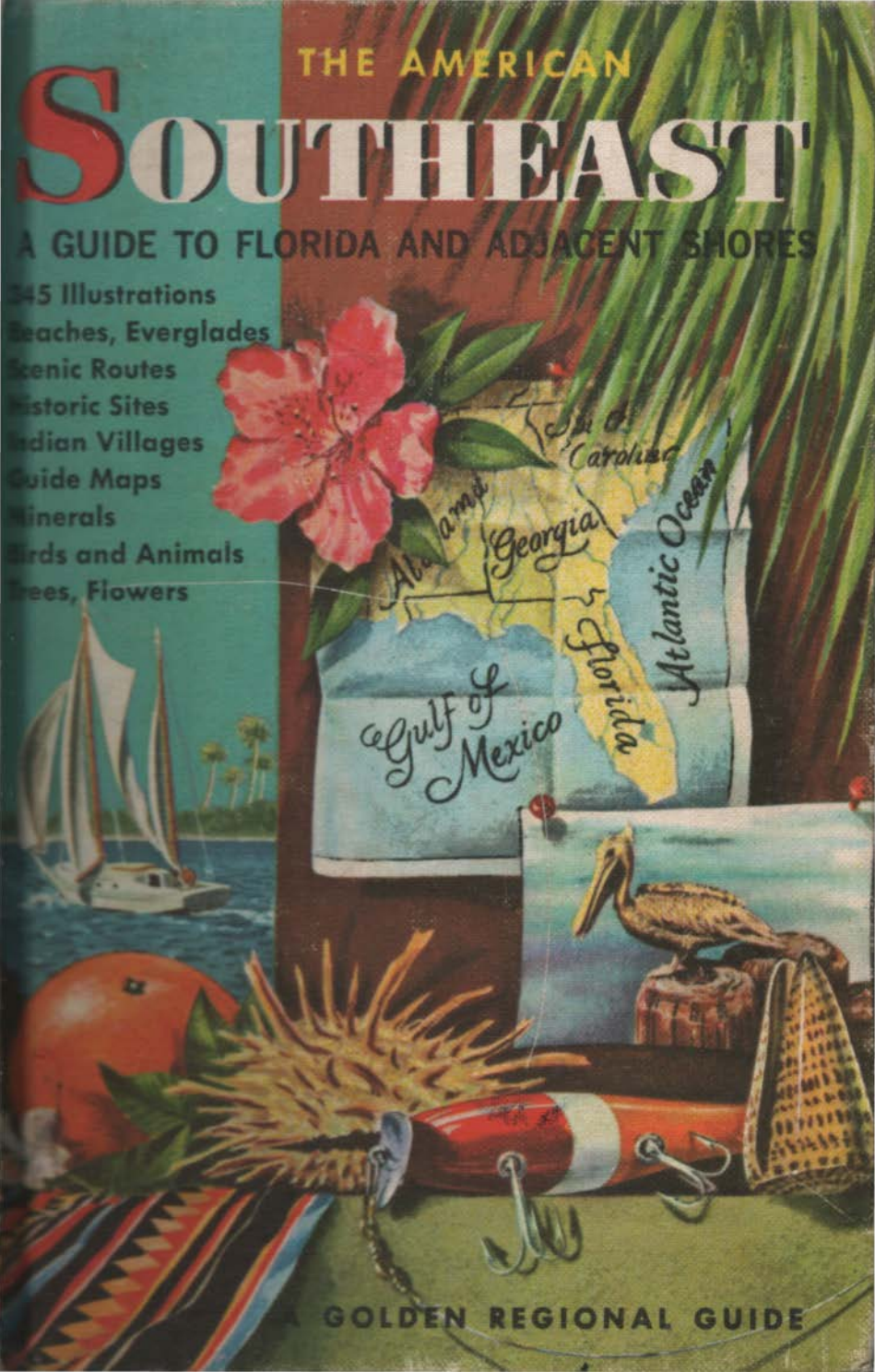
THE AMERICAN

SOUTHEAST

A GUIDE TO FLORIDA AND ADJACENT SHORES

345 Illustrations
Beaches, Everglades
Scenic Routes
Historic Sites
Indian Villages
Guide Maps
Minerals
Birds and Animals
Trees, Flowers



A GOLDEN REGIONAL GUIDE

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THE SOUTHEAST

A GUIDE TO FLORIDA AND NEARBY SHORES

by

HERBERT S. ZIM

in consultation with the staff of the

FLORIDA STATE MUSEUM
Gainesville, Florida

ILLUSTRATIONS BY DOROTHEA AND SY BARLOWE

A GOLDEN REGIONAL GUIDE

GOLDEN PRESS • NEW YORK

FOREWORD

With a climate uniquely favored, the Southeast supports a multitude of native and exotic plants and a richness of wildlife. These features, along with its subtropical scenery, bring it thousands of visitors. Here is a Golden Regional Guide that introduces the natural and human history of this fabulous region. It attempts to aid the reader to see, understand, and more thoroughly enjoy the Southland.

Scores of individuals have helped with this book. My gratitude to all, and especially to Arnold B. Grobman, Director of the Florida State Museum, and to Walter Auffenberg, Ripley P. Bullen, J. C. Dickinson, Jr., R. M. DeWitt, John D. Kilby, James N. Layne, A. M. Laessle and William J. Reimer. Thanks also to R. W. Patrick, U. of Florida, to Daniel B. Beard, formerly Superintendent of the Everglades Nat. Park, and to William B. Robertson and Ernest Christenson. Also to Robert P. Allen, Research Director of the Nat. Audubon Soc., Donald F. Hoffmeister, Hobart M. Smith and Hurst H. Shoemaker of the University of Illinois, and to Alexander C. Martin.

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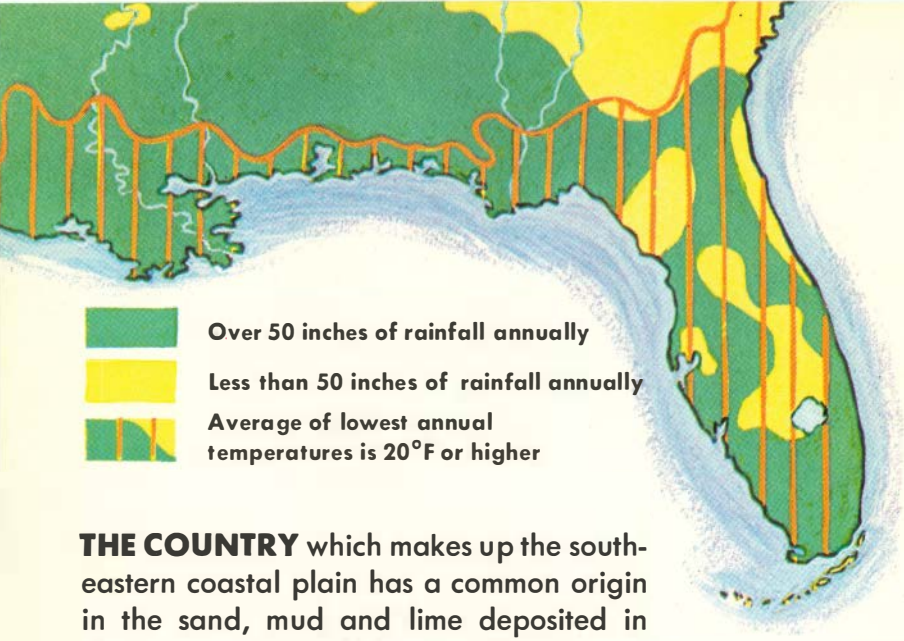
Wood ibis in flight

MEET THE SOUTHEAST

This is an area hard to bound or define. It is part of the great coastal plain which begins at Cape Cod and stretches along the Atlantic, expanding to include all of Florida and the lower Mississippi Valley as it curves to the west. Our area is further set off by two climatic conditions. First is its warmth. Over the past several decades, the coldest day in winter has averaged 20 degrees F. or higher—and in much of the region, frosts are rare. Second, most of this area receives 50 inches or more of rain annually. Thus, there is ample warmth and moisture for the growth of plants—some of which are not found elsewhere in the United States.

Our area of 120,000 to 150,000 square miles includes all of Florida and parts of at least five other states. It extends from eastern Texas to North Carolina. Whatever its exact boundaries, this area has about 24,000 miles of detailed shoreline including bays, sounds, and inlets. It is a diversified region of forests, farms, grasslands and wetlands. Famed for its agriculture, it is now developing new industries. As an all-year vacationland it has few competitors.

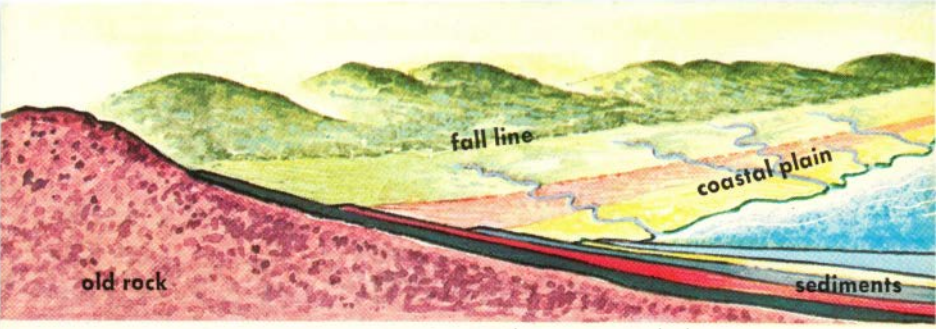

Montgomery
Columbus
Macon
SOUTH CAROLINA
Charleston
A M A
G E O R G I A
Albany
Savannah
Waycross
Panama City
Tallahassee
F L O R I D A
CENTRAL TIME
EASTERN TIME
Apalachicola
Perry
Jacksonville
Gainesville
St. Augustine
Ocala
Daytona Beach
Orlando
Tarpon Springs
Tampa
Lakeland
Cape Canaveral
St. Petersburg
Winter Haven
Bradenton
Sarasota
Sebring
Fort Pierce
Brighton
Lake Okeechobee
Stuart
La Belle
Fort Myers
Clewiston
Naples
TAMIAMI TRAIL
SUNSHINE PARKWAY
Fort Lauderdale
Miami
EVERGLADES NATIONAL PARK
Homestead
Flamingo
Tavernier
Key West
Marathon
ATLANTIC OCEAN
N
Scale of miles
0 10 20 30 40 50 100 150



THE COUNTRY which makes up the southeastern coastal plain has a common origin in the sand, mud and lime deposited in shallow water as the East and Gulf coasts slowly rose during the past 50 million years. Soils formed from these sediments are mainly sand, marl and silt, with areas of peat and muck. The sandy soils are low in organic matter and lose water rapidly. The peat and muck are just the opposite. Fertilizing, draining and irrigating, can make even poorer soils yield abundantly.

Long growing seasons and adequate rainfall are compensations for poor soil. Nearly all of this region has a growing season of more than 250 days, and the annual rainfall is usually between 50 and 60 inches. The area receives from 50 to 70 per cent of all possible sunshine—this varies, of course, with location and season.

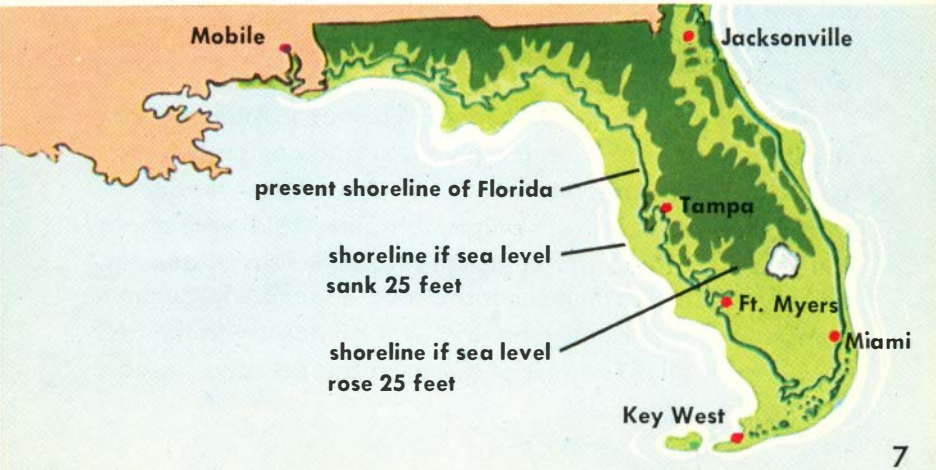
THE LAND forming the low coastal plain is cut by rivers and broken by low ridges that parallel the ocean. Along the Atlantic, the plain is about 100 miles wide. Its southward sweep includes all of Florida. To the west it widens to about 200 miles along the Gulf, loops up the Mississippi Valley, narrows in Texas.



Cross-section and view of Atlantic Coastal Plain

Along the Atlantic, the coastal plain slopes 20 to 30 feet per mile toward the sea. Along the Gulf, the slope is greater—30 to 40 feet per mile. In some places these sloping sediments are 20,000 feet thick, lying on a floor of ancient, altered rocks. The coastal plains sediments have not been disturbed or altered. Younger layers lie closer to the shore, where new sediments form. Older layers reach the surface farther inland, as shown above. The ancient rocks break through at the fall line.

Florida's highest point is only 345 feet above sea level, and this is high for the coastal plain as a whole. The land is low and flat over large areas. If the sea level shifted 25 feet one way or another, there would be great changes in the size and shape of Florida.



Lighthouse—Amelia Island. *FNB*

THE SEA is intimately connected with the land. Below the tidemark, the bottom—usually smooth and sandy—slopes gradually to the continental shelf. Spits, bars and shoals are common, and coral reefs ring southern Florida. Good harbors are at the mouths of rivers. Exposed shores occasionally suffer storm damage. Sport and commercial fishing are excellent, as are sailing and boating. The Inland Waterway provides a protected route for small craft.

CLIMATE determines this region (p. 4) and is one of its great natural resources. Mildness is the keynote. The difference between average January and July temperatures ranges from 13° for Key West to 33° at Jackson, Miss. Averages tell only part of the story. The highest recorded temperature for this region was about 105° and the lowest, just below zero. Temperatures are more extreme inland and to the north. Along the coasts, the sea has a moderating effect.

About half the region's rainfall comes in summer. Fogs are local and brief. Completely clear and completely overcast days are rare. More typical is a happy medium of partly clouded skies with ample sunshine. Relative humidity runs from 70 to 85 per cent, varying with season and time of day. Majestic thunderstorms are common in summer. Tampa tops the country, having over 80 days with thunderstorms annually. The rest of the area has 60 days or more, but hail is rare.

Though this is a hurricane area, less than 100 hurricanes have been recorded since weather records have been kept. They average less than two a year, but seem to be gradually increasing. Eighty per cent occur during August, September and October. With advanced warnings and better building construction, loss of life has been sharply reduced in recent years. The most violent hurricane known hit the Florida Keys on September 2, 1935, when the barometer gave the lowest reading ever recorded in the United States—26.35 in. The U. S. Weather Bureau maintains a hurricane warning center in Miami.

SUMMARY OF SOUTHEAST CLIMATE

City	Average Jan. temp.	Average July temp.	Avg. annual rainfall	Growing season
Baton Rouge, La.	53°F.	82°F.	58 in.	269 days
Biloxi, Miss.	54	82	59	276
Charleston, S.C.	50	81	40	285
Ft. Myers, Fla.	65	81	52	365
Gainesville, Fla.	58	81	49	285
Jacksonville, Fla.	57	81	48	299
Jackson, Miss.	49	82	51	234
Key West, Fla.	70	83	38	365
Miami, Fla.	68	82	59	365
Mobile, Ala.	53	82	61	298
New Orleans, La.	54	80	60	292
St. Augustine, Fla.	58	81	48	312
St. Petersburg, Fla.	64	83	51	365
Savannah, Ga.	53	81	45	273
Tallahassee, Fla.	55	81	55	282

Typical extremes of temperature

City	Highest recorded	Lowest recorded
Charleston, S.C.	104°F.	7°F.
Jacksonville, Fla.	104	10
Key West, Fla.	100	41
Miami, Fla.	98	27
Mobile, Ala.	103	—1
New Orleans, La.	102	7
St. Petersburg, Fla.	98	28
Savannah, Ga.	105	8

An Everglade Kite flies over Lake Okeechobee.

ANIMAL LIFE, so varied and abundant, is one of the prime attractions of this region. Of all the conspicuous animals, the birds are most attractive and most numerous —over 500 kinds have been seen, including several rare species like the Everglade Kite (above), found only near Lake Okeechobee in Florida. About 1000 kinds of fishes live in fresh and salt water.

PLANT LIFE in the Southeast is as rich as animal life, if not richer. In addition to a wealth of native plants—flowers, shrubs and trees—there are hundreds of exotic plants grown in gardens and as ornamentals. One sees trees and shrubs from Africa, Asia, Australia and South America growing along the streets. Subtropical Florida has flowers all year round, and scores of unique plants.

PEOPLE make this area a new kind of melting pot. The rising population is so swelled from all parts of the North that here, farthest south, much of the region is not typically Southern. Yet, there is still a large Negro population trying to find its proper place in the new South. Also, rural areas are still dominated by local folk of old stock, who live close to the soil. Some are "crackers"—whose ancestors were known for their uncanny skill at cracking the bullwhip. On the Keys, the old-timers are "Conchs." Older still are the Seminole, who include remnants of other Indian tribes.

Florida bullwhip

TRAVEL IN THE SOUTHEAST is easy—by air, train, bus or in the family car. Drive over modern, paved roads—nary a mountain! Graveled and all-weather unpaved roads are safe, but make inquiries before going back-country on dirt. Check your car, of course, before a long trip. Make your plans well in advance. Get pamphlets from Chambers of Commerce and from state and federal information agencies (p. 123). If you want to camp, there are fine camp sites in State Parks, National Parks and Forests. You will find ample motels and trailer courts. In resort areas, rates are higher from December to April, but elsewhere costs for food and lodging are distinctly less.

You are coming to a warm region. Light, informal clothing is desirable. Bring equipment for swimming, fishing and photography. Watch out for sunburn. When hiking, wear stout shoes and be careful on trails. As a visitor and guest, respect people and property. Littering the highway is not only bad manners, but it may also bring a stiff fine. Enjoy the parks and wild areas, and keep them clean. Leave wild animals alone and remember that wildflowers are never as beautiful as in their natural surroundings.

A walk in Myakka River State Park, Florida.

FNB

TOURING THE SOUTHEAST has infinite possibilities. Here are three samples for shorter vacations. The directions can be reversed and the tours extended—a full month is needed to explore this region adequately. Pages 15 to 21 and 123 to 156 give details on what to see.

One-week tour is jampacked—250 miles daily, plus many things to see. Add a day or two if you can.

First Day: Charleston, S.C. (historic sites, gardens) via Savannah and Jacksonville to St. Augustine. Allow late afternoon and evening for Castillo de San Marcos Nat. Monument and St. Augustine.

Second Day: Follow Rte A1A, the shore road to Marineland and Daytona Beach; then via US 92 to Deland, Orlando and Lake Wales.

Third Day: On to Sebring (Highland Hammock). Then east on Rte 70 to Brighton and south through the Seminole Indian Reservation. On to Lake Okeechobee (US 27), Clewiston—through Everglades to Miami.

Fourth Day: Around Miami. Try the Fairchild Garden, Matheson Hammock, University of Miami campus, Parrot Jungle, Seaquarium. Then head west on the Tamiami Trail (US 41) to Fort Myers.

Fifth Day: From Fort Myers continue north through Sarasota and Bradenton, over the majestic Sunshine Skyway bridge to St. Petersburg. Now, along the shore (US 19-Alt.) to Tarpon Springs; hence via Brooksville (Rtes 41, 200) to Ocala (Silver Springs, etc.).

Sixth Day: North to Gainesville (University of Fla. and Fla. State Museum); then on to Perry (US 27) and Tallahassee (capital and State University Museums). Continue west into the Florida panhandle to spend the night at Panama City.

Seventh Day: Hurry on through Pensacola (US 98), Mobile (historic sites, Azalea gardens), Biloxi, and into New Orleans. Seven days—about 1750 miles—and many pleasant memories.

One-week tour in southern Florida, easier (700 to 800 miles) and less hurried, gives you the feel of the region. Best from December to June.

First Day: Miami and vicinity. Choose two or more: Fairchild Garden, Matheson Hammock, Seaquarium, University of Miami campus, Parrot Jungle, Serpentarium, Monkey Jungle.

Second Day: Spend the day (or most of it) at Everglades National Park; on the Anhinga and Gumbo Limbo trails. Drive down to Flamingo. End the day there, or drive on to Homestead or the Upper Keys.

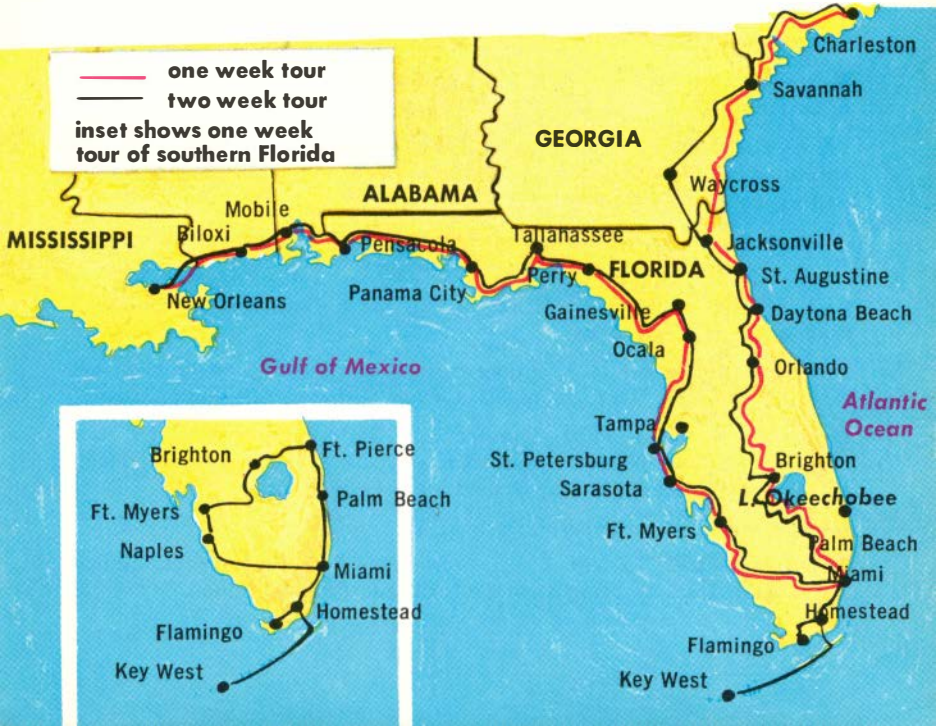
Third Day: Down the Keys through Tavernier and Marathon, over the 7-mile bridge, to Big Pine Key (Key Deer) and on to Key West.

Fourth Day: Back up through the Keys to Homestead. Take Rte 27 to the Tamiami Trail and head west to Everglades or Marco Island.

Fifth Day: On through Naples (Caribbean Gardens) to Fort Myers (Edison's winter home), with a side trip to Sanibel Island, if you like.
Sixth Day: Turn east (Rte 80) through La Belle; then on north through Seminole Indian Reservation (Rte S721). At Brighton, Rte 70 will take you directly to Ft. Pierce on the east coast.
Seventh Day: Head south again through Stuart (Menninger Nursery); go to Palm Beach, Fort Lauderdale, and on to Miami.

Two-week tour gives a more relaxed look at the Southeast with about 1800 miles of driving.

One day: Charleston, S.C., via Savannah, to Waycross, Ga. and the famed Okefenokee Swamp.
One day: Jacksonville, St. Augustine, Winter Park and Orlando.
Two days: Winter Haven, Lake Wales, Brighton Ind. Reservation, Clewiston and Miami.
Two days: Miami: museums, parks and commercial attractions.
Two days: To Everglades Nat. Park, the Florida Keys and Key West.
One day: Back via Homestead; Tamiami Trail to Fort Myers.
Two days: To Sarasota, St. Petersburg, Tarpon Springs, and Ocala.
One day: To Gainesville, Perry and (via US 98) to Tallahassee.
One day: On to Panama City via Apalachicola, and Pensacola; finish the day at Mobile.
One day: Via Biloxi, to New Orleans and the Bayou country.



CALENDAR OF EVENTS

(Verify these dates locally)

January—Jan. 1, New Year's football classics—Orange Bowl, Miami, and Sugar Bowl, New Orleans; New Year's Regatta, Ft. Myers; Jan. 6, Greek Epiphany Ceremony, Tarpon Springs; late January, Florida Orange Festival, Winter Haven; late January or early February, Florida State Fair and Gasparilla Pirate Festival, Tampa.

February—through March, Azalea Trail Festival, Mobile; February Camellia Show, Savannah; week preceding Shrove Tues., Mardi Gras at Mobile, Biloxi, New Orleans; Feb. 10, Festival of Light, Ft. Myers; mid-February, Central Fla. Exposition, Orlando; Feb. 24, Cuban Independence Day, Key West, Tampa. No fixed date, Azalea Festival, Palatka, Fla.; the Pageant of Sara de Soto and Country Fair at Sarasota; International Orchid Show, Miami.

March—Mar. 1 to 5, Strawberry Festival, Plant City, Fla.; Mar. 2 to 9, L.S.U. Livestock Show and Rodeo, Baton Rouge; watch locally this month also for Pensacola's Camellia Show, Mobile and the Gulf Coast's Azalea Trail and Spring Festival; the Natchez Pilgrimage to old estates; and either in March or April for the Audubon Pilgrimage in E. Feliciana Parish, La.

April—Early April, Miami Flower Show, Dinner Key; first two weeks, Spring Fiesta Events, New Orleans; near end of month, Spring Festival, Orange Bowl, Miami.

May—At Sarasota, watch for the three-day Fla. State Univ. circus; at La Fitte P.O., on the Delta in Louisiana, for the Pirogue Race.

June—Early June, Pan-American Regatta, New Orleans; start of Tarpon Roundups at Tampa, St. Petersburg and most sport-fishing centers, continuing through August.

July—No fixed date, at Mobile, Dauphin Island, Alabama Deep Sea Fishing Rodeo.

August—Watch for festivals of Blessing the Shrimp Fleet at bayous, Houma, La. to Biloxi, Miss.

September—Sept. 1 to 3, Shrimp Festival and Blessing of the Fleet at Morgan City, La.; Sept. 28 to 30, Cotton Festival, Ville Platte, La.

October—Month of Fairs: Greater Gulf State Fair, Mobile; N. Fla. Fair, Tallahassee; Rice Carnival, Crowley, La.; Sugar Festival, New Iberia, La.; Gainesville, Fla. Homecoming Festivities.

November—Peanut Festival, Dothan, Ala.

December—Dec. 15 to Feb. 15, Freshwater Bass Tournament, Clearwater, Fla.; Dec. 31, King Orange Jamboree Parade, Miami.

Miami—best-known Southeast city. *FNB*

THE MODERN SOUTHEAST

The Southeast impresses the visitor both with its rich past and its tremendous present. Industry and commerce have expanded; cities show phenomenal growth. Here are the larger cities. Some are centers of historic or scenic interest. For detailed information on what to see and do, see pages 123-156.

ATLANTIC COAST CITIES

Charleston, S.C. (pop. 70,200) is a large, protected port, rich in historic sites (p. 152). An important shipping center for cotton, tobacco and lumber. Industry includes clay products, lumber and pulp, textiles and fishing.

Savannah, Ga. (pop. 119,600) on the Savannah River, ships lumber, cotton, paper, and tobacco. Founded by James Oglethorpe in 1733; captured by the British during the Revolutionary War; Sherman's march to the sea ended here in 1864. Visit Forsyth Park. North on US 17 is Savannah Nat. Wildlife Refuge; south is U.S. Exp. Farm (bamboo farm).

Jacksonville, Fla., settled in 1816; named for Andrew Jackson in 1822. Industrial and commercial center; Florida's second city (pop. 204,500) and largest port, on St. Johns river, with paper, lumber, fertilizer and glass industries. See municipal zoo and beaches. U.S. "mothball fleet" is anchored at Green Cove Springs.

St. Augustine, Fla. (pop. 13,600)—see p. 128.

Daytona Beach, Fla. (pop. 30,200) has a broad, sandy beach over 500 ft. wide and 20 miles long. World speed records have been broken here. Driving on the beach is permitted.

THE GOLD COAST

West Palm Beach, Fla. (pop. 51,000), and adjoining Palm Beach are on Lake Worth, a large, protected waterway providing excellent boating. These renowned tourist centers are planted with royal palms and many other ornamentals. To the north at Stuart is the Menninger collection of tropical and flowering trees (visit on weekends). To the west, around Belle Glade, are miles of winter vegetables; also the Everglades Experimental Station. Lake Okeechobee is the protected nesting grounds for many birds. Farther west and north is the Brighton Seminole Indian Reservation.

Fort Lauderdale, Fla. (pop. 62,900) was founded during the Seminole wars by Major William Lauderdale. Nearby, at Dania, is a Seminole Indian reservation. A canal goes to Lake Okeechobee, past huge plantings of sugar cane and winter vegetables. Fort Lauderdale is a center for Gulf Stream fishing. Anderson Memorial Gardens has fine hibiscus.

Miami (pop. 260,000) merges into Miami Beach and two dozen more neighboring communities. A century ago only a few houses stood here on Miami River. Development was slow until the railroad came in 1896. Steady growth spiraled into a boom (1921-1925) and bust (1926). Since the depression, Miami has blossomed into the largest and fastest-growing metropolitan area in the South.

Miami and Miami Beach are famed as vacation centers. Miami also has expanding manufacturing and light industry. It is a major port for Latin-American air travel, and a center for commercial and sport fishing. To the south and west is the Redlands fruit and farming area. Visit the Subtropical Experiment Station near Homestead. Miami has many free (p. 139) and commercial attractions (p. 155). It is the gateway to the Everglades Nat. Park (pp. 124-125), the Bahamas and Cuba (pp. 20-21) and the Florida Keys (pp. 140-141).

Pool and gardens—Miami Beach hotel. *FNB*

Tallahassee—Florida state capital. FNB

INLAND CITIES

Albany, Ga. (pop. 31,200) is the largest pecan market, with nearly a million trees growing nearby. Radium Springs (US 19, south) is the largest spring in Georgia.

