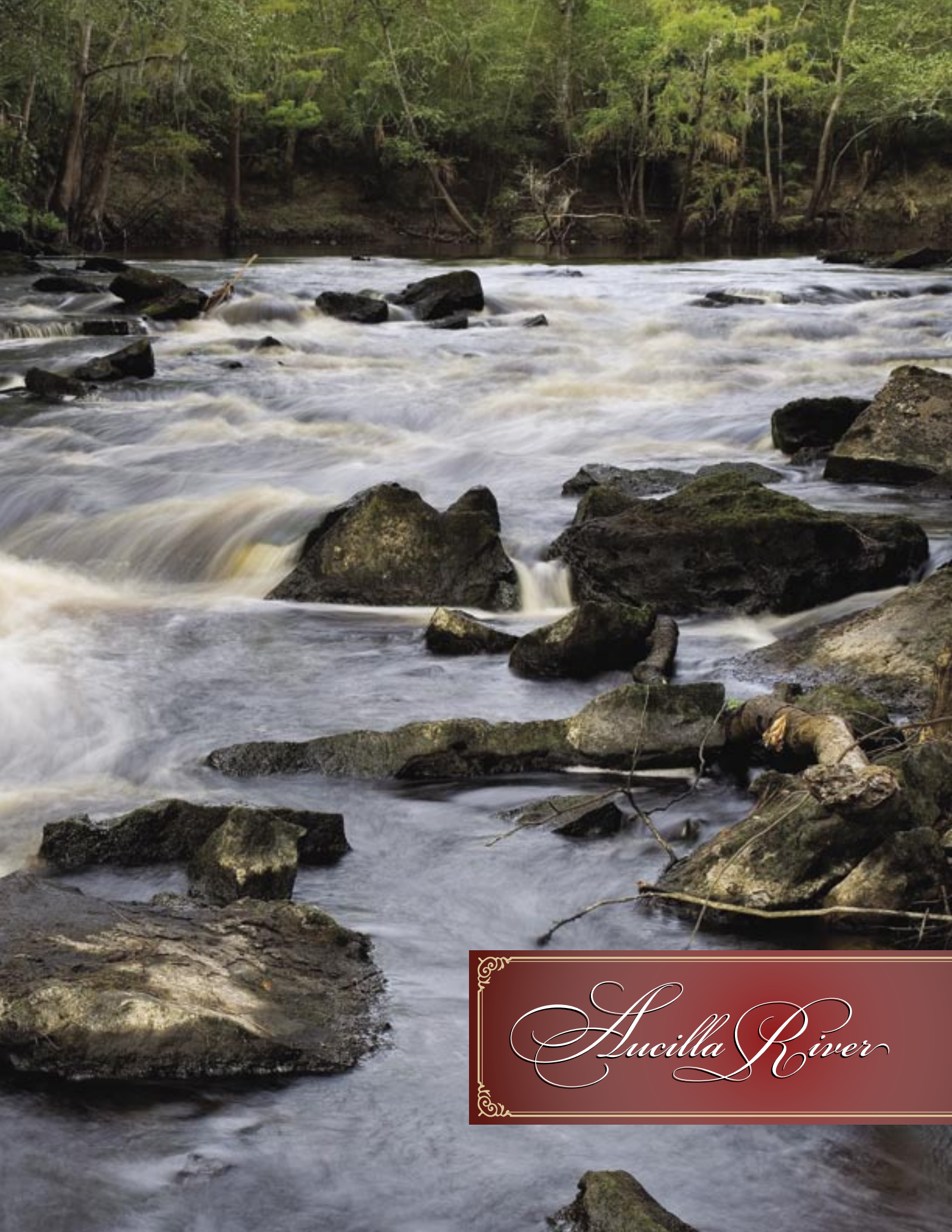




Lucilla River

Aucilla River

THOMASVILLE •

• Boston

Howell Sinks

Olive Creek

Masey Ferguson Pond

AUCILLA RIVER SWAMP DRAIN

Wisdom Lake

Sneads Smokehouse Lake

Lake Miccosukee

Wards Creek

MADISON CO.

• MONTICELLO

Lake Logan

Little Aucilla River

Hixtown Swamp

Sardony Creek

Rocky Creek

Beasley Creek

Bugs Creek

Royce Creek

Drifton Branch

Mill Pond Creek

Bailey Mill Creek

WACISSA RIVER

• Wacissa

Lamont •

Aucilla •

WACISSA RIVER CANOE TRAIL

HELLS HALF ACRE

Goose Pasture Recreation Area

Slave Canal

Ward Island

• Nuttall Rise

Cabbage Grove

AUCILLA SINKS TRAIL

AUCILLA CANOE TRAIL

Jones Mill Creek

Walamute Creek

Cow Creek

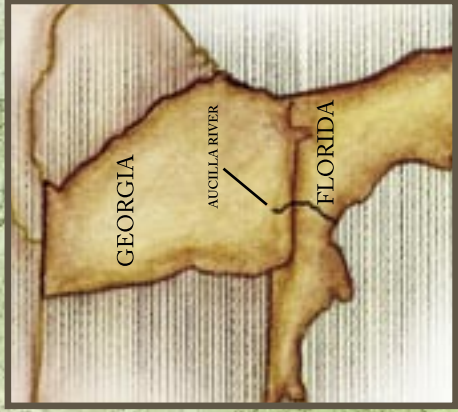
Jones Mill Creek

TAYLOR CO.

ST MARKS NATIONAL WILDLIFE REFUGE

APALACHEE BAY

Econfina State Park



A *Call* ^{TO} *Action*

Much has been accomplished, but there is still much more to do

In 2004, Tall Timbers Research Station & Land Conservancy, The Georgia Conservancy, and The Conservation Fund combined their efforts to produce the *Ochlockonee River*, a publication that introduced many readers to one of Florida and Georgia's most overlooked rivers. These same conservation partners have once again worked together to introduce readers to another critical resource in the Red Hills region, the Aucilla River. Though small in size, the Aucilla River more than makes up for this by virtue of its stunning beauty, bountiful natural resources, and its "now you see it, now you don't" vanishing act into subsurface limestone caverns in Florida and Georgia.

Many organizations are working to conserve the Aucilla River and its watershed. In Florida alone, more than 68,000 acres of floodplain and over 60 miles of river frontage have been purchased by state agencies and the Suwannee River Water Management District with the goal of protecting one of Florida's most outstanding rivers. In fact, the Aucilla River and its nearby companion the Wacissa River, are among only 43 officially designated Outstanding Florida Waters out of more than 1,700 rivers, lakes, and estuaries in the state. In addition to public acquisition of land in the Aucilla River Watershed, private landowners have conserved more than 45,000 acres in Florida and Georgia in conservation easements held by the Tall Timbers Land Conservancy, the Suwannee River Water Management District, and The Nature Conservancy.

Nevertheless, there is still more to do. Non-point source pollution from urban and rural landscapes, septic tank failures, and littering of public gathering places on the river all pose a threat to this treasure. If you would like to join efforts to protect the Aucilla River and its watershed, contact one of the following organizations:



TALL TIMBERS
Research Station & Land Conservancy

*Tall Timbers
Research Station &
Land Conservancy*

FOSTERS EXEMPLARY LAND STEWARDSHIP THROUGH RESEARCH, CONSERVATION, AND EDUCATION. THE TALL TIMBERS LAND CONSERVANCY IS THE LARGEST REGIONAL LAND TRUST IN FLORIDA AND GEORGIA WITH OVER 70,000 ACRES UNDER CONSERVATION EASEMENT.

Contact: 13093 Henry Beadel Drive, Tallahassee, FL 32312-0918, (850) 893-4153, www.talltimbers.org

THE CONSERVATION FUND

The Conservation Fund FORGES PARTNERSHIPS TO PRESERVE OUR NATION'S OUTDOOR HERITAGE—AMERICA'S LEGACY OF WILDLIFE HABITAT, WORKING LANDSCAPES AND COMMUNITY OPEN-SPACE.

Contact: Southeast Office, P.O. Box 1362, Tucker, GA 30085-1362, (770) 414-0211, www.conservationfund.org



Georgia
CONSERVANCY

The Georgia Conservancy IS A STATEWIDE ENVIRONMENTAL ORGANIZATION WHOSE JOB IS TO MAKE SURE THAT

GEORGIANS HAVE HEALTHY AIR, CLEAN WATER, UNSPOILED WILD PLACES, AND COMMUNITY GREEN SPACE NOW AND IN THE FUTURE.

*Contact: 18 North Main Street, Moultrie, GA 31768 (229) 985-8117, www.georgiaconservancy.org
Atlanta office: 817 West Peachtree Street, Suite 200, Atlanta, GA 30308, (404) 876-2900*



The Aucilla River



The Middle Aucilla River flows between high limestone banks

Trick question: How long is the Aucilla River?

BY RICHARD J. LENZ

Answer: No one really knows.

Why? Because the Aucilla River—fickle and mysterious, unknown and unknowable—can't make up its mind whether it wants to be a river, a swamp, or an aquifer.

For example, in the Middle Aucilla, the river decides to become a fast flowing stream with steep, 15-foot limestone riverbanks and some of the only rapids found in the Florida Panhandle. Above this area, the river and its tributaries elect to be what most would describe as a broad swamp. And in some locations—one in Georgia and several in Florida—what is a major, substantial river disappears entirely into the earth, as if to go underground to think for a while, then reappears 30 times over several miles in a crisis of indecision, before finally making up its mind to be a river and flow to the sea.

To experience the river from its swampy beginnings to where it feeds a salt marsh in the Gulf of Mexico requires a solid faith. And a detailed set of maps.

But be it river, swamp, or aquifer, the Aucilla undoubtedly supplies a great variety of free benefits to humans and the natural world. It serves as flood control; it purifies surface waters; it provides nursery and sanctuary for fish and

wildlife; and it recharges the underground water supply. The Aucilla is also a treasure trove for archeologists who study humankind's early beginnings and an outdoor laboratory for biologists who labor to understand and protect our finite natural resources. And lastly, the river is a source of spiritual renewal when used for recreation and appreciated for its beauty.



A Little Blue Heron in breeding plumage snags a crawfish

The latter quality is what threatens it most. You don't have to be a real estate agent to know that the entire Florida Panhandle region is undergoing a tsunami of new residents and development. While this wave raises property values, a corresponding effect is the reduction, alteration, depletion, and loss of the natural world and its freely served utilitarian benefits. That is, unless we take steps to protect the natural world which serves us so well.

The Geology of the Aucilla River in Georgia and Florida

Rivers are fundamentally created and defined by the landscape where they are born and move through. It takes uneven or porous landscape combined with gravity to get water moving. As it flows, it is influenced by the surrounding geology, among other factors.

The story of the Aucilla, and what makes the river so special, is largely a story of geology. Two-million-year-old Pleistocene-aged soils and stone cover most of Florida. But where

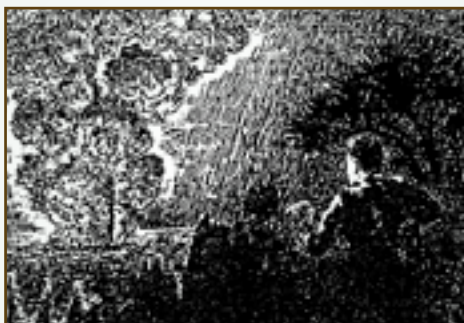
the Aucilla flows, it cuts and drops its way to the Apalachee Bay through some of the oldest exposed portions of Florida's basement rock.

Deep under the Aucilla and its tributaries in Georgia and Florida are thick layers of carbonate rocks that were formed under ancient oceans from deposited marine by-products—ancient coral reefs and shells—in a process that started 150 million years ago during the Jurassic age of the dinosaurs and ended in the Miocene period, roughly 13 million years before today.

