



WINTER BREAK AT HARVARD FOREST  
JANUARY 18-23, 2015

***READING AND CONSERVING NEW ENGLAND:  
Interdisciplinary insights into a landscape's past, present, and future***

Every landscape has a history of natural and human processes that have shaped the land and conditioned its future. Scientific interpretations of modern landscapes – and efforts to conserve them for the future – therefore depend on the ability to ‘read’ the subtle signs of what shaped the land before, and to anticipate how new processes such as climate change might affect the land’s future.

Winter Break Week will use Harvard’s 3,700-acre Harvard Forest in rural Petersham, Massachusetts as a living classroom. Ecologists and conservation/forestry specialists will guide students through a diverse landscape of forests, ponds, meadows, and wetlands (snowshoes provided!) to find and discuss evidence of change from pre-history to today. Through a series of guided workshops, artists, writers, and landscape designers will help students create reflective pieces that interpret these issues for a broad audience.

Limited to 10 students.

### LOGISTICS

On Sunday, January 18, students will meet the blue Harvard Forest van in front of the Harvard University Herbaria at 22 Divinity Ave at 4:00pm SHARP. Students will be housed at the Forest in Fisher House: a large, comfortable restored farmhouse including separate rooms and linens for each student, wireless internet access, and a fully equipped kitchen. The kitchen will be stocked with groceries (procured in advance by Harvard Forest administrative staff) for students to make their own snacks and continental breakfasts for each day of the program. A catered lunch and hot dinner will be provided each evening. Students will be fully engaged in class and outdoor activities all week. Students should bring along **plenty of warm, layered clothes including high waterproof boots (preferably snow boots that cover the ankle) for snow and wet weather**. Some days will include excursions that require 3+ hours of walking in the snow. We will provide snowshoes but these are no substitute for boots.

Students will be driven back to Cambridge after dinner on the evening of Friday, January 23 (arriving ~8:00pm).

### SCHEDULE

**1/18 Sunday evening – Arrivals, Welcome Dinner, Introduction to the Harvard Forest & Fisher Museum diorama tour** (*David Orwig, Clarisse Hart*)

**1/19 Monday – Trees 101 + Reading a Landscape’s History** (*Melissa LeVangie, Aaron Ellison, Wyatt Oswald*)

*Morning Workshop:* “Trees 101” with local arborist Melissa LeVangie will introduce students to the trees of the region, followed by a brief Winter Tree ID walk.

*Morning Field Excursion:* Students will learn to read the land and its history from vegetation, cultural artifacts, and other ecological clues during a guided hike of Harvard Pond with HF senior ecologist Aaron Ellison.

*Afternoon Field Excursion:* With Prof. Oswald, students will participate in scientific collection of sediment cores for pollen record analysis. Along the way, students will discuss forest change from Native American and early European settlement through the present.

*Afternoon Lab Exercise:* Students will view and analyze sediment cores in the Harvard Forest paleoecology lab.

**1/20 Tuesday – Regional Landscape, Global Change** (*David Orwig, Emery Boose*)

*Morning Lecture/Workshop:* Harvard Forest ecologist Dave Orwig will discuss his local-to-regional research on how invasive species are changing our forests; then students will collect and view a living sample of the hemlock woolly adelgid under the microscope.

*Afternoon Excursion:* Harvard Forest ecologist Emery Boose will lead a walking tour of the Forest's main long-term research sites, discussing the role of forests in climate change and watersheds, and other important dynamics. The excursion will also include a visit to the Forest's new, super-efficient wood heat facility, that uses our own trees as fuel.

**1/21 Wednesday – Drawn to the Landscape** (*Visiting artist Bethann Garramon Merkle – commnatural.com*)

*Morning workshop:* A fast-paced hands-on introduction to nature sketching will launch today's focus on developing a sense of place by drawing. Artist Bethann Merkle will emphasize the synergy of art and science, and students will learn to combine sketches and words to develop a natural history notebook/journal.

*Afternoon workshop/free reflective time:* Following an illustrated talk exploring the historical relationship between art and science, students will learn a range of design-oriented techniques for enhancing basic sketches. Discussions will explore how hand-drawn images can aid in learning, remembering, teaching, research, and communication. Whether you are a novice or a well-seasoned artist, a nature buff or a curious newcomer, the techniques introduced during this afternoon session provide a strong foundation for those interested in developing urban and/or nature sketching habits. Late in the afternoon, an interactive discussion and synthesis activity will focus on incorporating using our drawing toolkit to map out noteworthy aspects of the local landscape.

*Evening workshop:* Building on the day's exercises and toolkit, students will elaborate on the maps and journal entries made earlier in the day. Digital copies (photographs or scans) will be turned in for comments from the instructor.

**1/22 Thursday – Land Management, Thinking about Audience, and Writing the Landscape** (*Ben & Susie Feldman, Lynda Mapes, Clarisse Hart*)

*Morning excursion:* Conversation with local landowners Ben and Susie Feldman about managing a large land base for timber, recreation, wildlife, and aesthetics – at their property adjacent to HF.

*Afternoon & Evening Workshop:* Creative writing with HF writer-in-residence Lynda Mapes and Clarisse Hart. Discuss pre-reading packet about representations of the New England landscape in poetry, fiction, and essays. Reflective writing time, followed by constructive group discussion of student work.

**1/23 Friday – Landscape Planning and Landscape Design** (*Prof Richard Forman*)

*Morning Lecture & Excursion:* Graduate School of Design professor Richard Forman will discuss landscape ecology and related principles, theory, and models for an introduction to the concepts of landscape design, changing land mosaics, conservation and land use planning. On a morning excursion, students will explore the surrounding rural village of Petersham to see how roads, vehicles, and the town integrate with the forested landscape.

*Afternoon excursion:* Field trip to the rural/suburban areas of Westminister and Gardner, Mass., then informal discussion introducing proposed spatial plans and ideas for optimally designing landscapes. Students will then diagram/sketch and discuss their landscape design ideas.

*Evening* - Synthesis Discussion & Dinner (*All*). Departure for Cambridge at ~6:30pm, arriving ~8:00pm.

## **READINGS**

**(will be provided to you on-site)**

Foster, D. R. 2014. *Hemlock: A Forest Giant on the Edge*. Yale University Press, New Haven, CT.

Foster, D.R. et al. 2010. *Wildlands and Woodlands: A Vision for the New England Landscape*. Harvard Forest, distributed by Harvard University Press, Cambridge, Massachusetts. 36pp.

Assorted readings in natural history, environmental writing, and landscape design.

## **LEADERS**

### **Staff:**

*Emery Boose (Ecologist, Information Manager, Harvard Forest; boose@fas.harvard.edu)*

*Aaron Ellison (Senior Ecologist, Harvard Forest; aellison@fas.harvard.edu)*

*Richard Forman (Harvard GSD prof of landscape ecology; rforman@gsd.harvard.edu)*

*Clarisse Hart (Outreach and Education Manger, Harvard Forest; hart3@fas.harvard.edu)*

*Melissa LeVangie (Mass. DCR arborist, Petersham Tree Warden; melissalevangie@gmail.com)*

*Lynda Mapes (Harvard Bullard Fellow and Writer in Residence, Harvard Forest;*

*lyndamapes@comcast.net)*

*Bethann Merkle (Visiting Artist; b.g.merkle@gmail.com)*

*Dave Orwig (Forest Ecologist, Harvard Forest; orwig@fas.harvard.edu)*

*Wyatt Oswald (Bullard Fellow; w\_wyatt\_oswald@emerson.edu)*

More about the Harvard Forest: <http://harvardforest.fas.harvard.edu/>