Waycross, Ga. (pop. 18,900) a tobacco auction town and shipping center for farm and livestock, is in the center of a rich lumber region. Okefenokee Swamp, to the south, is a 700-sq.-mile wildlife refuge. Exhibits at Okefenokee Swamp Park on Rte 177.

Tallahassee, Fla., capital of the state, has a population of 38,100. It is an agricultural trading center. For things to see and do—see p. 136.

Gainesville, Fla., is the seat of the University of Florida and of the Florida State Museum. It is also a center of tung oil production. These trees, from China (p. 58), yield oil for paints and varnishes. Pop. 26,900.

Ocala, Fla. (pop. 11,700) lies in the Florida lakes region. It is a resort center, 6 miles from Silver Springs (p. 156) and near other commercial attractions. Ocala Nat. Forest to the east includes a wildlife area with the state's largest deer herd; also the Jupiter Spring Rec. Area with camping, boating and swimming. The spring flows 6 million gallons daily.

Orlando, Fla., is the largest city of the Florida lakes region (pop. 52,400) and is far enough south to have rich growths of palms and semitropical plants. As a resort city it boasts a fine municipal park and recreation center, swimming, fishing and other sports. Drive through the countryside. Visit Lake Eola Park. Winter Park, home of Rollins College and Beal Shell Museum, is to the north.

Winter Haven, Fla., is another resort center, forty miles inland from Tampa and within easy reach of scores of lakes. It is in the heart of the citrus area (pp. 54 and 55). The Florida Citrus Exposition is held in January. Cypress Gardens and Bok Tower (carillons and bird sanctuary) are nearby. Pop. 8,600.

New Orleans—largest port in the Southeast. *N.O. Port Comm.*

GULF COAST CITIES

Beaumont, Tex., and Port Arthur mark the western limits of this guide. Beaumont is on the Neches River; Port Arthur on the protected mouth of the Sabine.

Lake Charles, La., is a port connected by canal with the Gulf. Ships rice, lumber and petroleum products. Pop. 41,000.

Baton Rouge, La. (pop. 125,000), at the head of deep-water navigation in the Mississippi, is a shipping center for cotton, sugar and petroleum. Also has large refineries. For what to see and do in this state capital, see p. 142.

New Orleans, La. is the largest city in the south (pop. 570,000) and the most important port. Salt, sulfur, oil, cotton, sugar and lumber are marketed and shipped to many Latin-American ports and to the North. It is a manufacturing center also. Pages 142-144 tell what to see and do in and around this historical city.

Biloxi, Miss., (Pop. 37,000) a large shrimp and fishing center, is better known as a resort town and the oldest settlement in the state (p. 146). Gulfport to the west and Pascagoula to the east are fishing and shipping ports.

Mobile, Ala., (pop. 129,000) is the state's only major port. Located on Mobile Bay, it is a shipping center for cotton and lumber. Paper, metal and petroleum are processed. For scenic and historic sights, see p. 148.

Pensacola, Fla., is 860 miles from Key West by road—a bit farther than New York is from Chicago. This resort, fishing and shipping center is on a protected harbor behind Santa Rosa Island.

Founded by the Spanish, Pensacola became the capital of Florida when the British took over in 1763. It changed hands 17 times before it became a permanent part of the U.S. See the forts on Santa Rosa Island and the fine beaches near them. Visit the fishing wharves (famous for red snapper) and the plaza. Pop. 43,500.

Panama City, Fla., (pop. 25,900) is a sport and commercial fishing town. Lumber, paper and chemicals are produced. Settled by the English about 1765.

Tampa and St. Petersburg, Fla., are twin cities on O!d Tampa Bay which have spread to the Gulf and inland. Both are resort cities with much to see and do (p. 137) but they are also major industrial and commercial cities. Tampa is a cigar center. Phosphates, citrus fruits and cement are exported. St. Petersburg has a population of 96,800; Tampa, 216,800.

Sarasota, Fla., south of St. Petersburg, is a resort center famed as the winter headquarters of the circus. A long string of beaches runs north and south. Fishing from piers and boats is popular. Among the commercial attractions (p. 156) are: the Ringling museums, Cars of Yesterday, Sunshine Springs and others. Bradenton, to the north, has DeSoto Nat. Memorial (p. 126) and the S. Florida Museum (adm. fee); Myakka River State Park is east on Rte. 72.

Fort Myers, Fla., (pop. 13,195), widely planted with palms, is a west-coast resort town noted for its climate, fishing and shelling. It is also a packing center for citrus fruits, vegetables and winter flowers. Thomas Edison's winter home and laboratory are open to the public (p. 155). By ferry visit Sanibel Island—famed for its shell beach. Swim at Fort Myers Beach where there are fine public recreational facilities.

Key West, Fla., lies due south of Fort Myers and only 90 miles from Havana, Cuba. This important naval base has served as a winter White House. Pages 140 and 141 list things to see and do.

Bandstand—Municipal Park, St. Petersburg, Florida.

FNB

Bahama market. *Bah. Dev. Comm.*

NEARBY ISLANDS—the Bahamas and Cuba—fall within the Southeast orbit. Both are easily reached by air or boat for quick visits or longer tours.

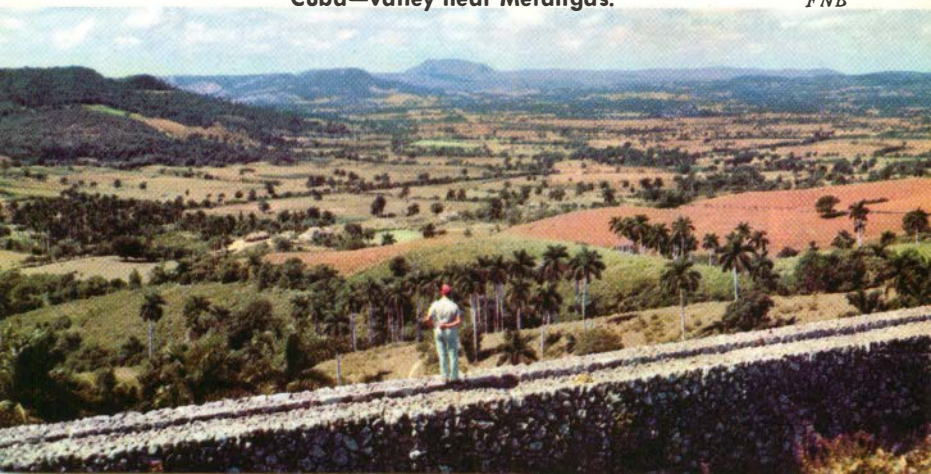
THE BAHAMAS extend to within 50 miles of Miami. Over 700 islands or cays and some 2000 reefs and rocks cover an area of over 4000 sq. mi. About 50 islands, of which Andros is the largest, are inhabited. Nassau, on New Providence Island, is the capital and resort center (pop. 46,200). Columbus landed in the Bahamas (Wattling Is.) in 1492. Many loyalists fled here after the American Revolution. These British islands are noted for boat building, fishing, and for winter vegetables. As a vacation-land, they offer a climate similar to southern Florida, plus excellent swimming, fishing and diving at tropical beaches or along the reefs. Historic sites and a foreign flavor make Nassau and the rest of the Bahamas a delight. Many plants and birds seen in southern Florida are found here, in addition to other Caribbean species.

Bimini and Cat Cay—closest to Florida—are noted for their fishing. Andros, largest of the islands, has rich bird life, especially around the fresh water ponds. Eleuthera was settled by colonists who came in 1648 in search of religious freedom. It is the best known of the outer islands. To the south are Cat Island, Long Island and the Exumas. All can be reached by air.

CUBA, nearly 800 miles long, is the largest of the West Indies. Its tropical climate is pleasantly moderated by trade winds. Rains are mainly in the summer and fall. Havana, the capital, is only 90 miles from Key West and is easily accessible by plane or boat from Miami. A "car ferry" operates from Key West. In Havana see the Capitol, Presidential Palace, the University and other government buildings; Morro Castle, the Columbus Cathedral and other churches and forts. Historic relics are preserved in the National Museum. Walk the broad streets, the boulevard along the sea wall, the old Spanish section with its narrow streets. See the new civic and residential areas.

Beyond Havana is a rich countryside of farms, sugar and tobacco plantations, small villages and old cities. The 2500 mile coastline supports fine commercial and sports fishing. Cuba has iron, copper, chrome and manganese deposits; also fine marble. There are tropical forests of pines and hardwoods, and interesting wildlife. In the mountain areas, which are relatively inaccessible, peaks rise over 6000 feet. About 2000 miles of roads are paved. Use extra care in driving and reserve accommodations in advance. Cuba is now out of bounds for United States citizens.

Cuba—valley near Metangas. *FNB*



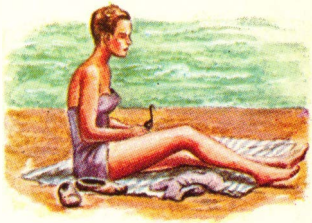
Chemical plant at Pensacola, Florida. *FNB*

THE INDUSTRIAL SOUTH is leaping ahead, especially the southeast area. Unfortunately, the story of industry is difficult to tell, for our southeast region includes only one state in full, and only parts of the remaining six. Hence the compilation of statistics is almost impossible. The industrial story of Florida holds generally true for nearby parts of the coastal plain, though it may not apply to neighboring states in their entirety. Here is the story of Florida's economic growth and details on southeast indutsry.

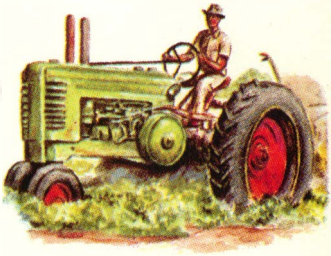
FLORIDA'S industrial growth has paced her rising population, increasing 72 per cent from 1950 to 1959. In 1958, residents had a total personal income of more than $8 billion. In 1959, more than 11 million tourists spent more than $1½ billion there and total agricultural production amounted to $800 million. Value added by manufacture in 1958 was $1½ billion, while mineral production was nearly $140 million. Export commerce, sales, services, electric power, commercial fishing, lumbering and naval stores, and military installations complete an impressive picture.

Shipping—Jacksonville, Florida. *FNB*

MAJOR SOUTHEAST INDUSTRIES



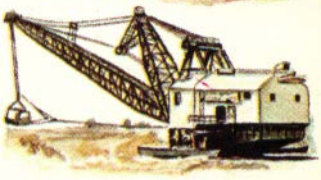
TOURISM is the region's major industry. Attracted by the climate, scenery, sports and wildlife, about ten million visitors find their way here every year.



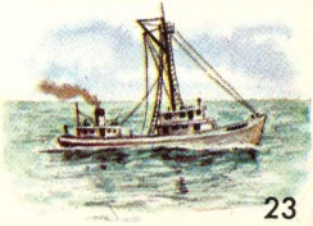
AGRICULTURE, long the backbone of this region, now has a new look in the form of huge corporate farms, giant citrus cooperatives and modern machines and methods. Citrus leads in Florida, with over 200 million bushels harvested yearly. To the north, cotton is still king, though soy beans, peanuts, tobacco and corn help diversify farming. Coastal Louisiana is our main rice area. Pecans and tung trees provide nuts for food and chemical use. Finally, the growing of winter vegetables and flowers for northern markets is steadily increasing.

LIVESTOCK is growing in importance too, and Florida now ranks 13th in cattle production. Brahman cattle and other purebred stock have improved southern herds. New pasture grasses and better feeds mean increased meat. The mild climate favors poultry (Georgia fryers are famous) and egg production.

LUMBER is being cut increasingly, but planting and seeding are conserving southern forests. Some cypress and much pine are cut for lumber. More pine goes into ties and poles, pulp for paper, cardboard and for chemical use.



MINERALS mined in this region include oil, salt and sulfur along the western Gulf and clay in Florida and Georgia. Florida has rich deposits of phosphate rock, used for fertilizer and in chemical products.

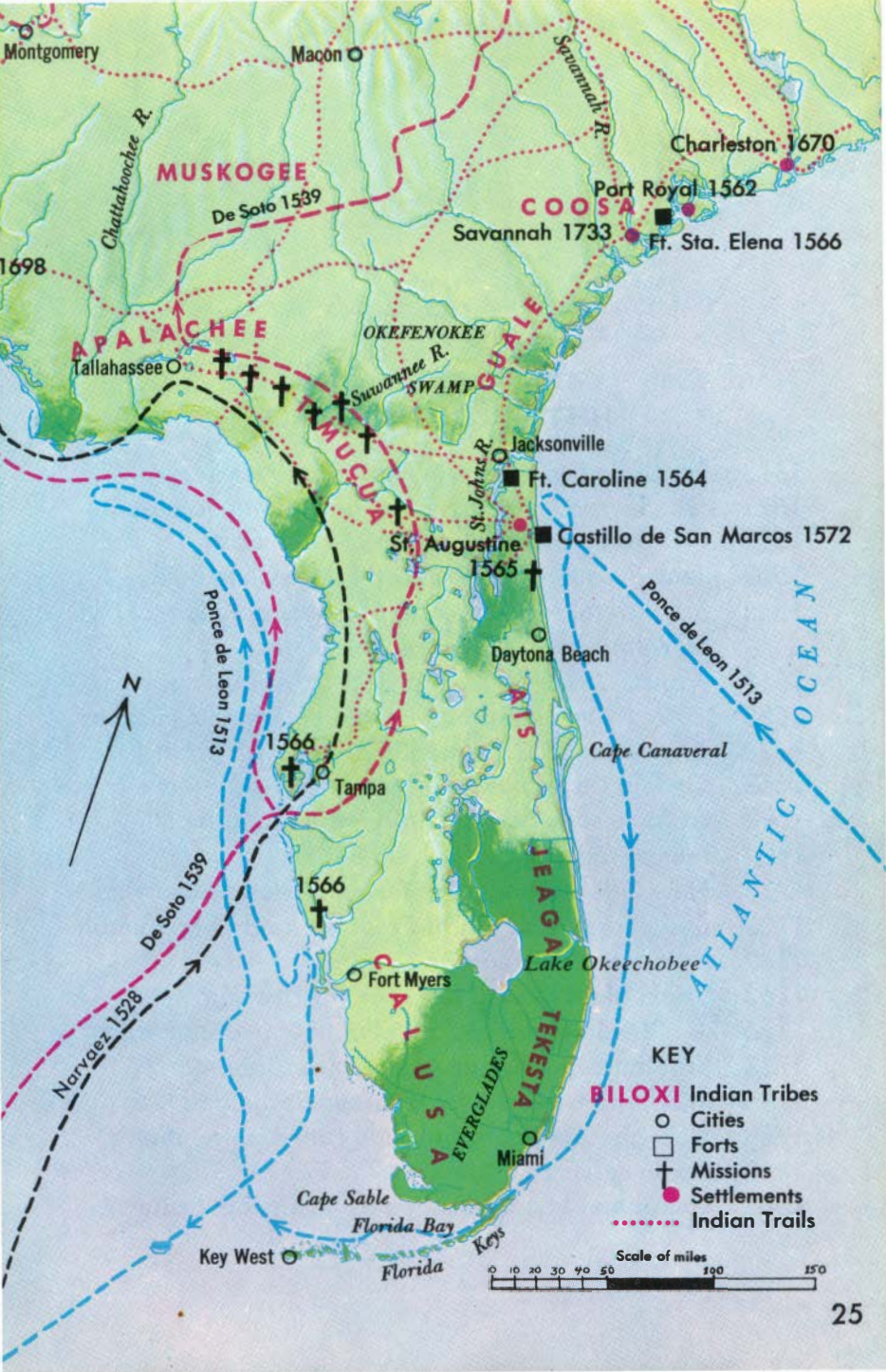


COMMERCIAL FISHING is well established all along the long coastline—for mullet, menhaden and snapper. Shrimping is concentrated in this area, too, and sport fishing is a major industry in itself.

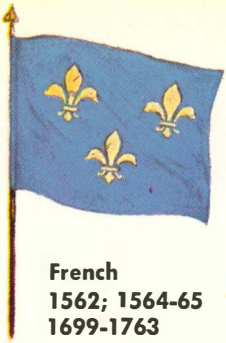
SHADOWS OF EARLY DAYS

Europeans may have seen this region as early as 1500 but exploration did not begin until Juan Ponce de León landed in April, 1513, and named this land Florida. In the century that followed, Spain, France and England founded settlements along the coast and pushed inland (details on pp. 26-27). They fought with the Indians and with each other to establish a firm hold on tne New World. Missions were erected, forts were built, and trading posts grew into settlements and cities. By the time the American colonists had won their independence, Georgia and South Carolina were ready to become part of the thirteen original states. It took the Louisiana Purchase, a war with England and a near-war with Spain to bring the rest of this area within the United States orbit.

The map shows the principal early settlements and forts, the routes of explorers, the Indian tribes at the time of their first contact with Europeans and other historical data. Florida, in a 1714 Dutch atlas, was shown to extend west to the Rockies and north to Cape Hatteras. The present boundaries were set before Florida became a state.


Montgomery
Macon
Savannah R.
Chattahoochee R.
MUSKOGEE
Charleston 1670
De Soto 1539
COOSA
Port Royal 1562
Savannah 1733
Ft. Sta. Elena 1566
1698
APALACHEE
OKEFENOKEE
SWAMP
GUALE
Tallahassee
Suwannee R.
TMUCUA
Jacksonville
St. Johns R.
Ft. Caroline 1564
St. Augustine
1565
Castillo de San Marcos 1572
Ponce de Leon 1513
Daytona Beach
ATLANTIC OCEAN
N
1566
Tampa
AIS
Cape Canaveral
JEAGA
1566
De Soto 1539
Lake Okeechobee
Fort Myers
CALUSA
TEKESTA
Narvaez 1528
EVERGLADES
Miami
Cape Sable
Florida Bay
Keys
Key West
Florida
KEY
BILOXI Indian Tribes
Cities
Forts
Missions
Settlements
Indian Trails
Scale of miles
0 10 20 30 40 50 100 150

Spanish
1513-1763
1783-1821



French
1562; 1564-65
1699-1763

Great Britain
1763-1783

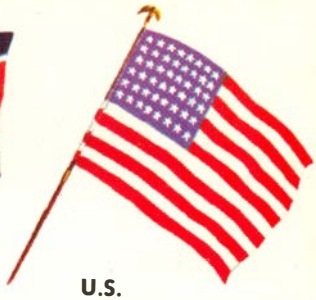
FLAGS OVER THE SOUTHEAST

HISTORICAL TIMETABLE

1513 Ponce de León lands in Florida and names it
1521—28 Several attempts at colonization unsuccessful
1539—41 De Soto explores most of Southeast
1562 Jean Ribaut explores coast; Ft. Caroline built
1565 Spanish take Ft. Caroline and massacre French; St. Augustine founded by Menéndez
1568 Francis Drake burns and loots St. Augustine
1573—1679 Franciscans build chain of Catholic missions
1670 Charleston, S.C., settled under English grant
1672 Castillo de San Marcos built at St. Augustine
1682 La Salle sails down the Mississippi to its mouth
1699 French settle at Mobile and Biloxi
1718 New Orleans begun by French under de Bienville
1733 Oglethorpe and British Colonists land at Savannah
1762 France cedes Louisiana to Spain
1763 Spain gives Florida to British for Havana
1776—78 Revolutionary War in South—Savannah taken
1783 Britain trades Florida to Spain for Bahamas
1785—1821 Border disputes between Spain and U.S.
1788 Georgia and South Carolina ratify constitution
1800 Spain cedes Louisiana back to France
1803 Louisiana Purchase: U.S. gets Mississippi basin

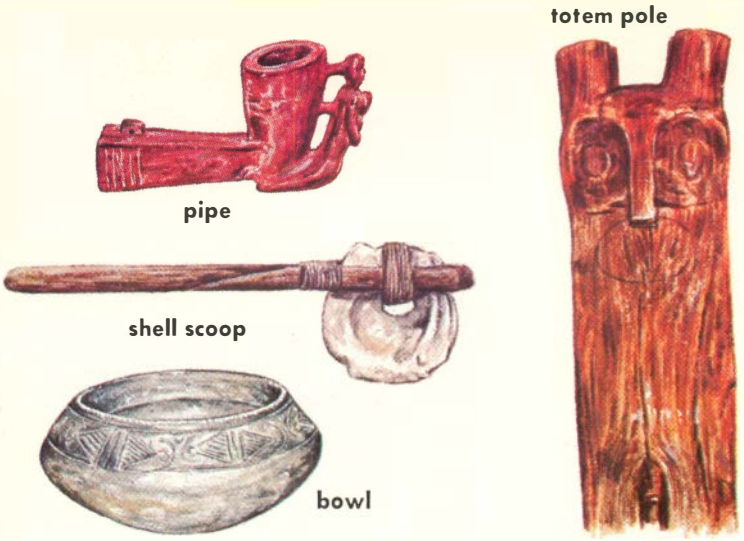
U.S.
1821-1861

Confederate
1861-1865



U.S.
1865-1959

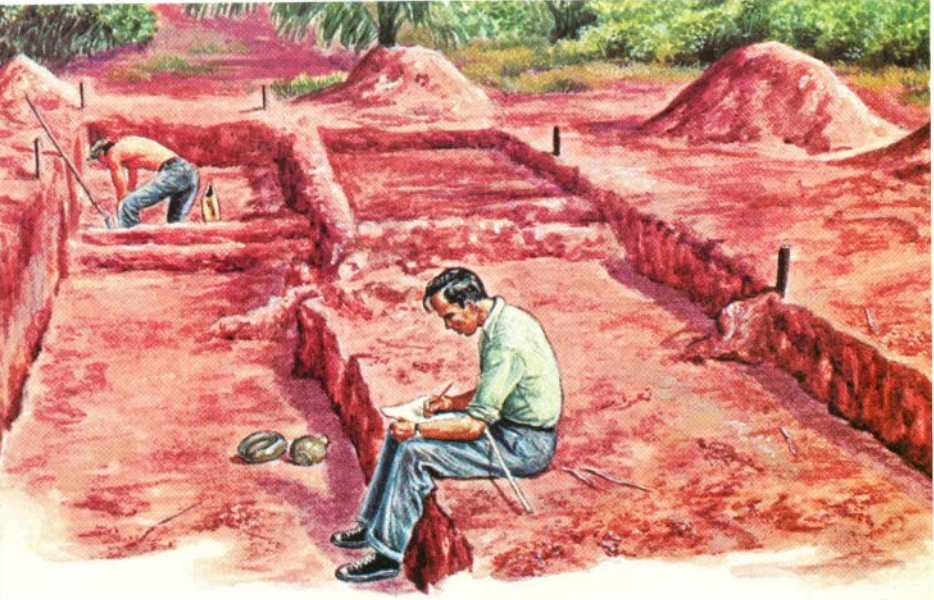
1812 Louisiana admitted to the Union
1817 Mississippi becomes the 20th state
1819 Alabama admitted to the Union
1821 U.S. gets East and West Florida from Spain
1835—42 Second Seminole War in Florida
1845 Florida admitted to the Union—the 27th state
1860—65 Secession. Civil War carried into South
1867—77 Era of military rule and "carpetbagging"
1868 Ku Klux Klan founded in South Carolina
1886 Flagler railroad and development program begins at St. Augustine
1888 Phosphate rock deposits discovered in Florida
1898 Southern ports grow, because of Span. Amer. War
1914 First commercial airline, Tampa to St. Petersburg
1925—26 Boom and Bust in Florida real estate
1927 Large-scale sugar planting begun; great Florida hurricanes, 1926—28
1940 Southern paper and pulp industry gets under way
1941—45 World War II brings new industry and many military establishments to the South
1950 Citrus industry boosted by frozen concentrates. Savannah River Atomic Project begun
1955 Supreme Court desegregation rulings announced
1957 Worst winter hits Florida.
Florida turnpike in operation



Prehistoric tools and objects

INDIANS were living in the Southeast for perhaps 10,000 years before the Europeans came. Of the first Indians very little is known. They undoubtedly hunted and killed large bison, camels, mastodons, and other now extinct animals. Later Indians left tremendous piles of fresh- and salt-water shells (middens). These and early village sites yield scant remains of bone, shell and stone tools. Still later the Indians buried their dead in specially built mounds and, after agriculture became well established, built large platform mounds for religious ceremonies. Some ceremonial mounds had the shape of animals. Others had buildings on top. A number of mounds have been excavated scientifically, yielding pottery, tools, and burials—usually simple and with the bodies in a flexed position.

Early explorers found several different Indian groups in South Florida (see map, pp. 24-25). These people hunted, fished and gathered shellfish. The largest group, the Calusa, were a warlike tribe of 3000 or more (in 1650). They were excellent boatmen, who made trips as far as



Excavation by Florida State Museum.

Cuba. By the 1800s only a few hundred were left in Florida. Some joined the Seminoles and went to Oklahoma with them. Others probably went to Cuba. One small group, the Tekesta, were the original inhabitants of Miami.

In northern Florida, the agricultural tribes were better off. They had larger villages, greater wealth, and Spanish aid. The Timucua and the Apalachee were the most powerful groups. The former totaled about 13,000 in 1650. But in less than a century, disease and warfare wiped out nearly all the North Florida Indians. A few survivors may have joined the Seminoles about 1740. Others drifted southward and migrated to Cuba in 1763.

Farther west along the Gulf, the Choctaw were the largest and most important tribe. The Choctaw were always at peace with the United States and developed their own model government. These agricultural Indians numbered about 20,000 a century ago. Many moved west along the Gulf. Others went to Oklahoma. There are still several hundred Choctaw in Louisiana and Mississippi.

FNB

Osceola—from an old print.

THE SEMINOLES, best-known Southeast Indians, are actually newcomers to Florida. Originally inhabitants of Georgia, they were part of the Creek Confederacy. Attracted by the good agricultural land in North Florida, these Indians began to turn southward in the 1700s, after the agricultural Indians of northern Florida had been decimated by disease and war and by the destruction of the Spanish missions where many lived and worked.

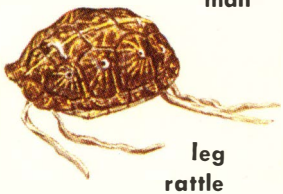
About 1750, one Creek group, the Oconee, migrated south and settled in northern Florida. Later, the Muskogee and other Creeks joined them, and together these people became the Seminoles. They grew corn, hunted, raised cattle, pigs and chickens, got along well with the Spanish and the English.

For fifty years the Seminoles prospered and grew powerful. But after the United States took over Florida in 1821, trouble began. The Seminoles harbored runaway slaves, and the settlers invaded Indian lands. By 1835 there was open warfare, and during the next seven years the Seminoles were pushed south into the wild Everglades. Their villages were burned and their leader, Osceola, was taken by treachery. The Seminoles responded with guerilla warfare and ambush. Eventually most were captured or surrendered. These were sent west to Indian Territory (Oklahoma), where they have since done well.

dolls

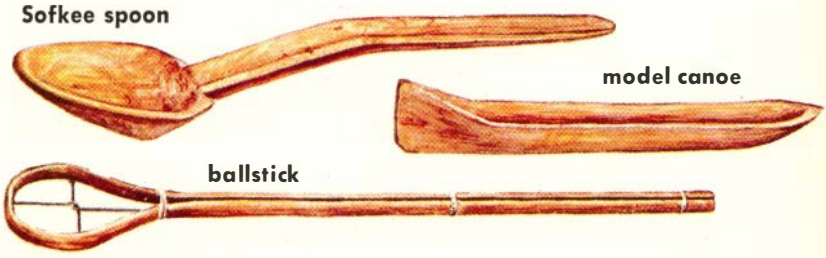
woman

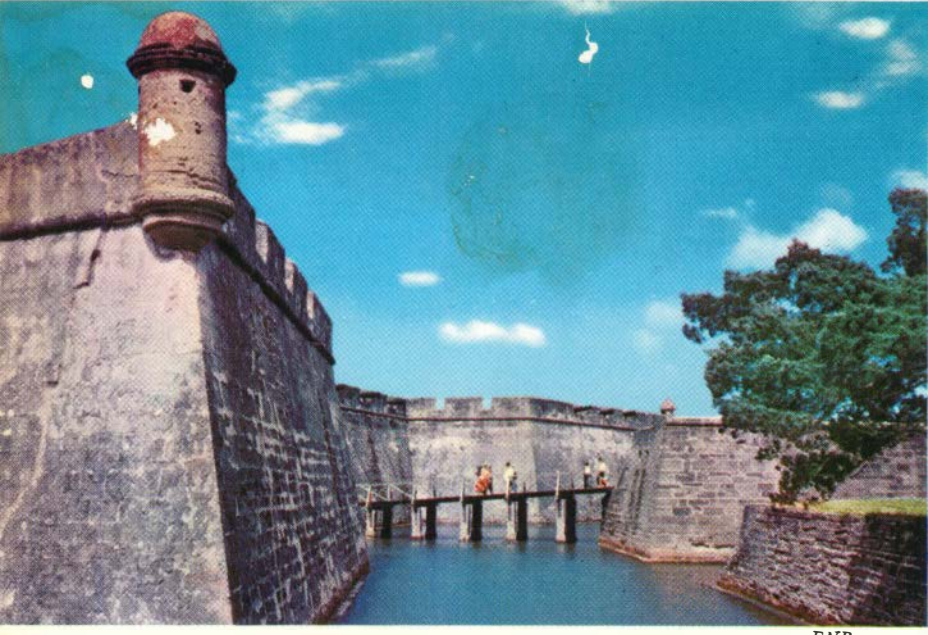
man



leg
rattle

Only a few hundred Seminoles remained deep in the Everglades. These scattered bands never surrendered. Now, about 900 of them live on or near their reservations (p. 129). Men are farmers, cattlemen, lumbermen and construction workers. Women sew colorful garments and make articles for tourists. Older Seminoles cling to their old ways. Younger men try to fit into newer ways of life, though this is not easy. Each year, toward the end of June, Seminole families gather for their most important ceremony—the Green Corn Dance. This is also the occasion when tribal matters are discussed, problems are ironed out, officers are elected and justice is administered in the old tribal way—a function that is recognized by Florida law-enforcement officials.





FNB

Castillo de San Marcos—St. Augustine, Florida.

