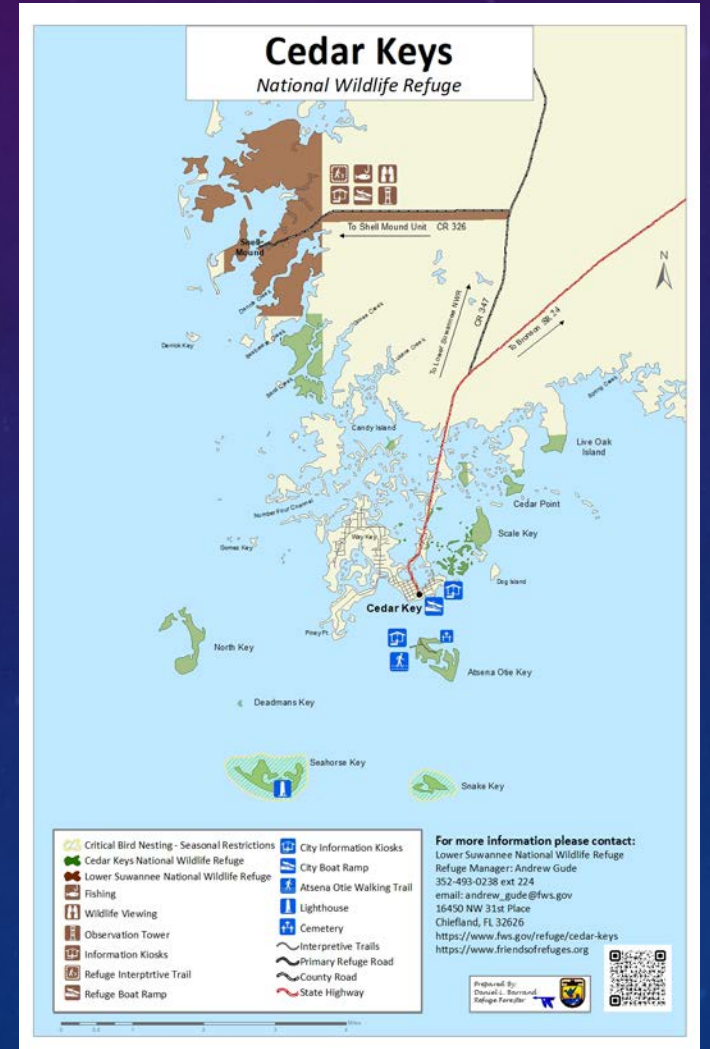


REFUGE UPDATE 2024

Andrew Gude
Refuge Manager





Volunteers



Pepper Busters



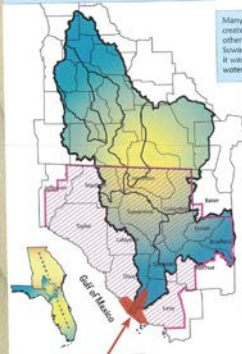


Pollinators



We're All About Water

A watershed is the land that gathers water from rain, marshes, creeks or springs and feeds a large body of water like the Suwannee River and Gulf of Mexico.



Many Wildlife Refuges are created to protect birds or other animals. The Lower Suwannee is different because it was created to protect the water of the Suwannee River.



Healthy plants and clean soil help water purify as it flows to the Gulf.

What is your super-power? How can you help protect watersheds for generations to come?

Lower Suwannee Wildlife Refuge JUNIOR RANGER

One of a Kind

The Suwannee alligator snapping turtle is only found in the Suwannee River system. This includes parts of the Refuge. It has special adaptations to help it fit into this specific riverine environment.

- It is one of the largest freshwater turtles in the world growing up to 100 pounds! As an adult, its large size protects it from predators, including alligators!
- It has a large head and powerful jaws which are used to crush prey.
- A spiky but streamlined shell protects it while allowing it to move easily even in strong river currents.

Find the words in the puzzle. Words can go in any direction. Words can share letters as they cross each other.



ALLEGATOR SHAPPING TURTLE SUWANNEE FRESHWATER SPECKS WORM ENGINEER LARGI WORM ENGINEER PROTECT

The alligator snapping turtle is protected because its range and habitat are so small that it is listed as "endangered" under the Endangered Species Act.

Fun Fact from Florida Fielder Club

The alligator snapping turtle's most visible adaptation is a large, flat, spiky shell that is used to crush prey and protect itself from predators.

Read the story: You've decided to explore one of the unique and endangered habitats on the Refuge. Hiking through the pinelands, you come across a cluster of pine trees where birds are taking over the ground and nesting up above. Then you see that some of the birds are black on only one side.

