



Discovery Field Trips

Objectives based on Alabama Course of Study and Alabama College and Career Ready Standards

The Secret Life of Trees (Kindergarten-1st grade)

- Observe, compare, and describe the properties of trees and parts of trees.
- Compare changes in parts of trees through the seasons.
- Acquire the vocabulary associated with the properties and structures of trees.
- Use oral language to describe observations.
- Observe animals that depend on trees for food and shelter.

Alabama Woodlands (1st-6th grade)

- Discover 3 ways animals use and depend on plants as well as 3 ways woodland plants depend on animals.
- Observe ways that plants and animals in a forest community are interdependent.

Dr. George Washington Carver (1st-6th grade)

- Examine the life and unique contributions of Dr. George Washington Carver.
- Discover the importance of nitrogen to green plants.
- Identify, not consume, wild edible plants on the grounds of BBG.
- Identify and harvest peanuts, sweet potatoes and cotton in The Gardens to take back to class.

Garden Gates (3rd-6th grade)

- Identify basic parts of a plant and the function of each: roots, stems, leaves, flowers.
- Identify basic parts of a flower and the function of each: petal, stamen (anther, filament, pollen), and pistil (stigma, style, ovary).
- Discover how bees pollinate flowers.
- Propagate plants using three different methods of propagation: seeds, cuttings, and division, and take plants back to class.
- Describe the benefit of plants in our daily lives (food, shelter, medicine, clothing, oxygen producer).

Native American (1st-6th grade)

- Discover and identify varieties of plants used by Native Americans for food, medicine, ceremonies, travel, shelters, dyes, and musical instruments.
- Describe the role of corn, beans, and squash in a Three Sisters Garden while understanding the symbiotic relationship of this Native American planting method.
- Describe how the Native Americans used Earth's natural resources.

- Connect the importance of legends to the Native American culture.

Tropical Rain Forest (1st-6th grade)

- Explore various plants in a tropical rain forest that give us chocolate, coffee, lemons, bananas, pineapple, and cinnamon.
- Describe six different plant adaptations in a tropical rain forest and locate each in the Botanical Gardens' Conservatory.
- Associate plant products with their sources.
- Describe the benefit of plants in our daily lives (food, medicine, oxygen producer).

Plants: Inside Out (7th-8th grade) New!

- Students create their own slide from leaves outside in our living collection to discover stomata (Greek for mouth), recognizing them as sites for carbon dioxide and oxygen exchange and using tools to investigate this micro world of plants.
- Students will visually discover pigments in a leaf through chromatography while understanding the role of chlorophyll in absorbing sunlight for photosynthesis.
- Use scientific equipment to measure and graph carbon dioxide, using data to determine how levels change during photosynthesis and respiration under light and dark conditions.
- Apply new knowledge to research renewable energy based on leaves for a follow up team project.