

SCHOOL PROGRAMS

HARBISON STATE FOREST

Bring your students to Harbison State Forest for a hands-on, engaging, and fun learning experience! All programs have been newly written and are aligned with South Carolina 2014 Science and 2015 SCCCR Math Standards. Programs include a pre-visit activity that prepare students to get the most out of their visit to the forest. Our programs teach students how to think, not what to think and follow the AKCA model for environmental education: Awareness, Knowledge, Challenge, & Action.

These FREE programs will be offered on Tuesdays-Thursdays with limited availability on Fridays. Programs can be modified to reach other specific learning objectives. Programs typically start at 9:30 and end by 12:45. Picnic tables are available for lunch but there are no on-site dining facilities. Please contact Matt Schnabel (mschnabel@scfc.gov or 803-896-8892) at the Harbison State Forest Environmental Education Center for more details and to reserve your school's space.

Kindergarten

PROGRAM 1 – FOREST PLANTS & ANIMALS AND THEIR NEEDS FOR SURVIVAL

Science standards: K.L.2A.1, K.L.2A.5, K.L.2A.6

Math standards: K.MDA.1, K.MDA.4

Description: Students will learn about the basic needs of plants and animals and what they need to survive in their environment. They will become a tree and learn about their life cycle. They will become deer and try to survive by obtaining resources in their habitat. Students will study different forest environments, identify measurable attributes of trees, and represent data using picture graphs.

PROGRAM 2 – USING YOUR SENSES TO LEARN ABOUT THE CHANGING FOREST

Science standards: K.L.2A.1, K.L.2A.4, K.E.3A.3

Math standards: K.MDA.1, K.MDA.2, K.MDA.3, K.MDA.4

Description: Students will learn how forests change through the seasons by using their five senses. Singing, listening and imitating nature sounds, creating art through the sense of touch, and using the sense of smell are ways the students will learn about the forest. Students will also go on a forest safari and then compare, sort, classify, and create object graphs from the items they have collected.





SCHOOL PROGRAMS

FIRST & THIRD GRADE

First grade

PROGRAM 1 – EARTH'S NATURAL RESOURCES

Science standards: 1.E.4A.1, 1.E.4B.1, 1.E.4B.2

Math standards: 1.MDA.1, 1.MDA.2

Description: Students will investigate the properties of Earth's natural resources and learn about ways that they can be conserved. Students will study the soils in a forest habitat to learn about their composition and structure. They will learn how trees benefit our environment and society and how we can help conserve natural resources through a fun paper-making activity. Students will study a forest environment and compare objects they observe by their length.



PROGRAM 2 – PLANTS AND THEIR ENVIRONMENTS

Science standards: 1.L.5A.1, 1.L.5A.2, 1.L.5B.2, 1.L.5B.3

Math standards: 1.MDA.4, 1.MDA.5

Description: Students will learn how plants survive and how they respond to changes in their environment. Working in a team, students will go on a seed scavenger hunt and then learn about different seed dispersal methods for different species and environments. They will act out the life cycle of a tree and create a tree using themselves as the parts. They will learn the positives and negatives of fire in a forest and how plants and animals are adapted to deal with fire. Students will observe, measure, record data, make graphs, and draw conclusions about what they have learned.

Third grade

PROGRAM 1 – FOREST ECOSYSTEMS

Science standards: 3.L.5A.1, 3.L.5A.2

Math standards: 3.MDA.3, 3.MDA.4

Description: Students will take an in-depth look at 3 different forest habitats to learn about their characteristics and how those environments support a variety of organisms including producers, consumers, and decomposers. At each site, students will record data on soil, sunlight, wind, temperature, topography, plant life, and animal life. Then students will organize, graph, and interpret their data to draw conclusions about the similarities and differences between the forest habitats.

SCHOOL PROGRAMS

THIRD & FIFTH GRADE

PROGRAM 2 – EFFECTS OF HABITAT CHANGES

Science standards: 3.L.5B.1, 3.L.5B.2

Math standards: 3.MDA.3, 3.MDA.4

Description: Students will examine how plants and animals respond when their habitats change. They will learn how changes are sometimes beneficial and sometimes harmful and that they can occur naturally or by the organisms that live in them. Students will become trees in a forest and learn how trees are affected by competition for resources and by natural or human-caused events. They will be collecting, organizing, and graphing data that will be analyzed to draw conclusions.

Fifth grade

PROGRAM 1 – TERRESTRIAL AND AQUATIC ECOSYSTEMS

Science standards: 5.L.4A.1, 5.L.4A.2

Math standards: 5.MDA.1, 5.MDA.4

Description: Students will work in teams to collect, analyze, and interpret data from different terrestrial and aquatic forest environments. They will then summarize and communicate their conclusions about the living and non-living components of the different forest environments and how the different plants and animals are adapted to those environments. Students will get to use tools to collect information on temperature, diameter, wind speed, and soil characteristics.

PROGRAM 2 – ECOSYSTEM INTERACTIONS

Science standards: 5.L.4B.1, 5.L.4B.2, 5.L.4B.3, 5.L.4B.4

Math standards: 5.G.1, 5.G.2

Description: Students will learn about the flow of energy through the biotic components of ecosystems including producers, consumers, and decomposers. They will become a part of a food chain and food web in a forest environment to learn how energy flows through it. Students will experience first-hand how a deer population reacts to limiting factors by becoming part of a deer herd. By collecting and plotting data on a coordinate system and then looking for trends, students will see how limiting factors can affect an ecosystem.



SCHOOL PROGRAMS

SEVENTH GRADE & HIGH SCHOOL

Seventh grade

PROGRAM 1 – FOREST ECOSYSTEMS: ORGANIZATION AND EFFECTS ON POPULATIONS

Science standards: 7.EC.5A.1, 7.EC.5A.3

Math standards: 7.GM.4

Description: Students will learn about the characteristics of the levels of organization within different forest ecosystems. Students will collect data to estimate volumes of trees in forested areas affected by fire and those not. Students will learn how limiting factors can affect a forest by becoming part of a forest in a hands-on (and body-on!) game.

PROGRAM 2 – POPULATION DYNAMICS AND ENERGY FLOW

Science standards: 7.EC.5B.1, 7.EC.5B.2, 7.EC.5B.3, 7.EC.5B.4

Description: Students will learn how the forests are dynamic and are ever-changing in response to natural and human-caused events. Students will act out food chains and food webs to show how energy flows through an ecosystem. Students will study the balance of ecosystems and how the introduction of new species may affect this balance.

High school

Programs are tailored to the needs and learning objectives of the specific class and teacher. Typical classes that use Harbison State Forest for field laboratory exercises include Biology I, Environmental Studies, AP Environmental Science, and Agricultural Science classes studying forestry.

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