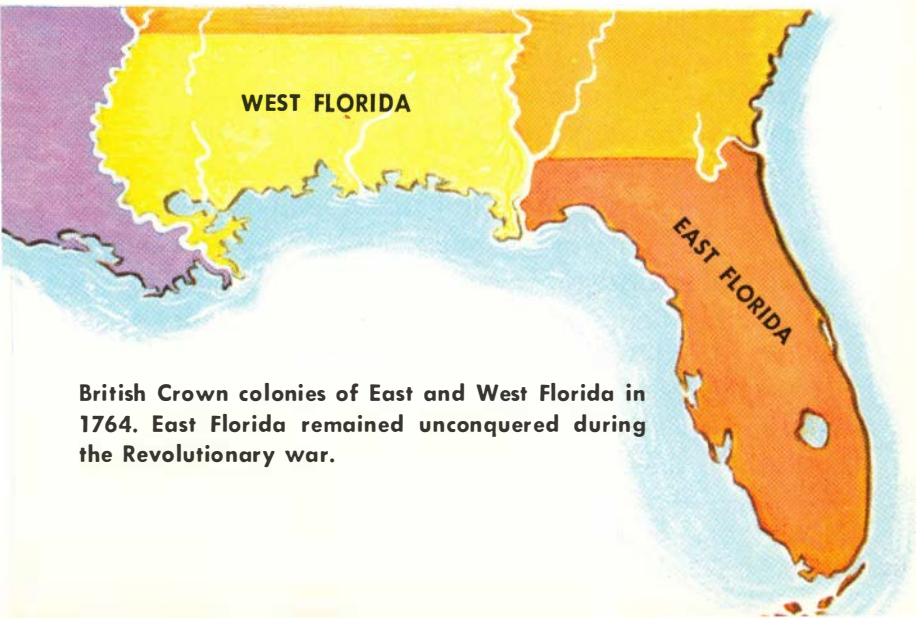
THE SPANISH, FRENCH AND ENGLISH explored and settled Florida—an area much larger than the present state. Spain came first, in 1513, with Ponce de León searching for gold and a fountain of youth in fabulous Bimini. Narvaez, de Soto, and de Luna followed. In 1565, after French Huguenots under Jean Ribaut had explored the area and settled at Ft. Caroline on the St. Johns, Spain established a permanent base at St. Augustine. That year they slaughtered the French in cold blood, and ended French settlements in Florida.

Spanish friars started a chain of missions across North Florida, and the fort at St. Augustine grew into a settlement. By 1615 there were twenty missions. Plants and animals were introduced. The missions and the Indians prospered. Meanwhile, England watched the Southeast. From settlements in Virginia and the Carolinas, troops and Indian allies pushed south. The next 50 years were a period of border raids and war.

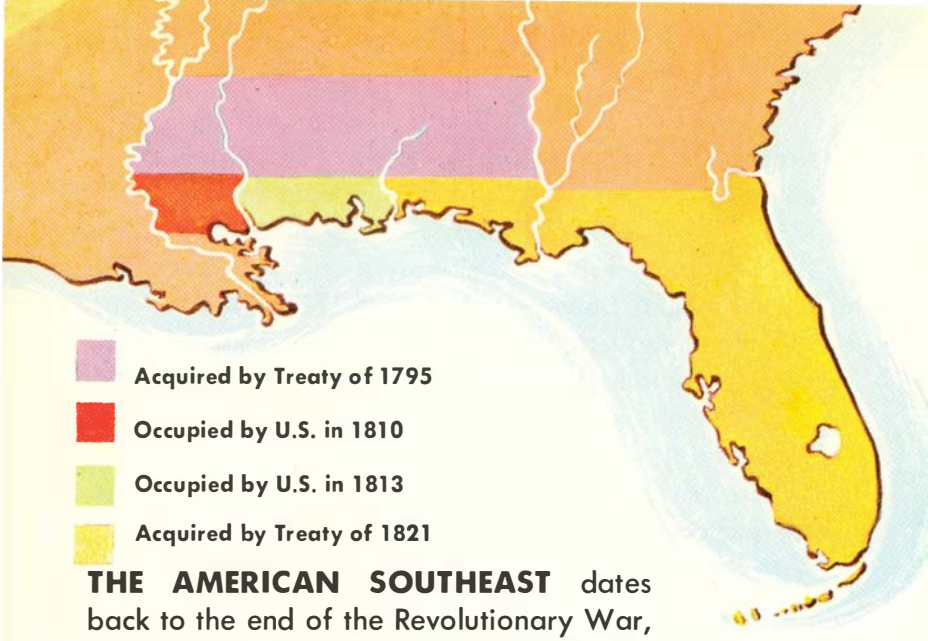
About this time, the French worked down the Mississippi. La Salle attempted a Gulf settlement in 1685. Spain countered with a fort at Pensacola. France built at Biloxi, and in 1718 at New Orleans. In 1719, Pensacola fell to France.

The English and their Creek Indian allies destroyed the Spanish missions between 1702 and 1704. Trouble continued along the Carolina border, and George II invited more by permitting James Oglethorpe to settle Georgia in 1733. War with Spain began in 1739. Oglethorpe invaded Florida, and the Spanish fleet attacked Georgia. After an uncertain peace (1748-1761), England conquered Havana, and two years later traded it back for all of Florida.

With the American Revolutionary War, loyalists moved south. There were raids and counter-raids between "Rangers" and "Patriots." In the treaty of Paris (1783) England gave Florida back to Spain in return for the Bahamas. Within a decade the United States was again expanding. By 1821, all of Florida was under the Stars and Stripes.



British Crown colonies of East and West Florida in 1764. East Florida remained unconquered during the Revolutionary war.



THE AMERICAN SOUTHEAST dates back to the end of the Revolutionary War, with Georgia and South Carolina both ratifying the new constitution in 1788. After unsuccessful attempts at purchase in 1803 and 1805, we acquired Florida by stages; these are shown at the top of the page. The formation of the "Republic of West Florida," with its Lone Star flag, and the encouragement of rebellion against Spain helped. The Louisiana Purchase of 1803 brought the western Gulf area and much more land under our control. For most of the South, the first half of the nineteenth century was a period of settlement, growth and heated political compromise. South Carolina seceded in 1860 and within months civil war had begun. War brought blockade, privation and disruption. And the end of the war did not bring relief. There followed a long period of military occupation, spoliation and economic collapse. It was not until 1875-1900 that recovery was well under way.

Visitors who want to understand this region should take the time to develop a historical perspective of the past, from which present problems have come.

MORE INFORMATION

The Southeast is so big and varied that the reader may want a more complete introduction to the region, its history and its people. If so, try some of the following. Books on natural history are listed in the sections on geology, plants and animals.

American Guide Series gives a rich background, state by state, plus specific (though dated) information on travel and sights. All were written by the Federal Writers Project.

LOUISIANA, Hastings House, N.Y., 1941
ALABAMA, Hastings House, N.Y., 1941
MISSISSIPPI, Hastings House, N.Y., 1949
FLORIDA, Oxford Univ. Press, N.Y., 1939
GEORGIA, Tupper and Love, Atlanta, 1954
SOUTH CAROLINA, Oxford Univ. Press, N.Y., 1949

THE FLORIDA HANDBOOK, Morris. Peninsular Pub. Co., Tallahassee, Fla., 1957. A factual and statistical reference, packed with information.

FLORIDA, A. Hepburn. Houghton Mifflin, Boston, 1956. This well-organized tourist guide to sights, places, food, lodging and things to do covers the state, section by section.

THE CURVING SHORE, L. Ormerod. Harper, N.Y., 1957. An interesting and readable description of the Gulf coast from Brownsville to Key West.

FLORIDA, LAND OF CHANGE, K. Hanna. Univ. of N. Carolina Press, Chapel Hill, 1949. A scholarly, historical account of the growth of the state.

FLORIDA'S SEMINOLE INDIANS, W. Neill. Ross Allen's Reptile Inst., Silver Springs, Fla., 1956. A short, readable account of the Seminoles.

THE INDIANS OF THE SOUTHEASTERN UNITED STATES, J. R. Swanton. Bur. Amer. Eth. Bull. 137; G.P.O., Washington, D.C., 1946. The best and most complete account of Indian life of the region.

THE SEMINOLE INDIANS, S. Bleeker. Morrow, N.Y., 1954. A profile of the Seminole way of life for younger readers.

THE EVERGLADES, RIVER OF GRASS, M. S. Douglas. Rinehart, N.Y., 1947. The history and life of the far South. Rivers of Amer. Series.

FLORIDA UNDER FIVE FLAGS, R. W. Patrick. Univ. of Florida Press, Gainesville, Fla., 1946. A popular history of old and new Florida by a top local authority.

Fiction gives an added dimension in understanding a region. Some famous writers have written of this country in a revealing way. Try these books and others:

BAREFOOT MAILMAN, Theodore Pratt; THE YEARLING and SOUTH MOON UNDER, Marjorie Rawlings; BRIGHT FEATHER and FLAMINGO ROAD, Robert Wilder; CRUNCH AND DES, Philip Wylie.

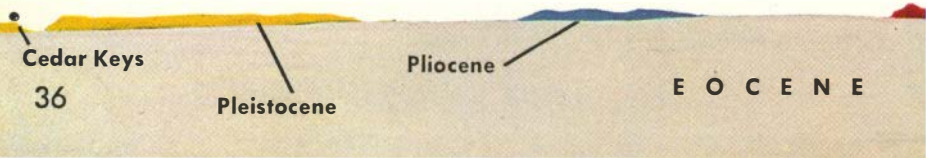
SUN PRAIRIE ELEMENTARY SCHOOL

The present Southeast and the submerged Florida Plateau.

LAND FROM THE SEA

FLORIDA and the nearby Southeast are part of a great plateau (as shown above), two-thirds of which is now below the sea. The core of this plateau is old, hard, altered rock, like that of the Piedmont and Blue Ridge Mountains. None of it comes to the surface in this region. It is buried over half a mile in northern Florida and much deeper to the south. For the past hundred million years, sediments, mainly clay, sand and lime, have been covering this old core. At times the Florida plateau has been above water. More often the area has been wholly or partly submerged. Then the shallow border seas were slowly filled with sand washed down from the north or with lime deposited by marine plants and animals.

A cross section through central Florida (below) shows the doming from east to west. To the west the younger deposits have been

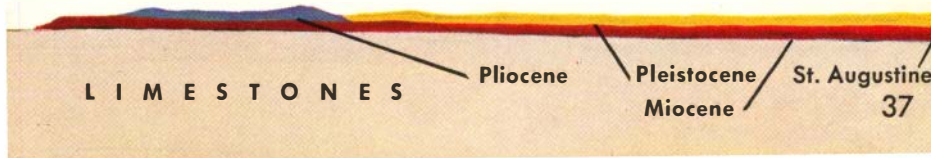


Some 35 million years ago, when this area was above water, a slow steady pressure domed up the rocks of central Florida several hundred feet, as shown below. Since then this area has been submerged several times. Each submergence is marked by the formation of new deposits with characteristic types of fossils. One formation, formed about 10 million years ago—probably at the mouth of an ancient river—contains a valuable concentration of phosphates. During the past 20 million years Florida has been mainly elevated. The rock at the surface has altered to red loam and sandy soil. Drainage patterns have developed, and many lakes have formed.

Present shoreline and shoreline 100 to 200 thousand years ago.

During the ice ages of the past million years, the level of the sea has risen and fallen. Because Florida and the coastal plain is flat, this has meant a great change in the total land area. Above is a diagram of the Florida shore line at a time between Ice Ages, when the sea level was high. Since southern Florida is especially low and flat it is interesting to speculate on possible changes in the shore line which may come about if the world climate becomes slightly warmer or colder during the next century or so.

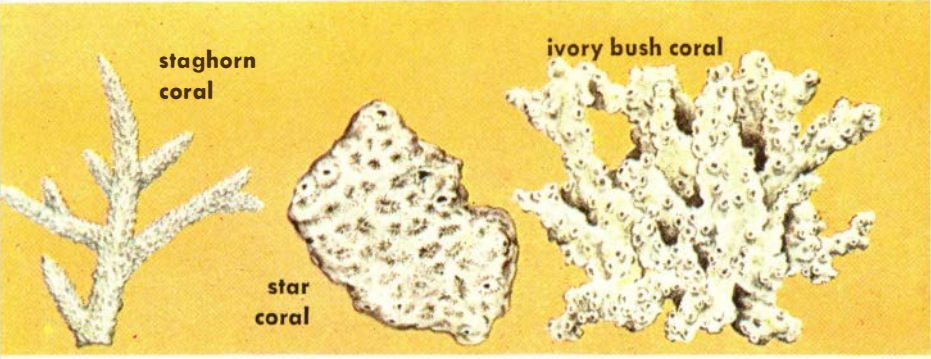
worn away more, and the older Eocene rocks are exposed on the surface. The vertical scale of this cross section is exaggerated.



THE AGE OF THE ROCKS of the coastal plain varies from about one to sixty millions years. All the rock is sedimentary, formed mainly under water from materials washed down from nearby land or from lime taken from the sea by plants and animals. Sediments sink slowly to the bottom, forming layers. The layers deposited at the mouths of rivers differ from those formed in quiet lagoons. Layers formed close to shore differ from those formed in deeper water. Older layers may be completely buried by younger rock, or come to the surface farther inland. The slow filling of the Gulf basin is tilting Florida, raising and eroding the west coast more than the east. Hence, more older rocks are exposed along the west coast.

The Story of the Earth in the Southeast

Geol. time divisions	Millions of years ago	Life of the times
Recent	.01	Muck, coral; modern plants and animals.
Pleistocene	1	Glaciers advance and retreat. Great lakes and present rivers form. Modern man develops. South Florida rocks form.
CENOZOIC		Final uplift of western mts. Animal life
Pliocene	11	practically modern. Florida phosphate beds form and other alluvial deposits.
Miocene	30	Elevation of the Alps, Himalayas and other mountains. Grasses and modern plants develop. Rise of three-toed horses and other grazing animals.
Oligocene	40	Badlands form in West; wide southern submergence and lime deposits. Development of primitive grazers; first monkeys.
Eocene	58	Extensive interior seas. Oil shales form. Five-toed horses and other primitive grazers. Widespread Ocala limestone formed.
Paleocene	60	A brief transition period from Mesozoic.
MESOZOIC	60-200	Age of reptiles; first birds; many shallow seas. Rocks of this age underlie Southeast.
PALEOZOIC	200-500	Widespread seas with simple marine life. First vertebrates. Some rocks highly altered. None exposed in Southeast.



LIMESTONE AND CORAL are related, though only a very small part of the limestone, which underlies all of Florida and much of the adjoining plain, is of coral origin. Extensive deposits of lime have formed in these shallow seas since Eocene time (58 million years ago). Much of it is from the shells of foraminifera—microscopic animals which lived by the billions in the warm waters. Many kinds of mollusks added their remains to the limestone. Lime-secreting algae formed deposits, too.

Coral animals produce limestone also, and coral colonies can be found along all Florida coasts, but especially in the Florida Keys. The upper keys are an ancient reef, on which new coral rock is constantly forming. Coral skeletons are attractive, but living coral is even more so.

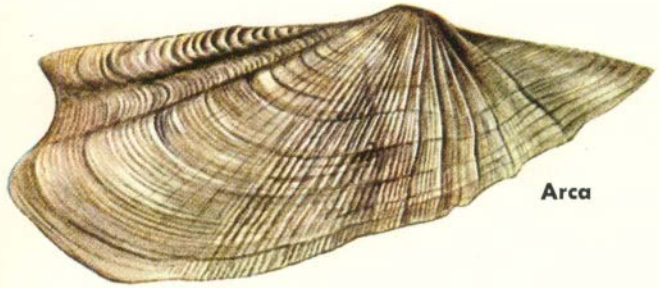
Where beds of limestone are now close to the surface, rain water percolating through dissolves the rock along cracks and fissures. Caves may form. Their roofs may collapse, making sinkholes. These often become lakes. Underground water is abundant in humid limestone regions.

For more about Southeastern geology, read:

PHYSIOGRAPHY OF EASTERN U.S., N. M. Fenneman. McGraw-Hill, 1938.
GEOLOGY OF FLORIDA, C. W. Cooke. Fla. Geol. Sur., Tallahassee, 1945.
NATURAL FEATURES OF S. FLORIDA, J. H. Davis. Fla. Geol. Sur., 1943.
DOWN TO EARTH, C. G. Croneis and W. Krumbein. Univ. of Chicago Press, Chicago, 1936.
ROCKS AND MINERALS, H. S. Zim and P. R. Shaffer. Golden Press, N.Y., 1957.

FOSSILS are the remains or imprints of living things preserved in the rocks. Most of the Southeastern limestones are rich in fossils—mainly of marine animals. They are easily collected in roadcuts and quarries and along canal banks—see *Geology of Florida* (p. 39) for details of formations and locations. The oldest rocks contain fossils most different from the animals of today. In the more recent rocks (Pliocene and Pleistocene) are fossils identical or very similar to living species. In recent rocks, the shells of marine animals are preserved intact; in older rocks, they may have dissolved, and only a mold or cast (impression) remains.

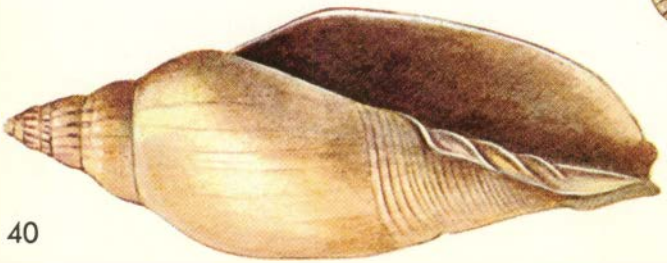
Some Southeastern localities yield bones of land animals. The oldest (Miocene) is the Thomas Farm formation. Next is the Bone Valley formation of mixed marine and land fossils (Miocene to Pliocene). The Melbourne beds contain Pleistocene animal fossils—including mastodons, mammoths, giant cats and, possibly, primitive man.



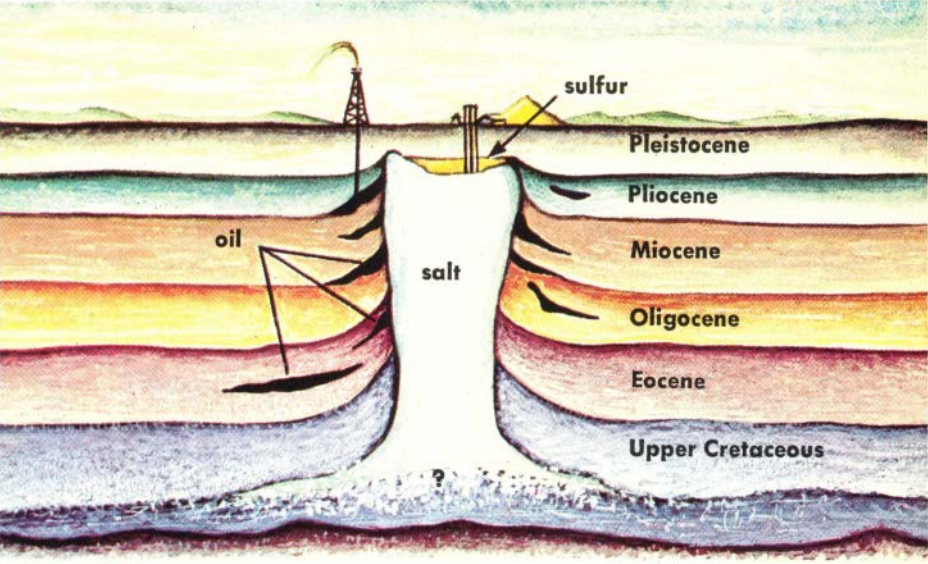
Arca

Potamides

Fossil shells several million years old—from Florida.

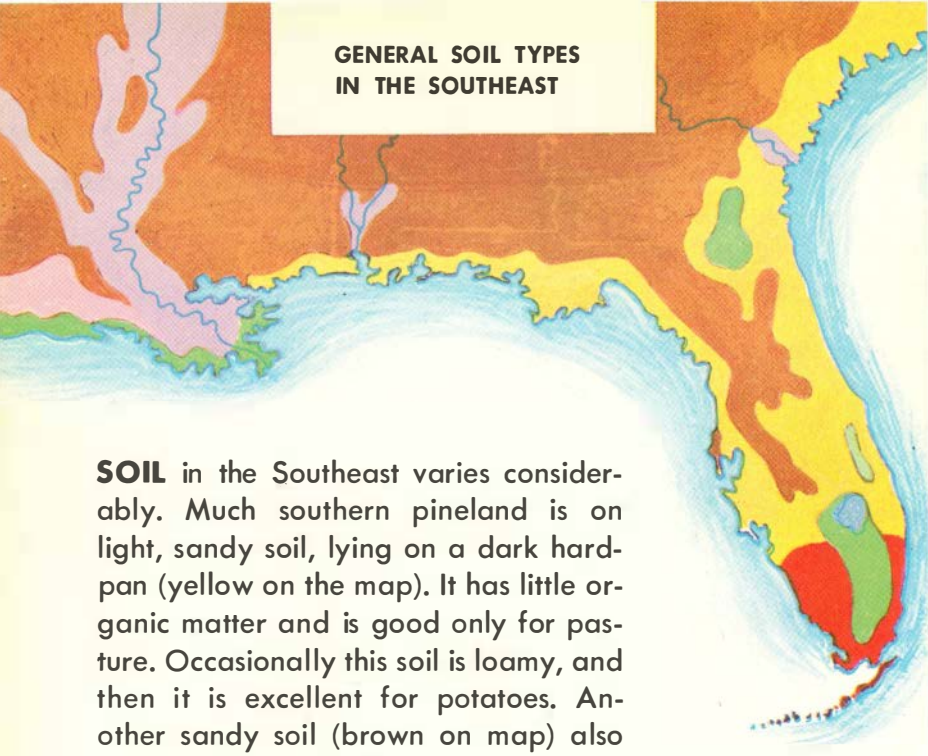


Scaphella



MINERAL RESOURCES of the Southeast are rich, though metals are in meager supply. Along the coast of Texas and Louisiana, salt domes have concentrated great deposits of sulfur (annual production over 5 million tons) and almost unlimited reserves of salt. Some salt domes also yield oil, and wells have been sunk in the tidal marshes and offshore. Central Florida produces nearly 10 million tons of phosphate rock annually, with high-class reserves of 2 billion tons more. Limestone is available for road building, construction and cement. Clays in the coastal belt yield brick and tile. Some of the dark sands of past and present Florida beaches have concentrations of metallic ores from which thorium, titanium and zircon can be obtained.

The two most important mineral resources of the Southeast are soil and water. The ground-water supply has been sufficient for industry, domestic use and agriculture, but now large wells near the sea show salt water infiltration. Soil, while generally poor, can be maintained and even improved by good farming practices.



SOIL in the Southeast varies considerably. Much southern pineland is on light, sandy soil, lying on a dark hardpan (yellow on the map). It has little organic matter and is good only for pasture. Occasionally this soil is loamy, and then it is excellent for potatoes. Another sandy soil (brown on map) also covers wide areas. This is light-yellowish, brown or gray. When properly fertilized, it grows nearly all Florida citrus and, to the north, produces cotton, tobacco and peanuts. Bog soils (green) are mainly along the coasts. These peats and mucks are of little value except when drained. Then they are fine for sugar cane and winter vegetables. South Florida is rockland (red) which, when scarified and fertilized, grows subtropic fruits and winter vegetables. The alluvial soil (lavender) of the Mississippi and other river valleys is inherently fertile and valuable when well drained. A band of dark soil (pink) over a lime clay in Louisiana and Texas grows rice—other crops when drained. Finally, a fine, silty, easily eroded loam (not illustrated) parallel to the Mississippi alluvium, is excellent for many crops. The yield of most Southern soils can be improved by fertilizers.

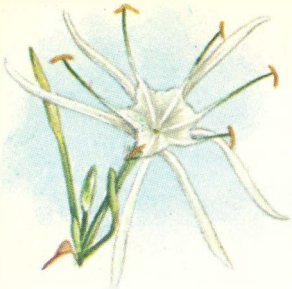
Fla. Silv. Spr.

Silver Springs—one of Florida's first-magnitude springs.

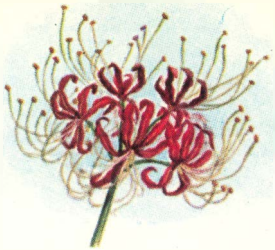
RIVERS, LAKES AND SPRINGS mark the Southeast. Major rivers (see pp. 24 and 25) were important in earlier days when shallow-draft steamers brought cotton and tobacco down to the head of salt-water navigation. Now rivers provide water and power for industry. Lakes are numerous in Central Florida, which reputedly has 30,000. Largest is Lake Okeechobee—700 square miles, the second-largest freshwater lake within the U.S.

Florida's porous limestone, which permits free movement of underground water, creates many springs. Their total flow of water is over four billion gallons a day, two and a half billions coming from 17 "first magnitude" springs. Some are listed below:

Springs	Location	Flow (cu. ft. per sec.)
Silver Springs	5m NE Ocala	808
Rainbow Springs	4m NE Dunnellon	699
Ichatuckee Springs	5m NE Hildreth	335
Homosassa Springs	1m W Homosassa	185
Wakulla Spring	14m S Tallahassee	183
River Sink	12m SW Tallahassee	178
Manatee Springs	7m W Chiefland	168
Blue Springs	5m NE Marianna	163
Weeki Wachee Spring	12m SW Brooksville	160
Natural Bridge	6m E Woodville	124
Alexander Spring	6m SW Astor	117



PLANT LIFE



WHITE SPIDER LILIES are native. Several species have stamens connected by a membrane. Leaves like amaryllis, a related plant.

RED SPIDER LILY, from the Orient, is widely planted. Flowers with long stamens appear in fall. Sometimes 6 ft. high.

PLANT LIFE is richest and most outstanding in the southeast coastal plain. Over 9000 species of flowering plants are native here. Florida has over 300 species of native trees, dozens of which grow nowhere else. In addition, many hundreds of foreign species have been planted. Nowhere else can one see so many different plants from Asia, Africa, Australia and the American tropics growing in the open. This region also boasts many kinds of unusual ferns, mosses and other non-flowering plants. The books listed below will give you more help in identifying plants. You can help others enjoy our plant life by obeying all state conservation laws.

For more about Southeastern plants, read:

FLOWERS, H. S. Zim and A. C. Martin. Golden Press, N.Y., 1950.

TREES, H. S. Zim and A. C. Martin. Golden Press, N.Y., 1956.

FLOWERS OF THE SOUTH, W. F. Greene and H. L. Blomquist; Univ. of N. Carolina Press, Chapel Hill, 1953.

FLORIDA WILD FLOWERS, M. E. F. Baker. Macmillan, New York, 1938.

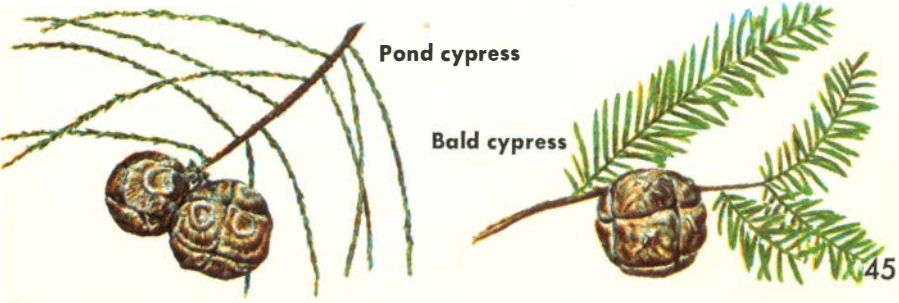
THE NATIVE TREES OF FLORIDA, West and Arnold. Univ. of Florida Press, Gainesville, 1956.

FLORA OF THE SOUTHEASTERN UNITED STATES, J. K. Small. The Author, New York, 1933.

FERNS OF THE SOUTHEASTERN UNITED STATES, J. K. Small, Science Press, Lancaster, Pa., 1938.

LANDSCAPE PLANTS FOR FLORIDA HOMES, Watkins. Florida Dept. of Agriculture, Tallahassee, 1955.

BALD CYPRESS, though a conifer, sheds its thin, flattened leaves in winter. Recognize this tree by the hemlock-like leaves, by the rounded, one-inch cones which form in late summer, and by the straight trunk, often swollen and buttressed at the base. Bark gray to brown, thin and shaggy. Conical or flattened "knees" grow up from the roots. Bald Cypress is an excellent timber tree, growing over a hundred feet high. The wood is durable and resists rotting. It is found along lake margins and in swamps, where it has been extensively cut for lumber. Pond Cypress, a smaller variety, has thin twigs and minute, scaly leaves.



SHORTLEAF PINE or Yellow Pine, prized southern timber tree, has needles in clusters of two or three; small clustered cones; bark in scaly plates—gray to reddish. Prefers dry, upland soil.

LONGLEAF PINE has long needles (12 in.) in clusters of three, and long (6 to 10 in.) spiked cones. Bark gray, twigs heavy. Attractive young trees are cut for Christmas decoration. Wood hard, heavy.

POND PINE is a smaller tree of swamps and sandy soil. Needles in threes, 6 to 8 in. long. Cones round when open, 2 to 3 in. long. Bark furrowed, reddish brown. Wood heavy, coarse.

SLASH PINE also prefers wet soils. With Longleaf Pine it produces gum and turpentine. Leaves 8 to 12 in., in clusters of two or three. Cones 4 in. long, oval, with small spines. Bark, dark gray.

RED CEDAR is a small, well-shaped tree with rising branches and two distinct types of foliage —sharp and spreading on young trees; rounded, overlapping scales on older. Fruit, small, purple.

WHITE CEDAR is a large tree of coastal swamps with pointed, overlapping, scale-like leaves and small, rounded, dry fruits. Bark fibrous, reddish brown; wood soft, even, close-grained.

LOBLOLLY PINE has long needles in threes, like other yellow pines. Cones are narrow, 4 in. long, persistent, with small spikes on scales. Bark gray, deeply furrowed. A fast-growing tree of sandy soil.

SAND PINE or Scrub Pine grows mainly in Florida sand dunes. Needles in twos, slender, 3 in. long. Cones open chiefly after fires; remain on tree for several years. Used for paper pulp.

LIVE OAK, a rounded, spreading majestic tree, is a symbol of the Deep South. This member of the White Oak group has sweet, edible, nearly-black acorns and oval dark-green leaves. These are often downy below, and persist on the tree through the winter. The bark is gray, heavy and furrowed. Once valued for ship timbers, Live Oak is now used in street and ornamental planting.

