Exploring Nature

PreK: Gardens and Landscape

School Tour Packet
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INTRODUCTION

With its riverfront campus on the St. John’s River and formal gardens, the Cummer Museum of Art & Gardens includes the integration of art and science in its mission. Students will explore the Cummer Gardens through hands on activities, then examine and discuss select artwork that raises awareness about the importance of the St. John’s River in the community and its connection to the history and living art of the Cummer Gardens. PreK students will learn respect for the environment and the concept of reduce, reuse, and recycle.

Goals
- Use the five senses to observe and interpret the world around us.
- Be introduced to the neighborhoods both human and in nature (a habitat).
- Using bodily kinesthetic to explore the concept of grown.
- Learn how to respect our habitats and environment.
**VOCABULARY**

**Acorn**
The seed of an oak tree that is food for some animals.

**Animal**
A living thing that gets food by eating plants or other animals.

**Bark**
The outside of a tree trunk that can be either rough or smooth depending on the tree. The oak tree’s bark is rough. Bark helps protect the tree from insects and helps the tree keep from being too hot or too cold.

**Flower**
The purpose of the flower is to produce seeds so that there will be more plants; it can produce fruit with seeds inside.

**Garden**
A piece of ground, often near a house, used for growing flowers, fruit, or vegetables.

**Habitat**
The area or neighborhood where a plant or animal lives. It provides food, a place to live, water and all thing a plant or animal needs to stay alive.

**Nature**
The physical world and everything in it that is not made by people.

**Neighborhood**
A neighborhood is a geographic location with distinctive characteristics; there may be many neighborhoods in a town or a city.

**Plant**
A living, growing thing this is different from animals. Plants are usually green and make their own food from sunlight, water and air.

**Pond**
An area of water that is surrounded by land and that is smaller than a lake.

**River**
A large natural flow of water that crosses an area of land and goes into an ocean, a lake, etc.
**Roots**
The part of a plant that holds it into the ground and sucks up water and minerals.

**Seed**
A part of a plant formed in the flower and found inside fruit. Seeds grow into new plants.

**Tree**
Large plant with a hard stem.

**Trunk**
The stem of a tree.
The Cummer Oak
About the Tree

The Cummer Oak (live oak/Quercus virginiana) is estimated to be 175 to 200 years old. It has a spread of 150 feet. The gallery nearest the oak is built on pilings to protect the tree’s root system. Live oaks are a long lived native tree in the southern United States with spreading heavy limbs. Old leaves are shed in spring before new growth emerges. Like the Cummer Oak, many live oaks of the southern United States have limbs that are draped with Spanish moss (Tillandsia usneoides).
The St. John’s River
About the River

The St. Johns River is seen from the Cummer Gardens. Running 310 miles, the longest river in Florida, it starts in marshes southwest of Cape Canaveral and flows north to Jacksonville, emptying into the Atlantic Ocean.

The St. Johns, like many Florida rivers, was altered to make way for agricultural and residential centers. It suffered severe pollution and human interference that has diminished the natural order of life in and around the river. Restoration efforts are underway for the basins around the St. Johns.
In 1931, Waldo and Clara Cummer, Arthur’s brother and sister-in-law, hired the Olmsted Brothers firm to redesign their property. Primarily, the firm helped to incorporate the land that Waldo and Clara acquired after the death of his mother, Ada. Although much of this work was destroyed by subsequent construction, a significant riverfront fragment of this garden remains. William Lyman Phillips (1885–1966) of the Olmsted Brothers firm designed this area using a varied palette of materials in his compositions, bringing together those plants and trees most appropriate to the site. This garden was recently restored using the original plans of the Olmsted firm and historic Cummer family photographs.
ACTIVITIES

ACTIVITY 1 What do you see?

The Olmsted Garden is a neighborhood (habitat) for plants and animals that live here. It provides them with food, water and a place to live. Ask the students to name what they see? As they name or describe something, ask if they think this object is alive? As a class, create a Venn diagram comparing the Olmstead Garden to their habitat either at home or at school.

Further Questions:
- How is your habitat similar?
- How is your habitat different?

ACTIVITY 2 Tree Hunt

Take students outside to find different trees. Let the students feel the bark. Is it rough or is it smooth? Name the parts of the tree. Can they see the roots? Where is the trunk? Where are the limbs or branches? Does it have leaves? Look under the tree and what do you see? Are their fallen leaves, grass or plants or is it just packed dirt? Look on/in the tree and what do you see? Are there any bugs, birds, or any other living things on or in it? Is the tree alive?

Students may then draw and label one of the trees they have observed.

Further Questions:
- How do you know if the tree is alive or not?
- Why do you think the tree has something in/on it?
- What do you think would happen if all of the bark from the tree would come off?

ACTIVITY 3 Adopt a Tree

Take your students for a walk in your schoolyard or near your school and select a tree that can be your class’s tree. Using a tree identification book, find out what type of tree it is. Bring a string and a laminated paper sign that indicates that this tree has been adopted by your class and hang it from a low limb or around the tree trunk.

