



Protecting Southwest Florida's unique natural environment and quality of life ... now and forever.

Guided Nature Center Experience Pre and Post-Program Activities

Grade Level: 3-5

Next Generation Sunshine State Standards

- SC.3.L.15.1; SC.3.L.17.1; SC.3.N.1.6
- SC.4.L.16.2; SC.4.L.17.4
- SC.5.E.7.2; SC.5.L.17.1

Program Overview

Encounter live animals in the Dalton Discovery Center. Look for jumping fish on an electric boat ride, and take a peek into the von Arx Wildlife Hospital where we care for more than 3,200 wild animals per year. Learn how you can help the Conservancy protect Florida's water, and, and wildlife.

Learning Objectives Students will be able to:

1. Classify animals into major groups according to their physical characteristics and behaviors.
2. Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments.
3. Recognize that plants and animals, including humans, can impact the environment.

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Conservancy of Southwest Florida has been awarded Charity Navigator's prestigious 4-Star top rating for good governance, sound fiscal management and commitment to accountability and transparency. Charity Navigator is America's largest and most respected independent evaluator of charities.

Pre-Program Activity 1: Classifying Animals

Duration of Activity: 1 hour

Materials: computer with internet access and a way to project the images to a larger screen for the class to observe, worksheets (provided)

Background:

Animals can be classified into six main groups: mammals, reptiles, amphibians, fish, birds and insects. Each type has its own specific characteristics that set it apart from the other animal classifications.

Mammals are warm blooded, covered with hair, give live birth and nurse their young. Reptiles are cold-blooded, covered with dry scaly skin, lay eggs and usually do not care for their young. Amphibians are cold-blooded, lay eggs and do not care for their young. Fish live in water, are covered with scales, breathe with gills, lay eggs, are cold-blooded and do not care for their young. Insects are warm-blooded, lay eggs, do not care for their young and are covered with a hard exoskeleton.

Directions:

1. Have the students watch this educational video about the six different animal types and the differences between them. Feel free to have the students take notes or pause the video at any significant sections and discuss. Video (20 mins): <https://www.youtube.com/watch?v=7ls7ds5Aqi4>
2. Hand out the animal classification worksheets (see below).
3. You can have the students either work in groups, individually, or you can go over each box together as a class.
4. This will help the students understand the big differences between the different animal types.
5. For each type, the animal can be projected on a larger screen so the students can understand that some of these differences can be seen with the naked eye (skin patterns) while others cannot (warm/cold-blooded).

Classifying Animals

	Fish	Amphibians	Reptiles	Birds	Mammals	Insects
Warm or Cold Blooded						
Body Covering Type						
Live Birth or Hatched from an Egg?						
Feed Young with Milk? (yes/no)						
Has a Skeleton?						
Break with Lungs or gills?						
Example:						

Pre-Program Activity 2: Researching Florida Habitats

Duration of Activity: 45 minutes

Materials: computers (one for every student, or they may work in pairs), paper, drawing/coloring utensils

Directions:

1. In the computer lab, assign students to one of the following southwest Florida habitats to research:
 - Uplands/Scrub
 - Hardwood Hammock
 - Cypress Swamp (Everglades)
 - Mangrove Estuary
 - Intertidal/Beach
 - Ocean

Questions to research:

- What, if any, is the predominant type of water that can be found there (fresh, brackish, salt)?
 - What kinds of plants can be found there?
 - What types of animals live there?
 - What are some adaptations that allow these animals to live there?
2. Have each student/pair draw a picture of their habitat, addressing the four research points. Have each group share their findings with the class to understand what characterizes each habitat type in southwest Florida.
 3. Discuss ways that humans impact each type of habitat (development, deforestation, altering the flow of water by draining and building canals, water pollution, littering, etc.).

(more activities on next page)

Post-Program Activity 1: Trash Clean-Up

Duration of Activity: 1-2 hours

1. Organize a trash-clean up around your school or in a nearby neighborhood. Perhaps have a goal of each student collecting at least 10 pieces of trash.
2. Create an inventory of trash collected. It could be broken down by 'material', i.e. glass, plastic, paper, rubber, etc. Then come up with a percentage for each (65% of the trash collected was plastic).

Material	Glass	Plastic	Paper	Other
Quantity				

3. Ask students if they like living in trash. Do you think animals do? Name some ways that trash can harm wildlife. Encourage students to pick up trash whenever they see it, even if they didn't put it there. The wildlife appreciates it. ☺

Post-Program Activity 2: 'Shoebox' Habitats

Duration of Activity: 2 hours

Students will create their own 3-D habitats of southwest Florida ecosystems.

Materials: cereal/cracker/shoe boxes (enough for each student), scissors, glue, construction paper, recycled materials (paper, water bottles, plastic containers, egg cartons, straws, juice boxes, etc.), play-doh

Directions:

One week before the project, collect clean, recycled materials so you have a stockpile for students to choose from.

1. Review some of the various Florida habitats that students learned about during their visit to the Conservancy, and the animals that live there.

- Uplands/Scrub: Dry, sandy soil, palmettos, shrubs, prickly pear cactus, gopher tortoises, indigo snakes, rattlesnakes, burrowing owls, small mammals, blue jays, hawks
 - Hardwood Hammock: cabbage palm trees, royal palm trees, slash pines, black bears, Florida panthers, raccoons, opossums, rat snakes, king snakes, tree frogs, owls, cardinals, hawks, eagles
 - Cypress Swamp (Everglades): lots of (fresh) water, saw grass, cypress trees, orchids, air plants, great blue herons, egrets, wood storks, gallinules, alligators, turtles, fish
 - Mangrove Estuary: red mangroves, muddy substrate, oyster beds, egrets, herons, kites, manatees, diamondback terrapins (turtles), blue crabs, fish, sawfish, sea stars, sea urchins
 - Intertidal/Beach: sandy, lots of sun, sea grass, seaweed, sea stars, sea urchins, horseshoe crabs, conchs, fish, spoonbills, osprey, pelicans, sea turtle nests
 - Ocean: coral reefs, sea grass, fish, sea turtles, dolphins, sharks, jellyfish, sting rays, plankton
2. Using cereal boxes and other recycled materials, have students construct their own mini-habitats. Students can add animals made out of construction paper, play-doh, etc. Encourage students to be creative! Have them think about how each living thing in the habitat interacts with another, and how human impacts can affect these species.

