

## 2018 Lakes Congress Session Descriptions

### Thursday, May 31, 7:00 – 8:30 p.m. Discussion

#### ***Summer Camps: The White Mountains (and Lakes!) Roots of an Iconic American Experience – Bringing History Alive in an Exhibit Experience*** (Carriage House)

*Presented by: Cynthia Robinson, Director, Museum of the White Mountains*

*Hosted by: The Lake Winnepesaukee Association in partnership with NH LAKES*

In the summer of 1880, Ernest Balch and a few friends set up camp on the shore of Squam Lake in New Hampshire. A recent dropout of Dartmouth, Balch paddled the lake, admired the mountain views, cooked over an open fire, slept in a rough-hewn shelter, and discovered his life's purpose. What he found was an island and an idea that would transform American childhood.

On the evening of Thursday, May 31, join us and Cynthia Robinson, Director of the Museum of the White Mountains, as we kick off the 2018 Lakes Congress. Through this fascinating presentation about bringing history alive through an exhibit experience, you will learn how experiencing nature in New Hampshire's lakes and mountains has been life-changing for generations of children.

*Pre-registration for this presentation is required and is \$5 per person.*

### Friday, June 1, 9:00 a.m. – 9:45 a.m. Keynote Address

#### ***“Climate Change and Lakes: What You Really Need to Know”*** (Winnepesaukee Ballroom)

*Presented by: Dr. Ken Wagner, Owner, Water Resource Services, Inc.*

The key factor in climate change is not some small average increase in air and water temperature, but variation in conditions. For the northeastern United States, we expect more intense storms and warmer winters, both of which can lead to undesirable lake conditions. We also expect warmer summers, favoring accelerated rates of organic matter decomposition in our waters and increased cyanobacteria growth. Yet, the effects on lakes will be highly variable, leading to lower predictability. This means that effective lake management must incorporate contingency planning with elements that can be implemented in response to climate-induced effects of which we will have limited advance warning. During this dynamic keynote address, Dr. Wagner will discuss what it is we really need to know about climate change and our lakes and he will highlight some ways we can respond.

### Friday, June 1, 10:00 a.m. – 10:50 a.m. Concurrent Session I

#### **A. Create an Annual Fundraising Plan: It's Easy and Fun!**

*Presented by: Martha Lovejoy, Director of Development, NH LAKES*

Find out how easy it is to create an annual fundraising plan for your organization. Learn how much fun raising money for your lake conservation efforts can be with a plan in-hand. Martha will provide you with a worksheet so you will leave this session with a basic plan outline.

#### **B. The State of Lake Advocacy in NH**

*Presented by: Kelly Buchanan, Advocacy Program Coordinator, and Tom O'Brien, President & Policy Advocate, NH LAKES*

Ever wonder how the legislative process in New Hampshire works? Attend this session and find out! Kelly and Tom will provide a summary of the process and the 2018 Legislative Session as it related to lake issues. They will also discuss how NH LAKES participates in the advocacy process and will highlight how local associations and lake enthusiasts can become involved, too!

## Friday, June 1, 10:00 a.m. – 10:50 a.m. Concurrent Session I (continued)

### C. The State of Aquatic Invasive Species in NH

*Presented by: Krystal Costa, Conservation Program Coordinator, and Andrea LaMoreaux, Vice President, NH LAKES*  
Krystal and Andrea will discuss how invasive plants and animals got to New Hampshire and have spread from waterbody to waterbody over time. Species of concern and the current status of infestations will be highlighted. A brief overview of current prevention and management efforts and a high elevation forecast of species of concern for the future (particularly relative to changes in regional weather patterns) will also be discussed.

### D. Water Quality: The Condition of NH's Lakes and Ponds—Past, Present, and Future

*Presented by: David Neils, Director, Jody Connor Limnology Center, NH Dept. of Environmental Services*  
What is current water quality condition of the lakes in New Hampshire? How have conditions changed over time? Dave will answer these questions and provide some insights as to what the future might hold. He will highlight how we can all work together to restore, maintain, and protect one of the state's most important natural resources.

