



The 1154th meeting of the New England Botanical Club, Inc. will be held **Saturday, 6 November 2021, at 7:00 PM EST via Zoom.**



“Transitioning Ecosystems: Foundation Species Loss Due to Hemlock Woolly Adelgid Invasion Affects Ecosystem Function”

By

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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. DANIELLE IGNACE’S ABSTRACT:** Eastern US forests are losing a foundation tree species, the eastern hemlock (*Tsuga canadensis*), due to the exotic insect pests hemlock woolly adelgid (*Adelges tsugae*) and elongate hemlock scale (*Fiorinia externa*). The widespread destruction of this important evergreen conifer has large ramifications for ecosystem processes and other species that depend on it for survival. The implications of this invasion for ecosystem processes are far-reaching because coniferous eastern hemlock is most often replaced by deciduous tree species, such as *Betula lenta* (black birch), which have differing effects on forest floor microenvironments. Using an "accidental experiment" initiated by patch-level timber harvesting about 30 years ago in western Massachusetts, I present the impacts on soil organic layer mass, C:N content, soil respiration, leaf litter characteristics, and the microbial community. Taken together, these impacts affect source/sink carbon dynamics, which may be exacerbated by a warming climate.
- 3) **HIGHLIGHTS OF SUMMER 2021 DAY FIELD TRIPS:** Please see [Past Field Trips](#) webpage for some details and photographs of this summer’s three field trips, including an observed plant species list compiled for Savage Hill Wildlife Management Area.

- 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.
- December 4, 2021
 - January 8, 2022
- 5) **VIDEOS of PAST PRESENTATIONS:** Please see [Past Meetings](#) for videos of past lectures.

The Council will meet 5:00-6:30 PM on 3 November 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)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 988 4553 8584

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

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NEBC WEB SITE: <http://www.rhodora.org/>
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