The Search for the South's Lost Volcano

Dark, mysterious, haunted. All swamps carry myths and legends and the Aucilla and Wacissa river swamps are no exception. Some locals share the eerie tale of the Swamp Ape, a 7-foot smelly creature that roams the dark jungle interior of the river swamps of the Florida Panhandle like a southern Abominable Snowman. Others tell the long-running fable of the "Lost Volcano."

First recorded around 1830, the legend states that from high ground near Tallahassee it was periodically possible to see a column of smoke and fire belching from the earth somewhere in eastern Wakulla County or the Wacissa swamps. According to news stories, even before the Spanish explored the area, Indians had passed down the story of a hidden "volcano." So the story goes, the adjoining swamplands made first-hand investigation difficult if not impossible and the source was never discovered despite many attempts. In 1886, after the South Carolina Earthquake, the smoke reportedly disappeared and that was the end of "The South's Only Volcano!" according to one newspaper story. During an expedition to the area in February 1894, Arthur



T. Wayne, who was a market hunter of birds, wrote that he could "see the smoke from the famous Florida 'volcano,' which must be in Jefferson County near the line of Wakulla County."

Some believed the smoke was evidence of fires from a secret settlement of runaway slaves, or a hidden Indian camp, or a bootlegging operation. Stories

published over a span of 130 years in national newspapers and magazines about the hidden "volcano" would inspire new hapless expeditions into the swamps, only to produce more tales about lost, bug-bitten misadventures, huge limestone boulders blasted from the earth, or the discovery of burned craters so hidden that they could never be found a second time. A recent theory, put forward by Tallahassee radio-personality Sonny Branch after a four-year search, is that the volcano was actually a naturally occurring peat-moss fire in the Aucilla Watershed in Jefferson County. Despite all the theories and disappointments, some residents continue to insist that they have seen the smoke and fire and the volcano is out there, still waiting to be revealed to science.

During this time, tectonic forces moved what was to be Florida from the warm seas of the equator to its current sub-tropical position. All of Florida and much of south Georgia sits on top of this limestone shelf.

On top of this marine carbonate sedimentary rock are the non-carbonate sediments of sand, clays, mud, and organics deposited from estuaries, coastal wetlands, rivers, and lakes during the transition of the landscape from sea bottom to land. Tectonic forces and the rising and lowering of sea level from periodic ice ages shaped the patterns, quantity, and composition of these soils. This layer ranges in depth from zero to 200 feet in the headwaters of the river to zero to 50 feet in the lower ranges of the river. The carbonate layer in northern Florida and southern Georgia is approximately 400 feet thick.

Moving from larger to smaller land-sized geographic classifications, geologists organize and divide the Earth into physical units that share geologic characteristics. In the East Gulf Coastal Plain Section of the Coastal Plain Province, the Aucilla begins in the Tallahassee Hills/Valdosta Limesink District (also known as the Red Hills ecoregion) of the Tifton Upland District of Georgia at approximately 250 feet elevation, and then drops down the Cody Scarp to the Gulf Coastal Lowlands District, before emptying into the broad marshes of Apalachee Bay in the Gulf of Mexico at sea level.

Rich clays and sandy loams of Miocene age (roughly 26 million years old) characterize the Tallahassee Hills/Valdosta Limesink District, helping to create the diversity of botanical life found here. The Gulf Coastal Lowlands District is characterized by sandy soils of Pleistocene age (roughly 2 million years old) and less botanical diversity. The Cody Scarp—which forms the

boundary between the two regions—is an east-west trending, ancient marine coastline that drops as much as 50 feet in places.

So the Aucilla's watershed is in a much larger region underlain by layers of limestone, which hold the waters of the Floridan Aquifer like a big, porous underground sponge. At various points, the permeable soil layers on top of the limestone are thin, allowing for water to reach the surface in springs and also for water to disappear underground in limesinks. Where the water appears in springs, they can have a large enough volume to produce a spring-run river, such is the case with the Wacissa River, the blonde-headed tributary of the brunette-headed Aucilla.



Green Anole (*Anolis carolinensis*)

Limestone-influenced landscapes are sometimes termed "karst" regions. The National Resources Defense Council defines karst as "A type of geology characterized by soluble rocks where streams and floodwaters disappear underground and then flow through channels into surface waters. In karst regions, acidic rain can dissolve the limestone rocks and cause cracks or sinkholes. Since all water that falls upon the ground in regions of limestone bedrock eventually finds its way



into underground channels, karst regions are particularly vulnerable to pollution from animal waste because pollutants seep quickly into the groundwater and springs underneath.”

A variety of natural factors going back millions of years helped create the karst environment through which the Aucilla flows. First is the large volume of precipitation that falls in the area, which produces a chemical reaction that slowly dissolves the carbonate rock. Second is the effect of the salt water of the Gulf of Mexico, which comes in contact with the aquifer and chemically influences the karst environment. Third, the wetlands and marshes of the region introduce carbon dioxide into the environment, resulting in further development of a karst landscape. And finally, the historic raising and lowering of sea-levels in the region over the last two million years produced a chemical washing machine effect on the limestone as water tables moved up and down.

The Aucilla River Watershed is one of four watersheds that define the Ochlockonee River Basin, which is one of Georgia's 14 major river basins. In Florida, the Aucilla River is managed by the Suwannee River Water Management District. This region contains the largest density of

springs in the world, with more than 253 identified springs. Twenty-one springs are graded as “first magnitude,” which means they discharge more than one hundred cubic feet of water per second. In the Suwannee River system, there are 197 identified springs, and in the Aucilla/Wacissa, Econfina, Fenholloway, Steinhatchee, and Waccasassa watersheds, approximately 56 springs have been located. A total count is problematic because many springs are found in the streambed and are only visible during extremely low flows.

Scientists estimate that the total discharge of all the District's springs is more than 4.65 billion gallons a day, which is equal to the volume of the Mississippi River flowing past Minneapolis, Minnesota, on an average day.

In the Aucilla Watershed, there are seven first magnitude springs, including Wacissa Spring, which gives birth to the Wacissa, the main tributary of the Aucilla. Adding to Wacissa Spring are approximately 20 other springs found in the first 1.5 miles of the Wacissa's headwaters.

Where they meet four miles from the coast, the Wacissa adds volume to the Aucilla, which then flows to Apalachee Bay, where it discharges an annual average of 550 cubic feet of freshwater per second. The Aucilla River basin also plays a role in adding water volume to the underground aquifer, which seeps fresh water into the Gulf of Mexico, adding up to 30 percent of all freshwater flow by some estimates. The combination of fresh and salt water creates the ideal conditions for supporting the productive tidal marshes that are nursery, home, and feeding grounds for fish and shellfish. The northeastern coast of the Gulf of Mexico, while only 17 percent of Florida's coastline, comprises 41 percent of the state's precious tidal marshes, which support Florida's multi-million dollar seafood, recreation, and tourism industries.





The Aucilla River near Snead's Smokehouse Lake

A Journey through the Aucilla Watershed

Geographers report that the watershed drains approximately 850 square miles, of which 86 percent are in Florida and 14 percent in Georgia. The majority of surface flow comes from rainfall. The region is affected by weather patterns that form due to the influence of the Gulf of Mexico. Thomasville, Georgia receives an annual yearly rainfall of 52 inches a year, and further south in the Florida Panhandle the watershed receives 65 inches of rain a year. This is enough to create streams and rivers as it drops on the rolling topography of southwest Georgia and north Florida.

Thus the Aucilla is born from the sky in a sunny southwest Georgia cotton field, seven-and-a-half miles northeast of Thomasville, in the distinctive terrain known as the Red Hills. If its headwaters were located several hundred feet to the west, north, or east, they would instead flow westward into the Ochlockonee River or eastward into the Suwannee River. Instead, it makes its way generally south for ten miles, forming the edge of the Thomasville Airport, before capturing Olive Creek and other streams that drain off the eastern urban half of the city of Thomasville. The Aucilla and these creeks add character to Red Hills hunting plantations named Aucilla, Pinefair, Osceola, and Rodina, until the river unexpectedly disappears underground into the Howell Sinks.

As stated earlier, lime sinks and springs are major natural components of the terrain through which the Aucilla flows. The river feeds — and is fed by — both in a complex relationship that is not fully documented, understood, or appreciated by the public. Our maps of rivers are two dimensional, which is usually sufficient. But where a river flows over the swiss cheese-like limestone landscape of South Georgia and North Florida, a 3-D subterranean map would make more sense and bring us a literally deeper understanding.



Spider Lily (*Hymenocallis occidentalis*)

At Howell Sinks, the Aucilla either disappears to emerge further downstream, or adds volume to the Floridan aquifer, or both. No one really knows precisely. During high water, the Aucilla escapes to the north of the sinks and flows along the railroad bed until it joins the Masse Branch and heads southeast before it disappears into a 12-mile-long by 1-mile-wide swamp known as the Aucilla River Drain (or Swamp) at the corner of Thomas and Brooks counties. Here it crosses the state line into Jefferson County and becomes a Florida river.

With its modest origins 20 miles from Florida, the Aucilla has the smallest watershed in Georgia — only 119 square miles — and almost all of it contained in Thomas County. Many Georgia watershed maps ignore it entirely and represent it as part of the Ochlockonee River Watershed, though it flows to Apalachee Bay without touching its neighbor. Some books claim the river flows 69 miles, others 75.

The river is as unknown as any in Florida or Georgia, perhaps because it doesn't come close to any major population centers. Where it begins near Thomasville, population 18,200, it is generally an ignored creek. On its way to the coast, it passes by the Georgia town of Boston, population 1,449, and then the small Florida settlements of Lamont and Nutall Rise, consisting of a few hundred people, before it reaches the marine estuary.

When looking at a map, the precise boundaries of the Aucilla River's Florida watershed are difficult to draw. With some rivers, it is easy to tell where they have branch streams and where they begin and end. For the Aucilla, surrounded by swamps, lime sinks, and springs, it is sometimes difficult to tell which waters flow to the Aucilla, or the St. Marks River to the west, or Econfinia River to the east, or the underground aquifer, or a combination of rivers. Traditionally in karst landscape, rainfall soaks into the ground rather than forming a stream that connects to other waterways to make the usual, dendritic, tree-branched look of most rivers.



Rope swing at the Wacissa swimming hole

Some large water bodies in the watershed only have obvious connections to the river during high water, such as Hixtown Swamp in Florida. The 15.5-square-mile Hixtown Swamp buffers the largest lake in the Aucilla, Ochlockonee, and St. Marks watersheds, measuring approximately 15,000 acres. Inaccessible and undisturbed, the swamp is considered to be the most extensive

cypress swamp in northern Florida. It serves as an important sanctuary for migrating waterfowl and a large number of sandhill cranes.

If you combine the Aucilla River Watershed to the east with the Ochlockonee Watershed of the west, you will make an irregular diamond shape that has Tallahassee at the center. This is the Red Hills Bioregion. If you draw a horizontal line across the center below the Florida state capital, you have roughly mapped the Cody Scarp, which is an ancient shoreline drop-off that divides the Red Hills from the Gulf Coast Lowlands.

The Red Hills holds the best remnants of longleaf pine savanna, a once widespread, fire-dependent ecosystem that stretched from southeastern Virginia to eastern Texas. Widely spaced, ancient pines towered over one of the most diverse ground covers in the world, where 75 species of vascular plants might be found in a single one-square-meter quadrat. Many of the species found here were rare and endemic, and are uncommon today due to the alteration of the landscape. Finding refuge in the Red Hills community are 43 species that are federally listed or of special concern, as well as 100 candidate species for federal listing. The most famous is the federally endangered red-cockaded woodpecker, which requires old growth or mature second-growth pines to prosper. The Red Hills harbors the largest population of red-cockaded woodpeckers found on privately owned land in the U.S., estimated at 180 active groups.

Where the Aucilla flows through the Red Hills, it passes through 14 different hunting plantations that help to conserve this native landscape that dominated the coastal plain when Columbus arrived. Originally, Native Americans farmed the lands. Spanish explorers and missionaries brought diseases that

decimated the original inhabitants of the area, who lacked natural immunity. Eventually, Florida became the 27th state admitted to the Union, and settlers timbered the area and converted the landscape to cotton plantations, which were supported by slave labor.

