

The Pettit Preserve

K-12 Program Guide

Kindergarten

Let's Learn About Nature –

Students will hike the .75 mile trail and cross the swinging bridge while participating in a representational display of Georgia's fauna. They will have to use scientific inquiry as they listen to poems describing their fauna to distinguish differences between them. At the learning shed, the students will participate in centers where they note the similarities and differences in groups of organisms, differentiate between living and non-living material, and use tools for observation. GPS – Science CS 1, 4, 6; L 1, 2

How do you get Soil from Rocks? –

Students will observe rocks and soils along the .75 trail while participating in a representational display of Georgia's fauna. At the Lakeside Amphitheater, students will use scientific inquiry as they listen to poems describing their fauna to properly identify what they have found. We will hike back to the Learning Shed to participate in centers where students will sort a collection of rocks and soils from the Preserve according to their attributes, differentiate between living and non-living material, and use tools for observation of animal tracks.

GPS – Science CS 1, 3, 4, 6; E 2

First Grade

Aquatic Investigation – Classes will use the important features of the process of scientific inquiry: observing and measuring. They will participate in centers at the Learning Shed where they will use tools to investigate different seeds and leaves, make a craft relating to weather and water patterns, and hear American/Georgian Folktales. Students will also hike the .75 mile trail that includes the swinging bridge where they will participate in a fun activity describing and finding Georgia fauna.

GPS – Science CS 1, 3, 4, 6, 7; E 1, 2 Social Studies H 2

Tree Identification Hike - On the tree identification hike, the children will be able to use the Identification posts to learn about the characteristics of different trees. They will learn the environmental impact of trees and how important they are to our climate and well-being. They will also learn how the trees help our wildlife and the uses for the trees when they are cut. Producers and consumers will be discussed along the trail. At the Learning Shed, students will participate in centers that address the basic needs of plants and animals and use tools for observation.

GPS – Science CS 1, 3, 4, 6, 7; E 1; L 1 Social Studies E 3

Second Grade

Life Cycles –The students will use the process of the scientific inquiry with teamwork, tools, and observations of plants and animals. They will observe and record changes in their surroundings and infer the causes of the changes as they investigate the life cycles of different living organisms.

GPS – Science CS 1, 3, 7; E 3; L 1

Field Investigation Hike – Students will use the skills of observing, measuring, and manipulating objects in scientific activities as they hike either the 1.5 or the .75-mile trails. Habitats, rocks, soil, decomposers, and scavengers will be taught along the trail as students observe their

environment. Discussion on the trail will include the Native Americans and how they used local resources.

GPS – Science CS 1, 3, 7; E 3; Social Studies H 2

Third Grade

How do we effect our Environment? – Students will hike the beautiful 1.5 mile Ann and John Collins' Trail as they observe and discuss the effects of pollution and human activity on the environment. Back at The Learning Shed, the students will learn about recycling, reducing, and reusing to protect our environment. They will visit the compost garden and participate in the composting of materials and observe the results.

GPS – Science CS 1, 3, 7, 8; L 2

Fossils, Rocks, Soil, and a Place to Live – Students will learn the attributes of rocks and soils along the 1.5-mile Ann and John Collins' Trail. Fossils will be observed and discussed at The Lakeside Amphitheater. Habitats of different organisms will be observed and the dependence of organisms on their habitats will be examined.

GPS – Science CS 1, 7, 8; E 1, 2; L1

Fourth Grade

Water, Water, Everywhere and We Must Keep a Drop to Drink! – How does the water cycle relate to weather? Water samples will be taken at the aquatic stations near the waterfalls as they hike the 1.5 mile Ann and John Collins' Trail and these will be examined under the microscope. Students will differentiate between states of water and find out about the water under their feet as well as in the air. Awareness of the importance of this required natural resource. Along the trail, camouflage, use of hibernation, protection, etc. will be discussed.

GPS – Science CS 1, 3, 7, 8; E 3; L 2

Let the Energy Flow – Students will hike the 1.5 mile Ann and John Collins' Trail and observe the flow of energy within an ecosystem. They will be able to see different ways the Native Americans could have lived on this land. Along the trail, camouflage, use of hibernation, protection, etc. will be discussed.

GPS – Science CS 1, 7, 8; L 1, 2; Social Studies H 1

Fifth Grade

Our Changing World – What is the role of technology and human intervention in the control on constructive processes? As the students hike the 1.5 mile Ann and John Collins' Trail, they will observe flood control, erosion due to water, weathering, the impact on organisms. They will be able to see physical and chemical changes along the trail.

GPS – Science CS 1, 7, 8; E 1; P 2

Vertebrate or Invertebrate? – Students will classify organisms into groups and relate how they determine the group they to which they belong. They will also participate in a food web activity where they role play different organisms and their role in the habitat. On the 1.5 mile trail, students will use dichotomous keys to classify different trees along the trail as another classification activity.

GPS – Science CS 1, 3, 7, 8; L 1, 4

Sixth Grade

Earth Field Investigation – As the students hike the 1.5 mile Ann and John Collins' Trail, they will investigate rocks, erosion, and soil. They will discuss groundwater, the water cycle, and

recognize the significant role of water in the processes of the earth. At the Lakeside Amphitheater, the students will observe and discuss fossils. More investigation and discussion will take place at The Learning Shed and The Frog Pit. The role of the sun will be discussed as the major source of energy and its relationship to wind and water energy. Students will identify renewable and nonrenewable resources.

GPS – Science CS 1, 4, 7, 8, 9; E 3, 5

Seventh Grade

Environmental Field Investigation – This field investigation will center around the dependence of organisms on one another and their environments. Water samples will be taken at the aquatic stations near the waterfalls to enable the students to see how the smallest organism is important to the food web. The students will hike the 1.5 mile Ann and John Collins' Trail and the 950 foot trail crossing the swinging bridge on the way back to The Learning Shed to use hand lenses and microscopes to examine their water samples.

G PS – Science CS 1, 2, 4, 7, 8, 9; L 3, 4

8th – 12th Grades

Field Investigations and Projects – The students will be able to hike the Ann & John Collins' Trail, The Toyo Tires Trail, and The Swinging Bridge Trail. This trail will take the students around the 9-acre lake, through the Appalachian type wooded preserve, and across the 36 foot swinging bridge.

Biology field studies, individual projects, discussions, and research will be customized to the Georgia Performance Standards for each group. The staff of the Pettit Preserve is eager to work with high school groups – please contact us with your area of interest so that we can tailor a program to meet your students' needs.

GPS – Science CS 1, 2, 4, 7, 8, 9