



The 1134th meeting of the New England Botanical Club, Inc. will be held Friday, **1 February 2019, at 6:45 p.m.** in Haller Lecture Hall (room 102), Geological Museum, 24 Oxford St., Harvard University, Cambridge, MA.



“The Ecology and Impacts of Garlic Mustard (*Alliaria petiolata*)”
By
Dr. Kristina Stinson
Assistant Professor, Department of Environmental Conservation
University of Massachusetts-Amherst, Amherst, MA

PLEASE NOTE:

1) **KRISTINA STINSON’S ABSTRACT:** The widespread invasive plant, *Alliaria petiolata* (garlic mustard) has direct, biochemical impacts on native organisms in northeastern deciduous forests of North America, with a cascade of ecological implications. Unique plant chemicals exuded by the roots of garlic mustard disrupt symbioses between native plants and root mycorrhizal fungi, alter soil microbial diversity and composition, and can thereby change the composition of native plant communities. Molecular sequencing of whole communities of soil fungi has shown that fungal communities of invaded soils are distinct from nearby soils without a history of garlic mustard invasion – with fewer symbiotic species and higher abundances of decomposers. A shift from symbiotic to decomposer fungi in forest soils could prevent seedling establishment and growth of native forest trees, and reduce the effectiveness of forests in nutrient and water cycling. Individual plant species reliant on mycorrhizae, such as trout lily (*Erythronium americanum*) are regionally less abundant in the presence of garlic mustard. There is partial microbial recovery and a decline in invasive earthworm biomass, but little overall change in plant composition, after long term experimental eradication of garlic mustard at several forests across the region. Site-specific and regional approaches may both be needed for management and restoration of native species in the wake of garlic mustard invasions

2) **ONLY A FEW DAYS LEFT TO APPLY - 1 FEBRUARY 2019 DEADLINE FOR LES MEHRHOFF BOTANICAL RESEARCH AWARD:** Full details for project requirements and application instructions can be found on the [Les Mehrhoff Botanical Research Award](#) web page. Summaries of past funded projects and a button for donations to the fund can be found on the same web page.

3) **NEBC GRADUATE STUDENT RESEARCH AWARD(S) – APPLICATIONS DUE 1 MARCH 2019:** This year NEBC will award \$6000 in support of botanical research conducted by graduate students. Friday, 1 March 2019 is the deadline for receipt of proposals and supporting letters. Full details can be found on the [Graduate Student Research Award](#) web page.

4) **VIDEOS of PAST PRESENTATIONS:** Please see [Past Meetings](#) for videos of past lectures. No password required for access to videos

5) **NONVASCULAR HERBARIUM WORK DATES:** If you would like to help Elizabeth Kneiper and the Nonvascular Herbarium Committee with many tasks related to the NEBC collection, please contact her at Ekneiper@aol.com. Meet in the basement of the Farlow Herbarium, Harvard University, Cambridge, MA. Upcoming work dates are on Wednesday's and Saturday's. Please see the [What's New](#) page for details.

6) **NEW ENGLAND WILD FLOWER SOCIETY APPLICATION FOR PCVs DEADLINE IS 1 FEBRUARY 2019:** Full details for volunteer qualifications, responsibilities, training, and online application can be found at the [NEWF Plant Conservation Volunteer](#) web page.

7) **EAGLE HILL INSTITUTE DISCOUNTS & NEBC STIPENDS:** Eagle Hill Institute, Steuben, ME, is again offering NEBC members a 20% discount for the 2019 Workshops and Seminars. Also, NEBC will give a **stipend of \$150** towards costs for the first 10 NEBC members who register for a summer botany course. Contact John Burns at nebc@rhodora.org for details. [Eagle Hill 2019 calendar](#).

8) **MEMBERSHIP RENEWALS ARE PAST DUE:** [Renew Your NEBC Membership for 2019 Here!](#)

9) **NEXT NEBC MEETING:** On 1 March 2019, Dr. Nancy M. Eyster-Smith, Associate Professor Emerita, Bentley University, Waltham, MA, will present “**Celebrating Edward Lothrop Rand, NEBC Corresponding Secretary for 25 years**” and Dr. Caitlin McDonough MacKenzie, Postdoc, Climate Change Institute, University of Maine, Orono, ME, will present her research based on Rand's study sites in her talk “**Floristic and Climate Change on Mount Desert Island, Maine, from the Champlain Society to Acadia National Park's Centennial**”.

10) **PARKING LOCATION:** From 5 PM-10 PM, our designated FREE parking lot is **the 52 Oxford St. Garage, near the intersection of Everett St. and Oxford St.** Parking in any other lot will likely lead to towing. Please find a map showing the Oxford Garage (52OX) at the following link: [Interactive Harvard University Campus Map](#)

11) **EARLIER ARRIVALS:** For those arriving before 5 PM, visitor permits (\$18.00/day) are available from Harvard Parking Service at Harvard Campus Service Center, 8th floor, Holyoke Building, 1350 Massachusetts Ave. (8AM-5PM) and on-line at [Visitor Parking Permit](#). Select OEB/MCZ/HUH for building and 2017 for the department code. License plate number needed for transaction. Print pass and display on dash. For more information, Parking Services may be contacted at 617-495-3772 or parking@harvard.edu. [AN ALTERNATIVE: Some members park at Alewife T station and ride the red line train to the Harvard Square T stop.]

The Council will meet 3–5 PM in the meeting room near Haller Lecture Hall.