

▶ Environmental Education

We live in an age of unprecedented population growth and consumption, which brings with it a variety of associated environmental problems. Solutions to these problems are extensive and varied. Many solutions require public education, decision making and participation for success.

Environmental education (EE) is a discipline that helps create a citizenry that is knowledgeable, motivated and committed to taking appropriate action concerning environmental issues. Programs in EE should help individuals understand their interdependence with the environment, local ecosystems and other natural resources. Programs should foster awareness of critical environmental problems and issues, as well as opportunities to develop those skills needed to make informed decisions to protect and improve the environment. These programs include both youth and adult education efforts.

Many faculty, extension specialists and county extension agents with the Institute of Food and Agricultural Sciences (IFAS), as well as other University of Florida (UF) staff, are involved with EE programs. Because EE involves the sciences, social sciences, education and communication methods, it is pertinent to many different disciplines. The following information presents a few examples of UF/IFAS departments, programs and people involved in environmental education.

EE PROGRAMS

UF/IFAS Cooperative Extension Service

The statewide Cooperative Extension Service Program on environmental education, (FL 714/214), led by Jerry Culen, stresses the need for science-based information and educational programs for youth. This program also emphasizes issue awareness and skill development related to promoting responsible citizenship behavior. County Extension programs may focus on specific problems and issues relevant to the clientele served. In response to the need for environmental education curriculum, youth activity and leader guides have been developed and are currently available through the Extension publications system or from the county Extension offices.

EE Curricula Include:

- Aquatic/Marine Ecosystems (ages 9-13)
- Coastal Marine Environmental Issues (ages 12-18)
- Earth Connections (ages 5-8 and 9-11)
- Energy Encounters (ages 9-11)
- Organics: A Wasted Resource? (ages 12-18)
- Recycling Adventures (ages 5-11)
- Soil, Water and Land Use I: Understanding Pesticide Interaction (ages 15-18)
- Soil, Water and Land Use II: Understanding Nitrogen Interaction (ages 15-18)
- Water Wise Guys (ages 9-11)



Escambia County 4-H'ers learn about the outdoors at a summer day camp near Pensacola.

Statewide Programs and Events:

In addition to these curricula, several events and programs are conducted that provide EE opportunities for youth. These vary from statewide competitive events to outdoor education and camping opportunities. Topics covered in these programs include:

- Marine Ecology Judging • Forest Ecology • Land Judging • Wildlife Habitat Evaluation • Marine Camps and • Environmental Ed-venture camps (held at the university's four residential facilities.)

Additional information about these events and programs is available through the local County Extension Offices, from the State Program Leader, Jerry Culen or from the State 4-H Office: (352) 846-0996
Web site: 4h.ifas.ufl.edu

UF CONTACTS

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4-H members in Jacksonville take a close look at seashells while attending a career exploration event.



Center for Natural Resources
<http://cnr.ifas.ufl.edu> (Web site)

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EE PROGRAMS

UF/IFAS School of Forest Resources & Conservation

One of the main goals of the EE Program at the School of Forest Resources & Conservation is to provide resources and training for educators and youth leaders. A secondary goal is to enhance public awareness and knowledge about natural resources in Florida. The following are some programs that Martha Monroe currently directs within the School:

- Provide Project Learning Tree (PLT) facilitator training to Extension agents.
- Track and enhance outreach activities with the U.S. Fish & Wildlife Service.
- Assess youth attitudes toward forests and forest management in Florida.
- Develop curriculum for high school students to use the FL Museum of Natural History collections to improve their knowledge of biodiversity and their writing skills.
- Develop and evaluate a community service learning project curriculum for youth groups, "Give Forests A Hand."
- Educate citizens about wildland fire and how to live safely in fire-prone ecosystems.
- Develop Web site to support 4-H Forest Ecology Contest and three new 4-H Project Books: www.sfrc.ufl.edu/4h.
- Assess teacher use of PLT Activity Guide in Florida.
- Train natural resource professionals to evaluate EE programs.
- Assess student changes in motivation and critical thinking skills as a result of environmental education projects.



A hornworm caterpillar fascinates kindergarteners during a field day at the UF/IFAS Suwannee Valley Research and Education Center.



Forestry camp attendees inspect pine trees at the UF/IFAS Pensacola Junior College campus in Milton.

Graduate Certificate in Environmental Education & Communications (EEC)

The Environmental Education & Communications Certificate is directed by UF's Center for Environmental Education, co-directed by Susan Jacobson (Wildlife Ecology and Conservation), Linda Jones (School of Teaching and Learning) and Martha Monroe (Forest Resources & Conservation).

The EEC certificate offers students official recognition of study with University of Florida EEC researchers who come from the following diverse academic disciplines:

- Agriculture
- Botany
- Communications
- Economics
- Education
- Entomology
- Forestry
- Recreation
- Social Sciences
- Wildlife Ecology
- Zoology

Contact: Graduate Programs, Dean's Office,
College of Agriculture, Box 116455, 103 Black
Hall, (352) 392-2251, nredean@nervm.ufl.edu.

WEB SITES

Florida 4-H <http://4h.ifas.ufl.edu/>

Sea Grant http://www.flseagrant.org/faculty-students/marine_education_links.htm

Project Learning Tree <http://plt.sfrc.ufl.edu/>

UF School of Forest Resources & Conservation <http://www.sfrc.ufl.edu/>

UF Wildlife Ecology & Conservation Dept. - Wildlife Extension Educational Resources http://www.wec.ufl.edu/extension/educational_resources.htm

St. Johns River Water Management District - Environmental Education Topics (Project WET, WaterWays, The Legacy Program)

<http://sjr.state.fl.us/programs/outreach/education/education.html>

Project WILD, Florida Fish & Wildlife Conservation Commission <http://www.floridaconservation.org/educator/projwild.html>

Southwest Florida WMD - For Educators (Splash, Teacher Training Opportunities) <http://www.swfwmd.state.fl.us/infoed/infoed.htm>

South Florida WMD - Students' Corner http://www.swfwmd.gov/stude/2_student.html