of Anthropology, University of Southern Maine

Freshwater resources provide vital societal and ecosystem services. Keeping our lakes and ponds healthy for future generations will require that we strive to gain a more nuanced understanding of the complex factors that influence their well-being. Historically, models aimed at identifying which Maine lakes may be most vulnerable to ecosystem decline have rarely considered the role that private citizens may play in the process. However, local citizen stewardship efforts such as water quality and invasive plant monitoring, watershed surveys, and other citizen-driven conservation and management efforts can be a major factor in determining the long-term resilience of an aquatic ecosystem. In this webinar, Dr. Pavri will share her recent research looking at the important role that citizen lake scientists and other lake residents play in protecting Maine waters for the future, and how we can use this information to more clearly determine lake vulnerability.

~ ~ ~ ~ ~



**Northeast Climate Trends, Tracking Increasing Harmful Algal Blooms,
and the Vital Role of Citizen Science in this Research**

Airing Friday, July 10th, 2020 at 4PM

Presented by Hilary Snook; Senior Scientist, US EPA Regional Laboratory

In recent years, the occurrence of harmful algal blooms (HABs) have been increasing throughout New England. Climate trends here in the Northeast may be contributing to this phenomenon. Through his introduction of the new US EPA Bloom Watch App, Hilary Snook will discuss the role citizen science can play in understanding the trends, toxicity, and expanse of HABs.

~ ~ ~ ~ ~

An Overview of Citizen Lake Watershed Surveys

Airing Friday, July 17th, 2020 at 4PM

Presented by Amanda Pratt, Environmental Specialist, Maine DEP Watershed Management Unit

An overview of how to plan and conduct a volunteer lake watershed survey to identify sources of erosion that negatively impact water quality.

~ ~ ~ ~ ~

Lake Ice Regimes: Some Baffling Trends and Challenges for Citizen Science

Airing Friday, July 24th, 2020 at 4PM

Presented by Lloyd Irland, PhD; Research Scientist, Author & Consultant

Maine's lakes are clear in no small part due to the fact that historically they have been covered with ice and snow. Recent studies have shown that a warming climate is affecting this relationship. Lloyd Irland has advanced the research pertaining to historical lake ice data through additional analysis, and by taking into account the total period of ice cover, including "ice-in" information, where available.

~ ~ ~ ~ ~

What You Need to Know About Lake Algae

Airing Friday, July 31st, 2020 at 4PM

Presented by Alan Baker, PhD; Professor Emeritus of Botanical Sciences, University of New Hampshire

An introduction to the basic biology, taxonomy and terminology needed to better understand lake algae and its role in the aquatic ecosystem. An overview will be provided of some of the more common types of algae found in Maine lakes including cyanobacteria.

~ ~ ~ ~ ~

**What's in the Water? A New Smartphone App
for Identifying Flora, Fauna and Other Fascinating Phenomena Found in Maine Lakes**

Airing Friday, August 7th, 2020 at 4PM

*Presented by Roberta Hill; LSM Invasive Aquatic Species Director & Aquatic Ecologist
and Tristan Taber; LSM Training & Technical Outreach Coordinator*

Every lake in Maine is a place of wonder and discovery. LSM's new Field Guide to Aquatic Phenomena app has been developed to provide a knowledgeable pocket-held companion when you are out exploring on your lake, and to help you spot potential threats to lakes as early as possible. Version 1.0 allows users to search a wide array of FAUNA, FLORA and OTHER LAKE PHENOMENA, zeroing in on issues of possible concern through a series of simple keys. Roberta and Tristan will provide participants with an on-screen tour of the app and its associated website, and show how users can play an active role in the ongoing development of this infinitely expandable compendium.

~ ~ ~ ~ ~



A Guided Tour of LSM's Lakes of Maine Website

Airing Friday, August 14th, 2020 at 4PM

Presented by Peter Vaux, PhD; Developer & Manager of the Lakes of Maine Website

With over one million visits per year, www.LakesOfMaine.org is the go-to online source for information pertaining to the health of Maine lakes. Brainchild of our speaker, Peter Vaux when he was Chair of LSM's Advisory Board, this comprehensive compendium is now a thoroughly collaborative endeavor involving Peter, Lake Stewards of Maine, Maine DEP, Yellahoose webmaster Jim Cradock, numerous researchers and research institutions, and hundreds of other contributors including over 1200 LSM citizen lake scientists. Join Peter, for a guided tour of the site as he demonstrates how to access the wide array of data available for hundreds of Maine lakes, and explains Lakes of Maine's various features, online tools and data visualizations.

~ ~ ~ ~ ~

Presentation TO BE DETERMINED

Airing Friday, August 21st, 2020 at 4PM

~ ~ ~ ~ ~

Do Maine Lakes Experience Harmful Algal Blooms (HABs)?

Airing Friday, August 28th, 2020 at 4PM

Presented by Linda Bacon; Limnologist and Lake Assessment Section Leader, Maine DEP

Over the last six years, the Maine DEP Lake Assessment Section has collected hundreds of samples from more than 130 Maine lakes to test for the algal toxin, microcystin. Microcystins are hepatotoxins (liver toxins) produced by cyanobacteria, also known as blue-green algae. Two sets of lakes were targeted: approximately 120 larger lakes located in more populated parts of the state, and a few lakes considered to be chronic bloomers. Results from the first group provide insight into conditions in Maine lakes more broadly. The chronic bloomers were tested more intensively (every few weeks during a bloom), to see how microcystin concentrations changed over the duration of the bloom. Linda will share the results of this important study and discuss the State of Maine's next steps in response to the findings.

Support for LSM's webinar series is made possible by:

