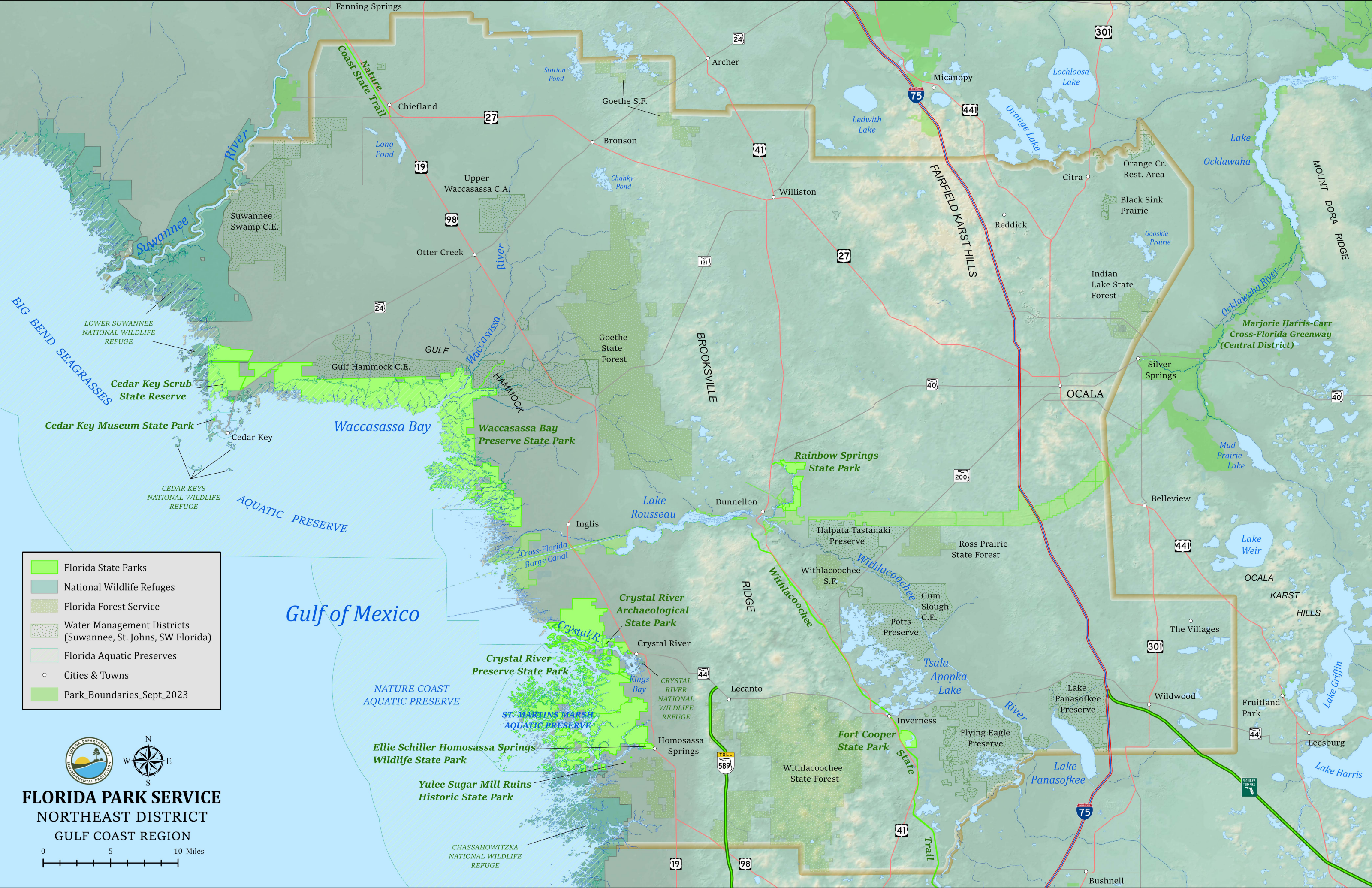




# **GULF COAST**

## Regional Introduction





Florida State Parks

National Wildlife Refuges



Florida Forest Service

Water Management Districts  
(Suwannee, St. Johns, SW Florida)

Florida Aquatic Preserves

Cities & Towns

Park\_Boundaries\_Sept\_2023



**FLORIDA PARK SERVICE**  
NORTHEAST DISTRICT  
GULF COAST REGION

0

5

10 Miles



# **GULF COAST REGION**

## **REGIONAL GEOGRAPHY**

Located along Florida's Nature Coast, the Gulf Coast planning region of District 2 encompasses Levy and Citrus counties, as well as adjacent portions of Marion and Sumter counties. Situated at the divide between north and central Florida, the planning region extends into each of these larger geographic subdivisions. This is an intersection of temperate and subtropical ranges, providing overlapping habitats for both north and south ranging species.