### E. Fishing and Fisheries Management in NH's Lakes: Past, Present, and Future

*Presented by: Scott Decker, Program Supervisor, Inland Fisheries Division, NH Fish & Game Department*  
All fish species—from the grandest gamefish to the tiniest forage (bait) fish—are inherently and indelibly interconnected with the aquatic ecosystem. In partnerships with the angling community, lake associations, other state agencies, municipalities, and private landowners, the Inland Fisheries Division of the NH Fish and Game Department strives to maintain and/or enhance cold and warm-water fisheries throughout the state. Scott will explain how the Department fills this role and will highlight what may be on the horizon for fishing and fisheries management in New Hampshire.

## Friday, June 1, 11:00 a.m. – 12:00 p.m. Concurrent Session II

### A. “It’s a bird...it’s a plane...no, it’s a drone helping to manage your lake!”

*Presented by: Dave Cote, Lead Drone Pilot, and Bob Hartzel, Principal, Comprehensive Environmental Inc.*  
The use of drones in environmental science and engineering is expanding rapidly as the accuracy of these tools increases and as costs go down. Bob and Dave will provide an overview of how drones can be put to work for lake and watershed investigations, including a live demonstration over Lake Winnepesaukee.

### B. State Regulatory Programs and Local Regulations Conserving Our Lakes

*Presented by: Jason Aube, Shoreland Protection Program Coordinator, NH Dept. of Environmental Services, and Kelly Buchanan, Advocacy Program Coordinator, NH LAKES*  
There are a number of state and local programs that help to keep our lakes clean and healthy. Jason will provide an overview of state programs including the Shoreland Water Quality Protection Act and the DES Wetlands Rules. Kelly will provide an introduction to local ordinances from across the state that have been implemented to provide additional protection to our lakes.

### C. “We have an aquatic invasive species infestation in our lake, now what?!”

*Presented by: Steven Anthony, Beaver Lake Improvement Association; Sandra Crystall, Bow Conservation Commission; Amy Smagula, Exotic Species Program Coordinator, NH Dept. of Environmental Services; and Steve Soreff, Pawtuckaway Lake Improvement Association*  
Amy will provide an overview of what happens when someone reports a new invasive species infestation in a lake. She will walk through the state's rapid-response approach and the long-term management plan process that follows. She will then facilitate a question and answer session with representatives from three local groups that are on the front-line helping to manage a recent infestation in a local waterbody. Attend this session and hear what these groups are doing and the things they have learned along the way.

## Friday, June 1, 11:00 a.m. – 12:00 p.m. Concurrent Session II (continued)

### D. Soaking Up the Rain in the Lake Winnepesaukee Watershed!

*Presented by: Lisa Loosigian, Stormwater Management Technician, NH Dept. of Environmental Services, and Patricia Tarpey, Executive Director, Lake Winnepesaukee Association*

Soak up the Rain Winnepesaukee is the Lake Winnepesaukee Association's local program aimed at protecting the water quality of Lake Winnepesaukee by working with property owners to install simple, low-cost, do-it-yourself stormwater management practices. Lisa will provide an overview of the statewide Soak up the Rain NH program, and Pat will highlight two recently completed and successful projects in the Winnepesaukee Watershed. You'll find out how you can get involved to help with a project or identify projects in your own neighborhood.

### E. State of the Loon: The Natural History, Challenges, and Successes of Loons in NH

*Presented by: Harry Vogel, Senior Biologist and Executive Director, Loon Preservation Committee*

Have you ever wondered why a loon's eyes are red? Why loon chicks ride on their parents' backs? What loons are saying with those eerie calls in the night? Join biologist Harry Vogel as he talks about this unique symbol of New Hampshire's wild lakes and its special place in the hearts of New Hampshire residents. Harry will talk about loons, challenges facing loons, and the Loon Preservation Committee's work to safeguard New Hampshire's threatened loon population.

