



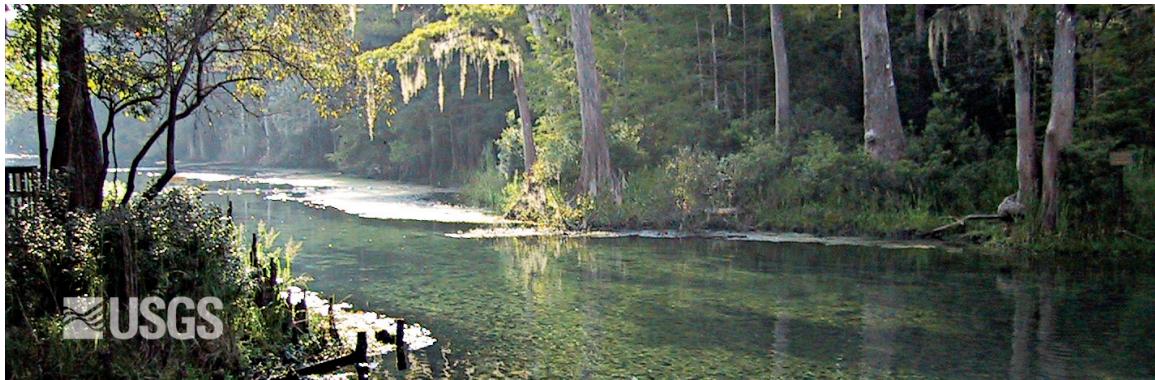
Dwarf
Salamander
Eurycea

USGS
science for a changing world

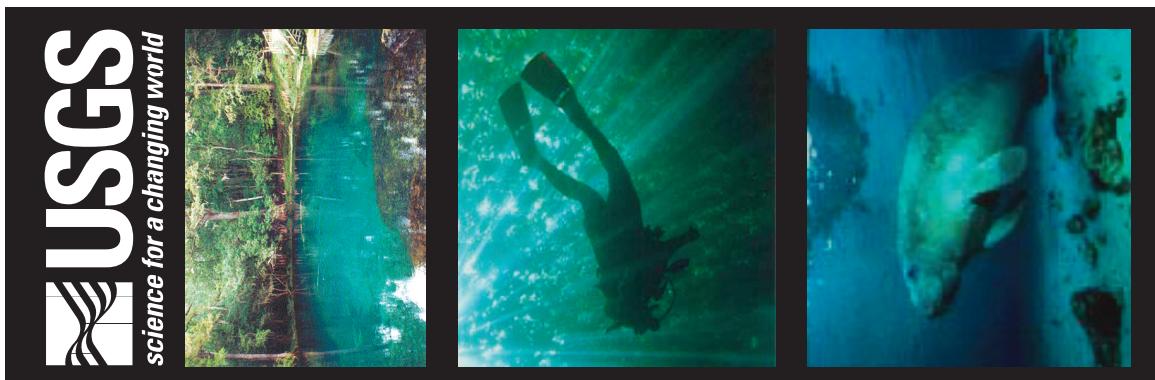


Great Egret
Casmerodius albus

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Did you know?



The dwarf salamander eats amphipods (small invertebrates), adult and larval beetles, spiders, and earthworms.



The adult dwarf salamanders in Florida are often found away from water during the summer and fall.



Females attach their eggs to leaves, pine straw, and sometimes to the underside of submerged logs.



Dwarf salamanders are eaten by birds, small snakes, and large invertebrates, such as crayfish and spiders.

Want to learn more? <http://fisc.er.usgs.gov>

Did you know?



Great Egrets inhabit shallow water habitats and sometimes dry uplands. They nest in colonies, usually with other herons and ibises.



They build their nests of sticks in trees.

Great Egrets usually wade in shallow water to catch fish and other aquatic organisms. They may also fly above or swim in deeper water to capture food where it is plentiful. They can also eat small reptiles, amphibians and mammals in upland habitats.

They lay three or four blue-green eggs that hatch in 28 to 29 days.

Want to learn more?

<http://fisc.er.usgs.gov>

The USGS routinely monitors flow in over 20 Florida springs. Changes in flow rates can impact the ecosystem within the spring as well as downstream rivers.

Manatee Springs is a 1st magnitude spring that discharges water (see photo) at 140 cubic feet per second into the Suwannee River, a river system with the greatest diversity of subterranean decapod crustaceans in the world.

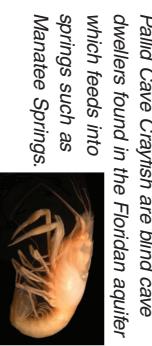
Did you know?

Surveys are used to assess current status of the subterranean community in the spring system. Identifying species that exhibit sensitivity to water quality changes is useful in monitoring ground-water quality and land-use activities.

Pallid Cave Crayfish are blind cave dwellers found in the Floridan aquifer which feeds into springs such as Manatee Springs.



