

**Date:** September 13-15, 2022

**Location:** Taconic Outdoor Education Center,
75 Laurel Mountain Lane, Cold Spring, NY 10516

# Agenda

**Tuesday, September 13, 2022**

10:00 AM – 12:00 PM Orientation (classroom)

* 10:00 AM – 10:20 AM: Staff Introductions & Housekeeping
* 10:20 – 11:00 AM: “Aquatic Plant Survey Methods” – Join Emily Mayer (Raritan Headwaters Association) for a session about aquatic plant survey methods. Topics include, data collection, survey timing, and different types of surveys, including visual, transect, biomass, hydroacoustic, and point intercept methodologies.
* 11:00 AM – 11:20 AM: “Aquatic Invasive Plants and their Look-A-Likes” - Join Chris Doyle (Naiad Consultants) for a classroom session on the identification and ecology of invasive aquatic plants that occur in the Northeast. This will include information on invasive species control options and associating each invasive with native aquatic plant look-a-likes.
* 11:20 AM – 11:40 AM: “Water Milfoils and Friends (Bladderworts, Hornworts, and Naiads) - Join Chris Doyle (Naiad Consultants) for a classroom session on the identification and ecology of water milfoils that occur in the Northeast. This session will also include the diverse bladderworts, hornworts, and naiads of the region.
* 11:40 AM – 12:00 PM: *“*An UnnaturalHistory of Invasive Plants in the Region” – Join Scott Kishbaugh (retired NYSDEC) for a classroom session on the primary vectors for AIS transport into and within the region, with specific vectors and introduction timelines for many individual invasive plant species including those that are “most invasive” in the region.

12:00 PM – 12:30 Lunch Provided

12:30 PM – 5:30 PM Field Trip or Classroom ID (weather dependent)

* 12:30 – 1:00 PM travel to Canopus Lake, Fahnestock State Park
* 1:00 PM – 5:00 PM Field Trip or Plant ID in Classroom – Join Plant Camp Staff for an introduction to aquatic plant field collection techniques, proper watercraft and equipment decontamination techniques, and data collection. Transport your own canoe or kayak to the site or use watercraft provided by Plant Camp.
* 5:00 PM – 5:30 PM Return to TOEC

6:00 PM – 7:00 PM Working Dinner

* Methods for Aquatic Plant Management – Join Ken Wagner (Water Resource Services) for a classroom session on management of aquatic vascular plants utilizing both techniques to inhibit plant growth and techniques to directly remove aquatic plants. Learn how to consider various alternatives and combine techniques when necessary to tailor treatment within a given waterbody.

# Wednesday, September 14, 2022

7:00 – 8:00 AM Breakfast

8:00 – 9:20 AM Native and Invasive Plant Identification - Live specimens collected in the Northeast will be on hand for the entire duration of the Plant Camp. There will be time during breaks, meals, and before/after sessions to view these specimens.

* 8:00 AM – 8:40 AM “Pondweeds of the Northeast”- Join Chris Doyle (Naiad Consultants) for a classroom session on the identification and ecology of pondweeds that occur in the Northeast. The pondweeds are a diverse group of plants that can be difficult to identify due to plasticity and hybridization. The presentation will focus on commonly occurring pondweeds but will also touch on less common species.
* 8:40 AM – 9:20 AM “Floating-leaf Plants and Misfits of the Northeast” - Join Emily Mayer (Raritan Headwaters Association) for a classroom session on the identification and ecology of floating-leaf aquatic plants (water lilies), and free-floating aquatic plants (duckweeds and watermeal) that occur in the Northeast. This session will wrap up with all the plants that don’t fit in any other category (such as wild celery, water stargrass, etc.).

9:20 AM – 6:00 PM Field Trip Harriman State Park -weather dependent

* 9:20 AM –10:00 AM: Travel to Harriman State Park
* 10:00 AM – 12:00 PM “Aquatic Plant Survey Protocols” - Join our Plant Camp instructors to practice rake toss surveys from shore or via watercraft. Transport your own canoe/kayak or use one provided by Plant Camp.
* 12:00 PM – 12:30 PM Boxed Lunch Provided on Site
* 12:30 PM – 3:00 PM “Field Identification” – Spend time with the Region’s experts as we identify the aquatic plants collected during the rake toss surveys. Learn tips and tricks to troubleshooting identification in the field. Learn what the findings may signal about the waterbodies’ overall health and discuss potential strategies for preventing spread and/or managing aquatic invasives at the site.
* 3:00 – 5:00 PM “Spread Prevention & Decontamination Measures”- Plant Camp instructors will provide demonstrations of spread prevention measures and discussion about the State’s prohibited lists and rules about transport. Learn and practice proper decontamination protocol at the end of the trip.
* 5:00 – 6:00 PM Return travel to TOEC