"It's still amazing" you mutter to yourself as you walk on, careful not to trip on tree roots.

Pinelands are littered everywhere, but a few look like southern forest trees with a surprise. Looking closer, you notice the bird is black on one side, but with green on the other. You're looking at a black and white bird with a green patch on its back.

"Oh, that's not a bird at all! It's a tree frog!" you say to yourself.

Take the puzzle to find out who or what caused the fire. Write answers in the box below. Use the combination of terms and pictures to help you. It may be helpful to "read" the puzzle out loud. Some of the pictures make the words of the puzzle, but are spelled differently. Be sure to write the full name of the animal or plant in the box.

Freddie says: I've seen a bird that has a black and white body with a green patch on its back. It's called a tree frog, and it lives in the pinelands. It's a very cool and unique animal to see.

15



Who's That Dolphin?

The Gulf of Mexico neighbors the Lower Suwannee National Wildlife Refuge to the west. Many dolphins live here year-round, and scientists can identify dolphins using their dorsal fins.

Draw a line to match the dolphin fins. Be careful! They may have picked up a new marking over time.

A dolphin's fin can get "marks" and "notches" over time from playing or fighting with each other, scratches from oysters, and even from boats or fishing gear.

6



Plants that Eat Insects!

Some plants "eat" insects (and even small animals). They are called carnivorous plants. They are called carnivorous (meat-eating) plants.

Go to the next page to build your own hungry carnivorous plant using the lures and traps shown below—or make up your own!

So, why do carnivorous plants consume bugs? It is an adaptation to living in an area with very poor soil. Most plants need water, sunlight, and soil with lots of nutrients to survive. Carnivorous plants can get their nutrition from the fluids and soft body parts of insects instead of soil and water.

Look for **butterworts**, **sundews** and **bladderworts**. Carnivorous plants are special to the Refuge because we have three of the five types found anywhere in the U.S.

SUNDEW - Sundews are sticky plants that use their sticky leaves to trap insects. They are able to attract insects.

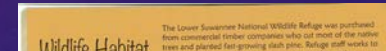
BLADDERWORT - Bladderworts use their underwater inflating bladders to suck in insects.

BUTTERWORT - Butterworts are high above the sticky leaves to prevent pollinating insects from being trapped and killed.

Other Traps & Lures Used by Carnivorous Plants

- Sticky substances to attract
- Slippery surface
- Digestive enzymes released on contact

11



Wildlife Habitat

The Lower Suwannee National Wildlife Refuge was purchased from commercial timber companies who cut most of the native trees and planted fast-growing slash pine. Refuge staff works to restore native long-leaf pine and encourage other natives.

Tree Root Fact

There is a small tree that grows in the forest. It is called a cypress. It has a special adaptation that helps it survive in wet soil. It has a root that grows in the water and takes up oxygen. This root is called a pneumatophore.

Circle the most trees:

Cypress	Magnolia
Oak	Pine
Sweetgum	Pecan
Palm	Hickory
Bay	Maple

What is a mast tree? Mast is the fruit of forest trees and shrubs such as acorns and other nuts. Mast is an important, high-calorie food for wildlife.



Prescribed fires are deliberately set for a variety of purposes, such as reducing hazardous fuels, improving wildlife habitat, and restoring ecosystems. A prescribed or controlled fire manager is called a burn boss.

Fire is important for many native plants and animals in Florida. What does fire leave behind after burning? How does fire benefit plants and wildlife?

5



Citizen Science

Anyone can be a scientist, like you! You can help Refuge scientists learn more about the diversity of plant life in this Refuge. One experiment scientists do is called a grid test. A grid test helps find out if an area has a lot of different plant species which can indicate a resilient ecosystem.

To perform a grid test, Ask a friend square on the ground anywhere outside. Your square can be the same size as the graph paper below or it can be bigger. Sketch and count what you see in your square. Try to identify all the plant species or take a picture and record your observations. A lot of different plants means high diversity.

Species 1- Name: _____ Quantity: _____

Species 2- Name: _____ Quantity: _____

Species 3- Name: _____ Quantity: _____

Example

Knowledge helps natural resource managers set goals that improve wildlife habitat. Learn more about grid test learning tools by searching the internet for Simpson's Index or Shannon-Weaver Index.

8



Scavenge for Answers Bingo

Write or draw what you discover

Write something not normally found in nature	Find something that is your favorite color	Measure the height of a flower above ground	Find something that is bigger than you
See something with wings	Identify a source of water	Find something rough	Hear a bird song
Draw a leaf from a tree	Find something smaller than you	Wipe to a fiddler crab	Find something that smells
Find a plant or animal that lives in water	Name the colors of a butterfly you see	Find nuts or seeds	Find something smooth

9



Shell Mound Time Travel

Shell Mound is a horn-shaped archaeological site that was once a special gathering place for Native Americans.