LAUREL OAK, of the Black Oak group, has bitter acorns that mature in two years. Leaves have wavy margins and persist on the tree till spring. Tall (to 75 ft.), with smooth dark gray bark cracked into vertical furrows.

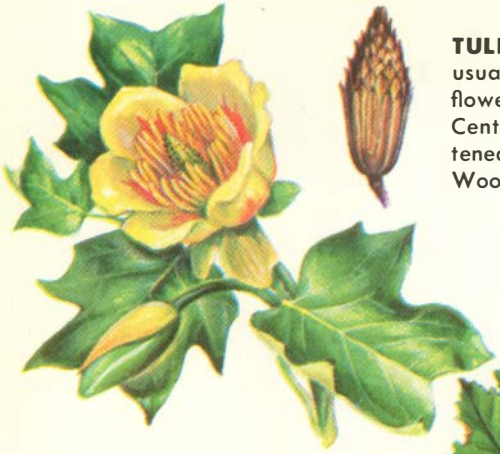
MYRTLE OAK is a shrubby tree (rarely over 30 ft.) with short twisted branches. Forms deep thickets on dunes and dry interior scrublands. Bark thin, gray to brown. Thick, shiny leaves more rounded than Laurel or Live Oaks.

SOUTHERN RED OAK (Spanish Oak) has stout, smooth, dark twigs bearing shiny leaves covered with yellow hair below. Variable leaves have 3 to 7 sharp lobes and a wedge-shaped base. The small acorns mature in two years. Bark ridged, nearly black.

TURKEY OAK grows to 30 ft. Bark gray with deep furrows and ridges. Leaves like oak above but wider and with hairs only at forks of veins. They turn crimson in fall and hang on the tree all winter. Turkey Oak prefers dry, sandy soils.

WATER OAK is a tree of swamps and moist meadows. It grows to 75 ft. with large, rising branches. Bark smooth when young, splitting into flat plates. Leaves rounded, thick, smooth on both sides. A short-lived member of the Black Oak group. Acorns small.

POST OAK is a Midwestern oak occurring halfway down Florida. Note the wide, heavy leaves, hairy beneath. Acorns mature in one season. Bark gray-brown, scaly. Tree grows to 75 ft., but is smaller in the South.



TULIPTREE, a magnolia, has unusual leaves and large tulip-like flowers. Grows to 100 ft. tall from Central Florida north. Note flattened buds and cone-like fruits. Wood yellow, soft, easily worked.

RIVER BIRCH is the most common southern birch, with reddish, papery bark. Flowers are catkins, fruit cone-like. Prefers swamps and river banks, north of the Suwannee. Height: 60 to 80 ft.

RED MAPLE with gray bark (brownish when older), and red twigs and fruits, is colorful in fall. Grows 90 ft. high with short, rising branches. Opposite leaves, with 3 to 5 lobes and small teeth.

PERSIMMON is found along roads in Southeast, often in thickets. Leaves alternate, dark green, smooth edges. Bark: dark, furrowed. Fruit: orange-brown, edible.

FRINGETREE is small, sometimes shrubby (ht. to 25 ft.) with large, thin, opposite leaves. Flowers (in spring) are thin, white and drooping; fruit smooth and black. From central Florida northward.

PECAN is a native hickory found from the Gulf northward, and now cultivated widely in the South. Wood inferior but the nuts of papershell varieties are excellent. Ht. to 120 ft.

BLACK GUM common except in S. Florida is a swamp tree with short, irregular branches. Leaves are alternate, edges smooth. Bark is gray, with thick ridges. Fruit in pairs, dark blue and oval.

SWEET GUM has star-shaped leaves somewhat like maple, but alternate, on corky twigs. Fruit is a large horned ball. Not related to Black Gum; prefers drier soil.

SOUTHERN MAGNOLIA is the best known of the magnolias for which the South is famous. A tree 60 to 80 ft. high, it has a heavy gray trunk, thick twigs and large, deep green leaves, rusty below. Creamy flowers of early summer mature into conical fruits.

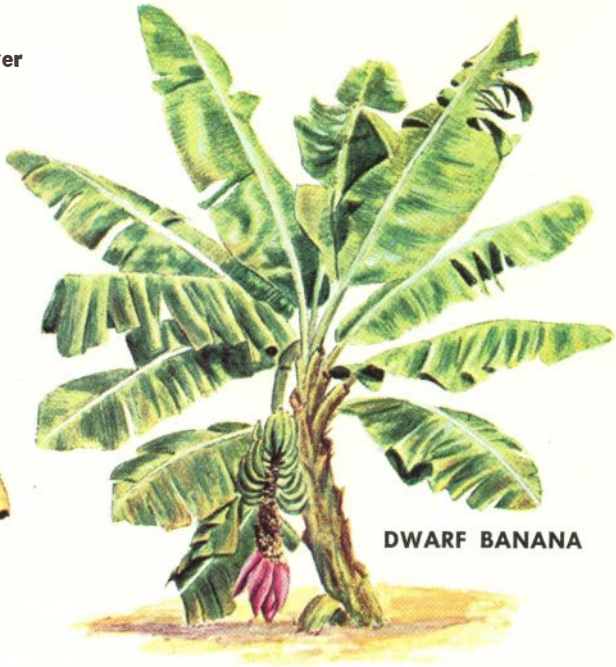
SWEET BAY is a smaller magnolia, found from Florida north. It prefers swamps and river banks, where it reaches 60 ft. As with all magnolias, leaves are alternate, and simple. Bay is silvery underneath. Flower small, white, and fragrant. Bark smooth and gray.

BIG-LEAF MAGNOLIA occurs in isolated groups from western Florida northward. Leaves to 2 ft. long; Flowers 8 to 12 in. across. Tree to 30 ft. high, with gray bark; grows in open woods. Fruit almost round, with small openings; becomes red as it matures.

CHINESE MAGNOLIA is a small oriental magnolia planted in the southern states. Large pink flowers open before the leaves. Other cultivated magnolias of the South include the white-flowered Star Magnolia and the fragrant Dwarf Magnolia.

detail of banana flower

ripe fruit

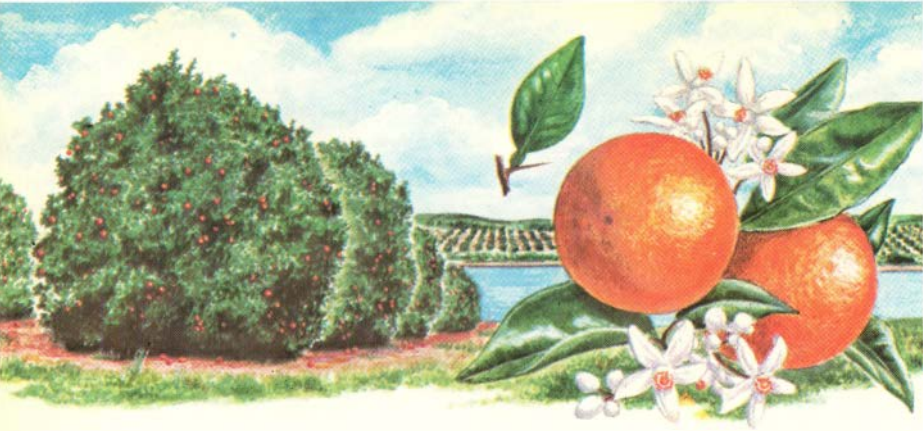


DWARF BANANA

CULTIVATED TREES

Cultivated and Exotic Trees outnumber native species and are an outstanding feature of this area. They come from all tropical regions of the world and include kinds which are not seen elsewhere in this country. Even their names—Banyan, Cherimoya, Melaleuca, Jujube—are exotic. Most numerous are species from the West Indies and nearby Central America. Many trees have attractive flowers and fruits which you should not sample unless you are sure they are edible.

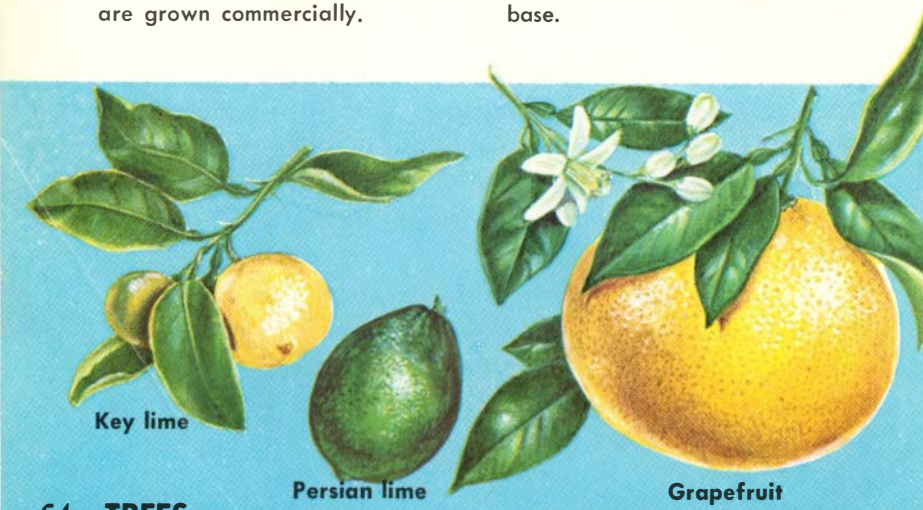
Bananas are not woody and so are not trees to the botanist. They are to the visitor, who notes that several varieties grow and bear fruit in Florida. The Dwarf or Cavendish Banana is common. A native of China, it grows to 7 ft. tall, with 4-ft. leaves, and up to 200 fruits to a cluster.



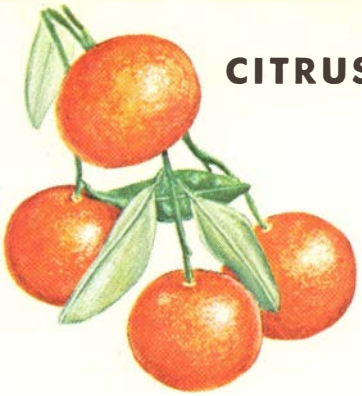
ORANGES came west soon after Columbus. Now the annual harvest is over 200 million bushels. Originally from China, the Sweet Orange has yielded over 25 varieties; the Valencia, Pineapple and Jaffa are best known. Trees grow about 25 ft. high, rounded, with few or no thorns. Leaves: oval, glossy, winged, about 4 in. long.

LIMES grow far south on smaller (15 ft.) spiny trees. Leaves 2 to 4 in., oval, glossy. Flowers white, in clusters. Key Limes have small, round fruit (yellow when ripe). Persian Limes, larger and hardier, are grown commercially.

GRAPEFRUIT is probably a citrus sport first found in Jamaica. Grapelike fruit clusters suggested name. Tree grows 30 ft. high. Twigs with few or no spines; leaves 6 in. long with wings at base.



CITRUS

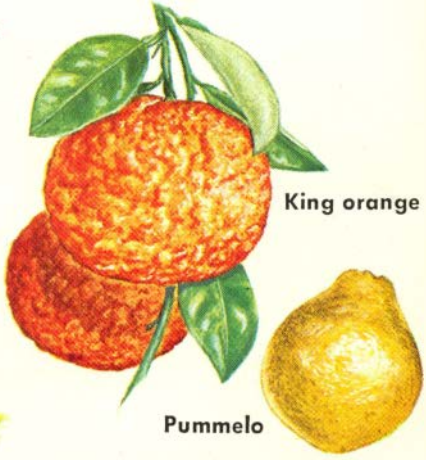


CALAMONDIN, from the Philippines—a hybrid citrus—is a small ornamental tree with tiny thorns and small elliptical leaves. Fruits when ripe are like miniature, thin-skinned oranges, attractive but sour. Used for juice and in marmalades.

TANGERINES, originally from south China, are a form of Mandarin Orange bearing a pumpkin-shaped fruit and with a thin, easily peeled skin. Trees are small; leaves small, too, and without wings. The Dacy Tangerine has a reddish skin.

KUMQUATS are all small trees. Plants shrubby, some with small spines. Leaves narrow, stalk not winged. Of three species, the Oval (shown above) is most common; others have rounded fruits. Entire fruit is eaten. Rind is sweet and pungent; pulp more sour.

KING ORANGES, closely related to tangerines, have similar fruits, but larger and rounder. Leaves may have narrow wings. Another easy-peeling citrus fruit is the Pummelo, large and pear-shaped, like a thick, rough grapefruit. Leaves winged and hairy below.



King orange

Pummelo

PAPAYA is not a true tree, having a somewhat herbaceous stem, though it grows 20 ft. high or more. This unusual plant with deeply cut leaves on long stalks grows from central Florida south and produces large melon-like fruits—excellent eating when ripe. Male and female flowers on separate trees, flowers yellowish, fragrant. Many varieties—from southern Mexico.

LOQUAT, a small tree with thick, oval, woolly leaves, is planted from the Carolinas south. Yellowish flowers develop into orange plumlike fruits with large seeds; good eating with a tart flavor. Loquat is a member of the rose family from the warmer parts of the Far East, widely planted as an ornamental and for its fruit. It is tolerant of poor soils and resistant to frost.

AVOCADO came to us via the Aztecs and the Spanish. Now improved hybrids grow all through Florida and in other Mediterranean climates. Trees are small; twigs green; leaves simple, oval in shape and clustered at the ends of branches. Small flowers develop into round or pear-shaped fruits (1 to 3 lbs.), tasty, distinctively flavored.

types of fruit

MANGO is a tall, well-formed tree from India, brought to Brazil and hence to the Southeast. Trunk straight, bark gray and furrowed. Leaves simple, long, narrow, slightly curved, and often clustered at the ends of twigs. Fruits on long stalks, ripen during the summer. New improved hybrid mangoes (Haden and others) bear the choicest of tropical fruits. The sap is irritating to the skin of some people.

GUAVA, from tropical America, is a loose, irregular tree with spreading branches and scaly brown and yellow bark. Leaves hairy, opposite, oval, with strong veins. White fragrant flowers give way to rounded fruits 1 to 2 in. in diameter, yellow and strongly flavored. Guavas are eaten raw or in preserves. Strawberry or Cattley Guava is a smaller shrub with smaller red or yellow fruit.

SAPODILLA produces the chicle of which chewing gum is made. In Florida it is grown as a fruit and ornamental tree with attractive evergreen foliage. Flowers yellowish and small. Fruits mature slowly till 2 to 4 in. in diameter, brown-skinned and pearlike in consistency, with a distinct flavor. Improved varieties of sapodilla have been developed, but not on a commercial scale.

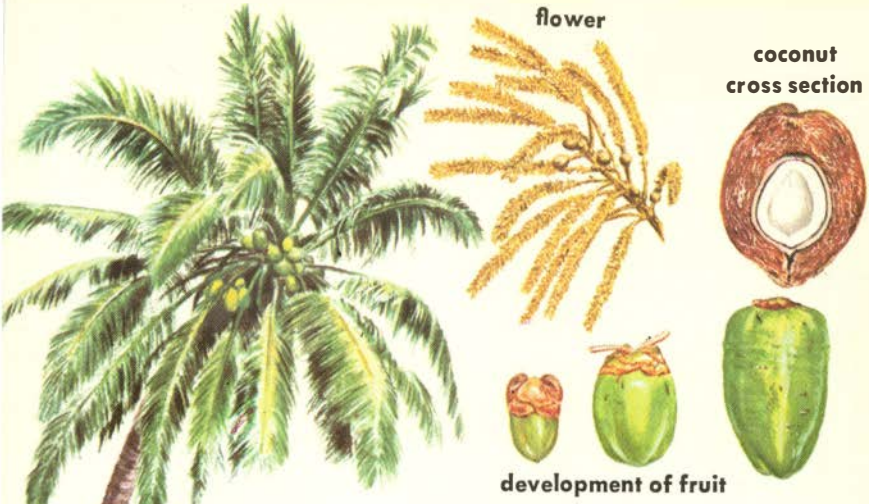
types of fruit

AUSTRALIAN PINE, though evergreen, has only minute scale-like leaves. The green "needles" are young twigs. The tree is not a pine—its nearest relative is the hickories. Planted widely from central Florida south as a windbreak and ornamental.

TUNG oil has been used in Asia for centuries. Now Tung trees are widely planted in the Southeast, except in S. Florida. Leaves simple, large; flowers in clusters at ends of twigs. "Nuts" contain about 15% oil; used in paints.

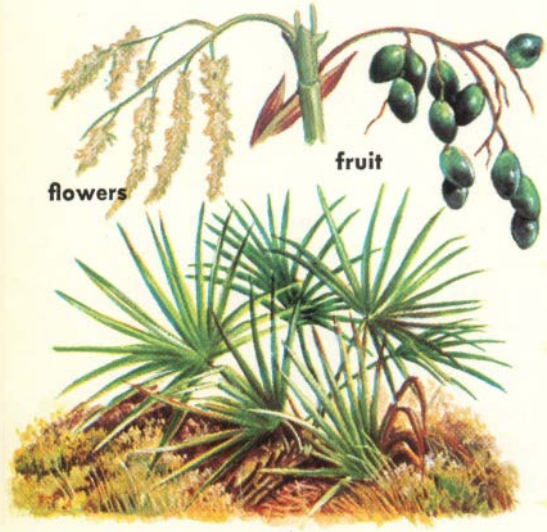
CHINABERRY, of the mahogany family, is found from the Carolinas south as a street and yard ornamental. The flat umbrella-shaped variety with lilac flowers and clusters of small yellow fruit is the one usually seen. Leaves are large and doubly compound.

MIMOSA, found north of central Fla., is a handsome, low, flat, spreading ornamental. The fluffy flower clusters in spring and the fine, doubly-compound leaves add to its delicate appearance. Height 25 ft.



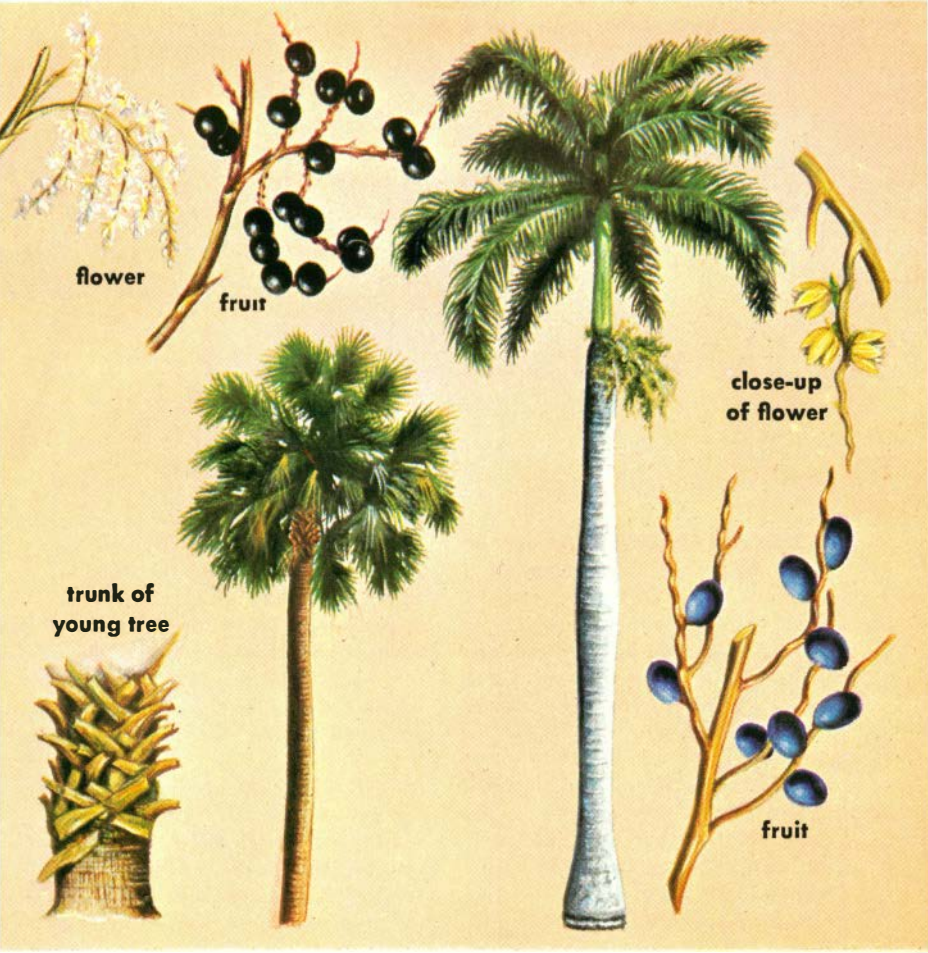
PALMS (1200 kinds) grow in the tropics. A dozen or so species are native to the Southeast. However, scores of introduced palms grow as exotic ornamentals. See the world-renowned collection at the Fairchild Gardens near Miami. All palms, though woody plants, are related to grasses, sedges and bananas. They lack a bark and their "wood" is very different from oak or pine. Palms rarely branch. The large leaves with parallel veins form only at the crown. Best known of all palms is the coconut. In southern Florida it grows over 60 ft. high, with a swollen base, long leaves and clusters of fruit at different stages of ripeness.

OUR NATIVE PALMS are concentrated in Florida and adjoining states. The Washington Palm (p. 62), from the Southwest, and many other exotic palms and cycads, grow widely in the Southeast also. Some palms require rich, moist soil; others thrive in arid soils or on beach sand. The two palms on p. 61 illustrate two types of palm leaves —palmate or hand-shaped on Cabbage Palmetto, and pinnate or feather-shaped on the Royal Palm.



SAW PALMETTO is sometimes a tree, but more often a low shrub forming large thickets. Its palmate leaves have small spines along the stalks. Flowers are yellowish; fruit round and black in loose clusters. Saw Palmetto is common throughout Florida. Two other shrubby palmettos are similar, but neither is thorny. The Scrub Palmetto has large palmate leaves that end in stringy filaments. The leaves of Bush Palmetto lack these threads. Its seed stalks are erect.

THATCH PALMS grow only in the southern tip of Florida and on the Keys. There are two species, both trees up to 30 ft. high with palmate leaves. The leaf stalks are smooth; leaves about 3 ft. across. Fruits are dark with white flesh; those of the Brittle Thatch Palm are about ¼ in. thick—half the diameter of the Jamaica Palm. (For more about palms, read NATIVE AND EXOTIC PALMS OF FLORIDA by Harold Mowry, Bull. 152, Fla. Agric. Ext. Ser., Gainesville.)



CABBAGE PALMETTO may grow 80 ft. high—but usually to only half that. It has a stout stem and a compact crown. The fanlike leaves with prominent midribs are 6 ft. long, the tips of the blades ending in long threads. The leafstalk is smooth. White flowers appear in spring, in large drooping clusters. These ripen by fall into round, quarter-inch black fruits. Seminole Indians used to eat the heart or "cabbage" at the center of the crown.

ROYAL PALM, most beautiful native species, is limited in its natural range to S. Florida and is preserved in the Everglades Nat. Park. It is also widely planted in rich moist soil. Long pinnate leaves are up to 12 ft. long, with 2- to 3-ft. leaflets. Royal Palm grows over 100 ft. high, with a smooth trunk that bulges at the base and again toward the top. Below the crown of leaves the trunk is bright green. Flowers white, forming open clusters of bluish fruits.

GOLDEN FEATHER—Areca or Cane Palm—grows in clumps of a dozen or more, 20 ft. high. Trunks thin, smooth, with yellow rings. Leaves long, feathery, drooping, yellowish in color. Prefers moist soil. This handsome tree comes from Madagascar.

FISHTAIL PALM has doubly compound leaves with roughly triangular leaflets that give the palm its name. Grows to 40 ft. high, with smooth trunk and spreading crown. Grows well in sandy soils. Flowers on long drooping spikes

WASHINGTON PALM, native of our Southwest and resistant to cold, is planted along Southeast streets. Spined palmate leaves cover the trunk of old trees, unless removed. Two species—Californian and Mexican—the latter planted more in Florida.

MANILA PALM, native to the Philippines, looks like a small version of Royal Palm, but with stouter leaves and brilliant clusters of inch-long red fruits in fall. Planted as an ornamental, it grows well in lime soils.

BOTTLE PALM, a short, stocky tree, has a smooth trunk that bulges at the base in a bottle-like effect. Large, thick pinnate leaves grow with a decided twist. Spindle Palm is a taller relative. Both have large black fruit set below the crown. Native to Mauritius.

QUEEN or Cocos Palm is widely planted as it grows rapidly where Royal Palms will not thrive. Trunk smooth with bases of leaves remaining under the crown. Leaves feathery and drooping. Orange fruits are large. From Brazil.

DATE PALMS number over a dozen. The Common Date Palm (from Arabia) with long, stiff grayish-green pinnate leaves and thick trunk does not produce good fruit in Florida. It and other date palms are quite hardy. Grown commercially in California.

FAN or HAIR PALM is best known because it comes from southern Europe—the only palm from that region. It is a dwarf, bushy plant with stiff, spiny palmate leaves about 2 ft. wide. Trunk short and thick.

zamia

CYCADS are a small group of unusual plants more closely related to pines than to the palms with which they are confused. They are widespread in the tropics, though never common. In the distant past they were much more common and important than they are now.

sago palm

ZAMIA, or Coontie, is a native cycad found in the dry, sandy uplands of this region. The stem is underground; the leaves rising two feet or so, in a loose clump. The brown fruiting cones seem almost too large for the plant. Used by Indians and settlers as a staple food. "Coontie" is from an old Seminole term meaning "white-bread plant."

SAGO PALM is a cycad from Java widely planted as a southern ornamental. Leaves are stiff, dark green, up to 6 ft. long, with the edges of the leaflets turned under. Plants grow up to 10 ft. high, with a rough trunk and a spreading crown of leaves. Seeds large and bright red.

fern palm

FERN PALM is sometimes called True Sago Palm, while the species above is called False Sago. This one grows larger (to 15 ft. high), is topped by a crown of stiff leaves which may each grow to 8 ft. long. Leaflets are stiff, broader than in above species. Male fruiting cones grow up to 2 ft. long. Female cones bear orange seeds. More commonly planted in southern Florida. Native of East Indies.

BLACK HOLLY, common in the coastal plain, grows 20 ft. high with wedge-shaped, leathery leaves and glossy black fruits.

OLEANDER, with simple, narrow evergreen leaves and pink or white flowers, is widely planted. Its milky juice is poisonous.

SHRUBS AND VINES

Shrubs and vines are somewhat neglected woody plants which come into their own in the Southeast. Here, in addition to the many native species of woodlands, meadow borders and shores, there are hundreds of exotic kinds planted as ornamentals or for fruit. Shrubs are erect woody plants, rarely growing as high or large as trees, with several trunks instead of one. Vines are not self-supporting, but climb on trees or buildings. Some vines can be trained to shrublike growth, as Bougainvillea. Since shrubs and vines include some of the most attractive flowering plants, wild species need protection. Laws can help, but you and your friends can help more. For further information on shrubs and vines you will need to look widely, as there are few specific books on these plants. *Flowers of the South* (p. 71) is one of the best for beginners.

MYRTLE DAHOON is a holly with thin, leathery evergreen leaves ending in a single spine. Found in swamps and along ponds. Round fruits, yellow to red, remain on the twigs. Dahoon is similar, but is often a tree, with wider leaves, downy beneath.

WHITE TITI is a common swamp shrub with simple, alternate leaves 2 to 4 in. long and short spikes of tiny white flowers in spring. Small yellow round fruits persist into winter. Along the Gulf coast, White Titi forms dense thickets 6 to 10 ft. high.

WAXMYRTLE or Bayberry is a well-known shrub of upland meadows, hammocks and shores. Recognize it by the thick clusters of waxy, gray berries which cover the twigs all winter. Leaves aromatic and evergreen; alternate, simple, with a few coarse teeth.

SPARKLEBERRY, or Tree Huckleberry, sometimes grows to tree size. More often it is an attractive shrub with glossy, alternate, simple, somewhat rounded leaves. The drooping, bell-shaped white flowers ripen into black, seedy fruits eaten by small animals.

GREENBRIER, or Bamboo vine, and other members of the thorny smilax group are common all along the south coastal plain. This species is a large vine with oblong, evergreen leaves which taper to a wedge-shaped base. Flowers small and greenish; fruits round and black.

GRAPES A score or more of wild and cultivated species grow in the south. The best-known wild grape is the Muscadine with leaves rounded and scarcely lobed. The Scuppernong is its cultivated form. The Summer Grape has soft leaves, rusty below.

SUPPLE JACK, or Rattan Vine, is a strong climber of southern woods and swamps with simple, alternate leaves, marked by conspicuous parallel veins. The small, greenish-white flowers are five-petaled, in short spikes. Fruits are oval and bluish-black.

CORAL BEAN is a southern plant which is sometimes a shrub or tree. Leaves compound, with three leaflets. Tubular, drooping scarlet flowers grow in a narrow spike. They ripen into long pods which split to reveal bright red, poisonous seeds.

BOUGAINVILLEA from Brazil is seen in most of Florida as a vine or trimmed shrub. The small yellowish flowers are set off by purple bracts. Twigs thorny, leaves, simple, narrow, heart-shaped. Hybrids are yellow, orange and deep red in color.

fruit

CRAPE MYRTLE is an old-time plant of gardens and borders with attractive pink, red or purple flowers in erect clusters. Leaves small, simple and alternate. It is easily grown. Originally from India but planted widely where mild climate permits.

POINSETTIA, introduced from Mexico, has become a Christmas symbol. Flowers small, surrounded by conspicuous leafy bracts. People who have only seen poinsettia potted are taken aback by the large shrubs of central and southern Florida.

HIBISCUS is probably the most common ornamental shrub of the South, with over 700 varieties—some native, most from Asia and Africa. Leaves alternate, toothed but variable. Flowers large five-petaled, often double. Colors white, pink, yellow, orange, red.

GARDENIAS include two African and one Chinese species. All have opposite, glossy leaves with smooth edges. The flowers are white, unfolding from a tubular base. The Chinese species, also called Cape Jasmine, is most commonly planted.

CONFEDERATE JASMINE, or Star Jasmine, is an old-fashioned vine from S. China, widely planted in southern gardens. Leaves opposite, glossy and thick. Flowers white (some yellowish), about 1 in. across and very fragrant.

CAMELLIAS, from China, are also evergreen shrubs with stiff, waxy flowers. These are white, pink or red—often double. The leaves are alternate, simple and toothed. Camellias are somewhat hardier than Gardenias and thrive in rich, shady acid soil.

JASMINES are a variable group of shrubs and vines, some very hardy. Leaves evergreen, simple or in three or more leaflets, depending on variety. White- and yellow-flowered species, with a fragrant flattened flower developing from a tube.