Both Levy and Citrus counties protect large sections of the vast marsh dominated coastline stretching from Apalachicola Bay to Tampa Bay. This is one of the largest contiguous salt marshes in southeastern North America. Levy County's south-facing salt marsh has distinction as the only such orientation along Florida's Gulf Coast outside of the panhandle, a geographic feature that lends definition to the Waccasassa Bay.

Large population centers have historically been absent near the coast due to lower elevations. However, the towns of Crystal River and Homosassa Springs have experienced significant growth and sprawl in recent decades. The largest city in the planning region is Ocala, located in the high rolling country of the Ocala Karst Hills.

Gulf Coast Region State Parks:

- Cedar Key Museum State Park.
- Cedar Key Scrub State Reserve.
- Crystal River Archaeological State Park.
- Crystal River Preserve State Park.
- Fort Cooper State Park.
- Ellie Schiller Homosassa Springs Wildlife State Park.
- Rainbow Springs State Park.
- Waccasassa Bay Preserve State Park.
- Yulee Sugar Mill Ruins Historic State Park.

These Division of Recreation and Parks (DRP) units protect and preserve exceptional examples of natural domain and significant cultural resources along the coastal wetlands, karsts and Brooksville Ridge highlands of Florida's Nature Coast. While these units are all identified as state parks, they are internally classified as either state park, state recreation area, state preserve, state reserve or state special feature site based on the inherent content and scale of their natural and cultural resources. These agency classifications determine how the individual units are managed in terms of program area focus.

## **REGIONAL GEOMORPHOLOGY TOPOGRAPHY AND SOILS**

The Gulf Coast planning region falls entirely within the Ocala Karst District, a geomorphological region that makes up the largest portion of District 2. The Ocala Karst District extends well beyond the boundaries of District 2, spanning a vast area from the Ochlockonee River to Tampa Bay. More precisely, the Gulf Coast planning region occurs within subsets of the Ocala Karst District known as provinces. Cedar Key Scrub State Reserve and Cedar Key Museum State Park occur within the Chiefland Karst Plain Province, a relatively flat coastal karst plain which is bisected by the Suwannee River. Areas of this province that do not lend their surface waters to the Suwannee River are internally drained via sinkhole depressions. Springs are also numerous, especially along the Suwannee River. The few higher elevations consist of ancient dunes, including

those that form Cedar Keys and the xeric uplands on the adjacent mainland. Many of these higher, well-drained uplands support oak-dominated scrublands like those encountered at Cedar Key Scrub State Reserve.

Waccasassa Bay Preserve State Park occurs within the Gulf Hammock geomorphological province, a poorly-drained coastal karst plain that slopes gently from the foot of the Brooksville Ridge to Waccasassa Bay. Eocene, Avon Park, dolomitic rock is very close to the surface here and commonly protrudes from the ground. Elsewhere, the Ocala limestone is similarly at or near the surface. Most of the province has a shallow soil consisting of geologically recent undifferentiated sediments of Ice Age origin. Karst features in this province are subtle, with few springs and only one known swallet. However, shallow circular depressions are quite common. The low elevation and limited relief correspond to wetlands such as basin swamp, dome swamp and hydric hammock. Periodically flooded alluvial forest, bottomland forest and floodplain swamp occur along the Waccasassa River and its tributary streams. This province drains to the Gulf of Mexico via the Waccasassa River, as well as shorter blackwater streams.

Crystal River Preserve State Park, Crystal River Archaeological State Park, Yulee Sugar Mill Ruins Historic State Park and Ellie Schiller Homosassa Springs Wildlife State Park are all located within the Crystal River Karst Plain Province. This is a small, coastal province with low elevations generally ranging between sea level and 25 feet. The Eocene Ocala Limestone is near the surface in most of the province, often exposed on islands and along the marshy shorelines that interface with pine flatwoods and coastal hammocks. The same occurs in nearshore waters where thin bottom sediments often reveal limestone. Many small sinkholes occur in the offshore seagrass flats, evidence that this submerged area is a “drowned karst.” Soil profiles thicken toward the eastern edge of the province near the Brooksville Ridge and larger karst features become more common. Between these two extremes is a low escarpment that gives rise to springs at Crystal River, Homosassa and Chassahowitzka.