Want to learn more? <http://fisc.er.usgs.gov>



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Florida's 320+ springs are a valued natural resource. Yet deteriorating water quality and threats of declining flow, due to increased pumping in the aquifer, pose a threat to these pristine springs and to the abundance of plants and animals they support. The USGS, in cooperation with Federal, State, and local partners, formed a Florida Springs Task Force in 2000, to address human health and ecological concerns that have arisen regarding Florida's springs. The USGS pilot studies are focused on Manatee Springs, where scientists are determining the major sources of the high nutrient levels and studying associated contaminants, such as pharmaceuticals and pesticides, in the springs. This includes a study of the effects of changing land-use practices on the nutrients and contaminants in the spring. Also, scientists are surveying organisms living in the springs, to determine which ones could be used to examine ecological effects from nutrient enrichment of spring water. By improving their understanding of our springs and their dynamics, managers will be better able to restore and/or preserve Florida's springs.



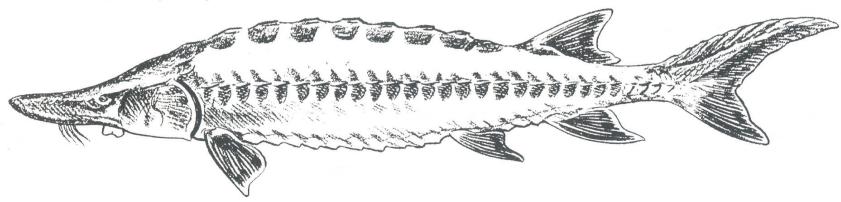
American Crocodile

*Crocodylus
acutus*



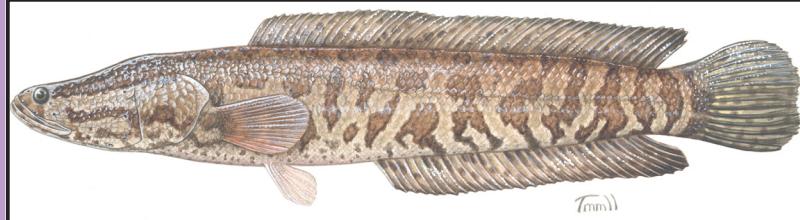
Gulf sturgeon

*Acipenser
oxyrinchus
desotoi*



Snakehead

Channa
(Asia, Malaysia
and Indonesia)
and
Parachanna
(Africa)



Pineland Ruellia





Did you know?

The American crocodile has a longer, more narrow snout than the American alligator.

The crocodile can also be distinguished because their 4th tooth on both sides of the lower jaw are visible even when their mouth is closed.

The American crocodile is brownish/grayish when it is an adult, while the adult alligator is mostly black.

Crocodiles were always rare in Florida. They became endangered because of habitat loss and some poaching.

Want to learn more? <http://fisc.er.usgs.gov>



Did You Know?



Gulf sturgeons are anadromous, migrating up rivers from the sea in the springtime to spawn. While in the river, the sturgeon does not feed.

Gulf sturgeon, a subspecies of Atlantic sturgeon, was listed as threatened under the Endangered Species Act in 1991, when populations declined after a century of fishing for meat and caviar.

Gulf sturgeon can be found in coastal rivers of the Gulf of Mexico from the Suwannee River, FL to the Pearl River, LA. They often jump completely out of the water.

Gulf sturgeon have a vacuum-like mouth that is used to siphon food, tiny invertebrates, from the mud. They have rows of armored plates along their sides and back.

Want to learn more? Check us out at www.fisc.er.usgs.gov



Did You Know?



Snakeheads are long and cylindrical with enlarged scales on their head, hence the common name snakehead. They have a large mouth with a protruding lower jaw that typically contains canine-like teeth.

Snakeheads are non-native air-breathing fresh water fish. They pose a threat to native fish by being highly predatory. Some species travel overland to other water bodies in search of more fish to eat!

Experts believe snakeheads entered U.S. waters via releases by aquarium hobbyists and releases to create a local food source for the live-food fish trade. It is a Federal offense to import snakeheads or transport them between states.

Four species of snakeheads have been found in the U.S. These states include CA, FL, HI, ME, MA, MD, RI, and WI. Reproducing populations exist in AR, FL, and HI.

Want to learn more? Check us out at www.fisc.er.usgs.gov



Did you know?