After the Civil War, the land was purchased on the cheap by Northerners who coveted the pine-scented forests and excellent hunting grounds. This helped preserve the original ecosystem, as fire was used to keep the land productive for bobwhite quail, the single species which has made the Red Hills famous for world-class game bird hunting.

The Aucilla is classified as a blackwater river. This type of river, named for its dark brown, tannin-stained waters, originates in acidic swamps and flatwoods. Blackwater streams have highly acidic water (low pH) from decaying plant materials, and support low biological

diversity. The ratio of inorganics (sand) to organics (plant material) can be 1:1, whereas in typical rivers it is 10:1. Blackwater rivers have low oxygen levels due to their slow moving, meandering, and generally warmer waters.

The Upper Aucilla Watershed is primarily characterized by mesic longleaf pine flatwoods, floodplain forest, and floodplain swamp communities. Numerous hardwood drains feed the Upper Aucilla and these often support rare plants such as Turk's-cap lily. Further south, the Middle and Lower Aucilla host an amalgam of hydric hammock, floodplain forest, and floodplain swamp habitats. Throughout the basin, extensive forests of bald-cypress, black gum, southern magnolia, spruce pine, sweet gum, red maple, and various oak, hickory, and ash species abound. In the lower watershed, these forests are complimented by more subtropical species such as cabbage and needle palms.



Aucilla River swamp drain

That is a scientific description. Blackwater rivers are also beautiful to see, with glaringly white sand banks contrasting with the dark, tea-colored waters that reflect like a mirror the surrounding green canopy, mesmerizing river travelers as they wind through the Aucilla's mysterious, green corridors.

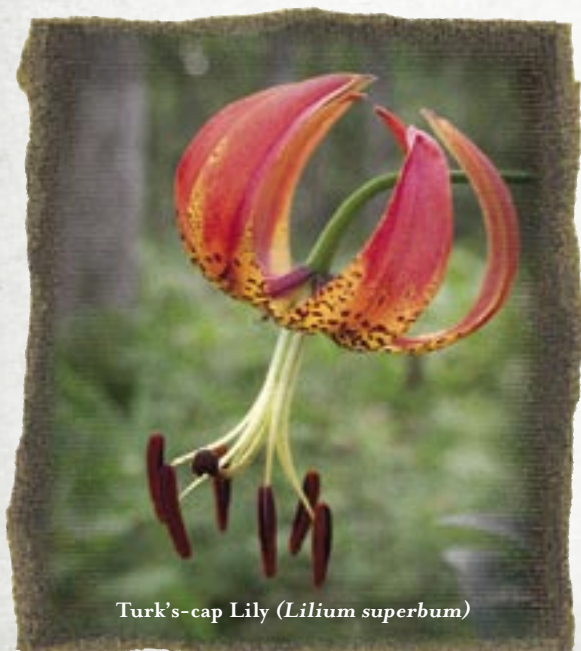
In the Georgia headwaters, most would call the Aucilla a series of creeks. Below the Georgia headwaters at the state line, after the Aucilla picks up volume, it broadens into extensive linear swamps of cypress, gum, and bay, which serve as a haven and nursery ground for waterfowl, wading birds, reptiles, amphibians, and fish. Here the river moves very slowly, if at all. Lily pads and other emergent vegetation adorn the river's surface, adding to the impression of a southern pond.

Below the cypress and gum swamps of Snead's Smokehouse Lake, the river narrows and the current picks up. Coming toward the Aucilla from the east is a zigzagging line shared by Florida counties named for presidential best friends Jefferson and Madison. It establishes straight legal boundaries through the crooked

intermittent swamps and wetlands. Where it intersects with the river, the county margins adopt the twists and turns of the Aucilla, with Jefferson on the west bank and Madison on the east bank, until Madison becomes Taylor County further south. The stream, as if it knows it carries legal responsibilities, becomes defined enough to be an obvious river, with current, stream banks, and shoals. This stretch is known as the Middle Aucilla.

The beauty of the Aucilla here is remarkable and a pleasure to canoe or kayak. It is no accident that the State of Florida has made it an official canoe trail. The noise from man's inventions fade away. Hawks study the river from above, looking for meals, while herons patiently wait for unsuspecting fish at their feet. Alert kingfishers cruise the channel, where down below lively otters play a game of tag. Shy sun-dappled alligators slide off sand banks into the cool, reflective black waters. Timid turtles and frogs leave their perches for the safety of the stream. Bass pop at the surface taking with them unsuspecting waterborne dragonflies the size of a man's palm. A white-tailed deer sips cool water from the river. Woodpeckers hammer for grubs. Massive Spanish moss-draped cypress shade the river, with their exposed roots and knees piercing the limestone. Boulders in the river suggest a lunar landscape. Curious clouds of slow, sweet sulphur butterflies briefly join the journey, making it one from a fairytale. All of this I experienced in one 6-hour trip.

As I drifted downstream, the river slowly dissolved its way down into the landscape of limestone, and the riverbank rose next to me, and it seemed like I was gradually sinking into the earth. The forested diversity on and beyond the banks was remarkable. Early on, I passed by cypress and gum swamps. Further down the river, I saw huge live, water, and laurel oaks and cabbage palms crowding the



Turk's-cap Lily (*Lilium superbum*)

Aucilla River

The Slave Canal

Since both are sizeable rivers, one might expect the Wacissa River and the Aucilla River to meet in an obvious way. But both rivers are full of unexpected twists, turns, and disappearances. The Wacissa flows southward until it disappears into a group of small streams and river swamps known as "The Warriors" or "Western Sloughs" located west of the Aucilla River. Near this same area, the Aucilla goes underground and reappears approximately 30 times.

Because the Aucilla disappears before meeting the coast, plantation owners thought building a canal in the 1830s that easily connected the Wacissa with the Aucilla would be a good investment. Roads were poor then and river transport of cotton on barges was common. Several of Florida's most powerful and famous men supported the idea, including James Gadsden, Napoleon's nephew Napoleon Achille Murat, William Nutall, and John and Robert Gamble. The Gambles led the effort and formed the Aucilla and Wacissa Canal and Navigation Company in 1831 and eventually used slaves to dig a 2.7-mile connection out of the limestone. The work started in the 1850s and progressed until the development of railroads, which made many canal projects obsolete, and the Civil War and post-war depression ended the effort. The canal is known as "The Slave Canal," which the state of

Florida found racially offensive and filed to have renamed "Cotton Run Canal." In January 2006, the U.S. Board on Geographic Names considered the request, but citing "a lack of local support for the change and a lack of evidence that the existing name was offensive to the local population," rejected the request.



Today, you can explore the canal in a low-draft boat if you can find the entrance. There are trees to go over and under along the course, but the adventurous are rewarded with a wonderful nature experience. Some consider it one of the finest canoe trips in Florida, if not the shortest. The water is crystal clear, full of fish, and only one to three feet deep; ancient oaks and palmettos draped with Spanish moss canopy the river; and wildlife including deer, bear, and wild hogs may be heard working their way through the nearby swamps.

Blocks of limestone and earth mounds—which may be excavated dirt from the canal or Indian mounds—remind explorers of the backbreaking work that happened here. The effort to carve the canal out of the Florida sub-tropical jungle had to be arduous. Laborers had to deal with heat, humidity, floods, soggy soil, snakes and alligators, and the threat of malaria and yellow fever. It remains a silent tribute to their muscle and grit.



Fragrant Water Lily (*Nymphaea odorata*)

river bank, festooned with resurrection ferns and tangled networks of native grape vines and poison ivy. Elsewhere, I identified turkey oaks and longleaf pine, cypress and tupelo swamps, beech and magnolia groves, and holly, sweetgum, hickory, ironwood, flowering cherry, Florida willow, and many other species. Smaller species such as possumhaw and Florida ash grew in the understory, and redtop panic grass, yellow star grass, and flowering ferns thrived as ground cover.

I noticed on the elevated bank a recent high-water mark located 15 feet above the surface of the water. Rusty fishhooks dangled mid-air from lines attached to tree branches, as if to catch birds and not catfish. Like most blackwater streams, the Aucilla and its tributaries fluctuate widely, and a lazy and obvious river channel after a Florida torrent can quickly rise to become a fast moving and confusing stream with multiple choices for getting downstream.

Recreational fishing here is excellent for largemouth and Suwannee bass, redbreast sunfish, channel catfish, and bowfin. Turkey, quail, and bear are frequently heard and sometimes seen in the woods.

Those looking for more than just breathtaking scenery on their canoe trip will find several sets of shoals south of Lamont as the river drops down the Cody Scarp into the Gulf Coastal

Lowlands District. Congratulations! You just found Florida's premier whitewater experience! Depending on water levels, two limestone rock dams can make for a nervous challenge if one is inexperienced or traveling with children, but sandy banks make portaging them easy.

South of the rapids, boaters who don't know the river they are on and plan to meet their friends at the marsh dock will be in for a surprise. Approximately 20 miles south of Lamont and 12 miles north of Apalachee Bay, the river disappears into a 6-foot hole and plunges underground. You are now at the Aucilla River Sinks.

For the next 8 miles or so, the river will flow underground in a network of caverns, connected to the surface in a series of limestone "sinks" and "river rises." Like a string of irregular river pearls, approximately 30 elliptical shaped water bodies indicate where deep underground the river has decided to flow. Some of these sinks are 100 feet deep.

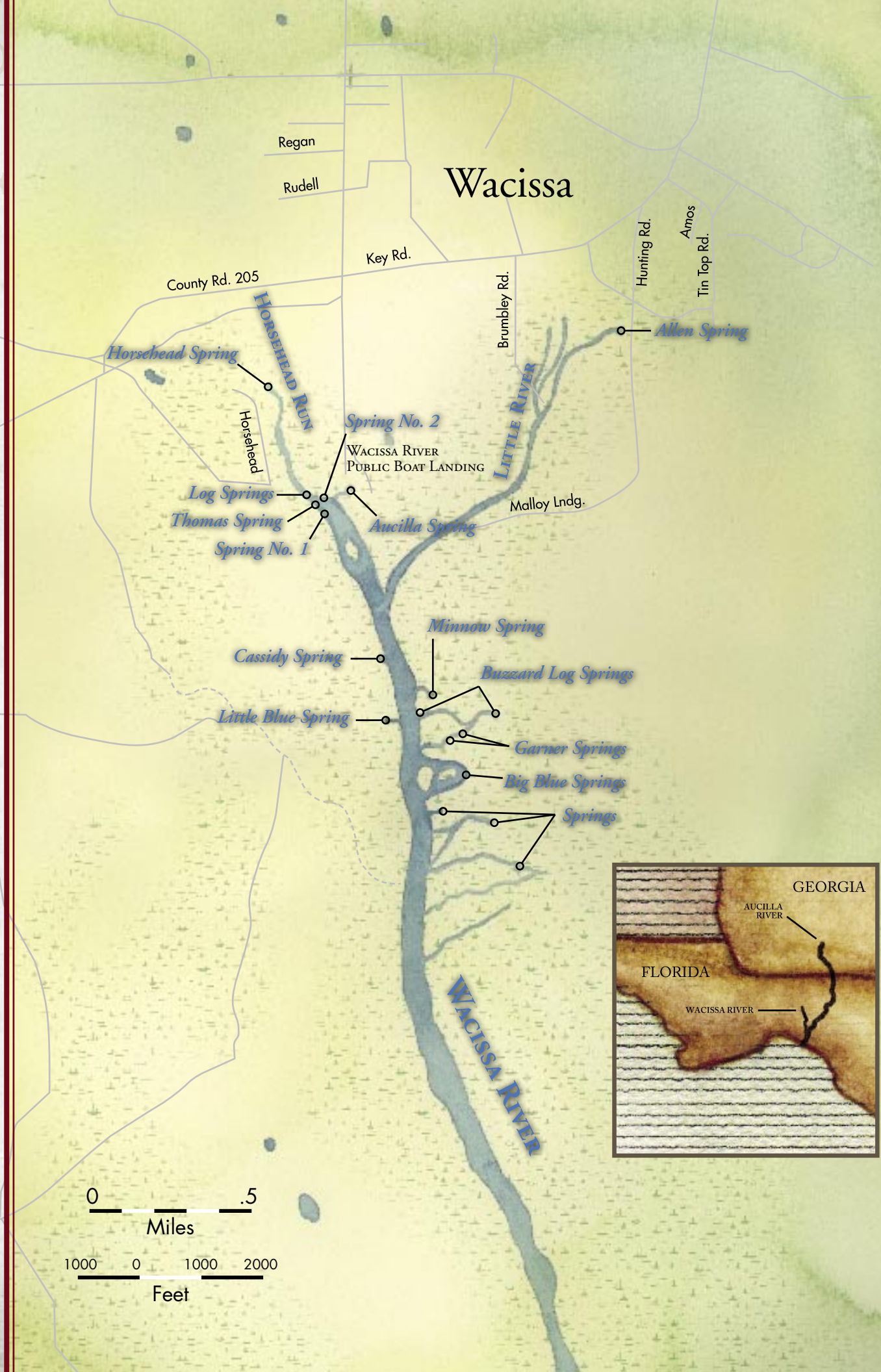
With their unique biological conditions, sinks and the caverns they connect to create their own mini-ecosystems. Several species of rare and imperiled cave dwellers inhabit the underground environments of the region, including Horst's cave crayfish, Hobb's cave isopod, Hobb's cave amphipod, and the Woodville cave crayfish. Although not especially common, some specialized plants are found around sinks and springs, such as the rare Venus-hair fern.