Rainbow Springs State Park is situated at the junction of the Brooksville Ridge, Tsala Apopka Plain and Williston Karst Plain geomorphological provinces. Pleistocene coastal processes created the broad north-south Brooksville Ridge that runs roughly parallel to the Gulf Coast. The ridge is divided into two subregions by a low gap through which the Withlacoochee River flows. Rainbow Springs State Park and the associated Rainbow River occur within this gap at the far north end of the Tsala Apopka Plain Province. The Tsala Apopka Plain is a moderately flat, inland karst lying just east of the Brooksville Ridge. Sinkholes, sinkhole lakes and other large karst features occur throughout the province. Eocene Ocala Limestone is the oldest stratum-affecting landforms in most of the region and is responsible for the karst features in the landscape. There is a thin soil layer consisting of geologically recent sediments. An exception is the area just south of Rainbow Springs State Park, where older Miocene Hawthorn Group sediments consisting of silty clay sands occur. Quaternary beach ridges occur closer to the Brooksville Ridge. These ancient dunes consisting of marine-deposited sands manifest themselves as sandhills at Fort Cooper State Park near the town of Inverness. These well-drained sandhills support a scattered forest of longleaf pines and turkey oaks with a mixed understory of shrubs and grasses.

The Brooksville Ridge, just west of Fort Cooper State Park, is the result of dune sediments that accumulated during times when sea level was much higher than today. The ridge’s deep sands were likely deposited over several cycles of sea level rise corresponding with interglacial periods when continental ice sheets were in retreat. The high rolling sandhills along the western flank of the ridge are evidence of this ancient interglacial period shoreline. The sandhills, along with underlying karst dissolution, contribute to the province’s hilly topography. Moving inland from the coast, the Brooksville Ridge becomes apparent as rolling hills in the vicinity of Bronson, Dunnellon and Inverness. Most of the surface streams along the ridge are ephemeral and drain internally into sinkhole lakes.

## **REGIONAL HYDROLOGY**

Sea level rise is impacting natural community structure and function along the coastline of the Gulf Coast planning region. Many of the sabal palms, a signature species within the historically freshwater tidal swamps and marshes, are succumbing to the more frequent influxes of brackish water. Another visible sign of the region's rising coastal waters and warming climate is the expansion of mangroves into salt marsh. These trends are expected to continue, exacerbated by seasonal high tide events and tropical cyclones.

### **Waccasassa River**

The Waccasassa River is a 29-mile long, tidally influenced, highly braided blackwater stream. The river's headwaters are Waccasassa Flats, a mosaic of depressional wetlands in Gilchrist and Levy counties. Water from these wetlands flows directly to the Waccasassa or contributes to the Floridan aquifer via numerous swallets and sinkholes. Delivering freshwater and nutrients, the river plays a key role in maintaining the ecology of the productive Waccasassa Bay and the waters surrounding Cedar Key.

### **Withlacoochee River (South)**

The Withlacoochee River originates in the Green Swamp in Polk and Hillsborough counties and flows from south to north through the Tsala Apopka Chain of Lakes region, a mosaic of lakes and forested wetlands that make up about one-third of the basin. Fort Cooper State Park is located at the western edge of the lakes where elevations quickly transition to high rolling sandhills.

### **Rainbow River**

Rainbow Springs drains into the Withlacoochee via the Rainbow River. This clear spring run stream meanders 5.7 miles through the Dunnellon Gap in the Brooksville Ridge before merging with the Withlacoochee in the town of Dunnellon.

### **Crystal River**

The vast wetland ecology of Crystal River Preserve and the Crystal River Archaeological state parks are dependent on the freshwater influx from the spring-fed Crystal River. The river originates in Kings Bay and flows for approximately 7 miles through Crystal River Preserve State Park to the Gulf of Mexico. The Kings Bay springs complex, one of the largest spring complexes in Florida, is made up of approximately 70 springs.

### **Homosassa River**

The Homosassa River originates at Homosassa Springs located within Ellie Schiller Homosassa Springs Wildlife State Park. This clear, spring-fed stream flows almost 8 miles to the Gulf of Mexico. The stable water temperatures of the various contributing springs provide winter refuge for manatees. Like many Florida springs and spring runs, the long-term impacts of anthropogenic nutrient loading are evidenced by the increasing presence of macroalgae covering the limestone bottom and submerged outcroppings.