6:00 PM – 7:00 PM Working Dinner

“Case Studies of Management in the Northeast”

* 6:00 – 6:20 PM “Hydrilla in Southeastern New York”- Join Nicole White(NYSDEC) for a presentation about the components of a large-scale management project for hydrilla in New York State.
* 6:20 – 6:40 PM *“*Eurasian watermilfoil” - Join Jon Gosselin (SePRO) to discuss several successful Eurasian watermilfoil treatment projects in the Northeast using SePRO’s reduced-risk aquatic herbicide ProcellaCOR EC.
* 6:40 – 7:00 PM “Water chestnut” - Join Steve Pearson (NYSDEC) to discuss some of the water chestnut infestations in New York State and describe how potential management options are based on the site characteristics, plant density, and age of infestation.

# Thursday, September 15, 2022

7:00 – 8:00 AM Breakfast Provided

8:00 – 11:30 AM Classroom Sessions

* 8:00 – 9:00 AM: “Harmful Algal Blooms” - Join Rebecca Gorney (NYSDEC) for a classroom session on the identification and reporting of harmful algal blooms (HABs). Rebecca will cover the basic questions, such as are blue green algae and cyanobacteria the same thing? This session will address the basic ecology of HABs in lakes in the Northeast, teach the basics on how to recognize a bloom in the wild, and discuss management strategies in NYS.
* 9:00 -9:45 AM “iMap Invasives and SASPro” classroom session– Join Jennifer Dean (New York Natural Heritage Program) for a classroom session to explore data tools for standardized collection of invasive species and a centralized database for survey and management data.
* Break 9:45 to 10:00 AM
* 10:00 – 11:00 AM “iMap Invasives and SASPro” field session– Join Jennifer Dean (New York Natural Heritage Program) for a test run of data tools for standardized collection of invasive species.
* 11:00 – 11:30 AM “Plant Quiz”: How much have your learned during Plant Camp? Take our quiz with questions and ID plant samples to win prizes.

11:30 – 12:00 PM Plant Camp Wrap Up and Evaluation

Plant Camp Instructor Bios:

*Jennifer Dean, Ph.D., NYNHP – Jenn is the invasive species biologist for the NY Natural Heritage Program. She manages species updates and new reports in iMapInvasives, assists with the development and training in the use of iMap applications, and is part of the aquatic invasive species lake and pond vulnerability modeling efforts.*

*Chris Doyle, CLM- Chris is the former Director of Biology for SOLitude Lake Management and former NEAPMS President. He has worked in the lake management field for close to two decades and has led many aquatic plant surveys for management projects in New Jersey and southern New York.*

*Rebecca Gorney, Ph.D., NYS DEC- Rebecca conducts waterbody research and management and coordinates the Harmful Algal Bloom program which confirms reports, conducts investigations, and works to manage waterbodies with algal bloom issues.*

*Jon Gosselin, SePRO – Jon is a Technical Specialist for the Northeast U.S. and is the Vice President of the Northeast Aquatic Plant Management Society.*

*Scott Kishbaugh, retired NYS DEC- Scott is the former director of the Citizens Statewide Lake Assessment Program, staffed the state lake management program and has extensive experience identifying and training others to identify aquatic plants. He is a member of the Board of Directors of the Northeast Aquatic Plant Management Society.*

*Emily Mayer, M.S., Raritan Headwaters Association – Emily is the Watershed Scientist and former Lead Biologist for SOLitude Lake Management. Emily serves as Editor on the Board of Directors for NEAPMS (Northeast Aquatic Plant Management Society) and is also a member of NALMS (North American Lake Management Society), and is on the technical advisory committee as the aquatic lead for NJISST (New Jersey Invasive Species Strike Team).*

*Cathy McGlynn, Ph.D., NYSDEC- Cathy is the Aquatic Invasive Species Coordinator with the Bureau of Invasive Species and Ecosystem Health and is the current President of the Northeast Aquatic Plant Management Society*

*Steven Pearson, Ph.D., NYSDEC- Steve is a Research Scientist I with the Bureau of Invasive Species and Ecosystem Health who specializes in eDNA, research, and AIS distribution; and leads the Long Island Metro AIS Task Force*

*Erin Vennie-Vollrath, M.S., NYSDEC - Erin is the New York Lake Champlain Coordinator and a member of the Board of Directors for the Northeast Aquatic Plant Management Society.*

*Ken Wagner, Ph.D./CLM/ lake management specialist with Water Resource Services, Inc.- Ken has worked on lake issues, including invasive and nuisance native plant problems, for over 40 years and is the author of manuals for lake management.*

*Nicole White, CLM, NYSDEC- Nicole manages the Croton River Hydrilla Control Project and provides expertise for other control projects; and serves on the Board of Directors for the North American Lake Management Society*