Found in the "natural bridge" section of the river, these watering holes have a fascinating natural and human history all their own. Some are very round, and others look like curved gashes in the earth. With steep, sandy banks, and deep water, physically accessing some of these holes is not easily done. But the banks are popular with locals, who use the area as



The Aucilla River near Lamont, Florida

Wacissa River Springs



Aucilla River

campsites and unfortunately leave literally garbage-truck loads of trash. Some who don't understand the direct connection between these sink holes and the water they drink out of their tap, ignorantly deposit appliances, household poisons, oil drums, car tires, and other garbage into the sinks, a criminal act against man and nature if there ever was one.

The Wacissa River

South of the Aucilla Sinks, the crystal clear, beautiful spring-borne Wacissa—the Aucilla's main tributary—joins the tea-colored Aucilla in a confusing jungle-like area of multiple channels. Not only is it mysterious how they physically meet, it is puzzling that two rivers, only ten miles apart at their most distant, are so different. The Wacissa has clear water, a straight short course, and is primarily shallow. The Aucilla is blackwater, winding, longer, and deeper.

The reason is geology. The 14-mile-long Wacissa, which lies on the eastern boundary of the Woodville Karst Plain and is entirely in the Gulf Coastal Lowlands of Florida, is created by approximately 20 springs, whereas the Aucilla is primarily created by runoff. The Woodville Karst Plain is internationally popular with cave divers who have explored some of larger spring vents, some which open up to large caverns.

With its abundant wildlife, surrounding spring-run rivers, and forested corridors, the Wacissa offers a sublime pleasure that makes it a treasure of the Florida Panhandle. A side exploration up some of the spring-run rivers that flow into the Wacissa is also magical. In all my travels, I have never seen more or a greater variety of bird life in a shorter period. In the span of a few hours, I saw the threatened limpkin, bald eagle, swallow-tailed kite; wild turkey, owls, hawks, osprey, kingfishers; great blue, little blue, tricolor, and green herons;

flocks of ducks, moorhens, and other species. It is like floating in an aquarium, where fish are extremely visible: you will see schools of mullet and sunfish as well as individual specimens of bass, sunfish, bowfin, and gar. Apple snails, the preferred food of the limpkin, are very abundant. Their pink, pearly eggs cling in clusters on the cypress buttresses. All of this found only 25 miles east of Tallahassee.



Snowy Egret (*Egretta thula*)

The Wacissa Watershed was clearcut in the 1930s, which affected the basin's water quality. But it recovered. Currently, the river is fighting a losing battle against introduced aquatic plant species of elodea and water hyacinth, which are outcompeting the native eelgrass.

Approximately four miles from the coast above and below the settlement of Nutall Rise, the Wacissa joins the Aucilla in several areas, including the man-made Slave Canal, a failed effort to make the Wacissa a reliable transportation conduit to Apalachee Bay for upstream cotton growers. The Aucilla comes to the surface for good at Nutall Rise and transforms into a tidal river with marsh banks.

Offshore, the Aucilla's waters help to support an important nursery ground for fish and shellfish. Due to the shallow, flat topography of the low-energy coastline where the Aucilla enters Apalachee Bay, an extensive estuarine complex has been able to develop, with miles of salt marsh, seagrass beds, kelp beds, oyster bars and limestone outcroppings augmented by tide channels, which support abundant fisheries. It is part of the largest aquatic preserve in Florida, the 950,000-acre Big Bend Seagrasses Aquatic Preserve. Sport fishermen here angle mainly for sea trout and redfish, but also tarpon, bull shark, Spanish mackerel, cobia, bluefish, jack crevalle, and flounder.

History Uncovered: Megafauna, Paleo-Indians, Spanish Conquistadors, and the Aucilla River

When did people first arrive in North America? What were they like? The Aucilla River, because of its unique features, is helping to solve this mystery.

Amateur collectors and archeologists have long known of the abundance of bones and Indian artifacts in the rivers and sinkholes of Florida's karst region. In 1983, led by Dr. S. David Webb and James S. Dunbar, the

University of Florida and the Florida Museum of Natural History initiated the Aucilla River Prehistory Project to learn firsthand about prehistoric humans in the region. The discovery of nearly 40 inundated paleo-indian sites in a short section of the river, containing some of the earliest known evidence of man on the North American continent, has made the river internationally significant and one of the most important archeology sites in North America.

Though scientific evidence is abundant for ice ages and fluctuating sea levels, it is hard to imagine the earth in earlier times when glaciers were grinding across the American Midwest and the coastline was a hundred miles away from its present position.

Eighteen thousand years ago, sea level was lower and the Florida Peninsula was more than twice its current size, and North America was joined with eastern Asia by a land bridge known today as Beringia, near Alaska. The first American Indians (and Floridians) were descended from people who crossed here and rapidly spread into North America.

Approximately 18,000 years ago, higher temperatures resulted in melting icecaps, which led to rapid sea level rise, increased precipitation, and much greater volume in North America's rivers. This change paused roughly 7,000 years ago (until recently), which enabled the development of coastal marsh ecosystems and more extensive human development that continues to this day.

Ten thousand years ago, the Florida coastline was located 90 miles away from its present position. Scientists have discovered a buried river drainage system indicating that approximately 15 to 20 miles offshore from today's coast—and now underwater—the Aucilla River combined with the Ochlockonee, St. Marks,



Rose Vervain (*Verbena canadensis*)



Fishing at the Wacissa swimming hole

Pinhook, and Econfina rivers to create what archeologists call the Paleo-Ochlockonee, which flowed another 70 miles before reaching the Gulf. Prehistorically, the Aucilla was not a continuously uninterrupted river from headwaters to coast, but consisted of a string of irregular sinkholes, the remnants of which can be seen today in the Aucilla Sinks region.

Where a river meets the ocean has always been a popular place for human occupation due to abundant and dependable food resources from the marine and riverine environments. As sea level rose and the river channel was drowned and the mouth backed up, humans moved their settlements further upstream and left behind evidence of their communities, which were eventually inundated by the sea and buried by river sediments. While there are approximately 100 known Paleo-indian sites in Florida, it is believed many more are waiting to be found off the coast under the sea.

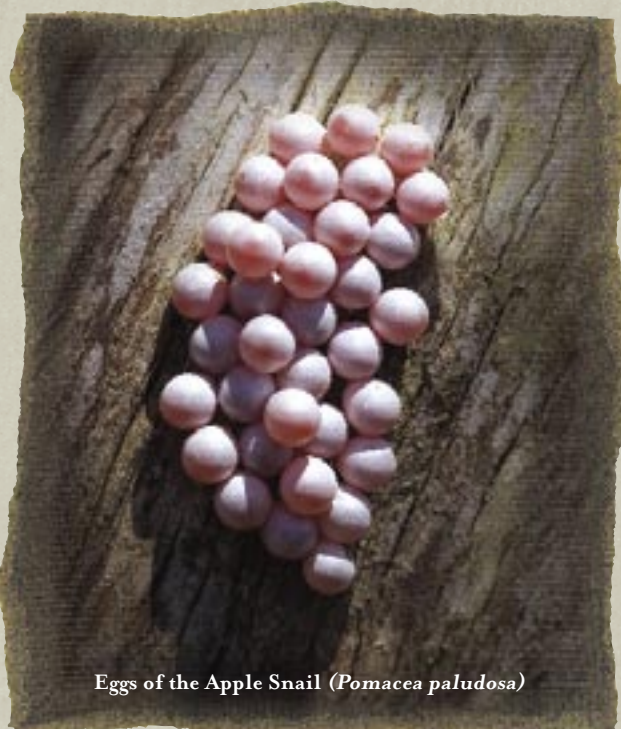
Florida at that time had a much drier climate and was dominated by grassy savanna. As sea level rose, so did the water table, helping to create sinkholes and springs in the karst environment. The environment was drier, so reliable watering holes were oases that attracted the animals of the Pleistocene Age, many of which are extinct today: giant sloths, beaver, water rats, saber-toothed cats, mastodons, bison, even a giant land tortoise. They also drew humans, who camped here and ambushed, butchered, ate, and discarded the remains of animals they killed here.

Working underwater in the sinkholes and surface waters of the watershed from 1984 to 1999, the Aucilla River Prehistory Project helped assemble a piece-by-piece portrait of some of North America's earliest human inhabitants, wildlife, and plant life. For example, they discovered an animal skull with a broken

stone point in it, animal bones with evidence of butchering; plant remains that reveal the existence of gourds not known before in Florida, pollen records, animal dung containing analyzable hormones, fish hooks and bone knives, hair, Indian artwork, the world's oldest dugout canoe, and much more. A 12,200-year-old, 7.5-foot long mastodon tusk was found by archeologists at Half-Mile Rise on the Aucilla that exhibited cut marks—evidence the animal was slaughtered by humans—making it one of the earliest records of man in North America.

Native Americans and the Aucilla River

While today it helps define counties, the Aucilla historically was an important boundary between two major Indian nations. To the east of the river were the Timucuan-speaking Indians and to the west lived the Apalachee-speaking Indians. At the time of Columbus's discovery in 1492, it is estimated that 200,000 Timucuans lived between the Aucilla River and Altamaha River in Georgia. In 1539, Spanish chroniclers traveling with



Eggs of the Apple Snail (*Pomacea paludosa*)

The Aucilla River Swamps: Deep Enough for Ivory-bills?

Holy Grail for birders has been the search for the rare or extinct Ivory-Billed Woodpecker. Up to 20 inches in length and weighing a pound and a quarter, the largest of American woodpeckers was termed the "Lord God Bird," by Theodore Roosevelt because when people saw it, they'd be so amazed they'd say, "Lord God!"

A sighting of this bird made for a dramatic experience, with its great stature, sharp black-and-white markings, distinctive crest, ivory-colored, chisel-tipped bill, and pale yellow eyes.

Probably never very abundant, the Ivory-bill's reported favorite habitat was virgin southern forests, where it could feed on beetle larvae. Destruction of its habitat led to remnant populations in old-growth bottomland forests swamps where food and protection were more likely. The bird was also known in the deep forests of Cuba. A market for the birds and their bills was established in the late 1800s, which led to additional loss of the species. Between 1880 and 1910, more than 400 specimens were taken with prices ranging upwards of \$50 a bird. Until very recently, the last confirmed sighting in America was in 1944 in Louisiana.

