

# EARTH CONNECTIONS II



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Earth Connections includes and adaption of selected activities from a variety of sources listed in the Bibliography.



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## PREFACE

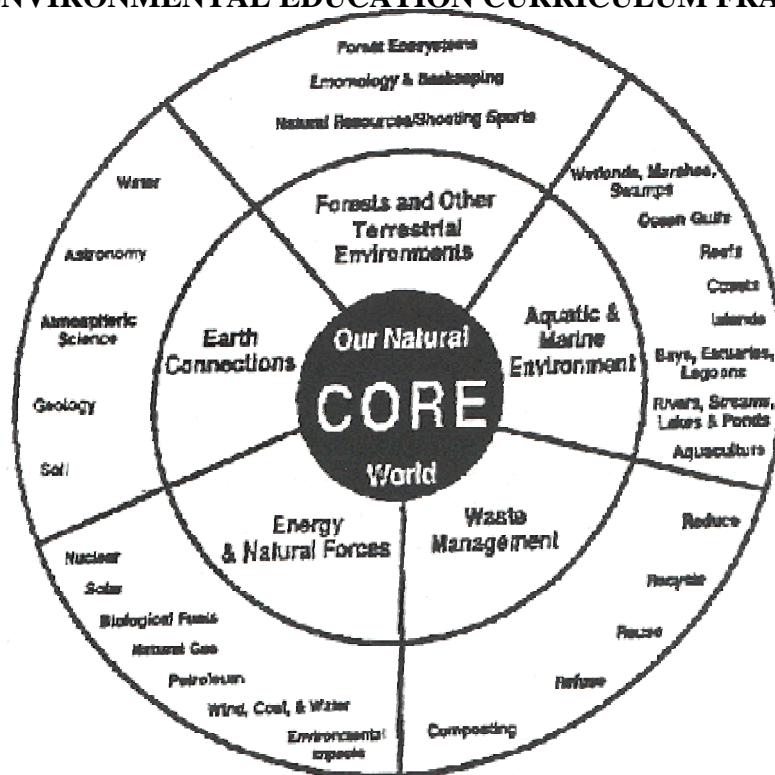
The Florida 4-H Environmental Education curriculum, OUR NATURAL WORLD, includes a basic premise, i.e., our environment is a web of cooperation and interdependence. One of the five key components of the curriculum is “EARTH CONNECTIONS”.

Earth Connections (soil, air, water) is a curriculum that is designed to help 9-11 year old youth to understand the environmental and stewardship issues associated with soil, air, and water conservation and quality. Additional curriculum packages are being designed for youth in other age ranges and for sequential advancement in Earth Connections education.

To the informed Florida citizen, it is not surprising that the conservation and preservation of the Earth’s soil, air, and water supply commands a priority within the total 4-H Environmental Education curriculum. An investment in young people’s knowledge, understanding and attitudes about our water use, conservation and water quality issues and their affect on the natural environment can not be ignored now or in the future.

In EARTH CONNECTIONS, we are particularly interested in helping young people develop a personal environmental ethic and to understand each person’s individual impact on THE ENVIRONMENT - Florida’s, the United States, and the World’s.

### 4-H ENVIRONMENTAL EDUCATION CURRICULUM FRAMEWORK



**FLORIDA 4-H AND YOUTH PROGRAMS  
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES  
UNIVERSITY OF FLORIDA**

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# About Earth Connections

The development of this 4-H Environmental Education Project is driven by two basic principles:

1. Learning about the environment can be fun. The project provides simple and inexpensive, yet fun activities that teach youth about major concepts of the interdependence of the Earth's soil, water, and air.
2. 4-H volunteer teaching activities must be easy-to-use. This project includes learning activities in an easy-to-use format. It was designed to be teacher friendly and takes much of the guesswork out of teaching this subject.

## AGE OR GRADE LEVELS

This project was developed for youth ages 9-11. Both group and individuals activities encourage participation and action in all aspects of earth connections. Teachers and volunteers are encouraged to select learning activities that are most suitable to their youth. The overall intent is to facilitate learning and to spark creativity in both teachers and youth.

## CONTENTS

The following resources are contained in the educational kit:

- Ž LEADER'S GUIDE - This three-ring notebook contains a complete, easy-to-read outline for lessons. Each lesson provides a variety of activities that can be conducted depending upon the time frame devoted to this project. The following activities are a mix of games, experiments, or demonstrations that help to teach the basic principles and concepts in each lesson. The lessons conclude with discussion questions for youth to REFLECT and APPLY.
- Ž EARTH CONNECTIONS WORKBOOK - contains activity sheets for youth that correspond to each lesson. A variety of activities including puzzles, word searches, and other instructional activities make up this fun booklet.
- Ž TAKE HOME ACTIVITIES - supplemental activities designed to involve the entire family in specific conservation practices. An activity such as "Imagine Your Home..." allows youth to investigate how they impact the environment around their home.

## **LESSON PROFILES**

A brief description of the five Earth Connection Lessons:

### **Ž LESSON 1 - EARTH CONNECTIONS**

To develop an understanding of how soil, water, and air interact and how living things are dependent upon them is the focus of lesson one. The interdependence of living and non-living things on Earth in various “ecosystems” are introduced through fun activities.

### **Ž LESSON 2 - WATER**

Why we need water, how it cycles, how we use water and where water is in Florida are the topics in Lesson Two. Experimental activities included allow youth to “see” the water cycle and discover how our Florida aquifers work.

### **Ž LESSON 3 - EARTH AND SOIL**

Soil is necessary for humans and other living things. Discover what’s inside the soil with “Hard-Boiled Earth”, how soil is formed and what in soil and what is in soil with hands-on experiments and activities.

### **Ž LESSON 4 - AIR**

The need for air is explored in Lesson 4. “Investigating Air” and “Air Labs” as well as other hands-on activities provide visible discovery experiences. Water vapor present in the air and how the air temperature affects plant growth can be seen.

### **Ž LESSON 5 - CARING FOR OUR EARTH**

After learning about soil, water and air and their connections, youth are given opportunities to make environmentally informed decisions concerning our environment with “Trade-Offs” and “Eco-Choices”. Their soil, water and air knowledge will be tested with “The Quiz Bowl”. Through these experiences youth will have a foundation for furthering their environmental awareness.