



The Harris Center for Conservation Education

supports undergraduate field research in environmental studies, geography, and related disciplines at Keene State College by training students in data collection methods and working with faculty to design capstone research experiences with applied conservation value. We also facilitate connections between KSC students and conservation professionals in our research and monitoring network, and offer public programs at KSC – with a focus on nature and conservation science – for the benefit of students, faculty, and the broader Keene community.

Community Programs

▲ Falls Brook Stream Restoration

Thanks to a team of conservation partners, an undersized culvert at Hale Hill Road in Swanzeey was replaced with a new, flood-resilient and wildlife-friendly open-bottom arch crossing, reconnecting more than 20 miles of stream habitat for wild brook trout, dace, and other aquatic wildlife. The final step was to revegetate the shoreline nearest the construction site, to prevent erosion and stabilize the streambanks. During this volunteer workday, KSC students worked alongside community volunteers to plant native, edible plants – many of which were grown in the KSC greenhouse – along the banks of Falls Brook. photo: Emily Lord / The Stewardship Network: New England

In the 2016-2017 academic year, the Harris Center partnered with KSC to offer three film showings, two citizen science trainings, two research presentations, and one service learning day – all free and open to the public – with more than 250 attendees in all.

Citizen Science



▲ Vernal Pool Documentation

Jefferson salamander eggs, discovered and documented in a local vernal pool. photo: Karen Seaver

Dozens of students and faculty members also participated in our citizen science programs: the **Salamander Crossing Brigades**, in which volunteers identify, count, and move amphibians across roads throughout the Monadnock Region during the spring amphibian migration; the **Vernal Pool Project**, in which citizen scientists find and document the ephemeral waterbodies that serve as specialized breeding habitat for those migrating amphibians; and **Project Nighthawk**, in which volunteers monitor the Common Nighthawk in Keene, one of the last places in New Hampshire where this endangered bird still breeds.



▲ Wood Frog

Salamander Crossing Brigade volunteers moved nearly 700 wood frogs to safety during the 2017 spring amphibian migration.

photo: Brett Amy Thelen

Conservation Internships

In the fifth year of an innovative partnership with the KSC Department of Environmental Studies (ENST), four outstanding ENST students participated in an 8-week summer **conservation internship program** with the Harris Center. Under the guidance of ENST faculty and Harris Center staff, the students gained specialized training and firsthand experience with many facets of the Harris Center's diverse conservation and education work. Together, the internship team documented vernal pools, inventoried forest communities, surveyed road-stream crossings, removed invasive plants, measured chestnut seedlings, monitored conservation easements and backcountry campsites, maintained trails, and assisted with educational events.

In addition, a recent alumnus of the internship program conducted a semester-long independent study in Geography, focused on mapping and analyzing four years of wildlife road mortality data collected by our conservation interns. She then returned to the Harris Center in 2017 to work as a naturalist with our camp and school programs.



▲ **Invasive Plant Inventory: Identifying Barberry**

Conservation intern **Anthony Oatley** takes a close look at an invasive plant found at (and removed from) an old homestead on Harris Center-conserved land. photo: Brett Amy Thelen

◀ **Culvert Surveys: Measuring Culvert Length**

The 2017 internship team surveys a road-stream crossing, to help prioritize sites for potential stream restoration projects in the Harris Center's SuperSanctuary. This project is a partnership with Trout Unlimited. photo: Brett Amy Thelen

Research on Harris Center Lands



Dr. Denise Burchsted continued her **water quality and instream habitat studies** along the Harris Center's Hosley Brook.

Dr. Renate Gebauer's students also focused on Harris Center lands for their two-semester **capstone research experience**, conducting wildlife surveys, identifying invasive plant infestations, assessing road-stream crossings for fish passage and flooding potential, monitoring water quality, evaluating recreational use of the Harris Center's growing trail network, and researching the effects of wildfire on soil health and tree regeneration. They'll share their findings in poster sessions at both KSC and the Harris Center later this fall.

◀ **Taking a Closer Look at Leaf Structure**

Harris Center Director **Jeremy Wilson** reviews invasive plant identification with KSC undergraduate student researchers **Anthony Ruggerio** and **Cameron Youngclaus**. photo: Brett Amy Thelen



Continuing Education

The Harris Center additionally partnered with **KSC's Cheshire Academy for Lifelong Learning (CALL)** and the **RiverMead retirement community** to offer a continuing education course on New Hampshire forests in the spring of 2017.

▲ **Noted forest ecologist and author Tom Wessels** kicked off a **CALL** course on the past, present, and future of New Hampshire forests. photo: Antioch University New England

Questions?

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