According to reports from the 1800s, the Ivory-Billed Woodpecker was once very common in the river swamps of the Wacissa and Aucilla. Arthur T. Wayne, of Charleston, SC, a major trader in Ivory-billed specimens,

advertised them in the *Auk*. He claimed he "encountered" more than 200 Ivory-bills in Florida between 1892 and 1894. Writing in the *Auk*, he stated that they were "now rapidly becoming extinct in the Wacissa. Every one is shot... they are shot for food, and people—the crackers—consider them 'better than ducks!' The bill is also prized and many fall victims for that reason."



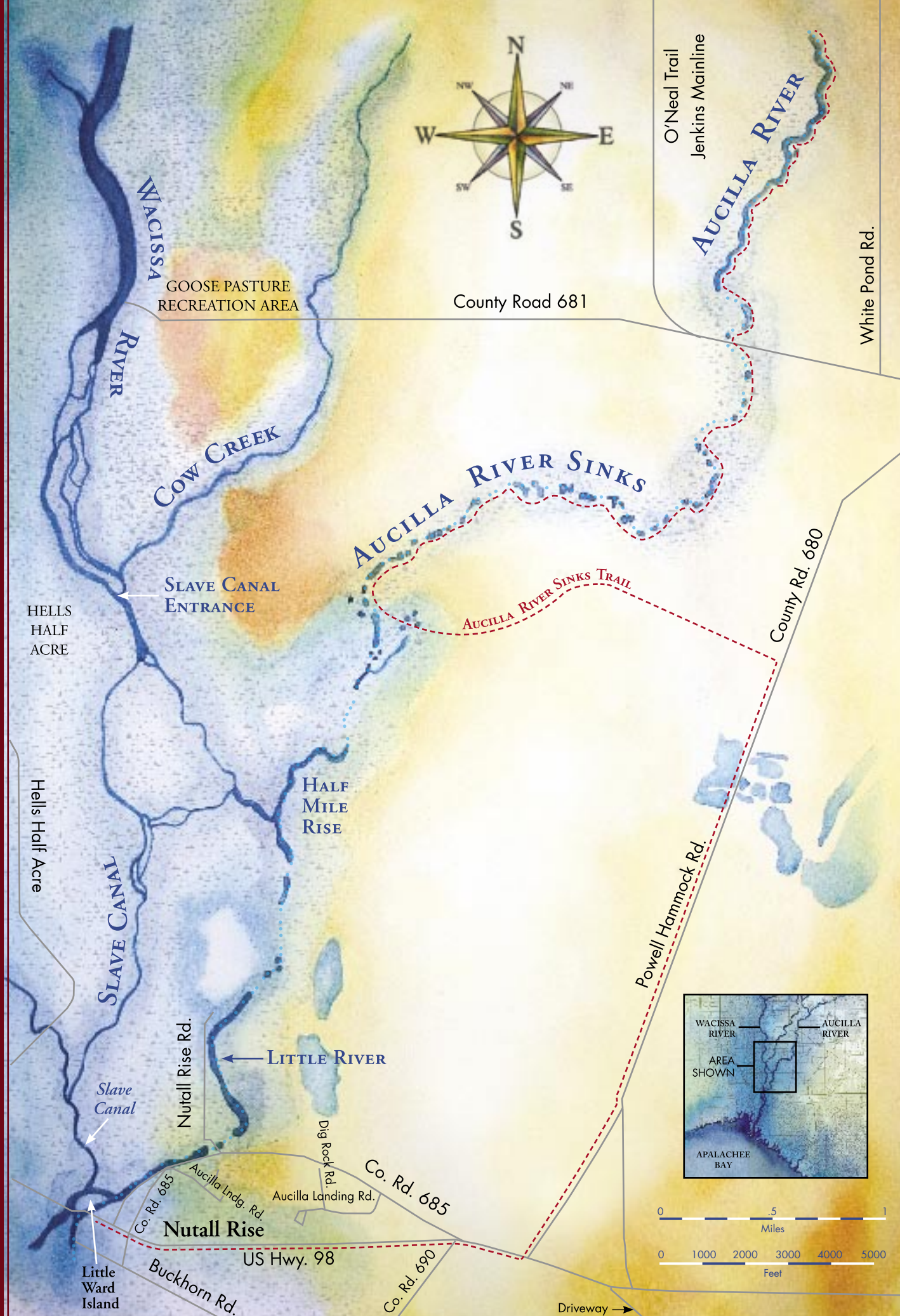
Since 1944, there have been at least 21 "unconfirmed" sightings of the lord of the forest in the southeastern U.S. by reputable birders and naturalists, twice in or near the Aucilla basin in 1958 and 1959. Herbert Stoddard reported seeing a pair in a beetle-killed pine near Thomasville, Georgia and William Rhein spotted one west of the Aucilla River in Jefferson County, Florida.

In February of 2004, Gene Sparling spotted an Ivory-bill in the Cache River in Arkansas, which led to a massive bird-hunt for the "extinct" species. Since then, more evidence has been gathered leading most to believe the bird still lives in the Big Woods of the Cache River National Wildlife Refuge, a 550,000-acre corridor of floodplain forest. This area coincidentally is almost identical in size to the Aucilla River Watershed. Could it be that the Aucilla River swamps are deep enough to host Ivory-bills?



Big Blue Springs on the Wacissa River

the Aucilla River Sinks



Aucilla River

conquistador Hernando DeSoto, who crossed at the “natural bridge” of the Aucilla River in the sinks region, described the Timucuan and their villages. In 1565, Spain established the colony of La Florida with the capital of St. Augustine, and eventually established a string of Franciscan missions with the intent to convert the Indians into loyal Catholic subjects of the Spanish crown who could be forced into slavery in support of Spain. European diseases decimated Timucuan populations, which dropped to 50,000 by the year 1600, and then shrunk to 1,000 by 1700, and finally dwindled to a single individual, who accompanied the Spanish to Cuba when they withdrew from Florida in 1763. The Apalachee suffered much the same fate, shrinking from 50,000 individuals to only a few survivors who evacuated with the Spanish.

Their ghosts remain in the names of cities, towns, counties, and rivers of Georgia and Florida, including the Aucilla and Wacissa. “Aucilla” might be the oldest still-used place name in Florida and Georgia, believed to be a corrupted Timucuan word of unknown meaning. Historians think it referred to an Indian village or tribe, first mentioned in Spanish accounts of the DeSoto expedition of 1539. As Florida has been under the flags of five nations (Spanish, French, English, U.S., and Confederate), different languages have tried to reproduce Indian pronunciations. Various spellings have included Assilli, Assilly, Agile, Axille, Aguile, Aussille, Ocello, Ocilla, Ocillo, Ossilla, Oscillee, Ochile, and Scilly. In the area, several features and settlements have carried a version of the name, including an Indian tribe (Asile), village (Ochile), a Spanish mission (San Miguel de Asile), a Spanish plantation (Aucilla), an academy, an unincorporated town, a swamp, and a post office in Florida and Georgia. It is possible that the Aucilla has one of the oldest names in North America, preceding even the Timucuan.

Runaway slaves, Seminole Indians, Confederate soldiers, bootleggers, and drug smugglers used the inaccessible Aucilla swamps as a place to hide their activities and themselves. Each has an interesting chapter waiting to be told in full.

The Clean Water Act and the Aucilla River

First, let’s start with the good news: Taken as a whole, the Aucilla River Watershed is in relatively good condition, primarily due to its isolation and Florida’s efforts to protect the watershed through land acquisition.

Now the bad news: Some stretches of the Aucilla in Georgia and Florida do not meet federal protection guidelines for fecal coliform, nutrients, and mercury and the watershed is starting to experience developmental pressures.

Thanks to President Richard Nixon, the nation has the Clean Water Act (CWA) of 1972, which forces the U.S. to pay attention to its water quality. The Act has regulations and tools that help control industrial pollution, municipal wastes, and polluted runoff. At first, the CWA focused on regulating traditional “point source” facilities, such as municipal sewage plants and industrial facilities, with little attention paid to runoff from streets, construction sites, farms, and other “wet-weather” non-point sources. This has changed to a more holistic, watershed approach that has encouraged local involvement.

A more recent program under section 303 is the EPA’s Total Maximum Daily Load Program (TMDL). A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant’s sources. Using scientific criteria, the state sets water quality standards by identifying the uses for each waterbody, such as drinking water



American Alligator (*Alligator mississippiensis*)

supply, contact recreation (swimming), and aquatic life support (fishing). Across the nation, states are in different stages of setting TMDLs and assessing their waters.

In Georgia, 13 miles of the Aucilla Watershed were listed in February 2006 as “impaired” or not fully supporting its designated use, which is officially “Aquatic Life Harvesting” or more simply, “fishing.” Ten miles on the Aucilla River—from Masse Branch to the Brooks County line near Boston, and 3 miles of Olive Creek—from downtown Thomasville to U.S. Highway 19, have excessive fecal coliform, low amounts of dissolved oxygen, and abnormal levels of nitrogen, organic carbon, and phosphorus nutrients. According to the TMDL report, Olive Creek’s problems relate to urban runoff, whereas the Aucilla’s problems stem from a broader suite of nonpoint sources, including runoff from agriculture and urban areas.

Dissolved oxygen issues for Georgia’s portion of the river have been impacted by droughts and the fact that blackwater streams are naturally lower in oxygen.

Fecal coliform in our rivers can have many sources: Animal wastes from agricultural operations, leaking septic systems, non-compliant waste treatment plants, and run-off from spray-field wastewater treatment systems. Looking at the numbers, it could be that the

Thomasville area has a combination of all four of these issues. Thomas County, one of the most productive agricultural regions in the state with a \$112 million economic impact, hosts more than 550,000 chickens, 16,000 beef cattle and dairy cows, 1,400 horses, 600 pigs, and 60 goats. Livestock frequently use streams for water and cooling and can directly contaminate a stream.

From 1990 to 2003, Thomas County’s number of septic systems grew 73 percent from 4,292 to 7,433, which may be a sign of population increases outpacing the expansion of sewage systems. According to the Environmental Protection Division of Georgia, Boston Pond, a permitted facility that feeds on average 210,000 gallons of treated water a day into Aucilla Creek, has had five violations between January 2001 and January 2005.

In Florida, where TMDL efforts are not as far along as Georgia, the Aucilla River and Anderson Basin Drain are tagged as “impaired” waters for dissolved oxygen by the EPA, but not by the state of Florida’s Department of Environmental Protection. The federal agency’s database-driven map of impaired waters shows a 25-mile stretch of the Aucilla as being impaired from Raysor Creek to Jones Mill Creek. Suwannee River Water Management District officials believe the low dissolved oxygen levels are naturally occurring conditions found in blackwater and spring-fed river systems.

The river also is found on the national fish consumption advisory list for mercury. The authors of the list recommend against eating more than one meal a week of fish for redbreast and spotted sunfish, largemouth bass, bowfin, and gar. Florida is studying the basin in order to set minimum low flow (MLF) guidelines by 2008, which are intended to protect the river and coast from excessive use of the water resource.

Aucilla River

Land Preservation

Georgia is ahead of Florida in submitting its TMDLs, but Florida is in front of Georgia in the area of land preservation, a key component in protecting water quality in the Aucilla River Watershed. First, Florida has the “Forever Florida” program run by the Florida Department of Environmental Protection, which will spend \$3 billion in ten years to save threatened and sensitive lands. Second, the state has an excellent inventory program that helps it to assess and rank the lands that are most in need of protection. Third, Florida’s Aucilla Watershed has just a few major land owners who are now selling off their forest lands, so the state has an easier time making transactions.