SWAMP AZALEA (left) is widespread on the coastal plain, not only in swamps. Flowers, white to pink, open with the leaves.

FLAME AZALEA (right) is a brilliant species found to the north. However, Florida has one with yellow to orange flowers.

AZALEAS are so closely related to Rhododendrons, those extravagantly flowered evergreen shrubs of southern mountains, that they are now classified together. Native azaleas have five-petaled funnel-shaped flowers and drop their small leaves in fall. They grow in swamps and open woodlands, flowering in spring. Most states protect these beautiful plants. Foreign azaleas, widely planted in acid soils all through the south, fall into three groups, of which the India and the Kurume Azaleas are best known. Potted azaleas usually belong to the former group. The famous azalea gardens of the South are best seen in early spring.

INDIA AZALEA flowers (left), to 3 in. across, are white, red, purple and variegated.

KURUME AZALEAS (right), from Japan, have smaller flowers. Colors run from white to pink, rose and lavenders.

SOUTHEAST FLOWERS

CHEROKEE ROSE, white to pink, from China, climbs over Southern walls.

This is the land of flowers; witness the name *Florida* itself. Flowers, or more fully, flowering herbaceous plants, are as numerous and prolific in the Southeast as the woody trees, shrubs and vines. With more than 9000 species of flowering plants, the Southeast probably exceeds any other comparable area in the United States. The native species are augmented by hundreds ot exotic and cultivated kinds grown in pots, beds and gardens. Many of these have escaped to become part of the local plant community and competitors of native species. Because of the climate, some species which die off farther north, here grow all year. Other herbaceous species become woody and shrub-like. In southern Florida many plants slow down or lose their leaves during the dry season. Only common species are illustrated. See books below for others.

For more about Southeastern flowers, read:

FLOWERS, H. S. Zim and A. C. Martin; Golden Press, 1950. A beginner's guide arranged by color; includes range maps.

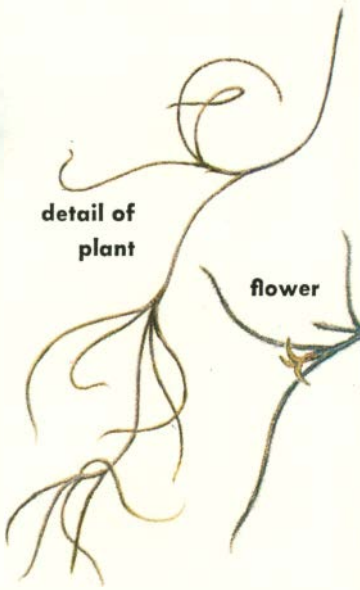
FLOWERS OF THE SOUTH, W. F. Greene and H. L. Blomquist; Univ. of N. Carolina Press, 1953. An excellent guide to flowers, flowering trees and shrubs. Native and exotic plants separated; many illustrations.

SUBTROPICAL GARDENING IN FLORIDA, N. Smiley; Univ. of Miami Press, 1951. Covers many aspects of southern gardening and garden flowers, shrubs and trees.

FLORIDA WILD FLOWERS, M. E. F. Baker; Macmillan, New York, 1938. An old but standard guide to herbaceous flowering plants.

YOUR FLORIDA GARDEN, Watkins and Wolfe; U. of Fla. Press, 1956. A. guide to tropical gardening and exotic plants.

AIR PLANTS, or epiphytes, grow attached to or perched on trees, poles or even wires where they may be able to get more sunshine and rain. They hold water by the use of specialized roots or stems. Some store moisture in "tanks" at the leaf bases; some have bulblike reservoirs; others use scale hairs. Many families of plants include epiphytes, ranging in size from microscopic algae to large ferns and orchids. Relatively few air plants are flowering. Among these the best-known are members of the pineapple and orchid families.



SPANISH MOSS (pineapple family) is neither a moss nor a parasite, though a heavy growth can smother trees. Tiny yellow-green flowers appear during May and June. It absorbs water through scale hairs. Still used for upholstering.

WILD PINEAPPLE, most colorful native air plant, grows in large clumps. Its gray-green leaves become tinged with purple in spring when the plant blooms. Flower stalk is a bright red; the violet flowers themselves are small.

BALL MOSS or Bunch Moss looks like a ball of coarse Spanish Moss —to which it is related—but leaves are longer and more curved. Common on trees, fences, and on telephone wires. Thin flower stalk bears small violet flowers.

CORKSCREW AIR PLANT is named from the spiral rosette formed by the small, lightly banded, twisted leaves. Long, branched flower stalk has clusters of small white to purplish flowers. A South Florida species.

SLENDER-LEAVED TILLANDSIA is a small epiphyte with delicate leaves often tipped with red at the time of blooming. Flower stalk red with small purple flowers. All these are in the pineapple family—not orchid.

ORCHIDS, mainly tropical, include over 15,000 species; about 200 in North America, 110 in the Southeast. They may take 4 to 8 years to bloom. The flower, specialized for insect polination, usually has an enlarged, colorful "lip" with a nectar spur at the base. Orchids grow in fields, swamps and woodlands. Tree-dwelling (epiphytic) orchids are found nowhere else in the U.S.

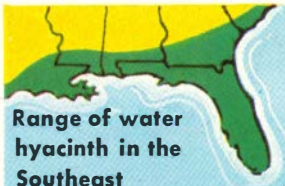
BUTTERFLY ORCHID is the most common of those growing on trees. Green bulbs produce narrow leaves and a long, thin flower stalk, bearing a loose cluster of yellowish, purple-spotted flowers, tinged with brown. Native orchids are protected by law.

GREEN-FLY ORCHID is a hardier relative of the Butterfly Orchid, found to the Carolinas and west to Louisiana. Leaves have no bulb at the base. The delicate, fragrant flowers on a 12- to 20-in. stalk are greenish with a tint of purple. Blooms in summer.

GRASS PINKS, found in damp pine woods and meadows, are a group of pink to purple spring-blooming orchids. These delicate plants usually have a single leaf or cluster of small leaves at the base of a stalk which bears from 3 to 20 flowers. Not an epiphyte.

YELLOW FRINGED ORCHID is a showy member of a large group found widely in the East, but more common in southern moist woods and meadows. A spike of orange flowers, each with a long, fringed lip, appears in summer. Narrow basal leaves are 8 to 10 in. long.

WATER HYACINTHS, now a serious pest throughout the Southeast, include at least six species. The common form, probably from South America, has bladder-like swellings below each leaf. It spreads rapidly from runners (like strawberries) and soon covers ponds, chokes rivers and clogs drainage ditches. Expensive programs of raking, mowing and spraying help hold it in check. Visitors are attracted by the delicate blue and purple flowers borne on thick stalks, seen in all seasons, but withering quickly when picked. Water hyacinths are of little use to wildlife or to man. By crowding out more desirable species, they are to native water plants what English Sparrows are to native birds.

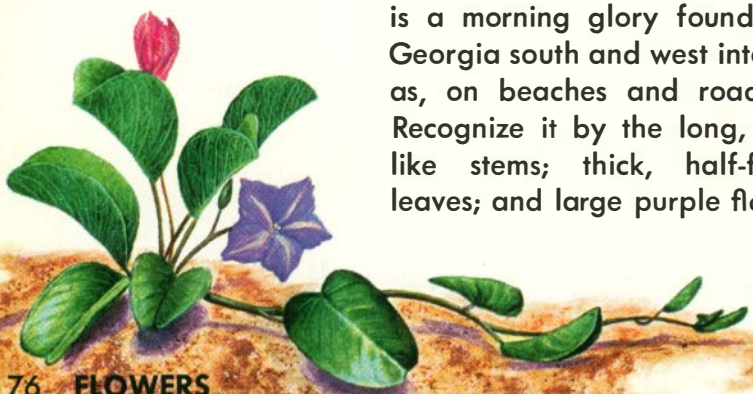


Range of water hyacinth in the Southeast

PITCHER PLANTS are unusual, with hollow, trumpet-shaped leaves, erect in some species. Insects trapped in the leaves decay, providing nitrogen for the plant. Flowers attractive, with a bright central canopy. Protected by law.

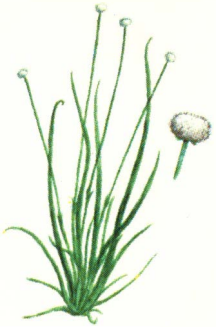
MOSS VERBENA with hairy, deeply-cut leaves, grows close to the ground along roads from central Florida northward. It blooms spring and summer, with flat-topped clusters of small, purple flowers.

MEADOW-BEAUTIES are a group of about a dozen species of purple-flowered perennial meadow plants. The attractive, four-petaled flowers open in summer. The simple, straplike leaves grow opposite.



RAILROAD VINE or Goats-foot is a morning glory found from Georgia south and west into Texas, on beaches and roadsides. Recognize it by the long, rope-like stems; thick, half-folded leaves; and large purple flowers.

PIPEWORTS are common summer-blooming plants of the southern coastal regions. The thin flower stalks with a tight crown of white flowers rise from a small rosette of basal leaves. Several species grow in moist, acid soil.



ROSE GENTIANS (some two dozen species) are closely related to the blue-flowered gentians. They grow 1 to 3 ft. tall with slender, branched stalks and simple, opposite leaves. The flowers—usually pink, sometimes white—bloom in summer.

MILKWORTS are a large, varied group with flowers ranging from white to yellow, orange and purple, in compact heads or open, flat-topped clusters. The small, simple leaves often grow at the base of the flower stalk.

PICKERELWEED, found along shores of ponds, rivers and ditches, flowers from June to October. Dark blue, thick flower spikes are somewhat similar to Water Hyacinth (p. 75), but large leaves with indented base are characteristic.

LIFE PLANT is the name given to species of Kalanchoe (Bryophyllum). Also known as Live-forever, Floppers or Air plant. This tropical group forms new plants at notches or at ends of leaves.

SNAKE PLANT or Bowstring Hemp is so often seen potted that it is a surprise to find clumps and borders of this thick-leaved, African plant. Most species are "stemless," leaves growing from a stout rootstock.

BIRD OF PARADISE plant has a series of colorful flowers arising from a shallow purple bract. This unusual member of the banana family grows 3 ft. high in rich moist soil. Another species has white flowers.

CORAL VINE is abundant in the South, climbing over sides of buildings. It has light green, wrinkled, arrow-shaped leaves and pink flowers. A white variety is less common.

TROPICAL FLORIDA

The area shown on the map reaches closer to the tropical zone than any other part of the United States. The climate, also, is tropical; winter temperatures average above 65°F.; frosts are rare or absent. As a result, many native plants are completely different from those of northern Florida. A number are related to species of the Bahamas, West Indies or Mexico. The region also abounds with plants from Africa, S. Asia, Australia, S. America, and the Pacific Islands, ranging from tiny perennials to large trees with unusual flowers.

For more about plants of tropical Florida, read:

400 PLANTS OF SOUTH FLORIDA, J. F. Morton and R. B. Ledin. Text House, Coral Gables, Fla., 1952.

COMMON EXOTIC TREES OF SOUTH FLORIDA, M. F. Barrett. Univ. of Fla. Press, Gainesville, 1956.

NATIVE TREES AND PALMS OF SOUTH FLORIDA, W. M. Bushwell. Univ. of Miami Bulletin, Vol. 19, No. 6, 1945, Coral Gables, Fla.

SHADE AND ORNAMENTAL TREES FOR S. FLORIDA AND CUBA, D. Sturrock and E. A. Menninger. Stuart Daily News, Stuart, Fla., 1946.

ALLAMANDA, from Brazil, is a vine with whorled leaves and funnel-shaped yellow (or purple) flowers. Propagated by cuttings.

CERIMAN is an eye-catching climber with large, deeply-cut and "holed" leaves. The white flower spathe forms a large, edible fruit.

GUMBO LIMBO, seen from Tampa south, is found also in Central America and the West Indies. Noted for the way its branches root quickly when stuck in the soil. Its papery, reddish-brown bark has a birch-like texture. Leaves compound (3 to 7 leaflets), alternate. Fruits purple, ½ in. long, in clusters.

POISONWOOD, the South Florida supplement to Poison Ivy, is a handsome but dangerous tree 40 ft. high with a gray-brown flaky bark over an inner orange layer. Leaves are compound; leaflets thick, dark green, glossy, with flattened bases—compare with Gumbo Limbo and Mahogany. Oval, orange fruit, in loose clusters.

COCO PLUM is a low (to 30 ft.) rounded tree of southern Florida, the West Indies and Central America. Tiny white flowers, in spikes, develop into large, edible, sweet, whitish-to-purple fruits. Leaves are rounded, tough and glossy, dark green, indented a bit at the tip. Coco Plum is a coastal tree, found along canals and waterways. Bark: reddish-brown.

FLORIDA STRANGLER FIG belongs in a large family, all having a milky sap. Small seeds from the red, paired fruits lodge in a palmetto or other host. Here they grow, sending roots downward along the trunk; branches and leaves cut off sunlight and eventually strangle the host. Leaves: thick, oval, 4 in. long. Bark: smooth, dark gray.

RED MANGROVE, 15 to 70 ft. high, with spreading stilt roots, is seen along most southern Florida shores. Seeds germinate on the tree and develop into seedling "pencils" which fall and float away. Leaves leathery, opposite. Black Mangrove lacks stilt roots, is more treelike—with small leaves, fragrant flowers.

WILD TAMARIND is found south of Miami as a tall tree (to 60 ft.) with brown, scaly bark. The leaves are feathery and twice compounded. In spring, the minute flowers form tight, fuzzy, drooping globes. By fall, the flat, brown fruit pods have formed, and may hang on the twigs for some time. Also occurs in the West Indies.

WEST INDIES MAHOGANY is found wild on the mainland and the Keys, and is also planted for shade. It is a handsome tree (to 50 ft.); bark gray-brown, scaly on older trees. Leaves alternate, with 4 to 8 leaflets with sharp tips and unequal bases. Fruits are erect brown pods, which split open, releasing winged seeds.

SEA GRAPE is an eye-filling tree forming dense thickets on coastal beaches. Also planted widely. Spreading branches droop to the ground. The round leathery leaves with red veins cannot be mistaken; young leaves are a delicate bronze. The tiny flowers form a thick spike. Purple fruits, fine for jelly, are eaten by wildlife.

ROYAL POINCIANA, from Madagascar, is widespread in the West Indies and southern Florida. Handsome at any time, it is superb in late spring when it is a mass of orange-red flowers. Seed pods are heavy, brown; often 2 ft. long. The tree has a wide, spreading crown and featherlike, twice-compounded leaves. Grows to 40 ft. high.

ORCHID TREE is a widely planted shrub or small tree (to 35 ft.) native to India. Several species are all marked by simple two-winged leaves of an unusual butterfly shape. The orchid-like flowers which appear in winter vary from white to pink, lilac, and purple, depending on the species. Seeds are long, brownish pods.

WOMAN'S TONGUE gets its name from the thin, brownish seed pods, which rattle in the slightest breeze. This weedlike, quick-growing Asiatic shade tree is naturalized in southern Florida. Its spreading branches bear pom-poms of greenish-yellow flowers, and twice compound leaves with rounded leaflets. Mimosa family.

TRAVELER'S TREE—from Madagascar—a member of the banana family, grows well in tropical Florida. It is not a true tree, though it may grow 30 ft. high, with its 9-ft. leaves forming a huge fan. Travelers, far from their hotel, can find water trapped in the base of the leaves. There are also bright blue seeds and a clear, sugary sap, both edible.

CENTURY PLANTS from Mexico and Central America join one native species to form a striking, easily identified group. The rosette of thick, spiked leaves grows slowly, and after 20 years or so (not a century) sends up a tall stalk of creamy flowers, and dies. These plants produce sisal fiber and the Mexican drinks *pulque* and *tequilla*.

ACALYPHA or Copper Leaf, commonly used as a hedge or ornamental plant, is a branching shrub (to 15 ft.) with red, varicolored, curled, heart-shaped leaves. Flowers are small and red, in short, drooping spikes. A native of S. Pacific islands. A close relative, the Chenille Plant, has more showy flower clusters.

TROPICAL ALMOND belongs to a large family of tropical trees from southern Asia. Fast-growing, it reaches 75 ft. high with thick, horizontal branches. Long, leathery leaves, clustered at ends of twigs, turn red with drought or cold. Flowers small, in drooping spikes. Fruits (not true almonds), in a green husk, are edible.

BANYAN of India is a famous tree which spreads aerial roots to form new trunks. This and other members of the fig family are widely planted as shade trees. The False Banyan, the Benjamin Fig and the Rubber Tree are generally similar, with simple, thick, glossy leaves. The leaves of the edible fig are lobed like maple.

CROTONS become more and more common as one goes south in Florida, where they are a universal front-yard plant. Dozens of varieties all have multicolored thick leaves—twisted, cut, lobed or elongated. Leaf color varies from green through yellows, reds and purples. Flowers small, yellowish, in a thin spike.

FLAME VINE from Brazil is a spectacular climber which grows rapidly and bears handsome tubular five-petaled orange flowers. In Florida these do not develop into fruit. Leaves with 2 to 3 leaflets, and a three-branched tendril by which the plant climbs.

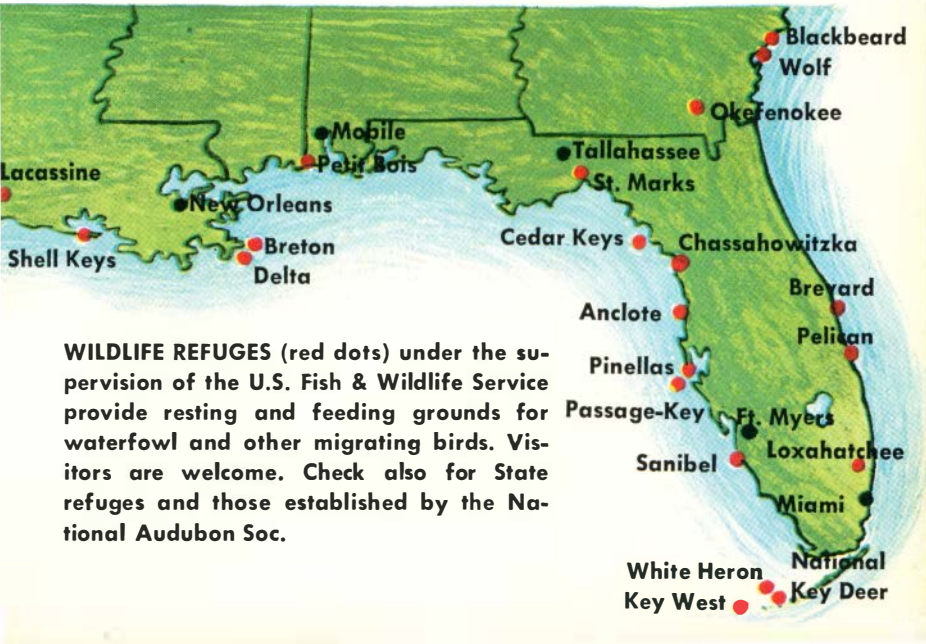
ALOES, originally from Africa and the Mediterranean region, have stiff, succulent, upcurved leaves forming a fleshy rosette. Flower stalk bears yellow or red spikes. Barbados Aloe is the common South Florida species. At least a score more are cultivated.

COMMON SCREW PINE, or Pandanus, grows tree high (20 ft.) with strong prop roots. Long, straplike leaves with needle-toothed margins, grow close in ascending spirals. From Madagascar. Other species, some with varicolored leaves, from South Pacific Islands.

ANIMAL LIFE

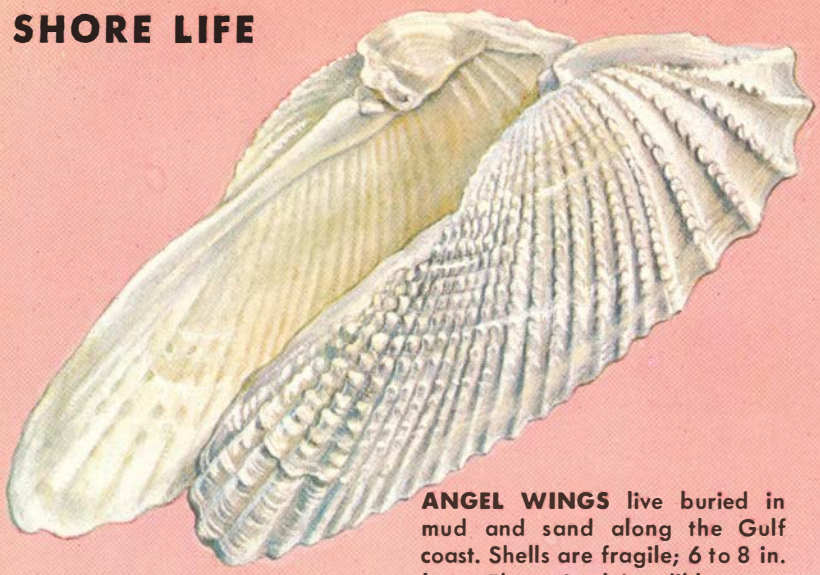
Animal life in the Southeast vies in abundance and diversity with the plants. Of the animals, fishes and birds are perhaps best known, but anyone interested in any phase of animal life will find the Southeast has something exciting to contribute. As the face of the Southeast changes, the increase in population, in industry and in agriculture limits the wildlife population. The number of birds in the great Florida rookeries is only a small fraction of what it was a generation ago. Enjoy and study wildlife, but don't take it for granted, even in refuges and parks below.

ROSEATE SPOONBILL of S. Florida and the Keys, has a unique bill for feeding on small fish and shallow-water life. Length: 30 in.



WILDLIFE REFUGES (red dots) under the supervision of the U.S. Fish & Wildlife Service provide resting and feeding grounds for waterfowl and other migrating birds. Visitors are welcome. Check also for State refuges and those established by the National Audubon Soc.

SHORE LIFE



ANGEL WINGS live buried in mud and sand along the Gulf coast. Shells are fragile; 6 to 8 in. long. The animal is edible.

Shore life abounds along the southeast shoreline which includes some 24,000 miles of bays, inlets and shores. This region is the Mecca of shell collectors. Beaches such as those on Captiva, Sanibel and Marco islands are famous. Shells from all over the world are sold at roadside stands, but it is more fun to collect your own. Even better, observe and study mollusks, starfish and crabs as living animals. Explore mudflats, rocks, tide pools, piling and wrecks for various kinds of sea life.

For more about southern shellfish, read:

AMERICAN SEA SHELLS, R. T. Abbott. D. Van Nostrand, N.Y., 1954.

ANIMALS WITHOUT BACKBONES, R. M. Buchsbaum. Univ. of Chicago Press, Chicago, 1948.

FIELD GUIDE TO THE SHELLS of our Atlantic and Gulf Coasts, P. A. Morris. Houghton Mifflin, Boston, 1951.

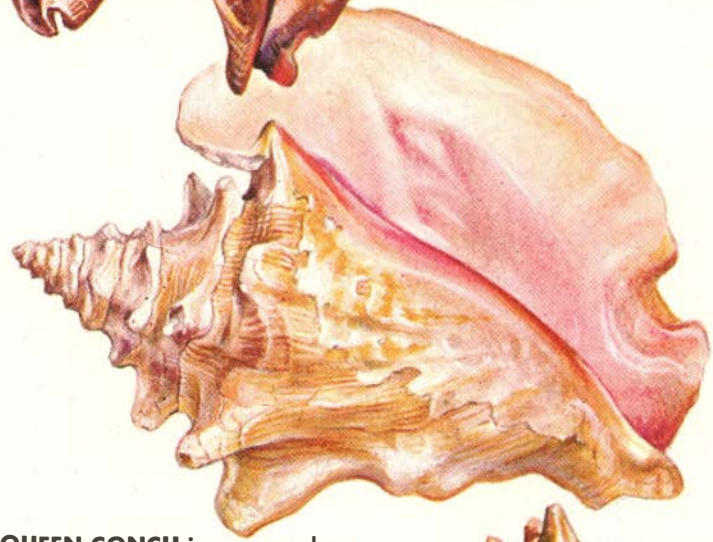
FLORIDA SEA SHELLS, B. Aldrich and E. Snyder. Houghton Mifflin, 1936.

SEASHORES, H. S. Zim and L. Ingle. Golden Press, N.Y., 1955.

CONCHS are a family of large tropical sea snails found along shores and coral reefs. They move actively, using a powerful "foot" which ends in a claw-like hook, searching for dead fish or mollusks on which they feed. Common in the Florida Keys and nearby Gulf waters.

HAWK WING is one of the smaller conchs—4 to 6 in. long with a mottled or streaked shell. Small knobs mark the edge of the whorls. A Florida Keys and West Indies species.

FLORIDA FIGHTING CONCH (3 to 5 in.) is similar to the West Indies Fighting Conch but is usually browner, with fewer knobs or spines. A scavenger of shallow Florida waters.



QUEEN CONCH is common, large and attractive. Few shells can vie with its rose-pink interior. A scavenger of coral roofs; to 12 in., weight to 5 lb. The prime ingredient of conch chowder.

TURKEY WINGS on both the Atlantic and Gulf coasts live attached to rocks, grow 2 to 5 in. long, with a straight toothed hinge. Shell heavy, streaked, yellow or brown.

PONDEROUS ARK is found in deeper waters of all shores but is most common in the Gulf. Shell of living animal is covered with a thin black skin which peels off.

JINGLE SHELLS are found along both coasts. Color varies from yellow to pink, gray and white. Lower valve smaller, usually remains attached to rocks.

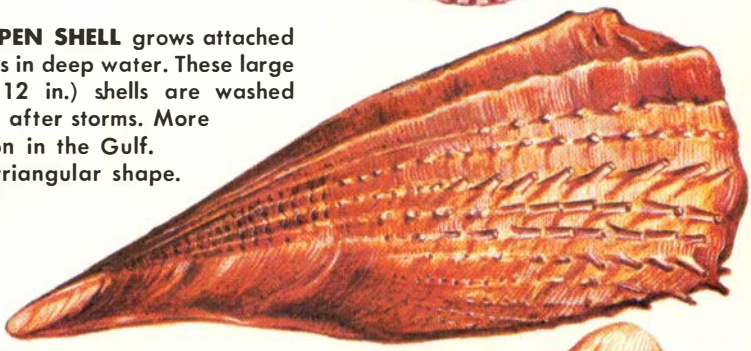
SUNRISE TELLIN or Rising Sun lives in the sand just below the low tide mark. Note the smooth shell with broadening colored rays. Grows 2 to 4 in. long.

SUNRAY VENUS is larger (5 to 6 in.) than the Sunrise Tellin but like it has broadening rays. Color gray, pink or lilac. Found under sand in shallow water. Edible.

CHITONS are a group of mollusks which have a shell of 8 overlapping plates. Found on rocks in tide pools. Common here, but more so along the Pacific.

CALICO SCALLOP is the most common southern scallop (1 to 2 in.); it is found in a rich variety of colors. About 20 radiating ribs join at the winged hinge line.

STIFF PEN SHELL grows attached to rocks in deep water. These large (8 to 12 in.) shells are washed ashore after storms. More common in the Gulf. Note triangular shape.



ATLANTIC COCKLE is found in the Gulf also, washed ashore after storms. Shell 3 to 6 in. in dia. with about 35 stout ribs. Very common. Used in shell souvenirs.

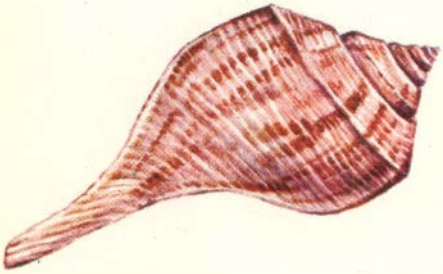
COQUINAS are common, and though small (½ to ¾ in.) are desirable as food. Their color and pattern include nearly every shade and form. Also called Butterfly Shell.

BLEEDING TOOTH is found on rocks and coral. Shell marked with dark zigzag bars. Edge of shell white with bright orange spot. Feeds on seaweeds.

TULIP SHELL is common along Atlantic and Gulf shores. Color a green-gray with darker markings. Length 5 to 8 in. A slow-moving scavenger of shallow water.

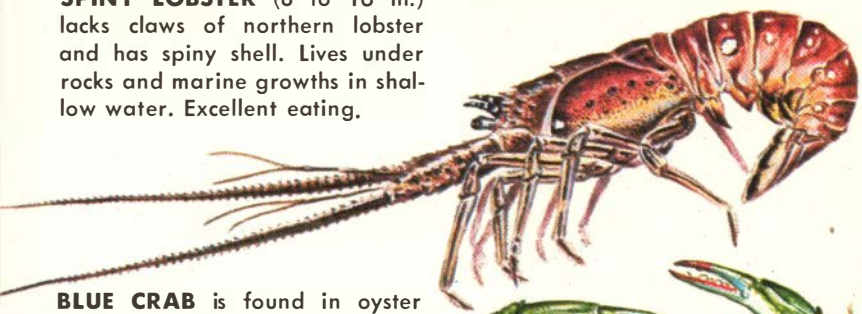
FLORIDA CERITH (or Hornshell) is one of a group of spiral-shelled snails of warm waters. Color white or gray, length about 1 in. A common animal on seaweeds.

ALPHABET CONE represents the large family of cone shells found in all tropical waters. Shells found washed on beaches. Irregular markings name this species.



PEAR WHELK is a southern member of a large northern family. Shell is more delicate and less knobbed than northern kinds. Found along both Florida coasts.

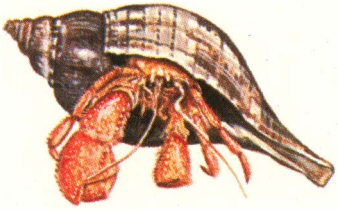
SPINY LOBSTER (8 to 16 in.) lacks claws of northern lobster and has spiny shell. Lives under rocks and marine growths in shallow water. Excellent eating.



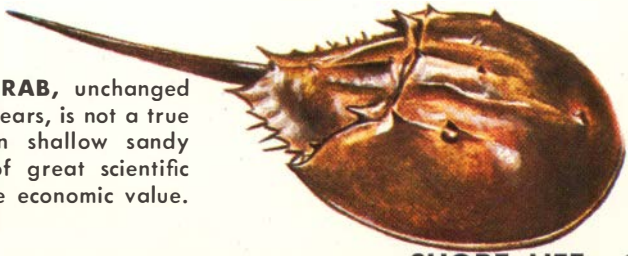
BLUE CRAB is found in oyster reefs, bays and channels. Famous in Louisiana bayous and Chesapeake Bay. Mature in 2 years; called "soft-shells" when molting.

