



Hardwood Hammock Station: The Keys to Plant ID's

- **Location:** Hammock on Southeastern end of parking lot
- **Booklet Page:**
- **Time Needed:** 20 min
- **Materials:**
 - Hammock plant identification cards
 - Laminated numbers
 - Explorer Booklets*

Summary

Students will enter a wooded area representative of the hardwood hammock on the keys within the park. Using a plant identification card they will compare and contrast leaves, leaf arrangements and bark in order to identify tree species.

Exploration:

Read (4 min.): The trees around you represent the the tropical hardwood hammock habitat, found on the islands within the park. The hammock is a shady tropical forest with hardwood trees. The hardwood hammock is also a habitat for animals. But what is a habitat? A *habitat* is an animal or plant's neighborhood; hopefully, all the resources that a plant or animal needs are right there in its neighborhood. Plants and animals need food, water, shelter and space.

Animals eat to get the energy they need to breathe, run, swim, fly, hunt...and to do everything. Food in the wild comes in many shapes and sizes. Pretty much anything that you can think of is eaten by one animal or another, even poop! All animals depend on plants, even carnivores; because energy travels from the sun to plants to the animals that eat the plants and then to the animals that eat those animals. This is called a food chain. Let's explore this important part of the food chain and habitat. When you first look at a hardwood hammock, you might think you are looking at a wall of green, but if you look carefully, you will realize that each plant has a unique leaf shape and size and that the leaves grow in certain patterns depending on the plant.

Scientists pay close attention to these things when identifying plants. Training your eye to see the differences between different plants can be fun. If you can tell plants apart, you will be able to know which ones to expect butterflies around, which ones are edible and which ones to keep a safe distance from.

Do (10 min.): Hand out the plant identification sheets and turn to this activity's page in your Explorer Booklet. Divide into in pairs or small groups and spread out throughout the hammock. Look around to spot the numbered plants. There are ten plants and ten blanks in your Biscayne Explorer Booklet. Use the plant identification cards provided to identify the plants and write their names in your booklets. Make sure to look at the leaf shape, size and color, and then look at how they grow on the branch. Give it a shot; you can touch all of these plants.

Read: Let's revisit these plants to go over the correct answers and learn something interesting about each one!

Answers and Fun Facts:

- #1: **Jamaican Dogwood** - Native Americans used the root, bark, twigs, and leaves of this plant to temporarily stun fish to catch them; the fruit was also used as a part of arrow poison.
- #2: **Black Ironwood** - Called "ironwood" because it is the densest wood in North America, it will even sink in water
- #3: **Sea Grape** - This plant belongs by the sea. It is salt and drought tolerant, and notice its large leaves to absorb as much sunlight as possible. Pirates and pioneers would make jelly and wine from the fruits. They are still popular in many countries today.
- #4: **Mahogany** - This hardy tree has large, oval-shaped seedpods. Each seedpod contains dozens of lightweight seeds designed for the wind to carry and spread them. See if you can find them up in the tree.
- #5: **Wild Coffee** - The shiny leaves and bright red berries this plant produces attracts many butterfly and bird species, including cardinals, mockingbirds, and zebra longwing butterflies.
- #6: **Gumbo Limbo** - Notice the red, flaky, peeling bark on this tree. Not only does it keep lichens and mosses from growing over it, but it can also photosynthesize. If this tree were to lose all its branches in a hurricane, it could still produce the nutrients it need to survive through its bark!
- #7: **Pigeon Plum** - The threatened white-crowned pigeon is a frequent visitor to this plant for the fruit it produces.
- #8: **West Indian Tamarind** - The fruit of this tree is enjoyed in juice and tasty treats by many cultures throughout the Caribbean and Central America.
- #9: **Cinnamon Bark**- The bark from this tree has been used to flavor both food and tobacco, and is believed to have healing properties for fevers and stomach pains.
- #10. **White Stopper**- This aromatic plant fills the air with a skunky fragrance you learn to love. It is called "stopper" because pioneers on the keys believed that a tea made from its leaves could help cure incontinence.

Conclusion (5 min.): Did you find plant identification to be easy or hard? Why? Many students are very good at identifying plants. Many have keen eyes, but just like in the animal kingdom, not everyone has the same talent.

Objectives: Students Will

- Know how all animals depend on plants.
- Know that to compare and contrast observations and results is an essential skill in science.