## **REGIONAL RESOURCE-BASED RECREATIONAL OPPORTUNITIES**

The planning region's rich cultural history is showcased through opportunities for learning at Cedar Key Museum State Park, Crystal River Archaeological State Park and Yulee Sugar Mill Ruins State Park. The Cedar Key Museum features shell and artifact collections and exhibits depicting historic times in the Cedar Keys archipelago. The archaeological history of the region's native mound builders is preserved at Crystal River Archaeological State Park. An interpretive trail winds through the extensive mound complex, and history is shared through the array of artifacts and displays in the visitor center. Just to the south, Yulee Sugar Mill Ruins

State Park offers a close-up walk around the ruins of an 1800s sugar mill – a window into the area’s past and the industry’s complex history.

The vast mosaic of salt marshes and other coastal wetlands at the Waccasassa Bay and Crystal River preserves provide excellent opportunities for both saltwater fishing as well as miles of paddling adventure on the nearshore waters and various salt creeks. Recreational opportunities at both parks focus on water-based activities in ecologically important estuarine wetlands.

Outdoor recreational activity at Cedar Key Scrub Reserve is focused on an extensive hiking and equestrian trail system. One of only two state park units classified as a reserve, Cedar Key Scrub State Reserve provides seasonal hunting access in coordination with the contiguous Lower Suwannee National Wildlife Refuge and with oversight from the Florida Fish and Wildlife Conservation Commission.

A former roadside attraction, Ellie Schiller Homosassa Springs Wildlife State showcases a wildlife walk featuring rescued native animals promoting the protection of their species. An underwater observatory allows visitors to "walk underwater" beneath the spring's surface to watch fish and manatees.

Located farther inland are Rainbow Springs State Park and Fort Cooper State Park. Like Homosassa Springs, Rainbow Springs is another former roadside attraction from the early to mid-20<sup>th</sup> century. Rainbow Springs State Park is a full-service park with extensive day-use facilities, as well as camping for registered overnight guests. The park’s recreational opportunities center on the springs complex and the associated Rainbow River. Water activities such as swimming, snorkeling, paddling and tubing are popular among day-use and overnight guests alike. Fort Cooper State Park, located south of Inverness, offers hiking, biking, nature study, and paddling opportunities on Lake Holathlikaha

## **REGIONAL INTERPRETIVE THEMES**

From the vast saltmarsh stretching along the Gulf coastline to the spring-fed riverine systems, water is a unifying interpretive theme flowing through the stories in the Gulf Coast Planning Region. The waves of people drawn to the region and their rich cultural heritage is also deeply connected to its waterways. Listed below is the **Central Park Theme (CPT)** for each park, highlighting its most significant natural or cultural features:

|  |  |
|--|--|
| Cedar Key Museum State Park            | From the pencil industry to the waterways it now depends on, Cedar Key's history is told through the collections of one of its most interesting residents at Cedar Key Museum State Park.                            |
| Cedar Key Scrub Reserve State Park     | Where tidal marshes meet towering pines, Cedar Key Scrub State Reserve nurtures one of Florida's most imperiled landscapes, the scrub.   |
| Crystal River Archeological State Park | The mound complex at Crystal River Archaeological State Park was once a flourishing destination where Native American cultures gathered to trade, mourn and celebrate along the fertile shores of the Crystal River. |
| Crystal River Preserve State Park      | Where a spring-fed river meets the salty Gulf of Mexico, wildlife thrives in a vibrant mosaic of coastal habitats at Crystal River Preserve State Park.  |

|  |   |
|--|---|
| Ellie Schiller Homosassa Springs Wildlife State Park | The life sustaining waters of Homosassa Springs are at the heart of a park for rescued wildlife whose stories as animal ambassadors illustrate how our choices can affect the health and survival of both the spring and its residents. |
| Fort Cooper State Park                               | Fort Cooper State Park preserves the story of the Seminole and their fight for freedom within the watery wilderness they were forced to call home, the Cove of the Withlacoochee.   |
| Rainbow Springs State Park                           | A former roadside attraction, Rainbow Springs State Park's historic walkways and cascading waterfalls give way to the natural beauty of a first magnitude spring.   |
| Waccasassa Bay Preserve State Park                   | The expansive tidal flats and palm tree islands of Waccasassa Bay Preserve may hold the secrets to the future of Florida's gulf coast and its increasingly threatened coastal hammocks.   |
| Yulee Sugar Mill Ruins Historic State Park           | An 1800s sugar plantation built and operated by enslaved laborers, Yulee Sugar Mill Ruins Historic State Park is a reminder of the complicated and hazardous history of one of Florida's first industries.                              |