Each month have your class visit the tree and collect objects that they find near it and put them in a paper bag that is marked by the month. When you
return to the classroom, look at the contents of the bag and examine the found objects. Ask which ones are alive and which ones are not? Also ask students to explain what supports their answer. Is the object something that came from the tree or can be used by the tree or is it something that a person or animal has left?

As the months go by, compare the objects from the different months to see what is the same and what is different as they chart what happens around the tree during the seasons. This can be done with a Venn diagram using two or three months/seasons or can be shown through a bar graph.

**Further Questions:**
- How do you know if ______________ is alive or not?
- How was the tree similar in November and March?
- How was the tree different in November and March?

**ACTIVITY 4 What’s in Your Neighborhood?**

Take your students for a walk around the neighborhood near their school. What do they see? Do they see houses, cars, shops, or vacant lots? Who lives and works near the school? Is there a firehouse, a neighborhood store, individual families? Now, look for signs of nature. What do you see animal, birds, worms, a butterfly, grass, weeds and trees? What sounds of nature can you hear? You live in a neighborhood with objects from the natural world and objects made by people. When you return to the classroom make a list of objects that make up your neighborhood and who lives and works there. The list of objects can be categorized into a T-chart with the headings “Nature” and “Man-Made”.

**ACTIVITY 5 Is it a plant or an animal?**

Ask your students to look at the following images and see if they can state and explain if the image is of a plant or of an animal? Or neither? After reviewing them, students can sort the images into three categories: plant, animal, and other. The images can then be glued onto a three sectioned organizer.

**Further Question:**
- How do you know __________ is a plant or an animal?
<table>
<thead>
<tr>
<th>Agapanthus</th>
<th>Cummer cat</th>
<th>Snapdragon</th>
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<tbody>
<tr>
<td>Mr. Karl</td>
<td><em>Sea of the Ear Rings</em> by Tokashi Soga</td>
<td>grass</td>
</tr>
<tr>
<td>butterfly</td>
<td>Meissen Plate</td>
<td></td>
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ACTIVITY 6  “I’m a Little Seed”

(To the tune “I’m a Little Teapot”) sing:

“I’m a little seed deep in the ground.” (stoop down, wrap arms around knees)

“You planted me so that where I’m found.”

“With the rain and sun I start to sprout.” (gesture raindrops with your fingers and a sun overhead with your hands)

“First my roots, then my leaves come out!” (stand and stretch arms up)

Lyrics by Carol L. Van Hise from *For Two Year Olds*. 
RESOURCES

Reading Resources:
- *Busy Tree* by Jennifer Ward and Lisa Falkenstern
- *Nature for the Very Young: A Handbook of Indoor & Outdoor Activities* by Marcia Bowden
- *Play Lightly on the Earth: Nature Activities for Children 3 to 9 years old* by Jacqueline Horsfall
- *Science is Simple: Over 250 Activities for Preschoolers* by Peggy Ashbrook
- *The Tiny See* by Eric Carle
- *On My Street* by Eve Merriam
- *Red Leaf, Yellow Leaf* by Lois Ehlert
- *A Tree is Nice* by Janice May Udry
- *I’m a Seed* by Jean Marzollo
- *The Giant Encyclopedia of Science Activities for Children 3 to 6*

Visual Resources: Artwork by any of the following -
- Edward Hicks, (1878-1849)
- Winslow Homer, (1836-1910)
- Frank Marc, (1880-1916)
- Claude Monet, (1840-1926)
- Frederick Carl Frieseke, (1874-1939)
- Martin Johnson Head, (1819-1904)

Music Resources:
- *Birds, Beasts, Bugs and Fishes Little and Big: Animal Folk Songs*, Pete Seeger
- *Animal Songs*, Geoff Johnson
- *Whale Watching Children’s Sea Animal Songs*, MaryLee
- *Carnival of the Animals*, Camille Saint-Saens

Internet Resources:
- Interactive and detailed information on animals - [www.muohio.edu/Dragonfly](http://www.muohio.edu/Dragonfly)
- Fun information about animals - [www.nationalgeographic.com/kids/](http://www.nationalgeographic.com/kids/)
- Learn about the San Diego Zoo - [www.sandiegozoo.org/kids/](http://www.sandiegozoo.org/kids/)
- Learn about the Jacksonville Zoo - [www.jaxzoo.org](http://www.jaxzoo.org)
- Learn about the St. John’s River - [www.stjohnsriverkeeper.org](http://www.stjohnsriverkeeper.org)
- Learn about habitats - [makemegenius.com/video_play.php?id=233&type=0](http://makemegenius.com/video_play.php?id=233&type=0)
- Learn about the parts of a plant - [makemegenius.com/video_play.php?id=42&type=0](http://makemegenius.com/video_play.php?id=42&type=0)
• Categorize plants and animals -
  www.sciencekids.co.nz/gamesactivities/plantsanimals.html
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