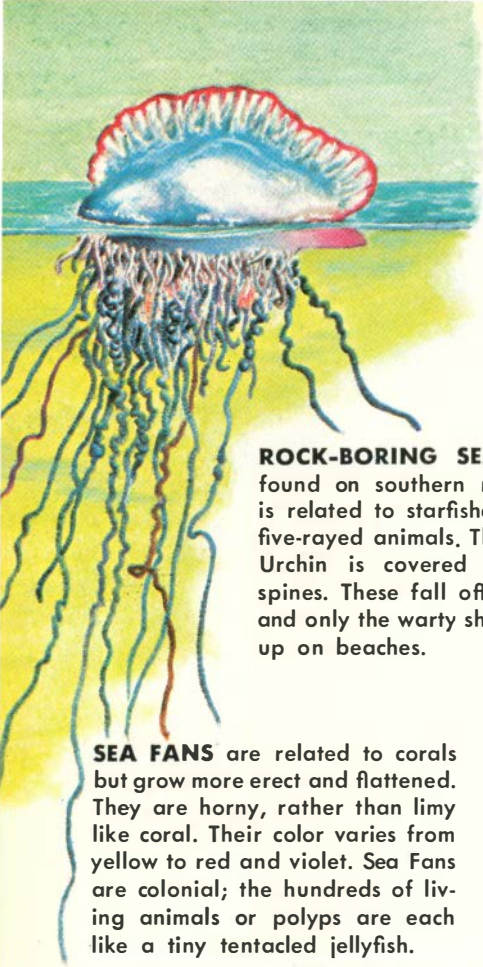
STONE CRAB, offered as a delicacy in restaurants, is found on sandy bottoms and oyster reefs in the Atlantic and Gulf. Stout, hard shell 6 in. wide. Massive claws.

HERMIT CRABS (1 to 6 in. long) use shells of any sea snails as portable homes. Prefer rocky beaches. Some southern species live on land—even in trees!

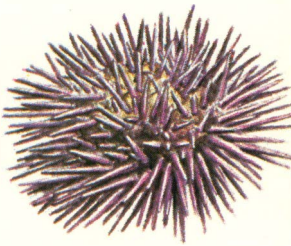


HORSESHOE CRAB, unchanged for 400 million years, is not a true crab. Found on shallow sandy bottoms, it is of great scientific interest but little economic value.





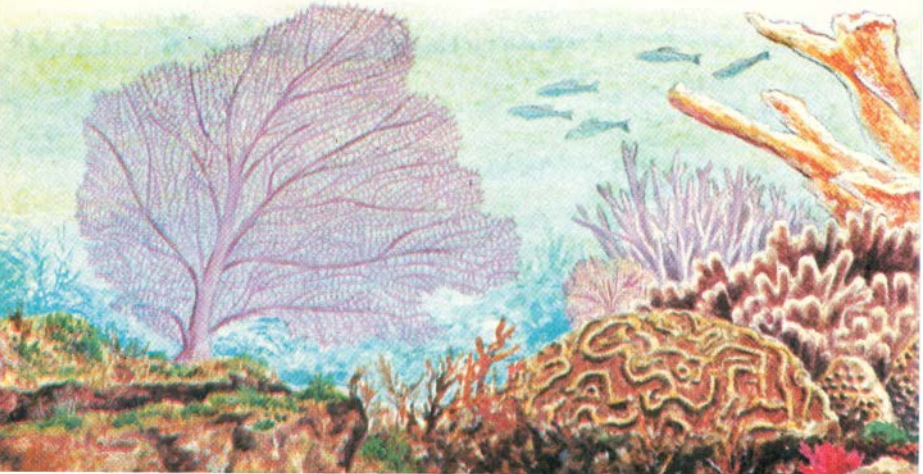
PORTUGUESE MAN-OF-WAR is a jellyfish—one of the few dangerous to swimmers. The stinging cells in the tentacles can cause severe and painful reactions. Watch for these jellyfish, easily recognized by their purple float, and remember that tentacles may extend over 20 ft.



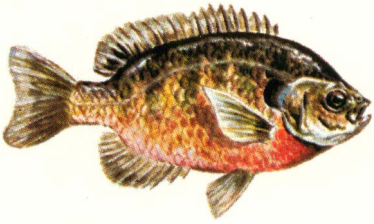
ROCK-BORING SEA URCHIN, found on southern rocky shores, is related to starfishes and other five-rayed animals. The living Sea Urchin is covered with purple spines. These fall off after death and only the warty shell is washed up on beaches.

SEA FANS are related to corals but grow more erect and flattened. They are horny, rather than limy like coral. Their color varies from yellow to red and violet. Sea Fans are colonial; the hundreds of living animals or polyps are each like a tiny tentacled jellyfish.

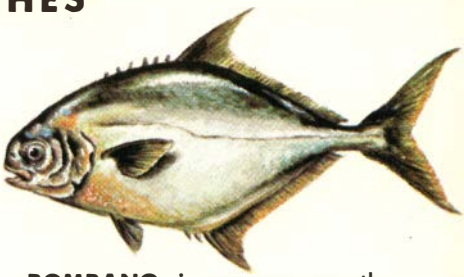
CORALS include some 2500 kinds, but only a score are found on our southern shores. Brain Coral forms rounded, furrowed masses. Staghorn Coral branches as its name indicates. Corals are colonial animals that secrete lime to build reefs and islands.



FISHES



BLUEGILL is a common sunfish of ponds and lakes; wt. to 1 lb.; food, insects and their kin. One of the best known pan fish, found with bass.



POMPANO is common on the East coast but more so on the Gulf around inlets, channels and river mouths. Wt. 2 to 3 lb. Note yellowish tail margin.

Fishes and fishing are, to some, more important than even the southern sunshine. This area is unequaled for its variety of fishes and for the excellence of fishing. Over 1100 species of fresh- and salt-water fishes are found here, including many that rank high as food and sports fishes. In South Florida waters are Bahaman, West Indian and other southern species never seen farther north. Marine fishing begins with the surf, jetties and piers. It moves into boats for bottom fishing, reef fishing (in southern Florida) and out to the Gulf Stream for the big ones. Fishermen are just as enthusiastic about bass and other fresh-water species in the lakes, streams and springs.

For more information about fishes, read:

FISHES, H. S. Zim and H. H. Shoemaker. Golden Press, New York,1956.
FISHING GUIDE. The Miami Herald, Miami, Fla. (annual editions).
NORTH AMERICAN GAME FISHES, F. R. La Monte. Doubleday, New York, 1946.
HANDBOOK OF FISHES OF THE ATLANTIC SEABOARD, W. Ackerman. Amer. Pub. Co., Washington, D.C., 1951.
LIFE STORY OF THE FISH, B. Curtis. Appleton-Century, New York, 1938.
FIELD BOOK OF THE SHORE FISHES OF BERMUDA, W. Beebe and J. Tee-Van. Putnam, New York, 1929.
FLORIDA FISHING, G. Lewis. Crown Pub., New York, 1957.

NURSE SHARK (harmless) is seen in shallow water from the Keys to Carolinas, feeding on shrimp, crabs. Length: 5 to 12 ft. Sand Shark, smaller (to 9 ft.), and without barbels, is a scavenger.

RED GROUPER is the most common of a desirable group of southern food fishes. A bottom fish preferring rocks and channels. Color variable; avg. wt. 5 lb. Jewfish is the largest of the groupers.

RED SNAPPER is the best known of the snappers—all are fine food and game fish. Found mainly in the Gulf, this one averages about 5 lb. Mangrove Snapper is smaller and greenish.

YELLOWTAIL is a streamlined snapper with a deeply forked tail and a yellow streak on the sides. Like other snappers, has sharp teeth, feeds on shrimp and other crustaceans. Wt. about 2 lb.

BARRACUDA (cuda for short) lives both offshore and in shallows. Avg. wt. about 8 lb.—often 25 lb. or more. This swift, savage fish feeds on smaller species. It may attack swimmers.

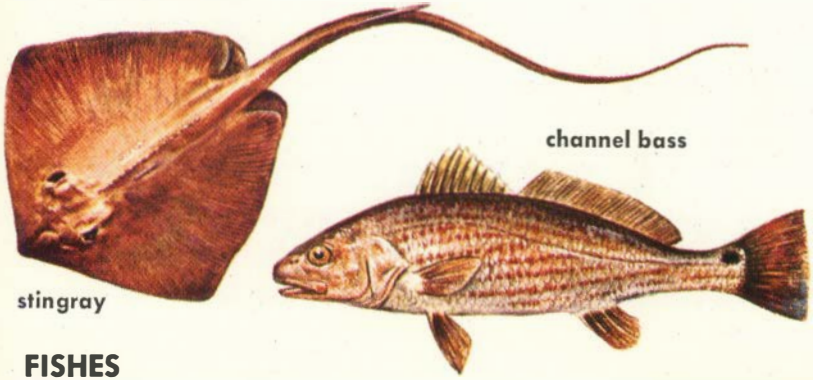
STINGRAY is a flattened relative of sharks. Name refers to a toothed bony stinger near the base of the tail which can produce a bad wound. Width of wings: 2 to 3 ft. Young are born alive.

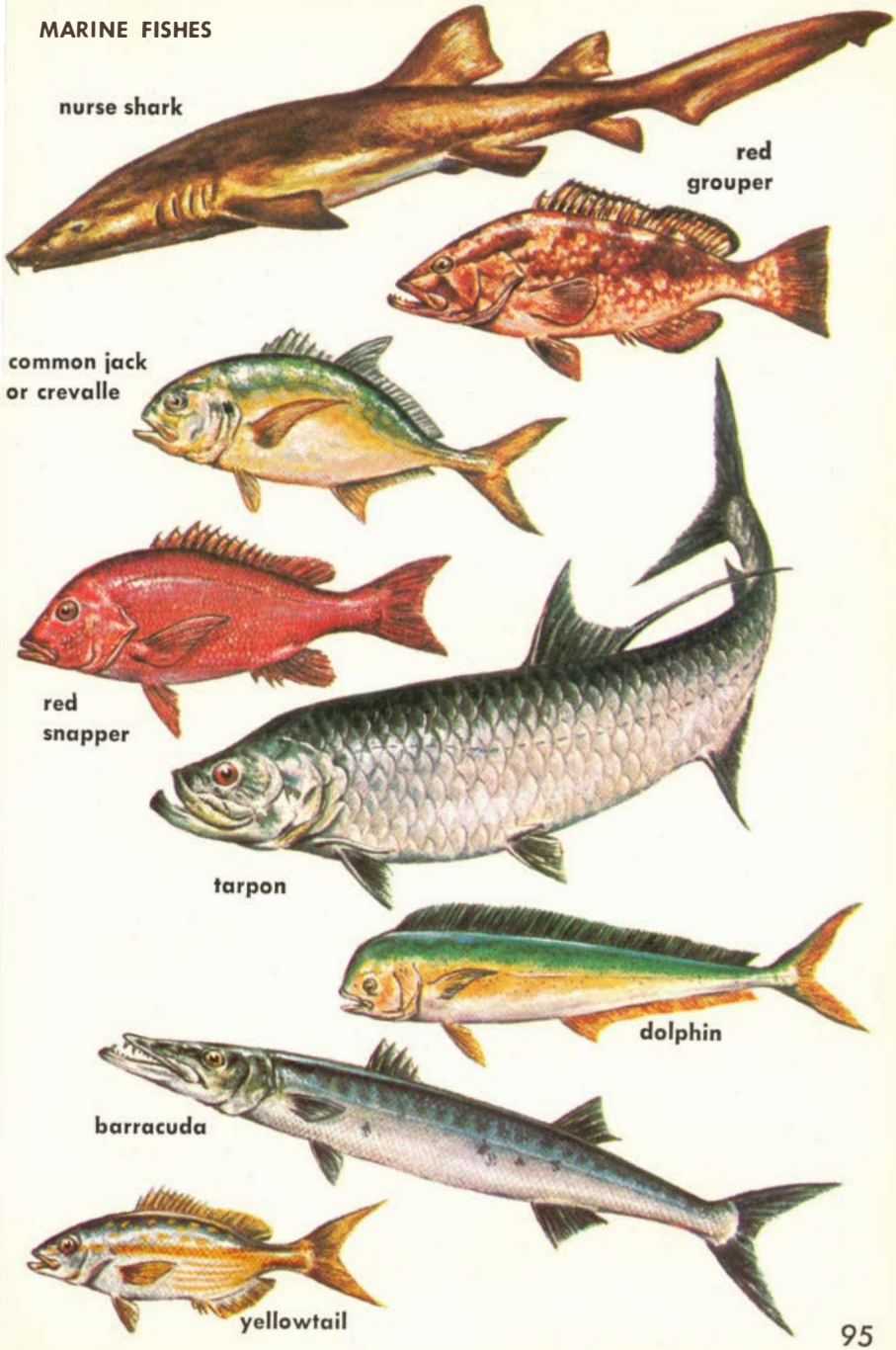
CREVALLE JACK, like others of its family, has a strong keel along the sides that supports the tail. This flattened game fish is found from Georgia southward, in cuts, channels and inlets. Avg. wt. 3 lb.

CHANNEL BASS ranges from the Keys to Delaware, moving north in spring. Use the black spot near the base of the tail for identification. A commercial food fish, and a fine sports fish also.

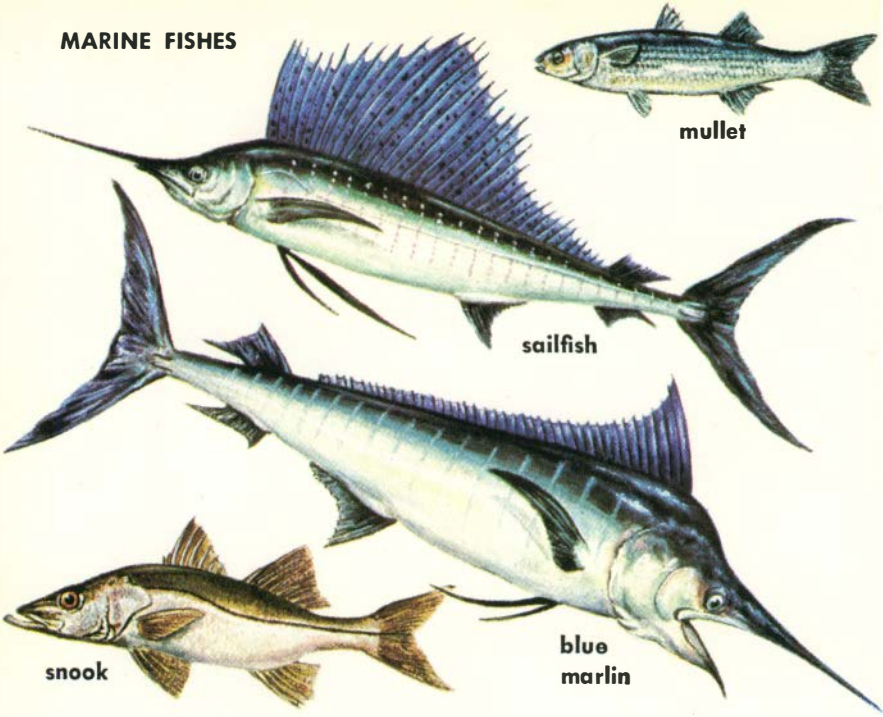
DOLPHIN or dorado is claimed to be swiftest and most beautiful of game fishes. Male has a vertical forehead. Feeds on fish, offshore in the Atlantic and Gulf. Avg. wt. 5 lb.; rarely to 30 or more.

TARPON, one of the best-known game fish, is rarely used for food. Moves from open water into bays and rivers in late spring. More common in southern Florida. Avg. wt. 30 to 50 lb.—but up to 300.




nurse shark
red grouper
common jack or crevalle
red snapper
tarpon
dolphin
barracuda
yellowtail

MARINE FISHES



SAILFISH, named because of its large dorsal fin, is a famed southern gamefish, averaging 35 to 45 lb., about 6 ft. in length. Found mostly in the Gulf Stream, it feeds on smaller fishes.

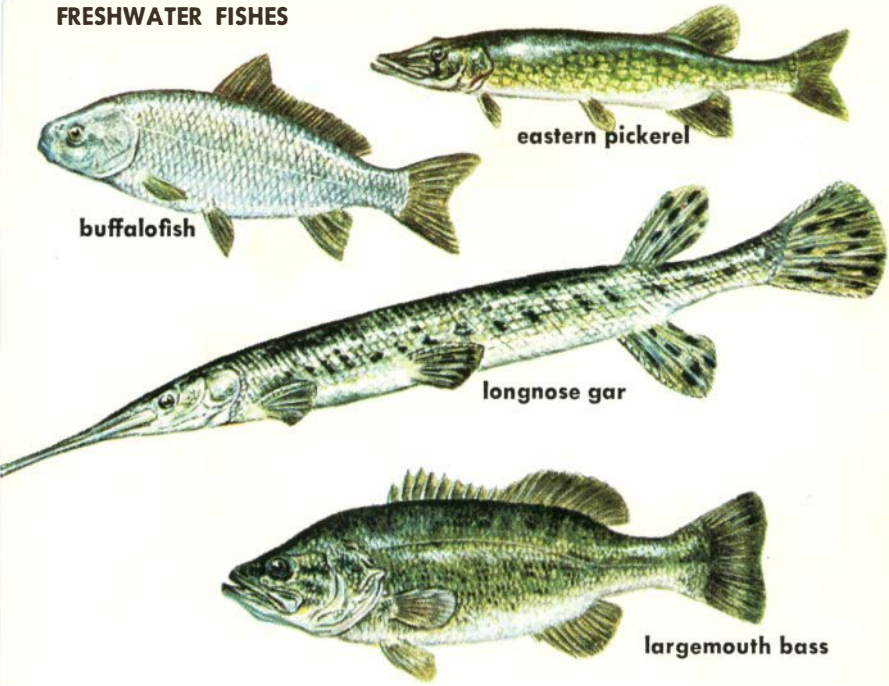
SNOOK are found on the Florida East coast and along the Gulf, in shallows, near spits and in canals. Feed on small fish and crustaceans. Snook, a top game fish, are excellent eating. Avg. wt. 5 lb.

MULLET is common along shores from Hatteras to the Gulf. It is a good food fish, also used for bait. It feeds on small bottom plants and animals. Caught mainly in nets. Avg. wt. 1 lb.

BLUE MARLIN is the granddad of game fish; some reported as large as 1500 lbs. A Gulf Stream fish, it moves north in summer, but is always found off Florida. Avg. wt. 300 lbs. Length: 6 to 15 feet.

SOUTHERN FLOUNDER is much like its northern relative—with color as variable as the bottom. This flatfish lies nearly buried in sand, awaiting crustaceans and small fish. Fine eating. Avg. wt. 2 lb.

FRESHWATER FISHES



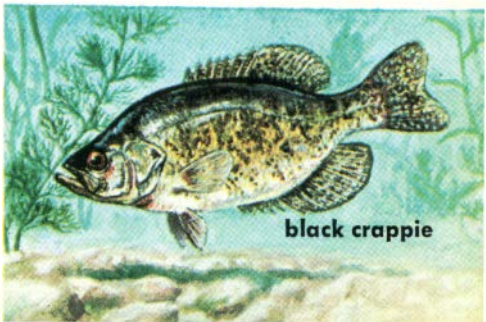
BUFFALOFISH—several species—live in rivers, bayous and southern ponds. The coarse food fishes are netted commercially. Smallmouth Buffalofish from the Gulf west of Florida weigh up to 25 lbs.

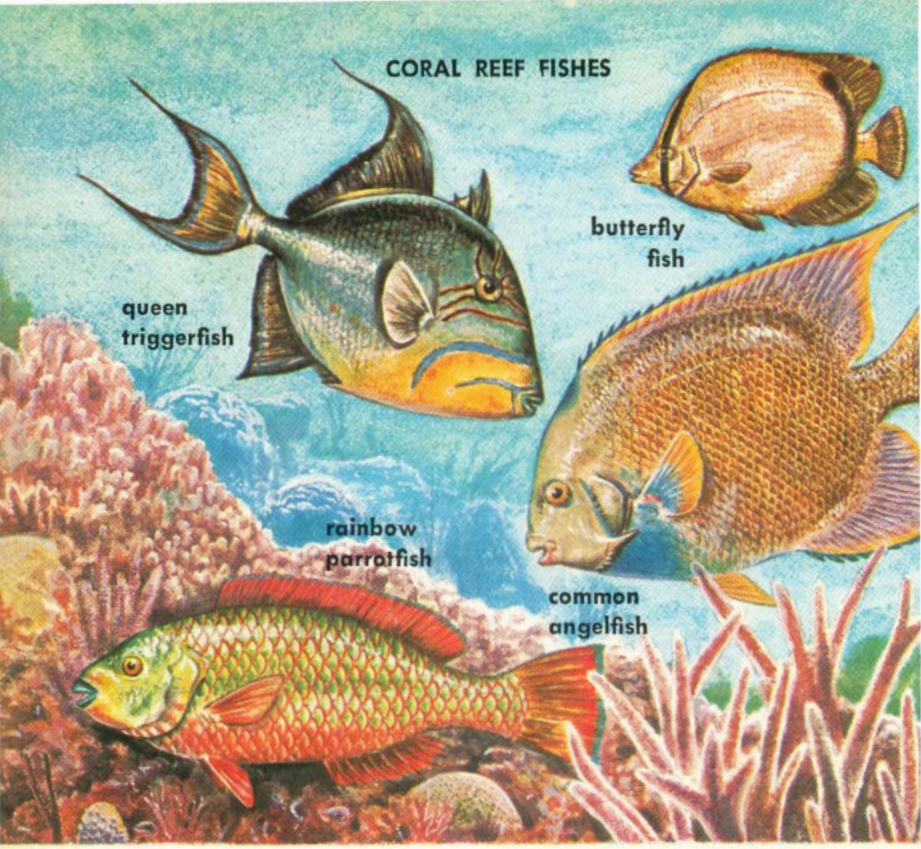
LONGNOSE GAR, most common of several species, lives in ponds, canals and rivers. Gars are ancient fishes, with armored skin. They are pests to fishermen and difficult to catch. Two to 4 ft. long.

BLACK CRAPPIE (Calico Bass) is common in lakes and ponds. Its banded relative, the White Crappie, is more common in the Mississippi basin. Both are well-known pan fish. Wt. about 1 lb.

EASTERN PICKEREL is a close relative of the Pike and Muskellunge. It lives along the weedy shores of ponds and slow rivers, feeding on all small aquatic animals. Avg. wt. 1 to 2 lb.

LARGEMOUTH BASS is *the* fresh-water game fish of the South. It prefers shallows, rocks, and overgrown bottoms, feeding on aquatic insects. Avg. wt. about 1 lb.—record about 25.



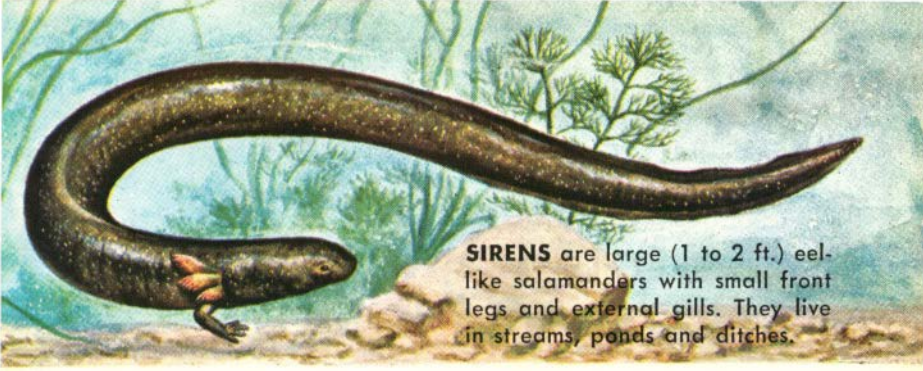


QUEEN TRIGGERFISH of southern Florida waters has a brilliantly colored, tough skin with small scales. A reef dweller about a foot long, it feeds mainly on shellfish. The Common Triggerfish, brownish and slightly smaller, is more widely distributed.

RAINBOW PARROTFISH is the largest of a group of West Indies and Florida reef fishes. It feeds on mollusks and can bite fishhooks in two with its heavy, fused teeth. Younger Parrotfishes are greener in color. Length about a foot; rarely up to 3 feet.

COMMON BUTTERFLY FISH has variable markings, but the black line through the eye and black spot on the upper fin are typical. The Four-eyed Butterfly Fish, also common, has black flecks on sides and an orange band on rear fins and tail. Both 8 to 12 in. long.

COMMON ANGELFISH about 18 in. long and brightly colored, lives in coral reefs and well up the Florida coast. Its food is mollusks and small crustaceans. The Queen Angelfish is similar in size and color but brighter, and with a dark "eye spot" on its forehead.



SIRENS are large (1 to 2 ft.) eel-like salamanders with small front legs and external gills. They live in streams, ponds and ditches.

REPTILES AND AMPHIBIANS

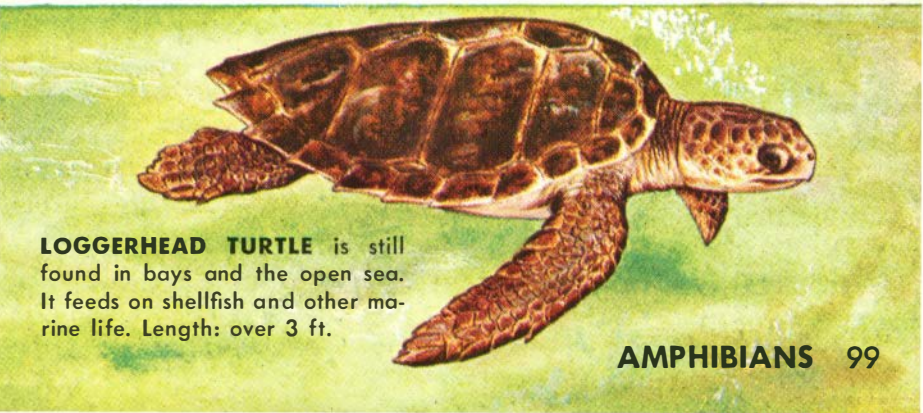
Reptiles and amphibians receive more attention than their importance warrants. Yet their unusual forms make everyone curious. The Southeast is rich in species of frogs, toads, salamanders, turtles, lizards and snakes. Close observation will show how interesting these animals are. Few snakes are poisonous and reasonable safeguards can make their danger negligible. Find out about proper clothing and first aid before going into woods or open country.

For more about reptiles and amphibians, read:

REPTILES AND AMPHIBIANS, H. S. Zim and H. M. Smith. Golden Press, New York, 1953.

GUIDE TO THE REPTILES, AMPHIBIANS AND FRESH-WATER FISHES OF FLORIDA, A. F. Carr and C. J. Goin. Univ. of Fla. Press, Gainesville, 1955.

HANDBOOK SERIES (various authors). Comstock Pub. Assoc. Ithaca, 1947-57. A series of five handbooks on Salamanders, Frogs and Toads, Turtles, Lizards and Snakes. Standard reference volumes.



LOGGERHEAD TURTLE is still found in bays and the open sea. It feeds on shellfish and other marine life. Length: over 3 ft.

GREEN TREE FROG is typical of a large southern group of Hylas. It is 2 in. long, bright green, with a white stripe down each side; toes end in suction disks. Like other tree frogs, it is found on plants near water. Not easily seen but often heard at night.

GOPHER FROG lives in pine lands and scrublands; often in burrows of Gopher Turtles. It is 3 to 4 in. long, pale in color, with dark brown spots. The Gopher Frog is built like the Bullfrog, but does not live by the water.

FLORIDA CHORUS FROG and its close relatives are all small, rough-skinned frogs with slender bodies and pointed snouts. This species has three rows of dark, uneven spots down its back; others have dark stripes. Chorus Frogs are about an inch long.

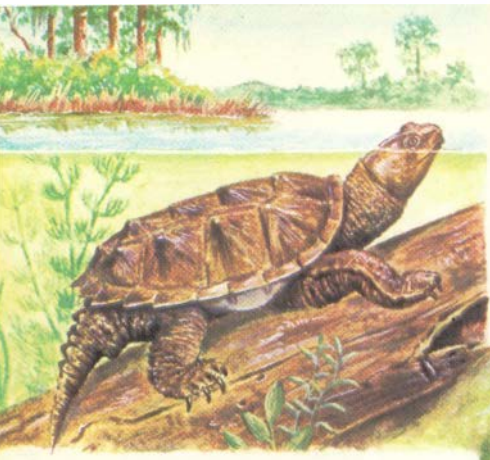
EASTERN NARROW-MOUTHED FROG is an unusual frog with smooth skin and a narrow, pointed head, with a fold on skin just behind the eyes. It is a dark reddish-brown and may have light strips on each side. 1 in. long.

ANOLE, or American Chameleon, is a common southern lizard, found on trees and around buildings. It climbs easily with suction toe pads. Skin has small scales. Color changes from bright green to brown and gray. Male can expand red fold of skin on its throat.

FIVE-LINED SKINKS (several species of them) are abundant in woods and scrublands, along fences, under rocks, and even in buildings. Adults usually have five light stripes. The brilliant blue tail fades in adults. Feed on insects and other small invertebrates.

SOUTHERN FENCE LIZARD, seen throughout the Southeast, can be recognized by its rough scales. Males have blue patches on their sides and on their throats. Fence Lizards prefer open woods, but are often seen in woodpiles.

SIX-LINED WHIPTAIL LIZARD, or Racerunner, is a common, fast and interesting species, with several western relatives. It is slender, with a tail twice its body length. Scales are fine and smooth, with six narrow stripes.



SNAPPING TURTLES, most common in the South, are aquatic. The rear of their rough shell has a toothed edge. The undershell is small. The Alligator Snapper, a larger species, may weigh over 100 lb. It is found only in southern rivers and ponds.

SOFT-SHELLED TURTLES, common in the South, are found throughout the Mississippi valley. The shell lacks the horny scales of other turtles, and the edge is soft. These vicious turtles snap and bite. The spiny southern species is often seen close to the water.