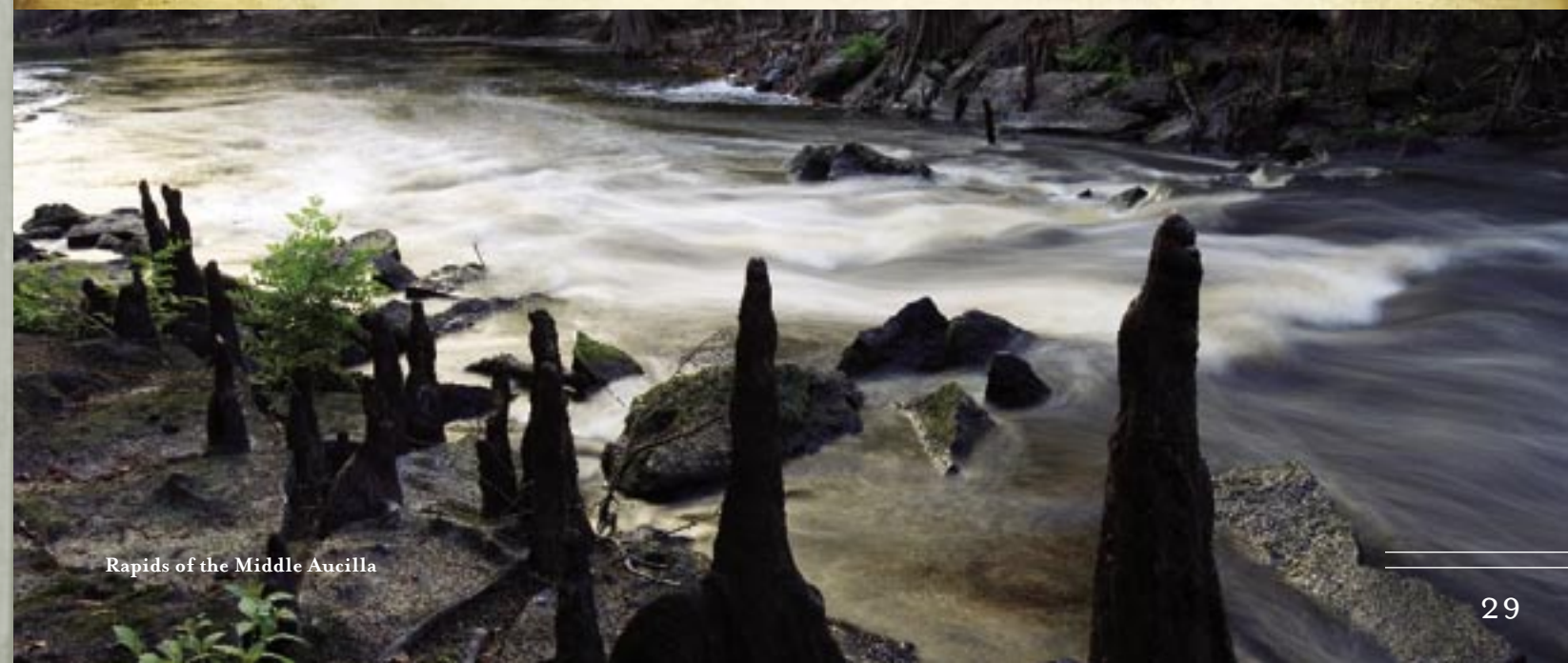
In the watershed, the Florida Forever program has spent years of effort and \$13 million to purchase more than 55,000 acres in the Wacissa and Aucilla watershed, including the complete length of the Wacissa and 30 miles of river frontage on the Aucilla. Approximately 34,000 acres remain that the state would like to acquire, much of it in Hixtown Swamp. The Suwannee River Water Management District also pitched in with its purchase of almost 14,000 acres and 42 miles of river frontage.

Also helping are private landowners in the watershed. Land owners have voluntarily elected to place more than 28,000 acres of their plantations and other lands into conservation easements with the Tall Timbers Land Conservancy and The Nature Conservancy in order to permanently protect the ecosystem.

Additionally, Florida has the “Outstanding Florida Water” (OFW) program, which designates certain waters worthy of special protection because of their natural attributes. Most OFWs are already areas under some form of protection because they are state or federal parks, including wildlife refuges, preserves, marine sanctuaries, estuarine research reserves, certain waters within state or national forests, scenic and wild rivers, and aquatic preserves.

Of Florida’s 1,700 rivers, lakes, and estuarine areas, only 27 rivers are designated as “Special Waters” category of OFW. The Aucilla and Wacissa are two of these.

While it is certainly possible to find larger, longer, and more famous rivers, it is hard to find more fascinating, complex, and beautiful rivers than the Aucilla and Wacissa. They are worth our study, respect, and protection.



Rapids of the Middle Aucilla



Aucilla Wildlife Management Area

3900 COMMONWEALTH BLVD, MS 100, TALLAHASSEE, FL
Twelve miles east of Tallahassee, just south of Wacissa and US 259, is the 47,532-acre Aucilla Wildlife Management Area (WMA), which buffers approximately 15 miles of the Wacissa and 9 miles of the Aucilla. Shaped like an oven mitt, the WMA is roughly defined by SR 59 to the west, US 98 to the south, and SR 14 to the east. The second-growth bottomlands and pinewoods help to protect the entire Wacissa River Watershed and Aucilla River below SR 14. The WMA is used by hunters in search of deer, wild hog, turkey, and squirrel during hunting seasons, and year-round by fishers to access fish populations in the Wacissa, Western Sloughs, and Aucilla River. See also *Goose Pasture Recreation Area*. More information and maps located at http://myfwc.com/hunting/wma/wma_regionMaps.htm.

Middle Aucilla Wildlife Management Area

3900 COMMONWEALTH BLVD, MS 100, TALLAHASSEE, FL
Approximately 2,261 acres in Jefferson, Madison, and Taylor counties provide a natural buffer for the river. Located off Lanier Grade and Sunbelt Grade dirt roads approximately 3 miles south of Lamont, Florida, and 16 miles west of Perry, Florida, this WMA is used for hunting deer, wild hog, turkey, and squirrel during hunting seasons, as well as providing access to the Aucilla River for fishing year-round. The river runs approximately 4 miles through the WMA and has four canoe launches. More information and maps located at http://myfwc.com/hunting/wma/wma_regionMaps.htm.

St. Marks National Wildlife Refuge

1255 LIGHTHOUSE ROAD, ST. MARKS, FL (850) 925-6121
The St. Marks National Wildlife Refuge consists of 65,000 acres of salt marsh, tidal flats, hardwood swamps, and pinelands along the Apalachee and Ochlockonee bays. Dikes built to produce impoundments to feed migratory birds help attract many of the 272 species of birds that have been identified here, including waterfowl, wading birds, shore birds, marsh species, raptors, and nesting bald eagles. Alligators, deer, and Florida black bear inhabit the refuge. Facilities and activities include: visitor center, observation tower, extensive hiking trails, fishing, hunting and crabbing in season. Historic features include the St. Marks Lighthouse, built in 1831 of stones from the old fort at San Marcos de Apalachee. Located 3 miles south of US Highway 98 on County Road 59. www.fws.gov/saintmarks

Wacissa River Public Boat Landing

STATE ROUTE 59, WACISSA, FL
Twenty springs along the upper 1.5-mile Wacissa River corridor create this crystal clear waterway. A county park located 1 mile south of Wacissa on SR 59 at the riverhead has parking, a boat ramp, picnic tables, port-a-lets, swimming, a diving board, and rope swing. The Wacissa River Canoe Trail begins here. Other activities include swimming and scuba diving, and sport fishing and wildlife watching. A boat is required to access the springs. The river has native aquatic eelgrass but is also infested and choked with exotic aquatic vegetation including hydrilla and elodea.

Some fish from this park, others use it to view the many springs, and others use it to launch a one-way trip down the Wacissa. First magnitude Big Blue Spring, also known as Big Spring and Blue Hole, is downstream from the county park boat ramp. It is on the left or eastern side of the river up the second major spring run approximately ¼ mile. The spring is an estimated 125 feet in diameter and 40 feet deep, with deep blue-green water. A floating dock is popular with swimmers and picnickers.

Wacissa River/Slave Canal Canoe Trail

3900 COMMONWEALTH BLVD, MS 795, TALLAHASSEE, FL
Accessed from a county park found 1 mile south of Wacissa on SR 59, the state-sanctioned Wacissa River Canoe Trail is approximately 14 miles in total length. One can travel the entire length from the park to Nutall Rise Landing, or split it into two different trips, one from the park to Goose Pasture Recreation Area, which is 9 miles in length, or from Goose Pasture to Nutall Rise Landing, which is 5 miles in length. Some travel the entire length to the Gulf, pausing to camp at Goose Pasture and/or Nutall Rise, and finishing at a boat ramp and floating dock before the river meets Apalachee Bay.

The first section is good for beginners. The current is 2 to 3 miles per hour, and the river alternates from broad sections of slower moving current to narrow sections where the current picks up, before broadening again prior to arriving at Goose Pasture.

The second section is more challenging because the river melts into river swamps and one must choose exactly the right course through the historic Slave Canal or risk getting lost. Canoeists also may have to work their boat around and over fallen trees and vegetation.

This trip is best undertaken with an experienced guide. Approximately 2 miles downstream from Goose Pasture, the river flows into a braided system of streams, some of which appear to be candidates for the main channel. Most eventually join with the Aucilla but are not passable. Bear right. The streams ultimately come back together and the channel widens to 50 feet. Eventually the river forks again at a field of wild rice. Go right here as well. Here you work your way through vegetation for approximately 40 yards until the river takes a hard right. Here, look for an old iron post on the left in the rice field that marks the entrance to the Slave Canal, which is on the right. There are also reports of a wood duck box. Turn right into the canal and look for stacked rocks that mark the construction effort by slaves in the 1850s. The canal eventually connects to the Aucilla, where you turn upstream and paddle 1,500 yards to exit at Nutall Rise Landing. www.dep.state.fl.us/gwt

Goose Pasture Recreation Area

3900 COMMONWEALTH BLVD, MS 100, TALLAHASSEE, FL
This recreation area, which features a boat ramp, camping sites, and port-a-lets, is used by campers, fishermen, and canoeists to access the Wacissa River. Most fishermen go upstream to catch largemouth and Suwannee bass, and most canoeists go downstream to join the Aucilla River through the Slave Canal. From the town of Wacissa, take State Route 59 south for 14 miles to US 98. Turn

left (east) onto US 98 until you cross the Aucilla River. Turn left on the second paved road (SR 14) off US 98. Drive approximately 3 miles on pavement until it turns into a dirt road. Take a left (east) at the first dirt crossroad. Continue for approximately 6 miles, going straight where the road forks. The road dead-ends at Goose Pasture Recreation Area.

Aucilla River Canoe Trail

3900 COMMONWEALTH BLVD, MS 795, TALLAHASSEE, FL
The Aucilla River Canoe Trail is officially designated as part of Florida's Statewide System of Greenways and Trails. Officially 19 miles in length, canoers and kayakers will experience the dark, coffee-colored waters of a blackwater river, surrounded by high limestone banks, bottomland forests, and cypress-gum swamps. An excellent fishing river for largemouth and Suwannee bass, the Aucilla has some of the Florida Panhandle's best (and only) whitewater, as the Aucilla River runs over shoals and the remains of two old rock dams. Alligators, turtles, snakes, and frogs are common sights, as are river otters, hawks, and a variety of wading birds. Check for flow levels before making your trip. Very high water broadens the river and can make the main channel difficult to find. Low water produces more shoals.

The first section, which runs 13 miles, starts south of the US 27 Bridge 1 mile southeast of Lamont. The take out is at the CR 257/14 Bridge, approximately 7.5 miles southwest of Lamont. The second section goes south from here approximately 6 miles to the Cabbage Grove area. For the take out, take SR 257/14 south from Lamont. Cross the Aucilla River bridge. Turn west just before Cabbage Grove Fire Tower. Continue .75 mile around first bend to the left and turn onto dirt (logging) road on the right. Follow this road 2.5 miles to its end. A trail to the right leads to landing. Continuing further south, a boater will run out of river where the Aucilla River dives underground. www.dep.state.fl.us/gwt

Florida Trail/Aucilla River Trail/Aucilla River Sinks Trail

3900 COMMONWEALTH BLVD, MS 795, TALLAHASSEE, FL
This trail is a 17-mile extension spur off the Florida Trail, running from Nutall Rise to the Aucilla River Sinks area and bordering several miles of the Aucilla River. This trail is an excellent way to get to know the curious phenomenon of limesinks and witness where the Aucilla goes underground before emerging at Nutall Rise to flow uninterrupted to Apalachee Bay. Jungle-like scenery of oak, palmetto, gum, and magnolia draped with Spanish moss and grape vines make for a memorable hike.

