# ENVIRONMENTAL RESOURCES LESSON PLAN LIBRARY

# **UNIT A: NATURAL RESOURCES**

#### 1. Introduction to Natural Resources

- Lesson 1—Exploring Natural Resources
- Lesson 2—Understanding Ecology and Ecosytems
- Lesson 3—Understanding Human Demands on Natural Resources
- Lesson 4—Comprehending Natural Resource Conservation
- Lesson 5—Exploring Careers in Natural Resources
- Lesson 6—Understanding Recycling and its Relationship to the Environment

#### 2. Soil

- Lesson 1—Understanding the Importance of Soil
- Lesson 2—Determining Land Use
- Lesson 3—Determining the Nature of Soil
- Lesson 4—Understanding Soil Formation
- Lesson 5—Understanding Soil Color
- Lesson 6—Understanding Soil Texture and Structure
- Lesson 7—Explaining a Soil Profile
- Lesson 8—Understanding Moisture Holding Capacity
- Lesson 9—Understanding Soil Degradation
- Lesson 10—Understanding Soil Erosion and Management Practices

#### 3. Water

- Lesson 1—Understanding the Water Cycle and Its Importance to the Environment
- Lesson 2—Determining Uses of Water
- Lesson 3—Identifying Water Sources and Quality Standards
- Lesson 4—Identifying and Reducing Water Pollution

- Lesson 5—Maintaining Watersheds
- Lesson 6—Conducting Water Quality Tests
- Lesson 7—Tracking Groundwater Contamination

#### 4. Air

- Lesson 1—Defining Air Pollution and its Effect on Humans
- Lesson 2—Examining Industrial Air Pollution
- Lesson 3—Monitoring Air Quality

#### 5. Outdoor Recreation

- Lesson 1—Understanding Outdoor Recreational Enterprises
- Lesson 2—Managing Outdoor Recreational Facilities
- Lesson 3—Managing Agritourism Enterprises
- Lesson 4—Understanding the National Park System
- Lesson 5—Practicing Snowmobile Safety

# **UNIT B: PLANT WILDLIFE MANAGEMENT**

# 1. Introduction to Forestry

- Lesson 1—Defining Forests
- Lesson 2—Understanding Forest Ecology
- Lesson 3—Recognizing the Importance of Forests
- Lesson 4—Recognizing Important Tree Species and Their Products

#### 2. Tree Growth and Development

- Lesson 1—Examining the Structures of a Tree
- Lesson 2—Understanding the Growth and Decline of Forest Trees
- Lesson 3—Identifying Diseases and Pests of Forest Trees

#### 3. Forest Management

- Lesson 1—Identifying the Role of Government in Forest Management
- Lesson 2—Measuring Trees
- Lesson 3—Measuring Timber Stands
- Lesson 4—Understanding the Role of Fire in Forest Management
- Lesson 5—Harvesting Forest Trees

Lesson 6—Examining Reforestation Practices

Lesson 7—Applying Safe Practices in Forest Management

#### 4. Forest Products

Lesson 1—Identifying Forest Products and Uses

Lesson 2—Understanding the Characteristics of Wood

Lesson 3—Processing Forest Products

Lesson 4—Protecting and Preserving Wood

## 5. Urban Forestry

Lesson 1—Defining Urban Forestry

Lesson 2—Selecting Trees for Urban Growing Conditions

Lesson 3—Transplanting Trees

Lesson 4—Pruning Trees in Urban Settings

#### 6. Prairie Ecosystems

**Lesson 1—Defining Prairies** 

Lesson 2—Understanding the Importance of Prairies

Lesson 3—Exploring Prairie Ecology

Lesson 4—Establishing Prairies

Lesson 5—Maintaining Prairies

#### 7. Wetlands

Lesson 1—Exploring Wetlands

Lesson 2—Determining the Importance of Wetlands

Lesson 3—Understanding Wetland Ecology

Lesson 4—Establishing Wetlands

Lesson 5—Maintaining Wetlands

# **UNIT C: ANIMAL WILDLIFE MANAGEMENT**

#### 1. Introduction to Wildlife

Lesson 1—Exploring the History and the Importance of Wildlife Conservation

Lesson 2—Describing Species Endangerment

Lesson 3—Identifying Problems Caused by Wildlife

#### 2. Wildlife Biology and Ecosystems

- Lesson 1—Understanding Life Processes
- Lesson 2—Understanding the Food Chain and Natural Selection
- Lesson 3—Defining Wildlife Habitat and Recognizing Its Importance
- Lesson 4—Conserving Wildlife and Wildlife Habitat
- Lesson 5—Creating Wildlife Habitat