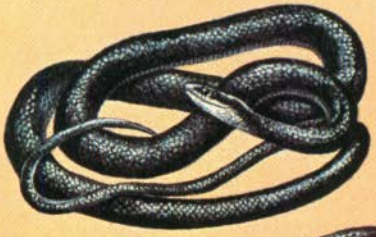
GOPHER TURTLE is a clumsy clubfooted vegetarian which lives in the long burrows it digs in the sandy soil. It is a true tortoise with a high-backed shell, related to those of the Southwest desert and to the giant tortoise of the Galápagos Islands. Grows 10 to 12 in. long.

SLIDERS are the turtles found in pet shops. They are flat-shelled aquatic species of the south and central states, often seen sunning on logs. Males may be much darker than females and often have extra-long toenails on their front feet. Length: 8 to 12 in.

ALLIGATORS AND CROCODILES are typical of this southern area. Alligators, once common, are widespread, though somewhat rare, and it is almost impossible to find one over 10 ft. long. Note the broad snout. Alligators become dormant when weather is cold and when it is hot and dry. The female lays 30 to 40 eggs in a nest of twigs and decaying plants and guards it till the young are hatched. Alligator hunting is now restricted by law, and young may not be sold. The crocodile is much rarer, being found only in a few places in southern Florida and the Keys; it has a narrower snout, needs a warmer climate, and prefers salt or brackish water. It is much more vicious. Alligators can be seen in Everglades Nat. Park (p. 124), but the chances of seeing a wild crocodile are slim.

HARMLESS SNAKES

PINE SNAKE, a southeastern bull snake, prefers open pine woods; feeds on gophers and other small rodents. It is blotched gray and brown, darker toward the tail. Length about 5 ft. Hisses loudly.



SOUTHERN BLACK RACER, thin, graceful, active, is blue-black, with white under the chin; length 3 to 4 ft. Scales smooth, tail long. Everglades Racer is similar but lighter, especially on the belly.

EASTERN COACHWHIP SNAKE is a long, thin (5 to 6 ft.) racer. Dark-colored at head, grading to tan or brown at tail. Prefers open country; feeds on mice, gophers and small snakes.

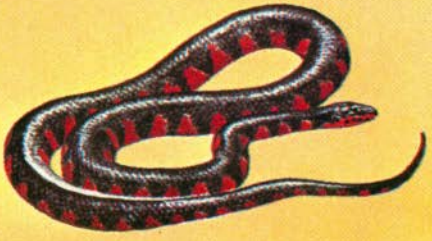
YELLOW RAT SNAKE represents a group of eastern snakes that kill their prey by constriction. It is 4 to 5 ft. long, yellow-tan with dark stripes. Everglades Rat Snake is similar, but bright orange.

CORN SNAKE belongs to the rat snake group, but is brightly colored, with black-edged red blotches. Length 3 to 4 ft. This and other rat snakes are sometimes seen around barns and other buildings hunting rats.

INDIGO SNAKE is the largest in the South—up to 8 ft. long; heavy, thick-bodied, midnight blue. Prefers open land and hammocks; feeds on rodents. Tames easily and can be kept as a pet.

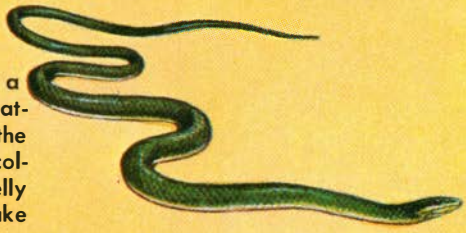
RAINBOW SNAKE and the Mud Snake are two attractive (but seldom seen) aquatic species. The Rainbow Snake is dark above, striped with red; belly red, with rows of black spots. Often burrows. Length 3 to 4 ft.

MUD SNAKE—or Horn Snake—is dark above, with red marking on the sides, merging into the red of the belly. Length about 4 ft.; tail short, ending in a sharp spike or "stinger" which is **not** poisonous.

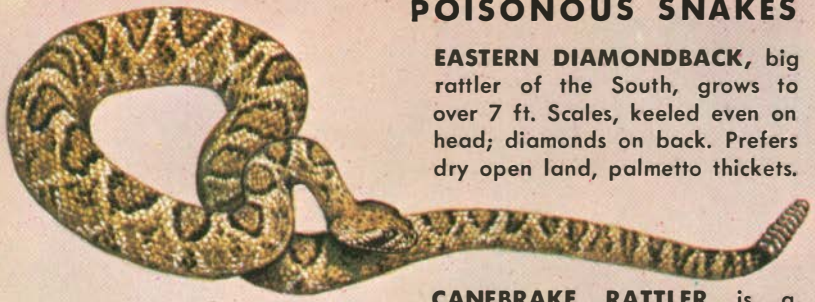


SOUTHERN RING-NECKED SNAKE is a small (12 to 18 in.), brownish or black snake with a yellow or orange belly, and marked by a yellow neck ring. Widely distributed. Feeds on insects and their kin.

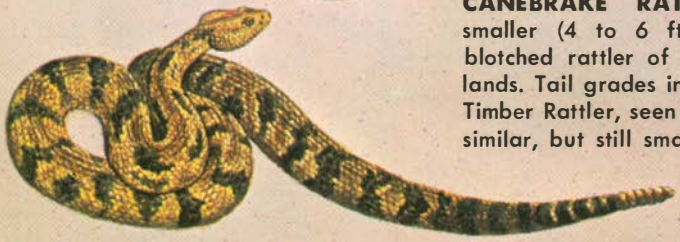
ROUGH GREEN SNAKE is a small (2 ft.), attractive, insect-eating species found throughout the South. Scales strongly keeled; color is bright green above, belly whitish. The only southern snake so colored.



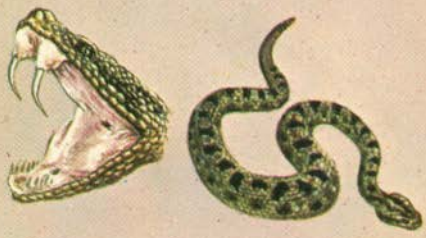
POISONOUS SNAKES



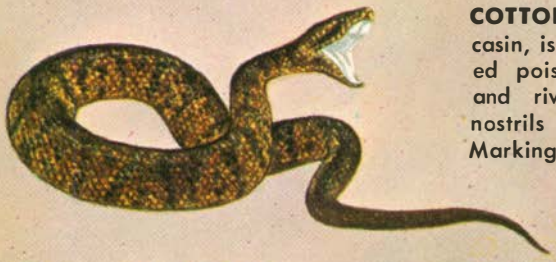
EASTERN DIAMONDBACK, big rattler of the South, grows to over 7 ft. Scales, keeled even on head; diamonds on back. Prefers dry open land, palmetto thickets.



CANEBRAKE RATTLER is a smaller (4 to 6 ft.), yellowish, blotched rattler of southern flatlands. Tail grades into black. The Timber Rattler, seen northward, is similar, but still smaller.



PIGMY RATTLER, also called the Ground Rattler, is a small, blotched snake (2 ft.), with a sharp snout. Has plates on head in contrast to Diamondback's scales. Vicious—in spite of its size.



COTTONMOUTH, or Water Moccasin, is a thick-bodied, flat-headed poisonous snake of swamps and river banks. Pits between nostrils and eyes—like rattlers'. Marking indistinct when mature.

CORAL SNAKE is dangerous. Red with black rings bordered by yellow, and with a black nose. A secretive, burrowing species. Do not confuse with harmless Scarlet Snake or Scarlet King Snake.

MOCKINGBIRD—slender, gray, with white wing and tail patches —is the sweet singer of the South. Seen around homes. 10 in.

CARDINAL is the crested, all-red bird of fencerows and open woods. Female brownish, but with same thick red bill as male. 8 in.

BIRDS

In the south bright Carolina Parakeets were once seen along streams, and Ivory-billed Woodpeckers guarded the virgin forests. There are still many species to see—in this region over 500 species have been identified. During winter, look for northern birds which have migrated southward. Other attractive species never leave the South. The climate favors all-year bird-watching. Several bird clubs hold regular meetings, to which visitors are welcome. The National Audubon Society conducts guided tours from Miami into the Everglades and other places noted for their bird life.

For more about Southern birds, read:

BIRDS, H. S. Zim and I. N. Gabrielson. Golden Press, 1955.

A FIELD GUIDE TO THE BIRDS, R. T. Peterson. Houghton Mifflin, 1947.

A GUIDE TO BIRD FINDING EAST OF THE MISSISSIPPI, O. S. Pettingill. Oxford Univ. Press, Toronto, 1951.

FLORIDA BIRD LIFE, A. Sprunt. Coward-McCann, New York, 1954.

GEORGIA BIRDS, T. D. Burleigh. Univ. of Okla. Press, 1958.

LOUISIANA BIRDS, G. H. Lowery. La. State Univ. Press, Baton Rouge, 1955.

LARGER HERONS — white species and others — are among the most dramatic southern birds.

Great White Heron (54 in.), largest and rarest, is all white, with greenish-yellow legs and a yellow bill. A form of the Blue Heron, it is sometimes seen along the south coast, more often in the Florida Keys.

American Egret (38 in.) is smaller, also pure white and with a yellow bill, but with black legs and feet. Found commonly in swamps and roadside ditches.

Snowy Egret (24 in.), still smaller and still all white; also with black bill and black legs. However, the feet are yellow. About the same size, and becoming increasingly common, is the Cattle Egret from Africa, with yellow legs and bill; buff on head and back when breeding.

Great Blue Heron (48 in.) is blue-gray in color and larger than any other dark wading bird except the Sandhill Crane (p. 111). Widely distributed north to Canada, but nests in Florida and along Gulf coast.

Louisiana Heron (26 in.) is found along the coast from Texas to the Carolinas. Color slate-gray, browner on head, with white on belly and rump and under wings.

Little Blue Heron (22 in.) is easily confused with similar species. Young birds white; greenish legs, dark bill. Plumage darkens with age; purplish head and neck. Similar but larger is the Reddish Egret, in two color phases—white and normal. Legs bluish; bill light at base, dark at tip. The Green Heron (18 in.) has a reddish-brown neck, green feathers and orange legs.

OTHER LARGE MARSHLAND BIRDS include a great many of the most unusual and most attractive of all southern species.

Anhinga, or Water Turkey has a long tail and longer neck. Note the silvery patches which appear on forewings. Both females and young have brownish neck and breast. Length, 34 inches.

White Ibis (25 in.) has white body, black wingtips, red face and legs. The Glossy Ibis (22 in.), is metallic bronze. The Roseate Spoonbill (p. 85) is a relative.

Wood Ibis (40 in.) is a stork, not an ibis. Note black on wings. Head gray, naked; pink feet; bill curved down. Flies with neck and legs outstretched.

Sandhill Crane (44 in.), flies like an ibis, with head and neck outstretched, but is a gray bird with a naked red patch on its head. Throat white, legs black; rear feathers tufted. Seen in open meadows; now uncommon.

Limpkin is a brownish wader, marked with white spots and blotches. Legs dark, bill curved slightly downward like an ibis's. Seen locally in Florida. Length, 26 in.

Flamingos, which have become an avian trademark for Florida, are birds which have wandered from the Bahamas and West Indies. They have never nested here. The large birds (46 in.) are all pink, with black on wings, neck long, bill heavy and bent down sharply midway. Several colonies of captive birds may be seen.

FRIGATE BIRD (40 in.), also known as Man of War Bird, is among the most graceful of all flying birds. This large black bird with long, thin wings and forked tail circles high over water, watching to rob a gull or a pelican. The young have a white head.

BALD EAGLE is fairly common along rivers, lakes and the ocean, nesting in tall or dead trees. Note the eagle's white head and tail. Length, 30 in., 7 ft. wings and powerful, hooked beak. Feeds mainly on fish. Young have white on wings and breast only.

OSPREY, or Fish Hawk (22 in.), can be recognized in flight by its white underparts and the black patches at the bends of the wing. Head mainly white, with a broad stripe behind the eye. Hovers, then plunges feet first to grasp trash fish, its principal food.

SWALLOW-TAILED KITE (24 in.), has a deeply forked tail; head is white; mainly white below. Feeds on insects and other small animals. Everglade Kite, now very rare (p. 10), feeds only on snails, around Lake Okeechobee.

NIGHTHAWK, or Bullbat (9 in.), is most often seen at dusk, feeding on flying insects. Its piercing call and erratic flight make it easy to identify. Note its long wings and slightly forked tail. Especially common in the South during summer, even about cities.

CARACARA, common in Mexico, is also found in central Florida. This 22-in. relative of hawks and vultures has long legs and a dark, crested head with red skin at the base of its bill. Some white on throat, breast and tail. Nests in late winter or early spring.

BLACK VULTURE (24 in.) is seen soaring with wings tipped slightly upward. Head black and bare, tail short; lighter patches under wings near tips. The Turkey Vulture is larger (30 in.) and has a naked, red-skinned head. Both are scavengers, feed on carrion.

RED-SHOULDERED HAWK (20 in.), seen all through the South on poles or fence posts, has broad wings and a dark-banded tail. A mottled reddish-brown, with reddish shoulders. Paler in southern Florida and on the Keys.

PALM WARBLER is the most common of the many warblers found in winter in the South. It is light brown, pale below, with a chestnut crown and a yellow line over the eye. Wags its tail constantly. Several dozen other warblers, some brilliantly colored, can be seen during migrations.

BOAT-TAILED GRACKLE is a dark, iridescent, long-tailed bird found along waterways and shores. Length, 16 in.; female smaller (13 in.) much browner and with a paler throat. It feeds on insects and water animals and nests in marshes during spring.

BOBWHITE, or Quail, is the southern gamebird. It is a ground bird; small, plump and reddish-brown, like a chicken with short wings. The male has a white throat and eye stripe. Florida Bobwhites are darker in color and a bit smaller (9 in.). They feed on seeds and insects.

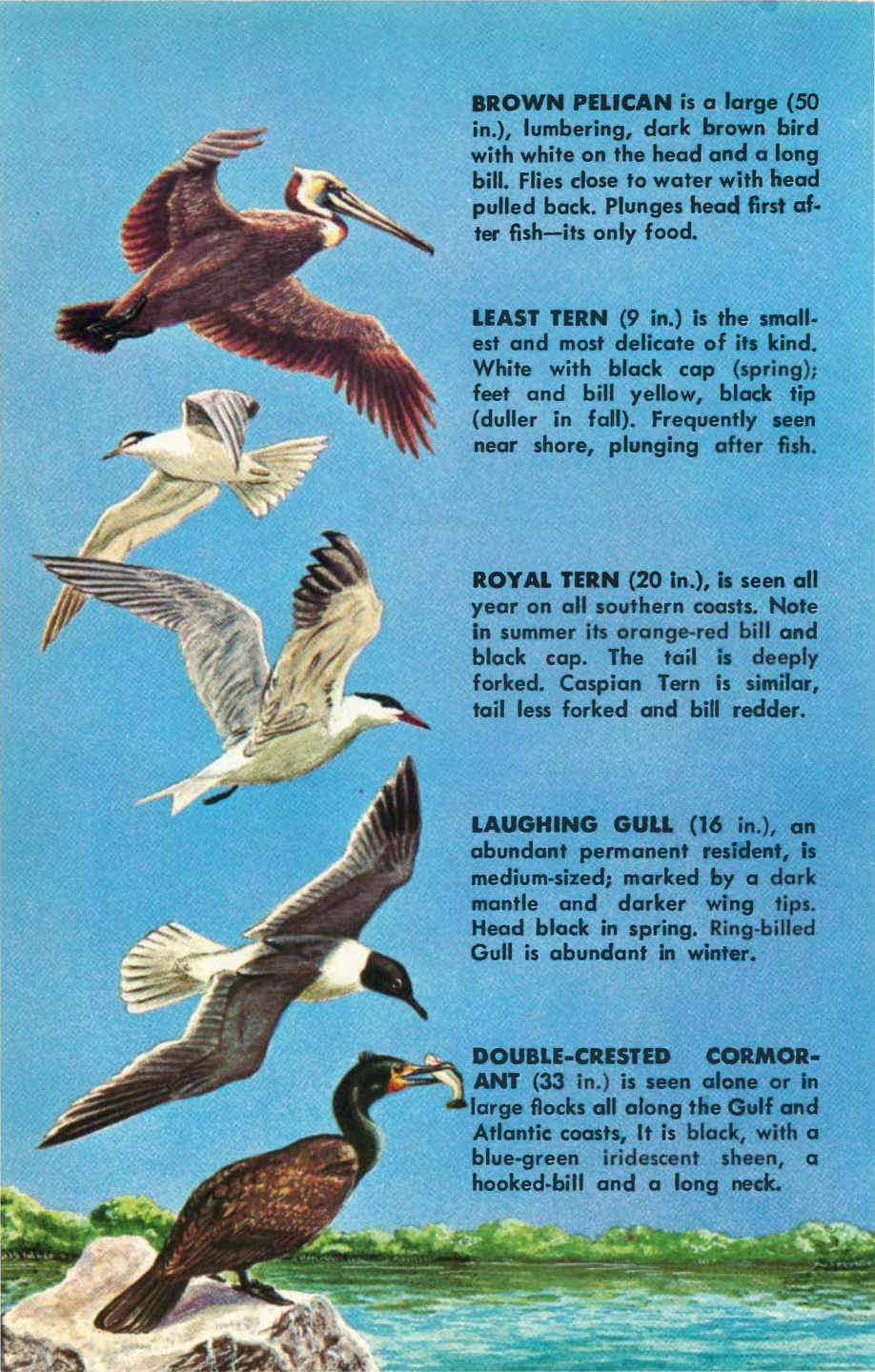
RED-WINGED BLACKBIRD is a widespread, attractive swamp bird, especially common in southern marshes, where it nests on cattails and shrubs. Note scarlet shoulder patches of the black male. Female smaller (7.5 in.), streaked gray-brown.

RED-BELLIED WOODPECKER is marked by a black-and-white striped back and by its red cap. The female has red only on the neck, and young birds have brown instead of red. This woodpecker, abundant in the South, feeds on acorns, other fruits, and insects.

GROUND DOVE is a small dove common in open areas and along southern roads. It is short (7 in.) plump with bright red-brown wings. Breeds from February to October. Feeds on seeds. Mourning Dove is larger, with olive-brown back and pointed tail.

PAINTED BUNTING, or Nonpareil, is considered the most beautiful American bird. The bright male (5.5 in.) needs no description; the female is greenish above, yellowish below. A summer resident which nests in the S.E. coastal plain. Indigo Bunting (5 in.) is an all-blue relative.

BURROWING OWL is a bird of the central Florida prairies, where it digs a nesting hole 4 to 8 ft. long, at the end of which eggs are laid in the spring. This small owl (9 in.) has long legs, large, white spots on its back, white below. Sometimes found on the Keys.



BROWN PELICAN is a large (50 in.), lumbering, dark brown bird with white on the head and a long bill. Flies close to water with head pulled back. Plunges head first after fish—its only food.

LEAST TERN (9 in.) is the smallest and most delicate of its kind. White with black cap (spring); feet and bill yellow, black tip (duller in fall). Frequently seen near shore, plunging after fish.

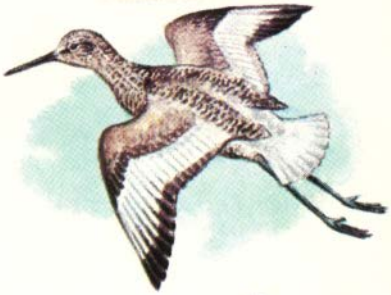
ROYAL TERN (20 in.), is seen all year on all southern coasts. Note in summer its orange-red bill and black cap. The tail is deeply forked. Caspian Tern is similar, tail less forked and bill redder.

LAUGHING GULL (16 in.), an abundant permanent resident, is medium-sized; marked by a dark mantle and darker wing tips. Head black in spring. Ring-billed Gull is abundant in winter.

DOUBLE-CRESTED CORMORANT (33 in.) is seen alone or in large flocks all along the Gulf and Atlantic coasts, It is black, with a blue-green iridescent sheen, a hooked-bill and a long neck.

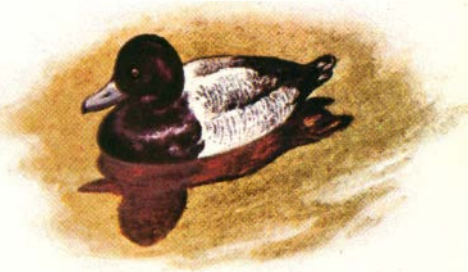
RUDDY TURNSTONE (9 in.) is a common red-legged shore bird with a reddish-brown back and black breast markings in spring. In winter, colors are duller. Winters commonly along S.E. coast.

WILLET is a larger shore bird (16 in.), gray and white with dark legs and a stout, straight bill. Wings darker with wide white stripes; breast gray. Seen along all southern coasts.



COOTS are seen in lakes and ponds all through the South. They are slate gray, plump, low and ducklike, with white bills. Expert divers and swimmers, Coots nest in northern marshes.

LESSER SCAUP is, according to experts, the commonest duck of Florida. It is seen mainly over salt water. Note its black head and tail, glossed with purple, and the short white wing stripe.



BLACK-BELLIED PLOVER can be seen all winter and during the migrations. Note its stout form and the short, heavy bill. Mottled gray above, lighter below in winter. In spring note the black belly.

WHITE-TAILED DEER, the only species of this region, is marked by a long tail, white underneath, and long white-lined ears. Only bucks have antlers. A smaller form, the Key Deer, is found only on and near Big Pine Key. About 3 ft. high; weight, 50 to 80 lbs.

MAMMALS

Mammals of the Southeast are not seen as often as other wildlife, but bear, deer, wildcat, opossum and raccoon abound and there are scores of smaller species. Most mammals are shy and nocturnal. Patience is needed to study or even spot them. They are more easily seen in zoos than in the wild, but there is nothing compared to the thrill of seeing a bear or deer in woods or hammocks. This region also offers many marine mammals—from the manatee to dolphins, porpoises and even whales.

For more about mammals and their life histories read:

MAMMALS, H. S. Zim and D. F. Hoffmeister. Golden Press, New York, 1955.

A FIELD GUIDE TO THE MAMMALS, W. H. Burt and Grossenheider. Houghton Mifflin, Boston, 1952.

MAMMALS OF NORTH AMERICA, V. H. Cahalane, Macmillan, New York, 1947.

LIVES OF GAME ANIMALS, E. T. Seton. Chas. T. Branford, Boston, 1953 (6 volumes).

BLACK BEARS are still found in this region, but have died out in some areas to the north, east and west. They live in woodlands, feeding on small animals and wild fruit. In Florida the Black Bear is larger than elsewhere in the South, weighing up to 600 lbs.

BOBCATS, once found over the entire U. S., are still common in the Southeast. In Florida they are darker, with more black on their backs. The Cougar, or Mountain Lion—largest of the cats—is rare, but does occur in southern and central Florida.

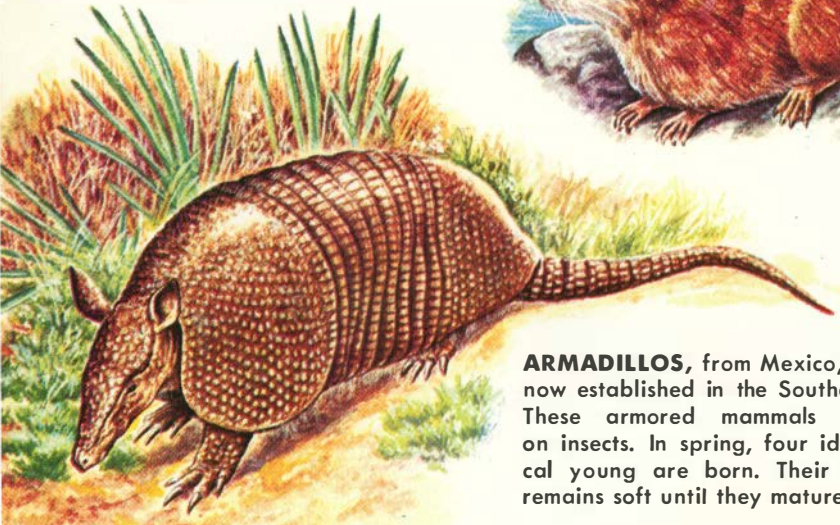
GRAY FOX (but not the Red) is common in open woodlands. It hunts small mammals and may take poultry. It also eats some fruits and berries. In Florida it is somewhat smaller, with shorter ears and tail. Length, 36 in. Young (4 to 6) are born in spring.

RACCOONS live in fields and open woods, feeding on small animals, corn and fruit. In spring 3 to 6 blind young are born in a burrow or hollow tree. There is much variation in color and size. Southern raccoons are yellowish. Length, 35 in.

OPOSSUMS are our only mammals with a pouch for protecting the undeveloped young. These slow, rather lazy animals feed at night on eggs, small animals and fruit. They seem more vicious than they really are.

MUSKRAT, an important southern fur mammal, is absent from Florida, but is common westward along the Gulf. Feeds on cattail and other aquatic plants. Note the long, compressed tail.

NUTRIA, from South America, are now common in the Mississippi delta and are spreading fast. Nutria compete for food with Muskrats, but have poorer fur. They are large, with a rounded tail.

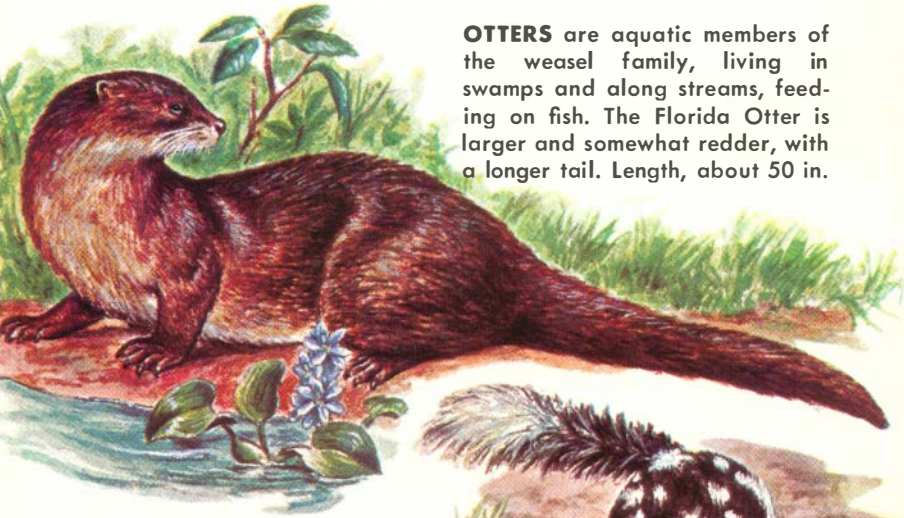


ARMADILLOS, from Mexico, are now established in the Southeast. These armored mammals feed on insects. In spring, four identical young are born. Their skin remains soft until they mature.

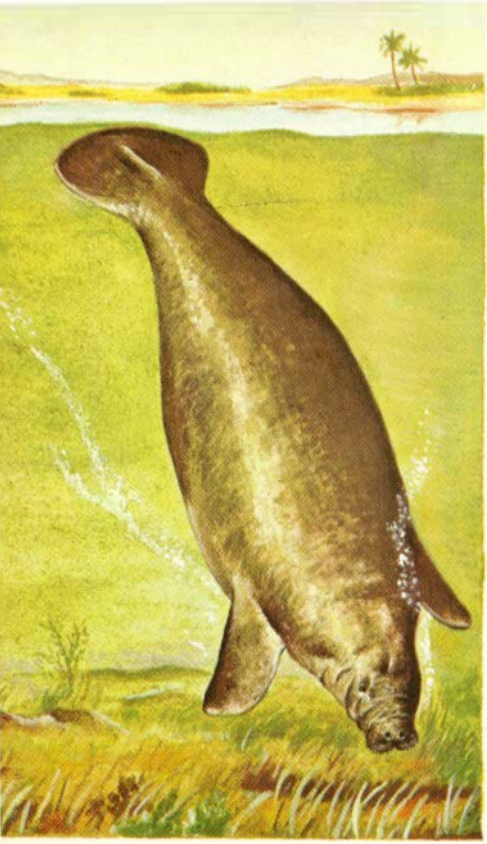
FOX SQUIRRELS are handsome tree dwellers with small ears and long, bushy tails. Several forms—gray, buff and black. All attractive, especially the Mangrove Fox Squirrel of the Everglades.

MARSH RABBIT is a smaller southern rabbit which might be confused with the Cottontail. The Marsh Rabbit, found in wet areas, is darker brown; the tail is smaller, as are its feet and ears.

OTTERS are aquatic members of the weasel family, living in swamps and along streams, feeding on fish. The Florida Otter is larger and somewhat redder, with a longer tail. Length, about 50 in.



SPOTTED SKUNKS are smaller than the Striped Skunk, which is also found in the Southeast. The Florida Spotted Skunk is the smallest kind, with large, white stripes and a shorter tail. Length, 15 in.



MANATEES are found in southern Florida bays and rivers, feeding on aquatic plants. These ungainly mammals weigh up to a ton. It is hard to see how they gave rise to fables about mermaids—but they did. Perhaps mothers nursing their single young suggested such stories. The young are able to swim at birth. Manatees (or Sea Cows), adapted for water, have a stout body ending in a flattened horizontal tail; forelimbs are modified into flippers. They can stay under water several minutes, but must come up for air.

BOTTLE-NOSED DOLPHIN, with a beaklike snout, is the common dolphin of southern shores—the star of marine exhibits. Farther out at sea, Harbor Porpoises may be seen leaping after fish or playing near boats. Both animals are rapid swimmers, and can leap well out of the water.

FNB

Family picnic on the beach at Hollywood, Florida.

WHAT TO SEE AND DO

In this richly endowed region there is much to see and do. Here is a summary for the benefit of the visitor or newcomer. Such common and enjoyable activities as sunning, swimming, picnicking, hiking, boating, camping and fishing are possible in so many places that detailed listings for such activities are impossible. They will be noted under National Parks and Forests, State Parks and other recreational areas. For a detailed listing of campsites, see VACATION CAMPGROUNDS, Southeastern edition, Hultquist, Box 265, Maryville, Tenn., 1956 (75c).

