



The 1153rd meeting of the New England Botanical Club, Inc. will be held **Saturday, 2 Oct 2021, at 7:00 PM EST via Zoom.**



“Plant Responses and Ecosystem Resilience Following Restoration of Former Cranberry Bogs”

By

Dr. Christopher Neill

Senior Scientist, Woods Hole Research Center, Woods Hole, MA

PLEASE READ:

- 1) **PRESENTATIONS & MEETINGS WILL CONTINUE TO BE VIRTUAL:** The link to join our Zoom Monthly Meetings will be reoccurring and is below. After this presentation, we invite attendees to stay on Zoom and participate in some “virtual visiting.” Feel free to provide your own refreshments!
- 2) **DR. CHRISTOPHER NEILL’S ABSTRACT:** The Massachusetts cranberry industry currently faces challenges caused by overproduction and competition with growers in Wisconsin and other locations. Massachusetts cranberry bogs are closely associated with surface waters and almost all were created from former wetlands. Our new analysis indicates that 20% of all Massachusetts cranberry bogs are highly likely to be retired in several years to a decade and another 35% are moderately likely to be retired. This creates a large and current opportunity to restore wetlands on former cranberry bogs. Restoration of former bogs has potential to expand stream and adjoining habitats, improve water quality and provide climate resilience by removing water control structures and restoring hydrological connections. Techniques to restore wetlands are a work in progress but three projects have been completed to date. These projects have successfully restored stream channels and fish passage, and promoted establishment of wetland vegetation through a combination of channel and landform re-engineering and reliance on germination of buried seeds from former wetland vegetation. I will present results from a detailed before-and-after study of a restoration project on the Lower Coonamessett River Bog in Falmouth, MA that found that removal of sand, lowering of elevation and creation of microtopography dramatically increased diversity and cover of native wetland-dependent plants within two years without increasing colonization by non-native and invasive plants was very low. Removal of water control structures also increased the ability of the new wetland system to absorb flooding from storm and high tide surges. I will discuss potential for expanding restored wetlands onto retired bogs across southeastern Massachusetts.
- 3) **NEBC WILL BECOME NEBS:** We will continue to use NEBC/New England Botanical Club during our transition to NEBS/New England Botanical Society, which includes a new website that is in development.

- 4) **NEXT NEBC MEETINGS:** Please save the date for future presentations, which will continue to be at 7 PM EST on Saturdays for as long as we hold meetings via Zoom.
- November 6, 2021
 - December 4, 2021
- 5) **VIDEOS of PAST PRESENTATIONS:** Please see [Past Meetings](#) for videos of past lectures.

The Council will meet the first week of October 2021, via Zoom.

ZOOM INVITATION FOR NEBC MONTHLY MEETINGS

Topic: NEBC Monthly Meeting
Date and Time: First Saturday of the month at 7:00 PM

Join Zoom Meeting

<https://zoom.us/j/98845538584>

Meeting ID: 988 4553 8584

One tap mobile

+19292056099,,98845538584# US (New York)

+13017158592,,98845538584# US (Germantown)

Dial by your location

+1 929 205 6099 US (New York)

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+1 669 900 6833 US (San Jose)

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+1 346 248 7799 US (Houston)

Meeting ID: 988 4553 8584

Find your local number: <https://zoom.us/u/adKxNNXCOj>

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[Mission and Vision Statements](#)
[Strategic Goals for 2020-2025](#)