#### 3. Fish Management

- Lesson 1—Exploring the Aquaculture Industry
- Lesson 2—Understanding the Environmental Requirements for Fish
- Lesson 3—Describing Nutritional Requirements of Fish
- Lesson 4—Identifying Fish Digestion and Feeding
- Lesson 5—Propagating and Selling Fish
- Lesson 6—Identifying Fish Facilities and Stocking Rates
- Lesson 7—Diagnosing Fish Diseases
- Lesson 8—Harvesting, Holding, and Transporting Fish

# 4. Game Birds Management

- Lesson 1—Identifying and Classifying Game Birds
- Lesson 2—Identifying Foods and Environmental Requirements
- Lesson 3—Raising Game Birds
- Lesson 4—Evaluating Wildlife Habitats
- Lesson 5—Managing Wildlife Populations
- Lesson 6—Harvesting and Preparing Game Birds

#### 5. Game Animals Management

- Lesson 1—Identifying and Classifying Game Animals
- Lesson 2—Identifying Foods and Environmental Requirements
- Lesson 3—Raising Fur-Bearing Animals
- Lesson 4—Evaluating Wildlife Habitats
- Lesson 5—Managing Wildlife Populations
- Lesson 6—Harvesting and Preparing Game Animals

#### 6. Safety and Ethics

- Lesson 1—Understanding Hunting Safety
- **Lesson 2—Understanding Hunting Ethics**
- Lesson 3—Identifying Hunting Equipment
- Lesson 4—Examining Boating and Fishing Safety

# UNIT D: EMPLOYABILITY IN THE AGRICULTURE INDUSTRY

#### 1. Developing Personal Skills

- Lesson 1—Self-Understanding and Assessment
- Lesson 2—Developing Human Relations Skills in the Workplace

# 2. Developing Communication Skills

- Lesson 1—Introduction to Communication
- Lesson 2—Understanding Effective Communication Techniques
- Lesson 3—Identifying Effective Communication Techniques
- Lesson 4—Identifying Effective Speaking Techniques
- Lesson 5—Organizing and Presenting a Persuasive Message
- Lesson 6—Using Communication Skills in Appropriate Situations

# 3. Gaining Employment

- Lesson 1—Developing Goals
- Lesson 2—Obtaining Education for a Job
- Lesson 3—Identifying Occupational Competencies
- Lesson 4—Finding a Job
- Lesson 5—Applying For a Job
- Lesson 6—Writing a Resume and Letter of Application
- Lesson 7—Succeeding in a Job Interview
- Lesson 8—Understanding Conflicts and Their Resolution

# UNIT E: DEVELOPING LEADERSHIP SKILLS IN AGRICULTURE

#### 1. Understanding the History and Organization of FFA

Lesson 1—Exploring the History and Organization of FFA

#### 2. Recognizing Opportunities in FFA

Lesson 1—Discovering Opportunities in FFA

Lesson 2—Determining FFA Degrees, Award, and CDEs

#### 3. Developing Leadership Skills

Lesson 1—Understanding FFA Officer Duties and Responsibilities

Lesson 2—Planning and Organizing an FFA Meeting

### 4. Participating in Community and Government Organizations

Lesson 1—Understanding Youth Clubs and Organizations

Lesson 2—Developing an Awareness for Your Community

# **UNIT F: SUPERVISED EXPERIENCE IN AGRICULTURE**

# 1. Determining Purposes and Procedures of SAE

Lesson 1—Determining the Benefits of an SAE

Lesson 2—Determining the Kinds of SAE

# 2. Planning and Developing SAE Programs

Lesson 1—Researching Possible SAE Programs

Lesson 2—Planning Your SAE Programs

Lesson 3—Implementing SAE Programs

# 3. Expanding My SAE

Lesson 1—Keeping and Using SAE Records

Lesson 2—Making Long Range Plans for Expanding SAE Programs