

UNIVERSITY OF NEW ENGLAND

DEPARTMENT OF ENVIRONMENTAL STUDIES

Involvement with land, habitat, and community conservation: an outline

CURRICULUM

1. During the first year, Environmental Studies and Environmental Science majors take an integrated group of courses in environmental literature, green economics, biology (ecology & evolution), and environmental issues called the *Green Learning Community* (GLC). This program continues through fall and spring terms, with a series of events highlighting land conservation:

--a weekend retreat at the Maine Conservation School (UMaine 4-H Camp at Bryant Pond)

--an autumn field trip to the Tilton Family Homestead Wildlife Commons, property of the Town of Wells, acquired and managed by Owen Grumbling.

--a spring field trip to the Wells National Estuarine Research Reserve

--a major integrated activity beginning with close analysis of Leopold's "Land Ethic" and followed by an role playing application: on a family farm, how to preserved rather than ditch and drain and plant a large wetland

2. During 3rd and 4th years, Env majors choose courses from a Distribution Group called "Conservation, Preservation, Restoration." Courses include

On-Campus Courses

Land Conservation Practicum. This field based lab course begins with an examination of values and assumptions by which we decide what is worth conserving. Then in the classroom we survey the different mechanisms by which conservation takes place examines assumptions of value governing conservation; simultaneously we travel to local conservation holdings to get a feel for the land, examine management on the ground, and interview the managers and often also the acquirers of the conservation holding. The course gradually evolves into a problem-solving exercise where students react to problems posed by conservation managers, actual questions that the manager poses. The course culminates in presentation of acquisition proposals created by teams of students. The proposals are real, designed to be worked by one of several land conservation organizations chosen by the student team.

Wetland Ecology and Conservation. In the field lab for this course, students visit different wetland types and conduct ecological research. Several of the properties we visit are owned by or under conservation easement with local land trusts (Kennebunk Land Trust, Kennebunkport Conservation Trust and Saco Valley Land Trust). At the end of the semester, students prepare reports for the land trusts that explain what they discovered at the property. These reports are descriptive in nature, providing a snapshot of the plants, wildlife and soils at the wetland. Some semesters they also prepare outreach material materials for trusts (posters, brochures, etc.). The students' work on the Great Cranberry Marsh in Biddeford was used by the SVLT to help conserve more of the property.

Terrestrial Wildlife and Conservation. In the field lab for this course, students have visited local trust properties to learn how to track and census wildlife. They have also analyzed game camera footage collected at the Kennebunkport Conservation Trust and analyzed the data to answer questions about human and dog effects on local wildlife.

Plant Systematics with Conservation Applications. In the field lab for this course, students conduct plant surveys on nearby land trust properties. They re-visit the same plots and so are collecting long-term monitoring data about the properties' plant communities. In one project, students have also mapped invasive and rare plants on a coastal island owned by the Kennebunkport Conservation Trust, helping the Trust to keep an eye on whether the invasives are spreading or not.

Sustainability and Ecological Restoration. Students in this course grow plants in the greenhouse to restore degraded sites. Their latest project involves the American Chestnut, which they have raised and planted on campus. Next year the plan is to plant trees on a parcel of forest land owned by a local land trust that will be selectively harvested late this summer.

Travel courses

Caribbean Sustainable Development. This course has a Caribbean-based field lab. Students experience first-hand the challenges of, and progression toward sustainable development in the Caribbean region, with a focus on the "Nature Island" of Dominica. Students explore tropical island ecosystems, engage with our Dominican partners who are working to achieve sustainable development, and make their own contributions through hands-on participatory development projects.

Environment, Health and Community Development in East Africa. The lab for this travel course is a 3-week trip to Kenya. For part of the trip, students stay with local families and volunteer their time for the Nyando District Centre for Environmental Conservation, working to combat severe soil erosion on the slopes of the Lake Victoria Basin in the Nyando District of Kenya's Nyanza Province, south of the city of Kisumu.

3. Internships

Over the years, many students have gained research, education and outreach, and conservation application experiences through internships with land trusts and other conservation groups in southern Maine.

PROFESSIONAL ACTIVITY of Environmental Studies Faculty related to conservation

Dr. Owen Grumbling is Professor of Environmental Literature and formerly Chair of the Department of Environmental Studies at the University of New England in Biddeford, Maine. He has taught university students since 1970.

For thirty years he has served as chief conservation officer of Wells, Maine, developing a program and funding mechanism for systematic land and habitat preservation, and developing management plans for Town-owned conservation lands, called "Wildlife Commons." He has served on the Board of Directors of the *Natural Resources Council of Maine*, the leading

environmental advocacy group in the state, acting as Secretary of the Board for four years. In the 1980's he was instrumental in the establishment of the Wells National Estuarine Research Reserve at Laudholm Farm (Wells, Maine), and has since served continuously on its Stewardship Advisory Committee. On Earth Day 2009 he received the award of the NE Environmental Protection Agency for *Lifetime Service to the Environment and Human Health*. In 2015 he received the Espy Land Heritage Award from the Maine Coast Heritage Trust.

If you are interested in his work in the nature literature, here follows some highlights: Dr. Grumbling co-edited and co-authored a major critical anthology of nature writing, *The Literature of Nature: The British and American Traditions* (Plexus, 1989), and has published in variety of journals and books on the topics of nature writing and the teaching of literature, science, and environmental studies. Invited publications include a seminal chapter on "Literature" in the Island Press anthology *Greening the Curriculum: A Handbook for Environmental Education in the Liberal Arts* (1996), and the article on "Nature Writing" in *The Encyclopedia of New England Culture* (Yale University Press, 2005). A narrative essay "Down the River with Edward Abbey," appeared in the Summer, 2004, issue of *North Dakota Quarterly*.

Professor **Tom Klak** works with the American Chestnut Society to restore chestnuts to the landscape by breeding and planting disease-free chestnuts. He also aids conservation and sustainable development activities on the island of Dominica.

Associate Professor **Noah Perlut** is a wildlife ecologist and a member of the Board of Directors, Friends of the Scarborough Marsh and of the Board of Editors for the *Northeastern Naturalist*.

Associate Lecturer **Christine Feurt** works also as Director of the Coastal Training Center at the Wells National Estuarine Research Reserve at Laudholm Farm. She has directed multiple projects that engage stakeholders to protect rivers and their watersheds in Maine and New Hampshire.

Associate Professor **Rick Peterson** is involved with several conservation organizations in Africa in Kenya and Congo and is on the Advisory Board of the nonprofit organization, Giving Back to Africa.

Associate Lecturer **Bethany Woodworth** is a board member of the South Portland Land Trust.

Associate Professor **Pam Morgan** is a wetland ecologist and conservationist. She is a member of the Board of Directors for the Kennebunkport Conservation Trust, and helped create their "Trust in our Children" program, which engages local school children K-12 in educational activities on trust properties. See: <http://www.kporttrust.org/trust-in-our-children/>