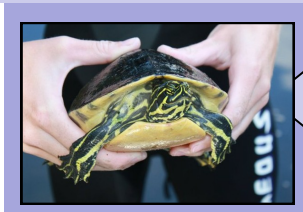
Freshwater Turtles of Central Florida



Florida Peninsula Cooter (*Pseudemys peninsularis*)

Suwannee Cooter (*Pseudemys concinna suwanniensis*)

Florida Redbelly Cooter (*Pseudemys nelsoni*)

Common Musk Turtle or Stinkpot (*Sternotherus odoratus*)

Loggerhead Musk Turtle (*Sternotherus minor minor*)

Florida Softshell Turtle (*Apalone ferox*)

Florida Snapping Turtle (*Chelydra serpentina osceola*)

Florida Chicken Turtle (*Deirochelys reticularia chrysea*)

What Can You Do?

- **Report Suspicious Activities**
  Taking turtles from the Parks is illegal, and can threaten population health. Report any suspected activity to Park officials.
- **Conserve Natural Resources**
  Water is a precious resource, and is not unlimited. We must all do our part to conserve and preserve such resources so that they are available in the future.
- **Donate Time or Money**
  Parks rely on external funding not only to expand their programs, but to continue those already in place. Research done by many groups is often paid for by the researchers involved. Even small donations of time or money add up!
- **Educate Yourself, Speak Out, & Get Creative!**
  Understanding the basics of good science can help you become a better informed citizen. Share what you know with others, and get together with friends and neighbors to find new ways to pitch in!

Central Florida Freshwater Turtle Research Group

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Central Florida Freshwater Turtle Study

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Population & Range Study

Central Florida Freshwater Turtle Research Group

Wekiwa Springs State Park

Rock Springs Run State Preserve

Blue Springs State Park

De Leon Springs State Park

Manatee Springs State Park

Fanning Springs State Park

Peacock Springs State Park

Who we are

The Central Florida Freshwater Turtle Study was begun in 1999 by Dr. Brian Butterfield (Freed-Hardeman University) and Dr. Brian Hauge (Peninsula College) as a field research experience for their students. The original study was designed to monitor the populations of species of aquatic turtles living in Wekiwa Springs and Rock Springs Run.

Currently headed by Eric Munscher, MS (a former student of Dr. Hauge now employed by SWCA Environmental Consultants), the research now includes turtle populations in Wekiwa Springs, Rock Springs Run, Blue Springs, and De Leon Springs in the St. John's River basin and Manatee Springs, Fanning Springs, and Peacock Springs in the Suwannee River basin. A diverse group of professional scientists, educators, college students, and volunteers come from all over the country to conduct these studies under the authority of state park employees.

Why we care

Turtles are an integral part of the spring ecosystem, eating plants, insects, snails, and fish, as well as scavenging. Turtles are also food for other animals in the food web; raccoons eat turtle eggs, birds and fish eat juvenile turtles, and alligators eat larger turtles. Because of their many roles, the presence of a healthy turtle population is critical to maintaining a healthy spring ecosystem. Turtles are what scientists refer to as indicator species. We hope to be able to assess the long term health of the springs we study by watching the turtle populations for unusual changes.

Turtles are long-lived, and because of this it is difficult to judge the health of a population by the presence of turtles alone. It is important to know both the number of individuals as well as the age composition of the population to determine whether the population is declining, increasing, or holding steady.

What we do

The aim of these studies is to determine baselines for population health and range of freshwater turtles in the areas of study, as well as to monitor the presence and status of invasive species.

Researchers collect turtles by hand while snorkeling within the study area, while another researcher follows with a canoe to collect the turtles. At times, the canoe has been nearly overflowing with turtles!

After they are collected, measurements are taken of each turtle. Turtles are marked so that they can be individually identified. After the data has been collected, the turtles are released back into the spring. The data helps determine the size, health, and age of a population.

In 2010, an additional study began in Wekiwa Springs to determine the natural range of Loggerhead Musk Turtles and Stinkpots along the run of the spring. For this study, the run is divided into 100 meter sections and the area of capture recorded, so that the movements of the turtles from season to season and year to year can be analyzed.

Invasive Species

An invasive species is a species that is not native to the area. These species can pose a serious threat to native animals, plants, or habitats. They can compete with native species for food or shelter, spread parasites or disease, or prey on native species. They can also make changes to the habitat in ways that are destructive.

Sometimes when pet owners become either unable or unwilling to care for their pets, they release them outdoors, which is illegal. Many invasive species are introduced in this way. If you are unable to care for a pet, it is better to find it a new home or bring it to a shelter than it is to release it into the wild.

Our research group has agreed to remove invasive species that are caught in the course of our research. In this way, we hope to help slow the spread of these destructive, pushy species.

Springs in Central Florida have specific problem species, just a few of which include:

- Red Eared Slider (*Trachemys scripta elegans*)
- Armored Sailfin Catfish (*Pterygoplichtys disjunctivus*)
- Blue Tilapia (*Oreochromis aurea*)
- Cuban Tree Frog (*Osteopilus septentrionolis)*
- Brown Anole (*Anolis sagrei*)
- Hydrilla (*Hydrilla verticillata)*