Walk the mound trail or visit friendsrefuges.org/shell-mound-trail.html to find the answers.

Shell Mound people ate lots of shellfish. What kinds of shells do you see as you walk around the mound? Check them:

clam whelk/corb oyster mussel

How tall is Shell Mound?

Shell Mound was a place of celebration but other nearby places were also important to the residents. From the listing view, can you see the former cemetery or fish trap? In your neighborhood, what buildings, other than homes, are important for your community?

What are some of the foods people ate here? (List at least 4)

a) mullet b) home c) oysters d) birds

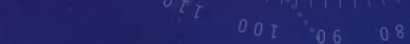
Today, no housing structures remain but scientists know they were here. In the water below, draw the type of house you would build with nearby materials.

Shells are artifacts when they are near mounds like Shell Mound. It is OK to remove shells from Shell Mound. Yes No (Circle the correct answer)

What is one possible reason people abandoned Shell Mound? (Underline the answer)

MITALEE GAEBICH

13



Lower Suwannee National Wildlife Refuge Junior Ranger Pledge

I, _____ pledge to protect the wildlife and environment of the Lower Suwannee National Wildlife Refuge to the best of my ability. I will not approach, interfere with, or feed wild animals on the Refuge. I will not litter. I will not collect rocks, shells, seeds, artifacts, or any other object other than litter on the Refuge. I will show by my good example what it truly means to be a Junior Ranger.

Certified by: _____

Junior Ranger: _____

Date: _____





Junior Ranger Days





Friend's Outreach Trailer



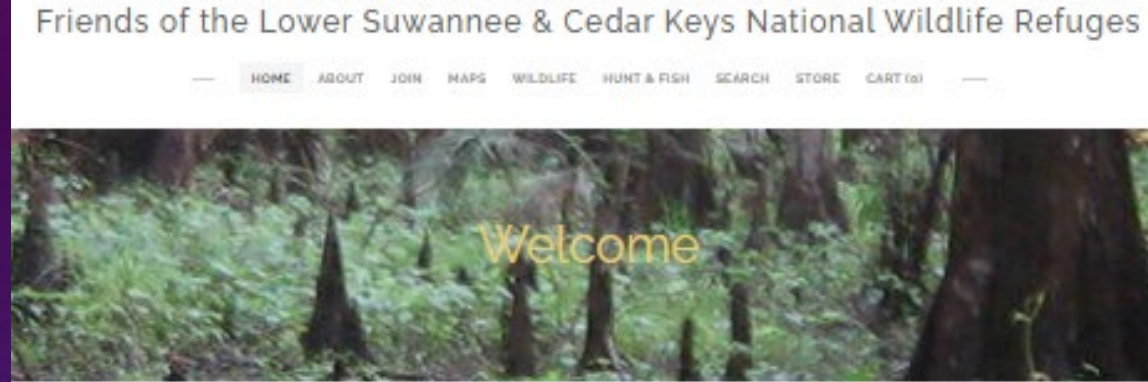
Friends supporting the Refuge for wildlife and our community:

- In-person contact,
- hosting and staffing events: solstice, festivals, community events, nature walks)
- Refuge outreach and messaging
- Monthly NewsBrief

Website!



- Refuge Contacts
- General Information
- Wildlife/What to See
- Science
- Bat House
- Hunting & Fishing



We are the Friends of the Lower Suwannee & Cedar Keys National Wildlife Refuges, a nonprofit organization.

Our mission is to support the work of the Lower Suwannee & Cedar Keys Refuges: protecting wildlife and the habitat needed for the wild to thrive.

Upcoming Events



[Click here for more information](#)

Visit our Online Store



Hunt News

All February hunt seasons are now finished. March 11 and 12 is the Youth Turkey hunt. Spring Turkey hunting is March 18 to April 9. The area around Refuge headquarters, including the Bat House, River Trail, and Tram Ridge Trail, is always a no-hunt area.

Friends Receives a Grant for Vista Work



The State of Florida, Division of Historical Resources has made its second grant to Friends of the Lower Suwannee & Cedar Keys National Wildlife Refuges for work on the Vista property.