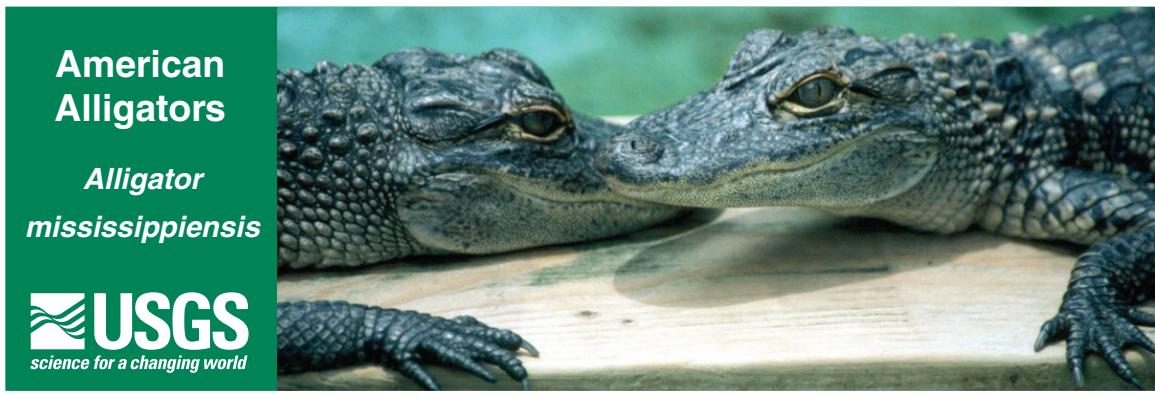
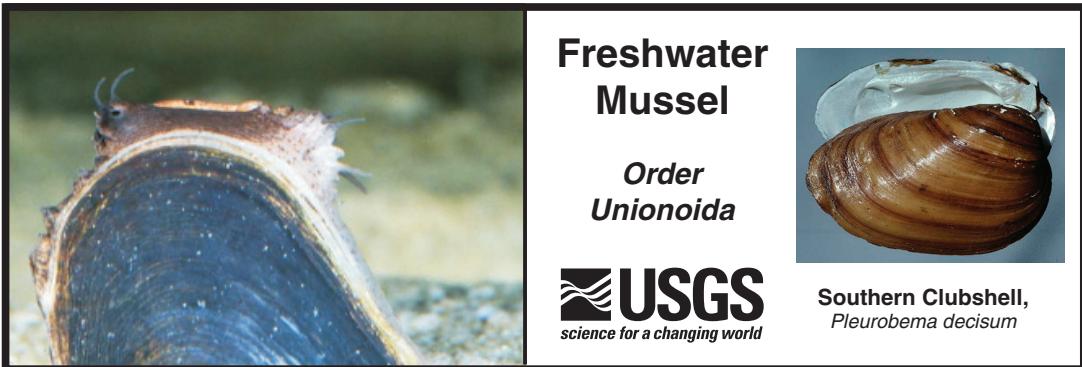
This species is found only in the limestone-based pine forests of South Florida.

The pineland ruellia sprouts back quickly and are one of the first flowers to bloom after a fire.

The genus name, *Ruellia*, honors the French herbalist Jean de la Ruelle (1474-1537).

This plant is eaten by caterpillars of the Common Buckeye and Malachite butterflies.

Want to learn more? <http://fisc.er.usgs.gov>





Did you know?

♦ There are more than 300 recorded species of freshwater mussels in the U.S., mostly concentrated in the Southeast.

♦ Some mussel species can grow to be **9 inches long** and can live to be more than **100 years old!**

♦ Mussels live their entire adult life partly embedded in freshwater sediments. They rarely relocate.

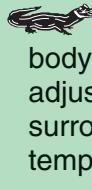
♦ Nearly 70 percent of the species is considered threatened or endangered.

Want to learn more? Check us out at <http://fisc.er.usgs.gov>



Did you know?

Most alligators weigh less than 400 pounds and rarely get longer than 13 feet.



An alligator's body temperature adjusts to its surrounding temperatures.

Male and females make deep bellowing sounds to communicate, and a male can be heard up to a mile away!

Alligators do not sweat, so they cool themselves by lying in the water or opening their mouths wide.

Want to learn more? Check us out at <http://fisc.er.usgs.gov>



Did you know?

The Florida box turtle is found from the extreme southeast corner of Georgia, south throughout the Florida Peninsula, and into the Florida Keys.

Unlike many turtles, the bones of box turtle shells fuse together, especially in older and larger specimens.

Box turtles usually live within a small home range, but a few individuals wander great distances.

In times of danger, the box turtle can withdraw its head, tail, and limbs completely within its shell.

Want to learn more? Check us out at <http://fisc.er.usgs.gov>



Did you know?

Green Treefrogs are usually green, but can range in color from dark olive-brown to pale yellow.

You can hear Green Treefrogs singing in Florida from early February to late summer.

Green Treefrogs are one of the most common treefrogs in the southeastern United States.

You can find Green Treefrogs foraging for insects in your own backyard.

Want to learn more?
Check us out at
<http://fisc.er.usgs.gov>

Bluenose Shiner

*Pteronotropis
welaka*



West Indian Manatees

*Trichechus
manatus*





Did you know?

The bluenose shiner is listed as a “special concern” species in many states due to loss of vegetation and urban development.

The scientific name *Pteronotropis welaka* is named after Welaka, Florida, a town near the St. Johns River.

Bluenose shiners grow to just over 2 inches in vegetated pools and backwaters of rivers and streams.

The bluenose shiner can be found in isolated populations from the St. Johns River in Florida to the Pearl River in Louisiana.

Want to learn more? Check us out at <http://fisc.er.usgs.gov>



Did you know?

 Manatees range in color from gray to brown and can live for 60 years.

 Manatees evolved from four-footed land mammals over 60 million years ago.

 Manatees can consume 10 to 15 percent of their body weight in food every day.

The average adult is about 10 feet long and weighs between 1,200 and 1,800 pounds. 

Want to learn more? Check us out at <http://fisc.er.usgs.gov>