The path is marked with Florida Trail signs, making it easy to find your way. The trailhead begins on the western side of the Aucilla River Bridge on US 98 at Nutall Rise and then goes east for 3 miles on the shoulder of the highway until it turns north on Powell Hammock Road. From here you hike along a graded road until the trail turns to the west into the forest. At approximately mile 8, hikers start to encounter the series of sinks beginning with Twin Sinks and Sarasinks. After crossing a dirt road and walking north, you find Chocolate Sink, New Sink, Mosquito Slap Sink, and Hurry Up Sink. After another dirt road, you find Kitchen Sink, Long Suffering Sink, Ryan Sink, Dragonfly Sink, and Watts Sink. After the next road, you find Frink Sink, Sunshine Sink, and Long Sink, and then cross another road to Breakdown Sink. On the other side of Goose Pasture road are Roadside Sink, Overflow Sink, Vortex Sink, and the Silver Blaze Tree, a 1984 commemoration of the completion of a major connection to the Florida trail. The trail continues another 7.1 miles along the east bank of the river. At approximately



mile 17, the trail ends near a campsite, just short of the Walker Springs Bridge and two miles east of CR 14. www.floridatrail.org

Econfina River State Park

4384 ECONFINA RIVER ROAD, LAMONT, FL. 32336. (850) 922-6007
The park consists of 3,377 acres of pine flatwoods, oak/palm forests, and salt marsh, and is used as a jumping off point for salt water fishing downstream and freshwater fishing upstream. The park features a boat ramp, picnic facilities, hiking, biking, and horseback trails, and cabins for rent with refrigerators and microwaves. Cabins can be reserved by calling (850) 584-3026. Equestrians must register with the park office prior to using a trail. Located in Taylor County at the end of State Road 14, south of U.S. 98. www.floridastateparks.org



Wakulla Springs State Park

550 WAKULLA PARK DRIVE, WAKULLA SPRINGS, FL. 32327 (850) 224-5950
This state park provides the opportunity to experience one of Florida's natural springs just a few miles away from the Aucilla River basin. Wakulla is one of the largest and deepest freshwater springs in the world and it plays host to an abundance of wildlife, including alligators, turtles, deer, and birds. Riverboat and glass bottom boat tours are offered when conditions are appropriate. The park features hiking, biking, and equestrian trails, swimming, picnic facilities, a playground, and rooms at the historic Wakulla Springs Lodge, built in 1937 by financier Edward Ball. Located 14 miles south of Tallahassee on State Road 267 at the intersection with State Road 61. www.floridastateparks.org

Rare, Threatened, and Endangered Species in the Aucilla River Watershed

This list was generated using the Florida Natural Areas Inventory Tracking List database for Florida's endangered species and species of special concern for Taylor, Madison, and Jefferson counties, and the Georgia Department of Natural Resources Special Concern List for Thomas County, through which the Aucilla River flows.

Federal Status Key (From: http://species.fws.gov/)	
E:	Endangered
T:	Threatened
SAT, T(S/A): Similarity of Appearance to a Threatened Taxon	
None: No Federal Status	
FNAI Global Rank Definitions (From: www.fnai.org)	
G1:	Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1,000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2:	Imperiled globally because of rarity (6 to 20 occurrences or less than 3,000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3:	Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4:	Apparently secure globally (may be rare in parts of range).
G5:	Demonstrably secure globally.
GH:	Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
G#?:	Tentative rank (e.g., G2?).
G#G#:	Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
G#T#:	Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
G#Q:	Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
G#T#Q:	Same as above, but validity as subspecies or variety is questioned.
GNR:	This code appears in the chart for <i>Sphodros abbotti</i> , however, there is no corresponding code in the key.
G?:	Not yet ranked (temporary).
Florida State Rank Key (From: www.fnai.org)	
S1:	Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1,000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2:	Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3,000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3:	Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4:	Apparently secure in Florida (may be rare in parts of range).
S5:	Demonstrably secure in Florida.
SH:	Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
SU:	This code appears in the chart for <i>Lasiurus cinereus</i> , however, there is no corresponding code in the key.
N/A:	Not listed in FL.
Florida State Legal Status (From: www.fnai.org)	
<i>Provided by FNAI for information only.</i>	
<i>For official definitions and lists of protected species, consult the relevant federal agency.</i>	
Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.	
LE:	Endangered: species, subspecies, or isolated population so few or depleted in number or so restricted in range that it is in imminent danger of extinction.
LT:	Threatened: species, subspecies, or isolated population facing a very high risk of extinction in the future.
LS:	Species of Special Concern is a species, subspecies, or isolated population which is facing a moderate risk of extinction in the future.

Florida State Legal Status (From: www.fnai.org)		(CONTINUED)
N:	Not currently listed, nor currently being considered for listing.	
N/A:	No listing found.	
Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, (352) 372-3505 or see: http://doacs.state.fl.us/~pi/5b-40.htm#.0055 .		
LE:	Endangered: species native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.	
LT:	Threatened: species native to Florida that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.	
N:	Not currently listed, nor currently being considered for listing.	
Georgia State Status Key		
<i>(From: http://georgiawildlife.dnr.state.ga.us/content/specialconcernplants.asp, and/or from: http://georgiawildlife.dnr.state.ga.us/content/specialconcernanimals.asp/, Georgia Department of Natural Resources web sites)</i>		
<i>The following abbreviations are used to indicate the status of state-protected plants and animals or those proposed for state protection in Georgia.</i>		
E:	Listed as endangered. A species which is in danger of extinction throughout all or part of its range.	
T:	Listed as threatened. A species which is likely to become an endangered species in the foreseeable future throughout all or parts of its range.	
R:	Listed as rare. A species which may not be endangered or threatened but which should be protected because of its scarcity.	
U:	Listed as unusual (and thus deserving of special consideration). Plants subject to commercial exploitation would have this status.	
N/A:	Not listed in GA.	
Georgia State Rank Key		
<i>(From: http://georgiawildlife.dnr.state.ga.us/content/specialconcernplants.asp, and/or from: http://georgiawildlife.dnr.state.ga.us/content/specialconcernanimals.asp - Georgia Department of Natural Resources web sites)</i>		
S1:	Critically imperiled in state because of extreme rarity (5 or fewer occurrences).	
S2:	Imperiled in state because of rarity (6 to 20 occurrences).	
S3:	Rare or uncommon in state (on the order of 21 to 100 occurrences).	
S4:	Apparently secure in state (of no immediate conservation concern).	
SH:	Apparently extirpated from state. GXC is known only in cultivation/captivity.	
SH:	Of historical occurrence in the state, perhaps not verified in the past 20 years, but suspected to be extant still.	
?:	Denotes questionable rank; best guess given whenever possible (e.g. S3?).	
SP:	This code appears in the chart for <i>Glebula rotundata</i> , however, there is no corresponding code in the key.	
N/A:	Not listed in GA.	
Special Animal Listings - State And Federal Status (From: www.fnai.org)		
Pandion haliaetus (osprey): State listed as LS (Species of Special Concern) in Monroe County only; not listed in rest of state. *Monroe County is not part of the Ochlockonee River Watershed.		
Ursus americanus floridanus (Florida black bear): State listed as LT but not applicable in Baker and Columbia counties or the Apalachicola National Forest.		

ANIMALS ANIMALS ANIMALS ANIMALS ANIMALS ANIMALS ANIMALS ANIMALS							
SPECIES				STATUS/RANK			
Scientific name	Common name	Federal Status	Global Rank	FL State Rank	FL State Status	GA State Rank	GA State Status
AMPHIBIANS							
<i>Ambystoma cingulatum</i>	Flatwoods Salamander	T	G2G3	S2S3	LS	S2	T
<i>Ambystoma tigrinum</i>	Tiger Salamander	None	G5	S3	N	S3S4	N/A
<i>Amphiuma pholeter</i>	One-toed Amphiuma	None	G3	S3	N	S1	R
<i>Hemidactylium scutatum</i>	Four-toed Salamander	None	G5	S2S3	N	S3	N/A
<i>Necturus beyeri</i> complex	Gulf Coast Waterdog	N	G4	N/A	N/A	S3	N/A
<i>Notophthalmus perstriatus</i>	Striped Newt	None	G2G3	S2S3	N	S2	R
<i>Rana capito</i>	Gopher Frog	None	G3	S3	LS	S3	N/A
AMPHIPODS							
<i>Crangonyx grandimanus</i>	Florida Cave Amphipod	None	G3G4	S2	N	N/A	N/A
<i>Crangonyx hobbsi</i>	Hobbs' Cave Amphipod	None	G5	S2S3	N	N/A	N/A
BIRDS							
<i>Accipiter cooperii</i>	Cooper's Hawk	N	G5	S3	N	N/A	N/A
<i>Aimophila aestivalis</i>	Bachman's Sparrow	N	G3	S3	N	S3	R
<i>Ammodramus maritimus</i> peninsulae	Scott's Seaside Sparrow	N	G4T2	S3	LS	N/A	N/A
<i>Aramus guaraua</i>	Limpkin	N	G5	S3	LS	S1S2	N/A
<i>Ardea alba</i>	Great Egret	N	G5	S4	N	N/A	N/A
<i>Athene cunicularia</i> floridana	Florida Burrowing Owl	N	G4T3	S3	LS	N/A	N/A
<i>Buteo brachyurus</i>	Short-tailed Hawk	N	G4G5	S1	N	N/A	N/A
<i>Charadrius melodus</i>	Piping Plover	LT	G3	S2	LT	N/A	N/A
<i>Cistothorus palustris</i> marianae	Marian's Marsh Wren	N	G5T3	S3	LS	N/A	N/A
<i>Egretta caerulea</i>	Little Blue Heron	N	G5	S4	LS	N/A	N/A
<i>Egretta rufescens</i>	Reddish Egret	N	G4	S2	LS	N/A	N/A
<i>Egretta thula</i>	Snowy Egret	N	G5	S3	LS	N/A	N/A
<i>Egretta tricolor</i>	Tricolored Heron	N	G5	S4	LS	N/A	N/A
<i>Elanoides forficatus</i>	Swallow-tailed Kite	N	G5	S2	N	S2	R
<i>Eudocimus albus</i>	White Ibis	N	G5	S4	LS	N/A	N/A
<i>Falco columbarius</i>	Merlin	N	G5	S2	N	N/A	N/A
<i>Falco peregrinus</i>	Peregrine Falcon	N	G4	S2	LE	S1	E
<i>Falco sparverius</i> paulus	Southeastern American Kestrel	N	G5T4	S3	LT	S3	N/A
<i>Grus canadensis</i> pratensis	Florida Sandhill Crane	N	G5T2T3	S2S3	LT	S1	N/A
<i>Haliaeetus leucocephalus</i>	Bald Eagle	T	G4	S3	LT	S2	E
<i>Ixobrychus exilis</i>	Least Bittern	N	G5	S4	N	N/A	N/A
<i>Laterallus jamaicensis</i>	Black Rail	N	G4	S2	N	S2?	N/A
<i>Mycteria americana</i>	Wood Stork	E	G4	S2	LE	S2	E
<i>Nyctanassa violacea</i>	Yellow-crowned Night-heron	N	G5	S3	N	S3S4	N/A
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	N	G5	S3	N	S3S4	N/A
<i>Pandion haliaetus</i>	Osprey	N	G5	S3S4	LS*	N/A	N/A
<i>Pelecanus occidentalis</i>	Brown Pelican	N	G4	S3	LS	N/A	N/A
<i>Picoides borealis</i>	Red-cockaded Woodpecker	LE	G3	S2	LS	S2	E
<i>Picoides villosus</i>	Hairy Woodpecker	N	G5	S3	N	N/A	N/A
<i>Plegadis falcinellus</i>	Glossy Ibis	N	G5	S3	N	S2S3	N/A
<i>Rallus longirostris</i> scottii	Florida Clapper Rail	N	G5T3?	S3?	N	N/A	N/A
<i>Recurvirostra americana</i>	American Avocet	N	G5	S2	N	N/A	N/A
<i>Rynchops niger</i>	Black Skimmer	N	G5	S3	LS	S1	N/A
<i>Seiurus motacilla</i>	Louisiana Waterthrush	N	G5	S2	N	N/A	N/A
<i>Sitta carolinensis</i>	White-breasted Nuthatch	N	G5	S2	N	N/A	N/A
<i>Sterna antillarum</i>	Least Tern	N	G4	S3	LT	S3	R
<i>Sterna caspia</i>	Caspian Tern	N	G5	S2	N	N/A	N/A
<i>Sterna maxima</i>	Royal Tern	N	G5	S3	N	N/A	N/A
<i>Sterna sandvicensis</i>	Sandwich Tern	N	G5	S2	N	N/A	N/A
BIVALVES							
<i>Medionidus walkeri</i>	Suwannee Moccasinshell	N	G1	S1	N	N/A	N/A
<i>Quincuncina infucata</i>	Sculptured Pigtoe	N	G4	N/A	N/A	S3	N/A