Vista Camp





WINDYBANK (CIRCA 1900)



MANSI HOUSE (CIRCA 1954-1990)



COOK'S HOUSE (CIRCA 1900-1910)



VISTA GATEWAY TO INCLUDE STORAGE & HISTORIC LIFESIZES

SCALE: 1" = 50'



* HISTORIC STRUCTURES HAVE BEEN LOCATED FROM BEND-SIMPSON AERIAL SURVEY AND ARE APPROXIMATIONS ONLY. EXACT SIZES OF STRUCTURES, ROADWAY ALIGNMENTS, SUE AND LOCATION OF TRAILING APERS TO BE DETERMINED BY BUILDER AND FIELD LOGS/DIR SURVEY.

VISTA MASTER PLAN CONCEPT®

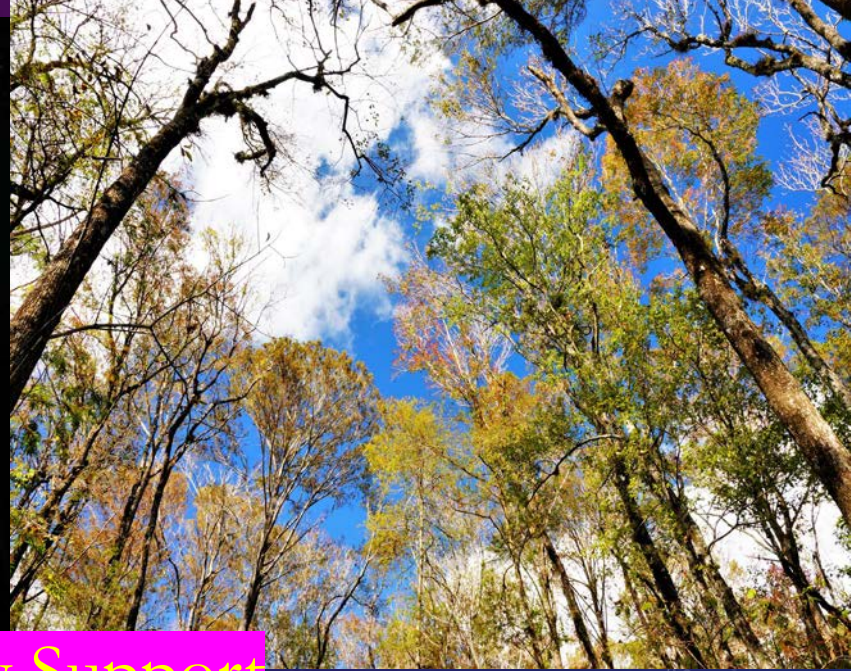
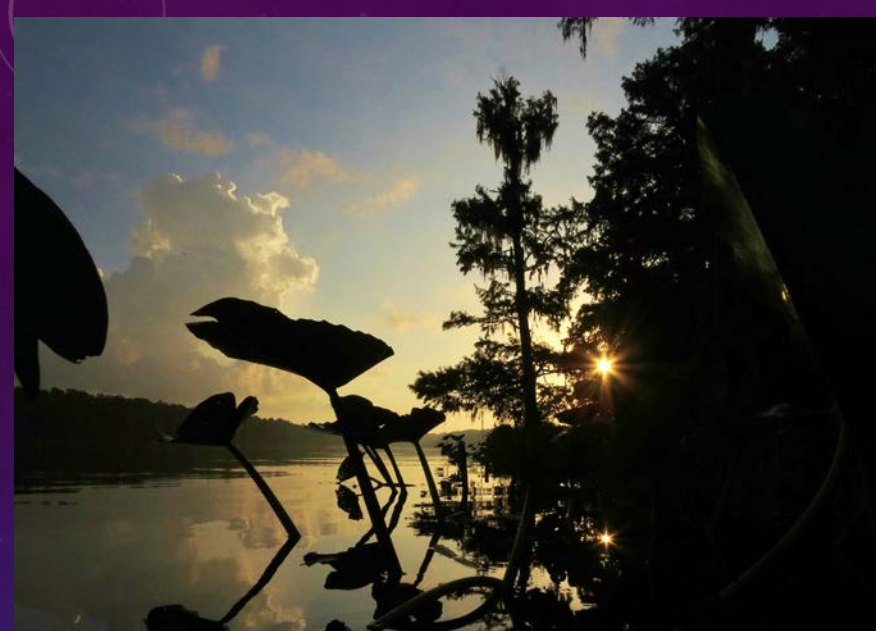
WELCOME CENTER,
LOWER SUWANNEE NATIONAL WILDLIFE REFUGE,
DOUGLASS COUNTY, GEORGIA

DAVID GUICHARD, GAITHERVILLE, FLORIDA
MARCH 2005



Vista

Conceptual Master Plan



Friends Support: Broad Membership = Community Support

