



Environmental Management
Outdoor Education
2015-2016





Environmental Management Education Offerings

Botany

Botany, also called plant science or plant biology, is the science of plant life and a branch of biology.

Ethnobotany

Edible and Medicinal Plants-Learn how humans have historically used the native plants growing in our area, and their importance to wildlife.

Exotic Plants

Air Potato Round-up-Learn about the hazards of the exotic, invasive air potato plant and do a hand removal of the bulbs.

Bark—Unique Prints of a Tree-An introduction to different habitats and the species of trees that live in each, focusing on the bark adaptations of each plant to its habitat.

Invasive Non-Native Plant Hike-An introduction to invasive non-native plants and the damage they cause to the natural lands.

Pepper Busting-Learn about the hazards of the exotic, invasive Brazilian pepper plant and do a hand removal of the trees.

Russian Thistle Dismissal-Learn about the hazards of the exotic, invasive Russian thistle plant and do a hand removal of the shrubs.

Grasses

Grasses and Their Look-Alikes-An introduction to grasses, rushes, and sedges and how to identify them.

Plant Adaptations

Bees and Other Pollinators-An introduction to pollinators, especially honeybees.

Leaves—Fingerprints of a Plant-An introduction to leaves and characteristics that make them unique.

Pollinator Garden Planting-Learn about the value of pollinators and then do site preparation and planting of pollinator plants in a garden.

Prickly Pear—Cactus of the Florida Desert-An introduction to the prickly pear cactus.

Seeds

Seed Scavenger Hunt-An introduction to fruits and seeds and how they spread.

Traveling Seeds-An introduction to how seeds disperse from their parent plant to their germination destinations.

Wildflowers

Flower Power-An introduction to flowers and plant reproduction.

Flower Power Pollination Party-An introduction to flowers and their role in plant reproduction and the interrelationships of flowers and their pollinators on the lands.

The Wonder of Flowers-An introduction to flowers and their role in plant life.

Wildflowers of the Fall-An introduction to native fall wildflowers of Volusia County.

Wildflowers of the Fall Eco-Buggy Tour-An introduction to fall-flowering grasses and wildflowers of Volusia County on an Eco-Buggy through conservation lands.

Earth Science

Earth science or Geoscience is an all-embracing term for the sciences related to the planet Earth.

Astronomy

Night Sky Star Tour-Observation of the night sky and discussion of its effects on wildlife.

Star Tour- The Moon and More-Introduction to the night sky and the Moon, and the effects of each upon the natural lands.

Telescope Workshop and Star Tour-Introduction to telescopes and the night sky and its effects on the natural.

Telescope Workshop for Beginners-An introduction to telescopes and how to use them.

Soils of Volusia County

Science and Art of Soils-Comparison of soil characteristics between wetland and upland habitats and the factors that affect them.

Ecology

Ecology is the scientific study of interactions among organisms and their environment.

Aquatic Ecosystems

Coastal Ecosystems Flora and Fauna-An introduction to the coastal environment-soils, water, and native organisms.

Waterbody Paddle-Explore various waterways, shorelines and the associated flora and fauna. Introduction to the factors that affect water quality and quantity.

Wetland Hike-Introduction to wetlands and their flora and fauna.

Decomposition

Dead Log Condos-Introduction to the process of tree decomposition and the carbon cycle.

Fire Ecology-Introduction to the importance of fire to maintain habitat health.

Land Management

GLOBE Biometry-Introduction to measuring land cover.

Plant Communities Neighborhoods of Plants-Introduction to the flora, fauna and structure of natural communities and the mechanisms that affect them.

Salt, Brackish and Fresh Water Ecosystems and who lives in them-At this time, a class has not been developed for this subject.

Environmental Management

Environmental resource management is the management of the interaction and impact of human societies on the environment.

Land Management

Bike Hike-Introduction to the trails and habitats of conservation lands.

Eco-Buggy Tours of Conservation Lands-Introduction to the natural and cultural history and current land management practices on Volusia County Conservation Lands.

Ecosystem Reconnaissance-Introduction to sampling and measurement methods used by ecologists, pedologists, botanists, and meteorologists. Introduction to orienteering.

Guided Hike-Introduction to the trails and habitats of conservation lands.

Swamp Buggy Forestry and Land Management Tour-Introduction to the natural and cultural history and current land management practices on Volusia County Conservation Lands.

Talk to the Trees-Introduction to forestry.

Wildlife Instructor

Workshop Schoolyard Wildlife Instructor-This program is designed for educators relating to the diversity of subjects on Workshop conservation lands.

Recreation

Recreation is an activity of leisure, leisure being discretionary time. Recreation activities foster a desire to preserve our natural environment.

Orienteering

Navigation Contest—Compass vs. GPS-Introduction to navigation with compasses and GPS.

Wildlife Observation

Animal Tracking and Scat ID-Introduction to finding and identifying animal signs.

Beginning Birding-Introduction to bird-watching and bird-watching techniques.

Sustainability

The concept of sustainability is that we should be able to meet the needs of today without compromising the ability of future generations to meet their own needs.

Water

Water is the most abundant compound on Earth's surface, covering 70 percent of the planet. In Volusia County, water quality and quantity are important issues.

Water Cycle

GLOBE Atmosphere with Cloud Art-Introduction to the water cycle and weather.

Water Cycle-Clouds to Wetlands

Water Cycle-Clouds to Wetlands-Introduction to clouds and the water cycle.

Water Quality Monitoring

Water Quality Testing-Introduction to water quality and water quality testing.

Why do we test the water?

Marine Ecosystems Exploration-Students will explore the chemical and biological components of a mangrove salt marsh estuary. Hands on Lab activities, water testing, seine and plankton netting followed by classroom activities. The group will also have free time to explore the Marine Science Center.

Zoology

Zoology, or animal biology, is the branch of biology that relates to the animal kingdom, including the structure, evolution, classification, habits, and distribution of all animals.

Aquatic Animals

Aquatic Critter-Introduction to aquatic faunal organisms, including benthic.

Mollusks and Their Beautiful Shells Wading Hike-Introduction to mollusk biology and ecology.

Mollusks and their Shells-Introduction to mollusk biology, habitat, ethnology, and mollusk shells.

Teeny Critters of the Pond-Introduction to wetland flora and fauna.

Birds

Meet the Florida Scrub Jay-Introduction to the federally threatened Florida scrub jay.

Shore Birding Hike-Introduction to shore birds.

Talking Turkey Hike-Introduction to Osceola wild eastern turkey ethnology and vocalizations.

Wild About Birds—Live Bird-of-Prey-Introduction to the natural history, biology, ecology, and ethnology of birds-Encounters of-prey, and their relationship with humans.

Florida Turtles and Tortoises

Gopher Tortoise Survey-Introduction to gopher tortoise habitats and biology.

Florida Turtles- Their Biology and Ecology-Introduction to native turtles found on the natural lands.

Insects Around Us

Ant Lunch and Ants for Lunch-Introduction to the ecology and feeding behavior of ants and ant lions in the scrub.

Butterflies- Flying Flowers of Central Florida-Introduction to native butterflies on the natural lands.

Insects in Various Habitats-Introduction to the insects found in different habitats.

Insects-Good or Bad?-Introduction to insects of Florida, including discussion of invasive non-native insects, with emphasis on benefits and problems caused by insects.

Leaf Litter Critters-Introduction to select invertebrates found in leaf litter on the natural lands.

Snakes

Florida Critters That Deserve Our Respect-Introduction to snakes, especially the water moccasin, which can be found on the natural lands.