SPECIES		STATUS/RANK					
Scientific name	Common name	Federal Status	Global Rank	FL State Rank	FL State Status	GA State Rank	GA State Status
DECAPODS							
<i>Procambarus horsti</i>	Big Blue Spring Cave Crayfish	N	G2G3	S1	N	N/A	N/A
<i>Procambarus pallidus</i>	Pallid Cave Crayfish	N	G5	S2S3	N	N/A	N/A
FISH							
<i>Acantharchus pomotis</i>	Mud Sunfish	N	G5	S3	N	N/A	N/A
<i>Alosa alabamae</i>	Alabama Shad	N	G3	N/A	N/A	S1	R
<i>Ameiurus serracanthus</i>	Spotted Bullhead	N	G3	S3	N	S2	R
<i>Cyprinella leedsi</i>	Bannerfin Shiner	N	G4	S3	N	S3S4	N/A
<i>Enneacanthus chaetodon</i>	Blackbanded Sunfish	N	G4	S3	N	N/A	N/A
<i>Etheostoma swaini</i>	Gulf Darter	N	G5	N/A	N/A	S3	N/A
<i>Micropterus notius</i>	Suwannee Bass	N	G3	S3	N	S1	R
<i>Notropis cummingsae</i>	Dusky Shiner	N	G5	S4	N	N/A	N/A
<i>Umbra pygmaea</i>	Eastern Mudminnow	N	G5	S3	N	N/A	N/A
INSECTS							
<i>Aphodius aegrotus</i>	Small Pocket Gopher Aphodius Beetle	N	GNR	S2S4	N	N/A	N/A
<i>Aphodius troglodytes</i>	Gopher Tortoise Aphodius Beetle	N	GNR	S2S3	N	N/A	N/A
<i>Bolbocerosoma hamatum</i>	Bicolored Burrowing Scarab Beetle	N	GNR	S3S4	N	N/A	N/A
<i>Cicindela hitilabris</i>	Peninsular Tiger Beetle	N	G4	S4	N	N/A	N/A
<i>Gomphaeschna antilope</i>	Taper-tailed Darner	N	G4	S4	N	N/A	N/A
<i>Gomphus hodgei</i>	Hodges’ Clubtail	N	G3	S3	N	N/A	N/A
<i>Mycotrupes cartwrighti</i>	Cartwright’s Mycotrupes Beetle	N	GNR	S1S3	N	N/A	N/A
<i>Remasellus parvus</i>	Swimming Little Florida Cave Isopod	N	G2G3	S1	N	N/A	N/A
MAMMALS							
<i>Corynorhinus rafinesquii</i>	Rafinesque’s Big-eared Bat	N	G3G4	S2	N	N/A	N/A
<i>Eptesicus fuscus</i>	Big Brown Bat	N	G5	S3	N	N/A	N/A
<i>Mustela frenata olivacea</i>	Southeastern Weasel	N	G5T4	S3?	N	N/A	N/A
<i>Mustela vison halilimnetes</i>	Gulf Salt Marsh Mink	N	G5T3	S3	N	N/A	N/A
<i>Myotis austroriparius</i>	Southeastern Bat	N	G3G4	S3	N	N/A	N/A
<i>Neofiber alleni</i>	Round-tailed Muskrat	N	G3	S3	N	N/A	N/A
<i>Podomys floridanus</i>	Florida Mouse	N	G3	S3	LS	N/A	N/A
<i>Sciurus niger shermani</i>	Sherman’s Fox Squirrel	N	G5T3	S3	LS	N/A	N/A
<i>Trichechus manatus</i>	Manatee	LE	G2	S2	LE	N/A	N/A
<i>Ursus americanus floridanus</i>	Florida Black Bear	N	G5T2	S2	LT	N/A	N/A
REPTILES							
<i>Alligator mississippiensis</i>	American Alligator	SAT	G5	S4	LS	N/A	N/A
<i>Caretta caretta</i>	Loggerhead	LT	G3	S3	LT	N/A	N/A
<i>Chelonia mydas</i>	Green Turtle	LE,LT	G3	S2	LE	N/A	N/A
<i>Clemmys guttata</i>	Spotted Turtle	N	G5	S3?	N	N/A	N/A
<i>Crotalus horridus</i>	Timber Rattlesnake	N	G4	S3	N	N/A	N/A
<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	N	G4	S3	N	N/A	N/A
<i>Dermochelys coriacea</i>	Leatherback	LE	G2	S2	LE	N/A	N/A
<i>Drymarchon couperi</i>	Eastern Indigo Snake	LT	G3	S3	LT	N/A	T
<i>Gopherus polyphemus</i>	Gopher Tortoise	N	G3	S3	LS	N/A	T
<i>Graptemys barbouri</i>	Barbour’s Map Turtle	N	G2	S2	LS	N/A	N/A
<i>Heterodon simus</i>	Southern Hognose Snake	N	G2	S2	N	N/A	N/A
<i>Lampropeltis calligaster</i>	Mole Snake	N	G5	S2S3	N	N/A	N/A
<i>Lampropeltis getula</i>	Common Kingsnake	N	G5	S2S3	N	N/A	N/A
<i>Lepidochelys kempii</i>	Kemp’s Ridley	LE	G1	S1	LE	N/A	N/A
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	N	G3G4	S3	LS	N/A	T
<i>Nerodia clarkii clarkii</i>	Gulf Salt Marsh Snake	N	G4T3	S3?	N	N/A	N/A
<i>Ophisaurus compressus</i>	Island Glass Lizard	N	G3G4	N/A	N/A	S2	N/A
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	N	G4T3?	S3	LS	N/A	N/A
<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	N	G5T3	S3	LS	N/A	N/A
<i>Pseudemys nelsoni</i> pop. 1	Florida Red-bellied Turtle –Florida Panhandle	N	G5T2Q	S2	N	N/A	N/A
SPIDERS							
<i>Sphodros abboti</i>	Blue Purse-web Spider	N	GNR	S4	N	N/A	N/A
<i>Sphodros rufipes</i>	Red-legged Purse-web Spider	N	G4	S3	N	N/A	N/A

PLANTS PLANTS PLANTS PLANTS PLANTS PLANTS PLANTS PLANTS							
SPECIES		STATUS/RANK					
Scientific name	Common name	Federal Status	Global Rank	FL State Rank	FL State Status	GA State Rank	GA State Status
<i>Agalinis divaricata</i>	Pineland Purple Foxglove	N	G3?	N/A	N/A	S1?	N/A
<i>Agrimonia incisa</i>	Incised Groove-bur	N	G3	S2	LE	N/A	N/A
<i>Angelica dentata</i>	Sandhill Angelica	N	G2G3	N/A	N/A	S2	N/A
<i>Asclepias pedicellata</i>	Savanna Milkweed	N	G4	N/A	N/A	S2	N/A
<i>Baptisia lecontei</i>	Leconte Wild Indigo	N	G4?	N/A	N/A	S1	N/A
<i>Brickellia cordifolia</i>	Flyr’s Brickell-bush	N	G2G3	S2	LE	N/A	N/A
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	N	G2G3	N/A	N/A	SH	N/A
<i>Carex chapmanii</i>	Chapman’s Sedge	N	G3	S3	LE	N/A	N/A
<i>Drosera tracyi</i>	Tracy’s Dew-threads	N	G3G4	N/A	N/A	S1	N/A
<i>Eleocharis rostellata</i>	Beaked Spikerush	N	G5	S1	LE	N/A	N/A
<i>Epidendrum conopseum</i>	Green-fly Orchid	N	G4	N/A	N/A	S3	N/A
<i>Forestiera godfreyi</i>	Godfrey’s Privet	N	G2	S2	LE	N/A	N/A
<i>Hexastylis arifolia</i>	Heartleaf	N	G5	S3	LT	N/A	N/A
<i>Leitneria floridana</i>	Corkwood	N	G3	S3	LT	N/A	N/A
<i>Liatris tenuifolia</i> var. quadriflora	Blazing Star	N	G4G5T4T5	N/A	N/A	S1?	N/A
<i>Lilium superbum</i>	Turk’s-cap Lily	N	G5	S1	LE	N/A	N/A
<i>Litsea aestivalis</i>	Pondspice	N	G3	S2	LE	N/A	N/A
<i>Macranthera flammea</i>	Flame Flower	N	G3	N/A	N/A	S1?	N/A
<i>Matelea floridana</i>	Florida Spiny-pod	N	G2	S2	LE	N/A	N/A
<i>Minuartia godfreyi</i>	Godfrey’s Sandwort	N	G1	S1	LE	N/A	N/A
<i>Oxypolis ternata</i>	Savanna Cowbane	N	G3	N/A	N/A	S2	N/A
<i>Phyllanthus leibmannianus</i> ssp. platylepis	Pinewood Dainties	N	G4T2	S2	LE	N/A	N/A
<i>Platanthera integra</i>	Yellow Fringeless Orchid	N	G3	N/A	N/A	S2	N/A
<i>Polygonum meisnerianum</i> var. beyrichianum	Mexican Tear-thumb	N	G5?T5?	S1	LE	N/A	N/A
<i>Pteroglossaspis ecristata</i>	Giant Orchid	N	G2G3	S2	LT	N/A	N/A
<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	N	G3	S3	LT	N/A	N/A
<i>Quercus austrina</i>	Bluff White Oak	N	G4?	N/A	N/A	S3?	N/A
<i>Rhynchospora harveyi</i> var. culixa	Georgia Beakrush	N	G1Q	SH	N	N/A	N/A
<i>Ribes echinellum</i>	Miccosukee Gooseberry	LT	G1	S1	LE	N/A	N/A
<i>Salix floridana</i>	Florida Willow	N	G2	S2	LE	N/A	N/A
<i>Sarracenia flava</i>	Yellow Flytrap	N	G5	N/A	N/A	S3S4	U
<i>Sarracenia minor</i>	Hooded Pitcherplant	N	G4	N/A	N/A	S4	U
<i>Sarracenia psittacina</i>	Parrot Pitcher-plant	N	G4	N/A	N/A	S2S3	T
<i>Sideroxylon lycioides</i>	Buckthorn	N	G5	S2	LE	N/A	N/A
<i>Sporobolus teretifolius</i>	Wire-leaf Dropseed	N	G2	N/A	N/A	S2	N/A
<i>Stachys hyssopifolia</i> var. lythroides	Tallahassee Hedge-nettle	N	G5T1Q	S1	N	N/A	N/A



