



UConn works to protect our environment

The University of Connecticut is helping to protect the environment and preserve our land, air and water resources. In this issue, *Traditions* focuses on land and air projects. In the summer issue, we will focus on marine sciences projects.

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The University is committed to protecting the environment through research, outreach and education.

Faculty are finding ways to preserve the environment and are teaching courses on the causes of environmental problems and how they can be mitigated. The Cooperative Extension System, meanwhile, is helping communities across Connecticut work on environmental practices.

"An interest in, and concern for, the environment - both academically and socially - on the part of the University proceeds from its long-grant tradition and mission as a college for our land and time," said Mark Emmert, chancellor and president for University affairs. "From the land to the sea, the University strives to protect and improve the environment and, in so doing, to better the condition of all of Connecticut's citizens."

Here are just some of the ways UConn is helping to protect the environment:

Pesticides

After World War II, pesticides were easy, inexpensive and highly effective in controlling pests. Since then pesticides have been found to be potentially harmful for humans and the environment. Other problems include contaminated groundwater, residue on food, pest resistance and increased costs.

To help farms, greenhouses and nurseries limit the use of pesticides, the Cooperative Extension System and the Department of Plant Science developed and implemented the Integrated Pest Management Program (IPM) in 1982. The program has trained more than 320 growers and groundskeepers in 12 years.

The training has resulted in 77,865 pounds of pesticide not being applied to 22,041 acres in Connecticut at a savings of \$103,391.

So what happens to pesticides after they are applied? David Miller, a professor of natural resources management and engineering and the state climatologist, is trying to find out.

Miller, through a grant from the Environmental Protection Agency, is studying the effects of pesticides as they travel into surrounding homes from sprayed areas. He is developing a model to test pesticide drift - a lesser rather than study the spread of aerosols in the air.

Forestry

The state of Connecticut has 1.4 million acres of forests. The Cooperative Extension System (CES) is helping the 60,000 private owners of 90 percent of that land become aware of the resources they hold through a voluntary networking project.

The Coveris Project, co-sponsored by CES and the Ruffed Grouse Society, a nonprofit conservation organization, offers training to landowners in sound wildlife management practices. Since the project's inception in 1984, more than 250 landowners have learned how to make wildlife habitat, more diverse and more abundant.

"For over 300 years, Connecticut's forests have been cut down, abused or neglected, resulting in the loss of wildlife, genetic depletion, poor health and poor productivity of wildlife," says Steve Broderick, an extension forestry educator.

There are 144 active volunteers who own or manage more than 17,000 forested acres in the state.

Environmental technology

The Environmental Research Institute (ERI) and its outreach arm, the Connecticut Environmental Entrepreneurial Center (CEECC), are focusing on fostering environmental technology that will benefit the environment and the health of people. That includes improving a lead-pipe encapsulation, developing a process to recycle tin cans, and testing and supporting an electrical product that can destroy the dangerous cryptosporidium parasite from water supplies. ERI began in 1987 to conduct research to advance environmental technologies and the understanding of natural systems that would help businesses and state agencies more effectively manage environmental concerns. The institute has initiated its research to produce spin-off products and licensing agreements with commercial potential for state companies.

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Open space preservation

Jan Gibbons, an expert in land use with the Cooperative Extension System extension center, has worked to preserve open space for 21 years. In the past decade, he has helped communities connect parkland.

"People are interested in preserving parkland and recreation space," he says. "They want to know about wetlands and how they are connected. The focus really has changed from saving scattered pieces of land to putting them together into greenways and creating urban trails."

Gibbons has served on the State Greenways Commission to promote a network of open space within 10 to 15 minutes from every resident in Connecticut.

Satellite imaging

When state and local officials want to understand the complex dynamics affecting Connecticut's natural environment, they turn to the University's Laboratory for Earth Resources Information Systems (LEGIS).

The lab, within the Department of Natural Resources Management and Engineering, provides education, research and service through the use of remote sensing, geographic information systems (GIS) and the global positioning system (GPS).

LEGIS is an excellent resource for students, but also provides critical assistance for state and local environmental projects. The lab, for instance, uses remote sensing - the analysis of earth surface features with data and imagery acquired from satellite and aircraft sensors - to observe the decline of the Eastern Hemlock due to an insect, the Hemlock woolly adelgid.

Agritourism

Farmers and others who own agricultural lands, woodlands and open spaces in the Northeast face persistent economic pressure to sell their properties. So Norm Butler, a senior extension educator based at the Norwich extension center, produced a development plan in conjunction with the Northeast Connecticut Visitors District, the Southeastern Connecticut Tourism District, the Connecticut Farm Bureau and the state departments of economic development and agriculture.

Fresh, locally grown fruit and vegetables, beautiful vistas and camping are all part of the award-winning nature-based tourism plan in eastern Connecticut which has increased awareness of activities and opportunities while also encouraging tourists to visit Connecticut's natural beauty.

The project is designed to help owners save their land by earning additional income and employment from nature-based tourism and recreation activities, including bed-and-breakfast inns, cross-country skiing, farm museums, nature trails, petting zoos, farm tours and pick-your-own operations.

Other projects

The Cooperative Extension System also has:

- Educated more than 2.2 million residents on the proper disposal and recycling of household waste through videos on public and cable television.
- Coordinated with other agencies to help greenhouse and nursery operators and dairy producers recycle polystyrene.
- Educated the public about environmental hazards such as food poisoning and radon.
- Trained more than 6,000 people to answer questions about horticulture through the Master Gardener Program.
- Educated farmers and growers on farm composting.
- Conducted seminars to educate municipal officials and commissioners on land-use planning.

Basic Detail Report

Medium paper, printed ink

Description Newsletter insert from the publication, Traditions, Spring 1997, published by the University of Connecticut. The article is titled, "UConn works to protect our environment," and outlines work related to agritourism, pesticides, environmental technology, open space preservation, and satellite imaging.

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