THIRD GRADE PRE AND POST VISIT ACTIVITIES

GEORGIA STANDARDS OF EXCELLENCE

SL31. Obtain, evaluate, and communicate information about the similarities and differences between plants, animals, and habitats found within geographic regions (Blue Ridge Mountains, Piedmont, Coastal Plains, Valley and Ridge, and Appalachian Plateau) of Georgia.

- a. Ask questions to differentiate between plants, animals, and habitats found within Georgia's geographic regions.
- b. Construct an explanation of how external features and adaptations (camouflage, hibernation, migration, mimicry) of animals allow them to survive in their habitat.
- c. Use evidence to construct an explanation of why some organisms can thrive in one habitat and not in another.

GUIDING QUESTIONS

In what Georgia region is the Atlanta Botanical Garden located (Piedmont)? What kinds of native plants and animals are common to the Piedmont region that we may we see during our visit to the Garden? Native plants are plants that naturally grow in Georgia and are not introduced by man.

ACTIVITY Schoolyard Walk

- Beforehand, watch the video <u>In"Tree"guing Plant Identification</u> for a look at common native trees in the Atlanta area. If possible, with the students, make a quick guide for the 6 trees discussed in the video: Redbud, American Holly, Tulip Poplar, Dogwood, Sweetgum and Magnolia.
- Take a walk around your school yard. Can you find any of the trees discussed in the video?

ACTIVITY discover carnivorous plants

- Watch the video <u>Meat Eating Plants by SciShow Kids</u>. Carnivorous (meat-eating) plants capture and digest insects to get extra nutrients the soil is missing. Discuss how plants need nutrients to survive and how carnivorous plants adapted to capture those missing nutrients.
- Georgia is home to Pitcher Plants, Butterworts, Sundews, and Bladderworts. Many of our native carnivorous species grow in the Coastal Plain region of Georgia. What is the soil like in the Coastal Plain region? Why are many carnivorous plants native to the Coastal Plain region of Georgia?

WRAP UP QUESTIONS

What kinds of native plants and animals did we see during our visit to the Atlanta Botanical Garden?

Which regions of Georgia were many of those native plants and from? How was Storza Woods (Piedmont region forest) different from the Conservation Garden (Coastal Plains wetland)?

ACTIVITY Create your own poetree

- Read Poetree by Shauna Lavoy Reynolds.
- Encourage the students to find a tree near their home or on the school property to compose a poem for or about.

ACTIVITY design a carnivorous plant

- Create your own plant that captures and digests animals. You can
 present your designs through drawings, sculptures or can act out the
 attraction and capture of the animal.
- Questions to consider while designing: What kind of animal and size
 of animal is your plant going to capture and digest? How is it going to
 capture and hold it? How does the plant attract the animal?
- Resources: It's a Trap: Pitcher Plant Pitfalls <u>video</u> and <u>lesson plan</u>

SUGGESTED RESOURCES

In a Nutshell by Joseph Anthony

<u>Treemendous: Diary of a Not Yet Mighty Oak</u> by Bridget Heos & Mike Ciccotello Eaten Alive by Kathleen Honda and Makoto Honda

THIRD GRADE

THEMES

- Georgia Habitats
- Native Plants
- Plant and Animal Adaptations

SUGGESTED DESTINATIONS

- Kendeda Canopy Walk
- Anne Cox Chambers Garden
- Conservation Bog



GEORGIA PIEDMONT FOREST

Location: Kendeda Canopy Walk (and Storza Woods if you have time)

Walk along the Kendeda Canopy Walk and through Storza Woods to see an urban deciduous forest. Many of the tall trees in this deciduous forest are native to the Piedmont region of Georgia. What do you notice about the plants and animals that live in this habitat? What do you think the weather is like in this habitat? How would you describe a deciduous forest to someone who has never been here before? Note: This is a great place to do the Native Georgia Tree Hunt (see scavenger hunt description for instructions)

IT'S A TRAP!

Location: Conservation Bog

Visit the Conservation Garden to observe carnivorous plants in action. Many of the plants in this garden are native to the Coastal Plains region of Georgia. Can you see any insects visiting the tall pitcher plants? How do you think the carnivorous plants are attracting insects into their traps? With your feet on the path, carefully lift the lids of the pitcher plants and peer inside. What do you see? You may also see sundews, butterworts and Venus flytraps in this area. Note: during the cooler months many of our outdoor carnivorous plants are dormant. What other plants go dormant in winter in Georgia? Why do you think they go dormant?

GEORGIA'S ANIMALS

Location: Everywhere!

While walking through the Garden, take note of the native animals you see. Common Georgia natives found in the Garden are bumblebees, butterflies, birds, squirrels, bullfrogs (look in the ponds with lily pads), skinks, and many more! You can also find a native Alligator Snapping Turtle in the Fuqua Conservatory Tropical Rotunda pond. What characteristics do those animals have that help them survive in Georgia (ex. camouflage, hibernation, migration, mimicry)?

SCAVENGER HUNT Georgia's Native Trees

Location: Anne Cox Chambers Garden and Kendeda Canopy Walk

Using the printed guide, identify common Georgia natives using their leaf shape. Most of these trees can be found in the Anne Cox Chambers Garden and along the Kendeda Canopy Walk.

Note: During the cooler months, many leaves won't be visible, which will prevent tree identification for some trees.



Georgia Tree Scavenger Hunt

Use this guide to identify a few common native Georgia trees. Can you find them all?

AMERICAN BEECH

(Fagus grandifolia)



Other ways to spot:

- Bark is very smooth
- In the fall, the leaves change to a golden brown color and stay on the tree throughout the winter.

EASTERN REDBUD

(Cercis canadensis)



Other ways to spot:

- Bright pink-purple flowers in the spring grow directly from the tree trunk
- May see a long pink or rose color seedpod in the summer.

TULIP POPLAR

(Liriodendron tulipifera)



Other ways to spot:

- These trees are often very big!
- In the late spring and early summer this tree produces large yellow & orange flowers

HOLLY

(Ilex opaca)



Other ways to spot:

- May have red berries.
- Leaves are thick and the edges are sharp!

WHITE OAK

(Quercus alba)



Other ways to spot:

- These trees are often very big!
- Produce acorns

RED OAK

(Quercus rubra)



Other ways to spot:

- These trees are often very big!
- Produce acorns

SOUTHERN MAGNOLIA

(Magnolia grandiflora)



Other ways to spot:

 Look for large, fragrant, white flowers in the spring and early summer.

SWEETGUM

(Liquidambar styraciflua)



Other ways to spot:

 Look for round spikey balls along the ground. These are opened fruits.

SOUTHERN SUGAR MAPLE

(Acer saccharum)



Other ways to spot:

When the winged seed pods fall, they spin like helicopters.