## Friday, June 1, 12:10 p.m. – 12:50 p.m. Lunch Table Discussion Topics!

### NEW networking opportunity this year!

During the lunch session, we will offer the opportunity for attendees to sit together to discuss specific lake-related topics at designated tables. If you are interested in this networking opportunity, when you register for Lakes Congress, be sure to tell us what topic(s) would be of most interest to you! Topics could include, but are not limited to the following: forming a lake association; membership recruitment; volunteer recruitment; applying for 501(c)(3) status; and governance issues. Once we know the topics, we'll try to place at least one individual knowledgeable about the subject area at each discussion table.

## Friday, June 1, 1:00 p.m. – 2:30 p.m. Concurrent Session III

### A. Easy Do-it-Yourself Watershed, Shoreline, and Lake Mapping with Your Smart Device

*Presented by: Shane Bradt, Extension Specialist, Geospatial Technologies & Water Quality, UNH Cooperative Extension*

Mapping used to be the exclusive domain of GIS geeks. However, online mapping (mostly free) and mobile apps (mostly free or inexpensive) can help nearly anyone make maps about their lake, shoreline, and watershed. Join Shane and get a tour of the easiest (and least expensive) ways to map your lake!

### B. "Social Skills" for Your Lake Association: Engaging Your Members

*Presented by: Erin Graichen, Membership Program Coordinator, NH LAKES*

Engaging with members is an essential part of any lake association community and can help retain current members and recruit new ones. Join Erin as she shares tips, technology, skills, and ideas for way to effectively engage your members – both online and off.

**C. Advocating for Preventing the Spread of Aquatic Invasive Species in NH with the Aid of Cleaning and Wash Stations**

*Presented by: Kelly Buchanan, Advocacy Program Coordinator, and Tom O'Brien, President & Policy Advocate, NH LAKES*

The rate of the spread of invasive plants from waterbody to waterbody in NH has slowed during the last 15 years; however, the rate of spread of aquatic invasive animals appears to be on the rise. Hear from Kelly and Tom about how boat cleaning and wash station technologies are being used throughout the country to aid in the prevention of the spread of aquatic invasive species (particularly invasive animals) and how these best practices might be implemented in NH. This discussion will include what local organizations can do now to increase prevention efforts, local ordinance options, and possible changes in state law and potential funding mechanisms. We must do more to prevent the spread!

**D. LakeSmart: Saving Our Lakes One Shore at a Time**

*Presented by: Maggie Shannon, Executive Director, Maine Lakes Society, and Krystal Costa, Conservation Program Coordinator, NH LAKES*

LakeSmart introduces lakefront homeowners to sustainable living through property visits that produce individualized plans for lake protection. LakeSmart's distinctive award signs, posted at driveway openings and on the waterfront, identify good stewards, showcase lake-friendly landscaping, and arouse interest. Essential for developing watersheds, LakeSmart establishes lake conservation as the community norm. Attend this session to find out how this program works in Maine and share your thoughts with us about bringing it to New Hampshire!

**E. Toxic Cyanobacteria in NH's Lakes: Ecology, Monitoring, and its role as a Neurotoxin**

*Presented by: Dr. James Haney, Center for Freshwater Biology, University of New Hampshire; Amanda McQuaid, Beach Program Coordinator, NH Dept. of Environmental Services; and Dr. Elijah Stommel, Dartmouth Hitchcock ALS Center.*

Although cyanobacteria are present in all waters, their abundance and toxicity is limited to specific locations and times of year. Dr. Haney will discuss why some lakes are especially "sensitive" to cyanobacteria blooms, how a lake's natural defenses can be used to combat blooms, and how citizen science can minimize health risks associated with cyanobacteria toxins. Amanda will highlight how the NH Department of Environmental Services informs the public of cyanobacteria blooms. And, Dr. Stommel will discuss research focused on the clustering of amyotrophic lateral sclerosis (ALS) in proximity to waterbodies that have a history of cyanobacterial blooms and the role of cyanobacteria as a neurotoxin.