Before your trip, get road information from the tour divisions of the large oil companies, airlines, railroads or bus lines. Further information can be had from state and local Chambers of Commerce and from:

ALABAMA: Inf. & Educ. Sec., Dept. of Conservation, Montgomery

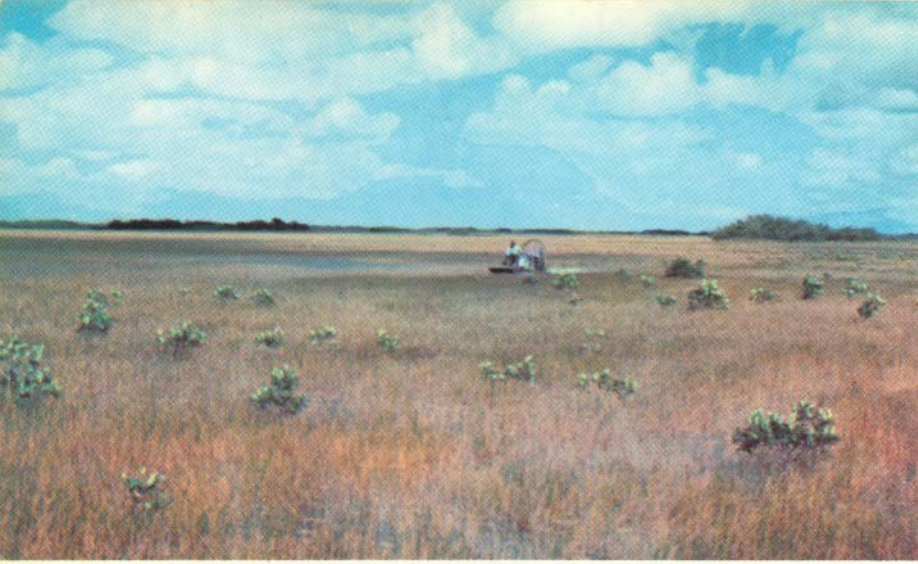
FLORIDA: Fla. Devel. Comm., Caldwell Bldg., Tallahassee

GEORGIA: Fish & Game Comm., 412 State Capitol, Atlanta

LOUSIANA: Dept. of Comm. & Ind., State Capitol, Baton Rouge

MISSISSIPPI: Agr. & Ind. Board, State Office Bldg., Jackson

SOUTH CAROLINA: S.C. Chamber of Commerce, Columbia



Everglades National Park—ranger patrolling in airboat. *FNB*

FLORIDA

EVERGLADES NATIONAL PARK, covering over a million and a half acres, is the only National Park in this region. The great wilderness area is dedicated to preserve the natural everglades environment—a sea of grass and water with hammocks of tropical hardwood trees, rare plants and a wealth of wildlife. In this, our only tropical park, are some of the great rookeries of egrets, ibis, herons and other wading birds. There are alligators, crocodiles and other reptiles. Fish are plentiful, too, in Florida Bay and in the "lakes" and "rivers." Fishing is permitted; it is excellent.

Enter the park by US 27 from Homestead. An excellent road leads to the Royal Palm Station and on to Flamingo (museum, boats, restaurants). Stop at the Anhinga trail and at other marked areas. Rangers conduct walks, give talks. Audubon tours, local boat trips, camping and other facilities are available.

Everglades National Park is a sanctuary. Do not pick plants or disturb animals. There are wonderful opportunities for nature photography if you are patient and have the equipment. The park can also be entered by boat from the town of Everglades and from the Florida Keys. Use a guide or have a chart before trying unfamiliar waterways. Have another look at the everglades along the Tamiami Trail (US 41) where trips by airboat or in swampbuggies can be arranged. These can take you deep into the everglades but are banned from the park itself. Also along the Tamiami Trail are a number of Indian villages, where local Seminoles offer handicrafts and conduct airboat trips.

Young egret—Everglades Nat. Park. *FNB*

Audubon wildlife tour in Everglades.

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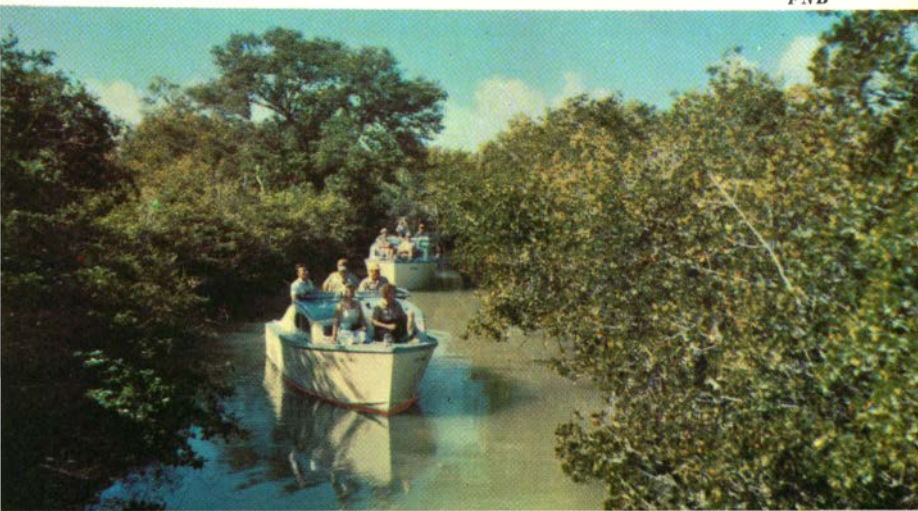

HISTORIC SITES, a score and more of them, are preserved in Florida under the auspices of State and Federal agencies. The first five of these are under the care of the National Park Service. Visit them if possible.

Castillo de San Marcos, built from 1672 to 1696 by the Spaniards (p. 26) in St. Augustine (p. 128) helped protect the treasure fleet homeward bound from New Spain. The massive fort figured in wars with the French, British and Indians. It was later used as a military prison. Museum and guide service.

Fort Matanzas, 14 miles southward, on route A1A, protected the "back door" to St. Augustine. Nearby, at the Anastasia inlet, the captured French were slaughtered by the Spanish. Historical Museum and picnic grounds.

Fort Caroline, on the St. Johns river east of Jacksonville, was the first French settlement (1564). The ill-fated colony was weakened by famine and mutiny when reinforcements under Jean Ribaut were wrecked by a hurricane and killed by the Spanish, who took the fort in 1565. The memorial area offers a museum and picnic grounds.

De Soto Nat. Memorial commemorates the landing of Hernando De Soto and the beginning of inland exploration. Four miles west of Bradenton; monument and picnic grounds.

Fort Jefferson, on the Dry Tortugas 70 miles west of Key West is accessible only by boat. The great fort, begun in 1846, became the prison for the "Lincoln conspirators." Rare birds and wonderful fishing.

Fort Clinch State Park, 30 miles N.E. of Jacksonville at the tip of Amelia Island, surrounds a brick fort begun in 1850 and never finished.

Fort Jefferson National Monument—Dry Tortugas, Florida.

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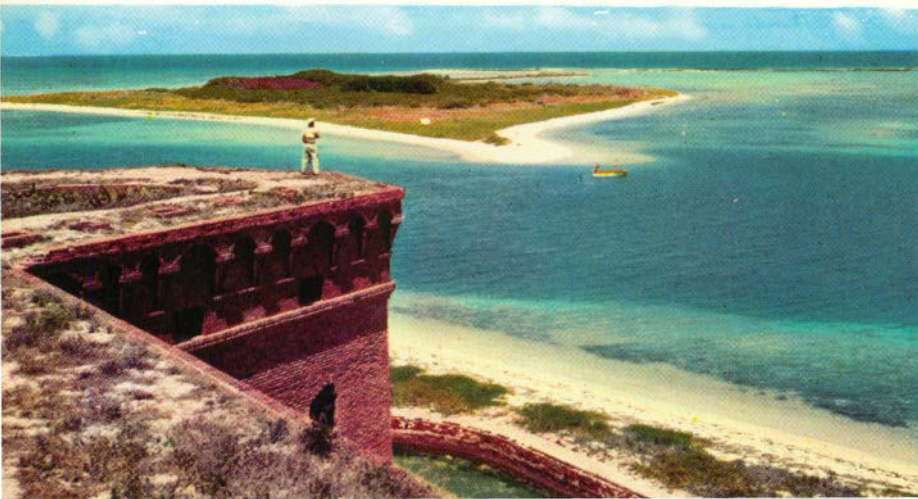

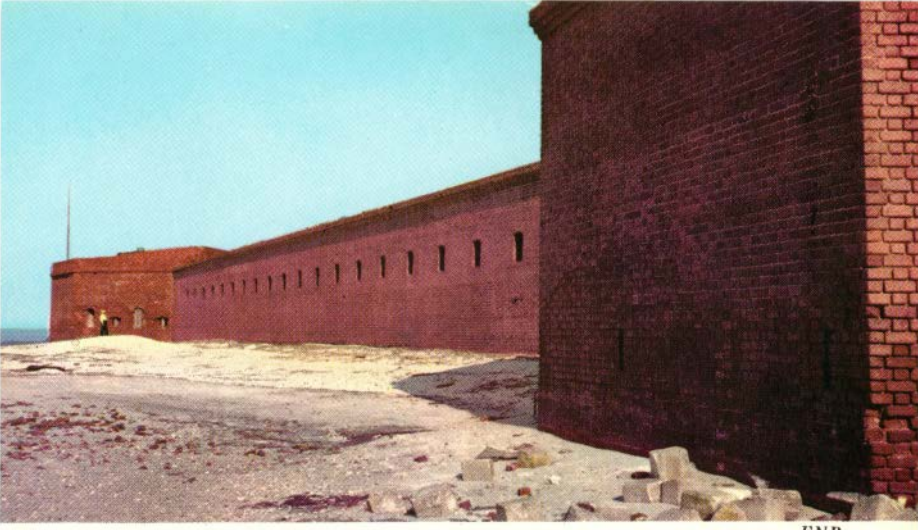

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Fort Clinch State Park—Amelia Island, Florida.

This and other forts of this period were made obsolete by the invention of the rifled cannon which could pierce the walls with high-explosive shells. Museum, camping, boating and swimming.

Fort Pickens State Park occupies the western tip of Santa Rosa Island, opposite Pensacola. Fishing, swimming, camping and boating. Fort Pickens once protected Pensacola and was held by Union forces all during the Civil War. Now a museum.

Battle of Natural Bridge Monument marks the site where local defenders held off a Federal attack and kept Tallahassee from falling into Union hands—the only Southern capital which did not do so. East of Woodville on US 98 and southeast of Tallahassee.

Dade Memorial Park, on US 301 south of Bushnell, marks the place where Maj. Francis Dade and his command were ambushed by the Seminoles in 1835. Only three men escaped, and for the next seven years the second Seminole war was fiercely waged. Museum.

State Constitution Convention Memorial (with museum) is just south of Port St. Joe. Here the first Florida state constitution was adopted in 1839. Two years later, Port St. Joe was wiped out by yellow fever. In 1844, Dr. John Gorrie, attempting to cool fever victims, invented the first mechanical ice-making machine. In the square in Apalachicola (about 20 miles east on US 98) is a memorial to Dr. Gorrie, and a state museum.

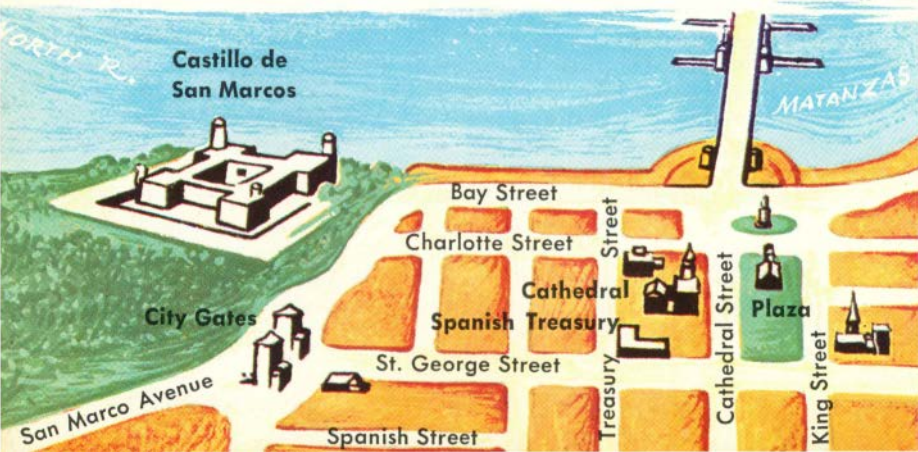
Olustee Battlefield Historical Mem., east of Lake City on US 90, marks the site of the largest Civil War battle in Florida at which Union forces were defeated. Visit the museum.

Other historical sites include Marianna Memorial in that town; Gamble Mansion at Ellenton; Addiston Blockhouse and several plantation ruins—all north of Daytona Beach.

FNB

Oldest house—St. Augustine, Florida.

SAINT AUGUSTINE is a gem. This oldest city in the United States overflows with things to see. Founded in 1565, the town may be the place where Juan Ponce de León landed in 1513. The monumental Castillo de San Marcos (p. 126) dominates the old town. Across from the plaza is the cathedral and around it are narrow streets and old buildings. Walk, or tour the town by horse and buggy. See the old Spanish treasury; Spanish cemetery; zero milestone; Patio house; Oldest House and the State Arsenal. There are also a number of commercial attractions. Nearby are Anastasia State Park and several beaches.



INDIANS do not object to tourists, but if you visit them at their reservations or along the Tamiami Trail, remember you are their guests. There are three Seminole reservations in Florida: (1) a small one at Dania on US 441 north of Miami. Here at the Seminole Arts and Crafts Guild are excellent examples of sewing and other crafts; (2) Brighton reservation on the northwest side of Lake Okeechobee; (3) the Big Cypress reservation, off Rte 29 south of Immokalee, is least accessible and most interesting. There are several villages along the Tamiami Trail also. For more about the Seminoles, see pp. 30 to 31. The Seminoles are the only Indians living in Florida today. Mounds made by earlier Indians (p. 28) are preserved in state parks. These are: Bickel Mound at Terra Ceia; Turtle Mound on Rte A1A, south of New Smyrna Beach; Green Mound, 7 mi. south of Daytona Beach on A1A. There is a ceremonial mound at Ft. Walton, and others near Lake Okeechobee and in Everglades Nat. Park.

Seminoles carving model canoe—Dania, Florida.

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FLORIDA STATE PARKS total about two dozen, plus an equal number of historical sites (pp. 126 and 127). Some are undeveloped or only partially developed, but in total they form one of the best State Park systems in the South, preserving scenic and natural areas and providing recreational facilities. These vary from park to park, but include picnicking, camping, boating, fishing and swimming. Because State Park camping is so popular, the reservation of a campsite may be necessary. Get further information from the Florida Board of Parks and Memorials, Tallahassee. Parks are listed from north to south.

Florida Caverns is the only developed cave in Florida. (Guided tour, 75c.) Nearby are interesting geological formations, wildlife and plants. Museum, golf course and camping. Three miles north of Marianna; west from Tallahassee on US 90.

Santa Rosa Park, just east of Pensacola, has fine groves of live oak, and beaches on the Gulf and Sound. Mainly undeveloped.

Torreya State Park, on the Apalachicola River, northeast of Bristol (west of Tallahassee on Rte 20) preserves two rare trees in their natural environment—Torreya and Florida Yew. Nature trails and camping. The old Gregory mansion and Confederate guns stand on the bluff.

Killearn Gardens are beautifully planted formal and informal gardens, once a large estate. North of Tallahassee on US 319.

Little Talbot Island, northeast of Jacksonville on route A1A, has a fine ocean beach, a picnic area and playground.

Suwannee River State Park, on the high bluffs between Madison and Live Oak on US 90. Many springs; remains of Confederate earthworks; fishing and picnicking.

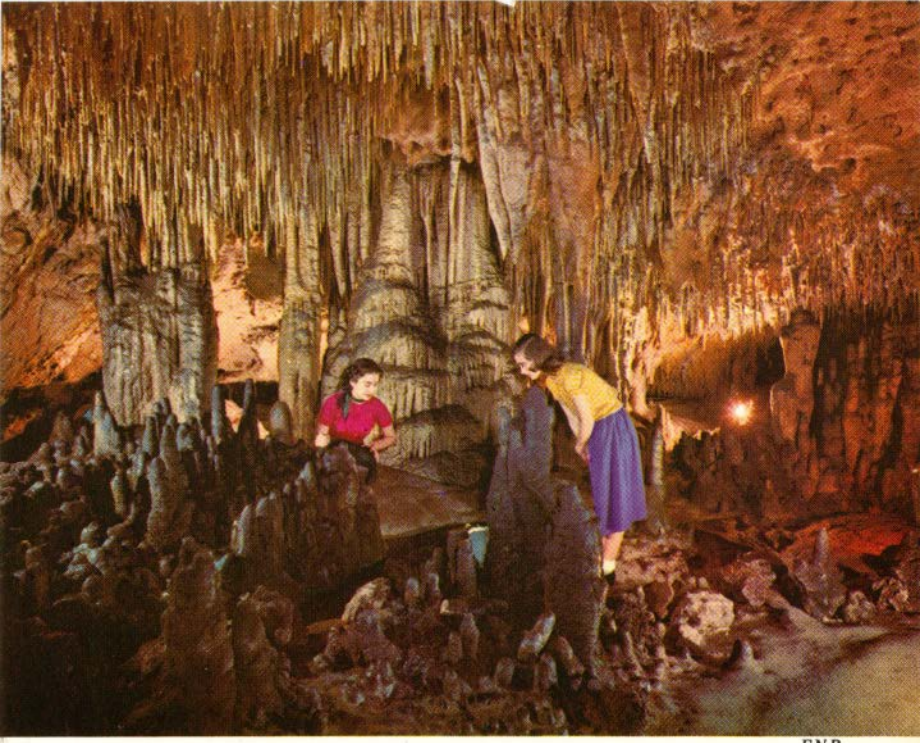
Gold Head Branch, off Rte 21 S.W. of Jacksonville, provides fishing, swimming and boating on streams and lakes. Gold Head Branch forms a wild ravine in which a nature trail has been built.

St. Andrews Park near Panama City will serve as both a wildlife area and as a bathing and waterfront beach. Still undeveloped.

O'Leno State Park, in which the Santa Fe River goes underground, is north of High Springs on US 41. Located on the Old Spanish Trail, it now offers swimming, boating and camping.

Manatee Springs, flowing 66,000 gallons a minute, empties into the nearby Suwannee River. The park offers swimming, boating and fishing. Located off US 19, 7 miles west of Chiefland.

Anastasia State Park, on Rte A1A south of St. Augustine, has a beautiful stretch of coastline. Here were the old Spanish coquina quarries.



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Florida Caverns State Park—Marianna, Florida.

Pellicer Creek, South of St. Augustine on US 1, is part of a fine hardwood hammock—an undisturbed wildlife area.

Tomoka State Park offers picnicking, boating and fishing. It includes the Bulow Sugar Mill and Plantation Museum. Just north of Daytona Beach on US 1.

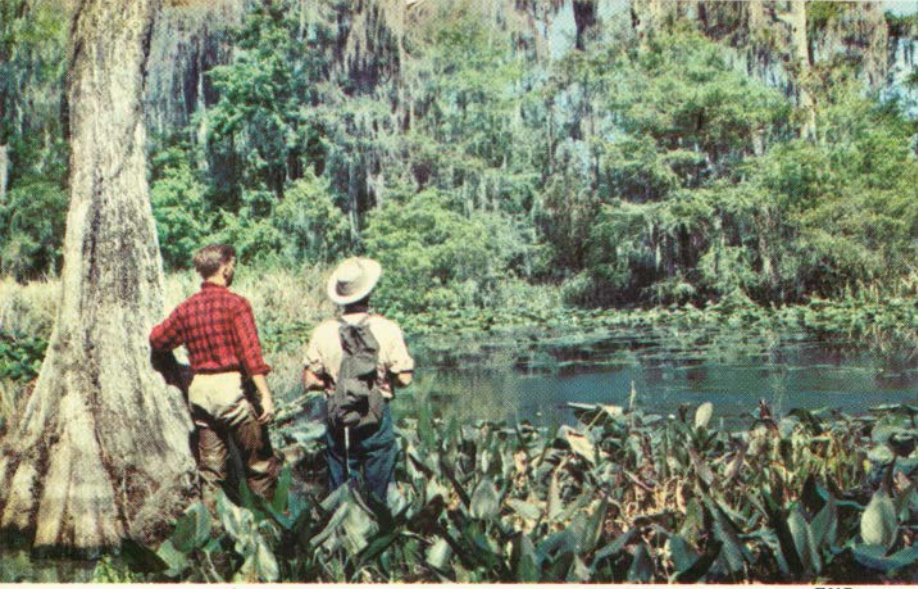
Lake Griffin, north of Leesburg, is an undeveloped wildlife area of sandy ridges and marshland.

Hillsborough River Park sits astride the river rapids in wild country with many species of birds and plants. Nature trail, swimming, fishing, boating and camping. On Rte 201, N.E. of Tampa.

Highland Hammock is one of the best examples of hammock growth and a famous park. Here are old hardwoods, cypress swamps and subtropical plants. Miles of trails, camping and picnicking. 6 miles west of Sebring, off US 27.

Myakka River Park, S.E. of Sarasota on Rte 72, is a wildlife refuge famous for its birds. Camping and fishing. Museum and trails. Largest of Florida's parks.

Collier-Seminole Park, off US 41 east of Naples, includes everglades land and tropical vegetation along the coast. Excellent fishing waters. Development is under way.



Audubon refuge—Corkscrew Swamp, Florida. FNB

NATIONAL AND STATE FORESTS in Florida total over a million and a quarter acres, but the total forested land is many times this. These forests demonstrate forest management and conserve forest resources. They are natural areas, offering many opportunities to see plant and animal life. Hunting and fishing are permitted and there are good possibilities for primitive camping. Some have excellent recreation areas. The national and state forests (mainly in northern Florida) are:

Ocala National Forest, west of Daytona Beach, has two excellent recreation areas (Juniper and Alexander Springs) for camping, swimming and boating; lakes, springs and a large unique "scrub" area of sand pine. This is the most southerly national forest of the area.

Apalachicola Nat. Forest, S.W. of Tallahassee, has large areas of Slash and Longleaf Pine with cypress swamps. Bottomlands along the Apalachicola River are filled with Appalachian hardwoods.

Osceola Nat. Forest, N.E. of Lake City, is also an area of pine highlands and swampy lowlands, with large stands of the cypress. Swimming and fishing in Ocean Pond, but no public facilities.

State Forests include Pine Log, near Panama City, and Cary, near Baldwin—both small; also Blackwater River, north of Milton on US 90.

BIRDS AND WILDLIFE are a great natural attraction of Florida with its shores, lakes and swamps. National and state parks and forests are wildlife areas. Visitors are welcome at the national wildlife refuges listed below. Explore the smaller parks, canals, banks and shores of lakes and ponds. Dress appropriately and use care in the woods. Try the National Audubon Society tours to Corkscrew Swamp, Duck Rock and the Everglades—details at Miami office. See the place listing in GUIDE TO BIRD FINDING EAST OF THE MISS. by O. S. Pettingill (p. 107).

National Wildlife Refuges

St. Marks N.W.R.	On Apalachee Bay, S. of Tallahassee
Cedar Keys N.W.R.	Off Cedar Key, end of Rte 24
Pelican Island N.W.R.	North of Vero Beach
Anclote N.W.R.	Northeast of Tarpon Springs
Nat. Key Deer Refuge	Big Pine Key

Some Other Good Places for Bird Watching

St. Johns River: marshes at head and islands near mouth; Lake Okeechobee, esp. N. and W. sides; Tamiami Trail; Titusville Beach; Kissimmee prairie; Inland Waterway, N. of Daytona Beach and elsewhere; all Florida Keys; Big Cypress Swamp, on and near Rte 29.

Roseate spoonbills—near Tavernier, Florida. *FNB*

Shelling—Sanibel Island. FNB

SHELLS AND SHELLING are popular all along the Florida coasts — especially along the Gulf, where the wind and currents wash ashore many specimens on the open beaches. Collecting on the shell beaches (some listed below) is a favorite pastime. After high tides and storms there is a better opportunity for rare shells. More serious students of shore life collect living animals. These live in sand or mud. Some can be collected by digging, others by dredging. See books listed on p. 86 for more details on identification and for more help in the art of collecting.

Some Shell Beaches and Collecting Areas in Florida

Sanibel Island, west of Ft. Myers by ferry from Punta Rassa. Most famous of the west-coast shell beaches. Also in this immediate vicinity: Captiva Island, just north; inland to Charlotte Harbor and Punta Gorda. Also Ft. Myers Beach and Estero Island to the south.

Cape Sable beaches north of East Cape, accessible only by boat.

Marco Island at end of Rte 92, off Tamiami Trail; also Cape Romano to the south, accessible by boat.

Naples and adjacent beaches, north and south.

Bonita Springs Beaches west of Bonita Springs.

Sarasota and vicinity: beaches to the west, including Anna Maria Island and Long Key.

St. Petersburg and vicinity: Pass-a-Grille Beach, Clearwater, Tarpon Springs and intermediate points.

Cedar Key and vicinity: end of Rte 24, west from US 19.

Florida Keys to Key West—many coral and some sand beaches. Also many commercial shell exhibits and salesrooms along US 41.

Manilla palm—Fairchild Garden, Miami. FNI

SPECIAL PLACES TO SEE PLANTS might not seem worth pointing out in Florida—with such an abundance of native and exotic species about. But the plant life in northern Florida is very different from that in the south. Field identification of trees, shrubs and smaller plants is not easy, and so botanic gardens and other places where labeled living specimens can be seen are a great help. You can study plants in all national and state parks. Some of the gardens listed on pages 153-156 have unusual collections. Below are places in southern Florida where exotic plants are best seen.

Cities with interesting street and park planting—St. Petersburg, Bradenton, Sarasota, Fort Myers, Key West, Coconut Grove, Coral Gables, Fort Lauderdale, Vero Beach, West Palm Beach, Palm Beach, Avon Park, Lake Worth; also Mobile, Ala. (azaleas).

Nurseries with rare and unusual plants: Arvida, Miami; Cutler, Miami; Dade Co. Park, S. Miami; Dietel's, Fort Lauderdale; Everglades, Ft. Myers; Fantastic Gardens, S. Miami; Menninger, Stuart; Newcomb, Homestead; Palm Lodge Grove, Homestead; Reasoner Tropical, Bradenton and Oneco; Royal Palm, Oneco; Smith's, Fort Lauderdale; Sturrock Tropical, W. Palm Beach.

Botanical Gardens and Experiment Stations: U.S.D.A. Plant Intro. Station, Old Cutler Rd., Miami; Gifford Arboretum, Univ. of Miami, Coral Gables; Subtropic Exp. Station, Univ. of Fla., Waldin Dr., Homestead; Fairchild Tropical Garden, Old Cutler Road, Miami; Mead Bot. Garden, Orlando; Wilmott Mem. Garden, Gainesville.

Others: Woodlawn Park and Miami city cemetery both have fine plantings of trees; plans available in superintendent's office. Miami city parks (Bayfront, Simpson and Crandon). Tampa, Lowry Park.

State capitol building—Tallahassee, Florida. *FNB*

TALLAHASSEE lies in an area of rolling hills—some forested, more in tung and pecan orchards. Midwesterners will find it on the most direct route south. As capital of Florida, it offers visitors a dignified capitol center; all buildings open to the public. The capitol itself was begun in 1845 and enlarged since. At the State University are an art gallery and two museums—one features Indian exhibits, the other is the geological museum, with a fine collection of Florida fossils. To the north of Tallahassee is Killearn Gardens State Park and Lake Jackson. This and several other large lakes are within easy reach. To the south is the Natural Bridge Historic Site and farther south is Wakulla Springs and the St. Marks Nat. Wildlife Refuge, famous for its birds and wildlife. Apalachicola Nat. Forest to the west offers camping, hunting and swimming.

TAMPA and ST. PETERSBURG are the twin capitals of the west coast. Tampa, the older city, itself includes Ybor City, the Cuban and Latin center and hub of cigar-making; factories open to visitors. Try Cuban cooking. Also see Tampa Municipal Museum and Lowry Park with its fine plants. St. Petersburg's Mirror Lake Park has mammoth recreational facilities. Leading south from the city is the famed Sunshine Skyway across Tampa Bay. Fishing and swimming along the route. Farther south, is the Bradenton-Sarasota area, with fine beaches, museums and attractions (pp. 154 and 156). To the west lie Clearwater, Boca Ciega, Pass-a-Grille and other famed beaches. Excellent fishing in Tampa Bay and in the Gulf. To the north is Tarpon Springs, with its sponge fleet and Greek divers.

Gasparilla Festival—Tampa, Florida.

Sponge fleet—Tarpon Springs, Florida. *FNB (both photographs)*

GAINESVILLE at the north and Sebring at the south mark the central Florida lakes area—a region some 200 miles long and 60 miles wide. Here, thousands of lakes and ponds offer all kinds of recreation and natural history possibilities. The entire lakes area is made more attractive by low, rolling hills and extensive citrus orchards. Packing and canning plants are open to visitors (don't pick fruit along the road!). Excellent bass and other fresh-water fishing in the lakes and streams.

Gainesville has the University of Florida, where authorities on agriculture, geology and wildlife can be consulted. The Florida State Museum is one of the best in the south. Ocala is the center of many commercial attractions (p. 156) and gateway to the Ocala National Forest, with its fine recreation areas (p. 132). At Winter Haven, center of the citrus industry, is a citrus museum. An annual citrus exposition is held in February. Nearby are Cypress Gardens and other commercial attractions, south, near Sebring, is Highland Hammock State Pk.

Orange grove—central Florida.

FNB

Matheson Hammock Park—Miami, Florida. FNB

MIAMI is more than a playground. It is a growing metropolis, with homes and industries and many substantial attractions for visitors. There are handsome city parks—Bayfront (fine trees, band concerts, Miami Library), Lummus (old Ft. Dallas) and Crandon on Key Biscayne (beaches, recreation areas and a good zoo). Farther south is Matheson Hammock (a county park), which tapers from an outstanding hardwood hammock with trails and picnic grounds to an ideal sandy beach. Nearly 200 species of birds have been seen here. Nearby is Fairchild Garden and the U.S. Plant Intro. Station. At Hialeah Park racetrack are superb plantings and the largest flock of flamingos. The University of Miami campus is an attraction itself. See the exhibits at Lowe Galleries. No less interesting are the Vizcaya Museum and the residential areas of Coral Gables, Miami and Miami Beach. Fishing from the many bridges and in Biscayne Bay; sailing and boating also. Swimming in municipal pools and at several public beaches. A score of trips, tours and commercial attractions (p. 155) are offered.

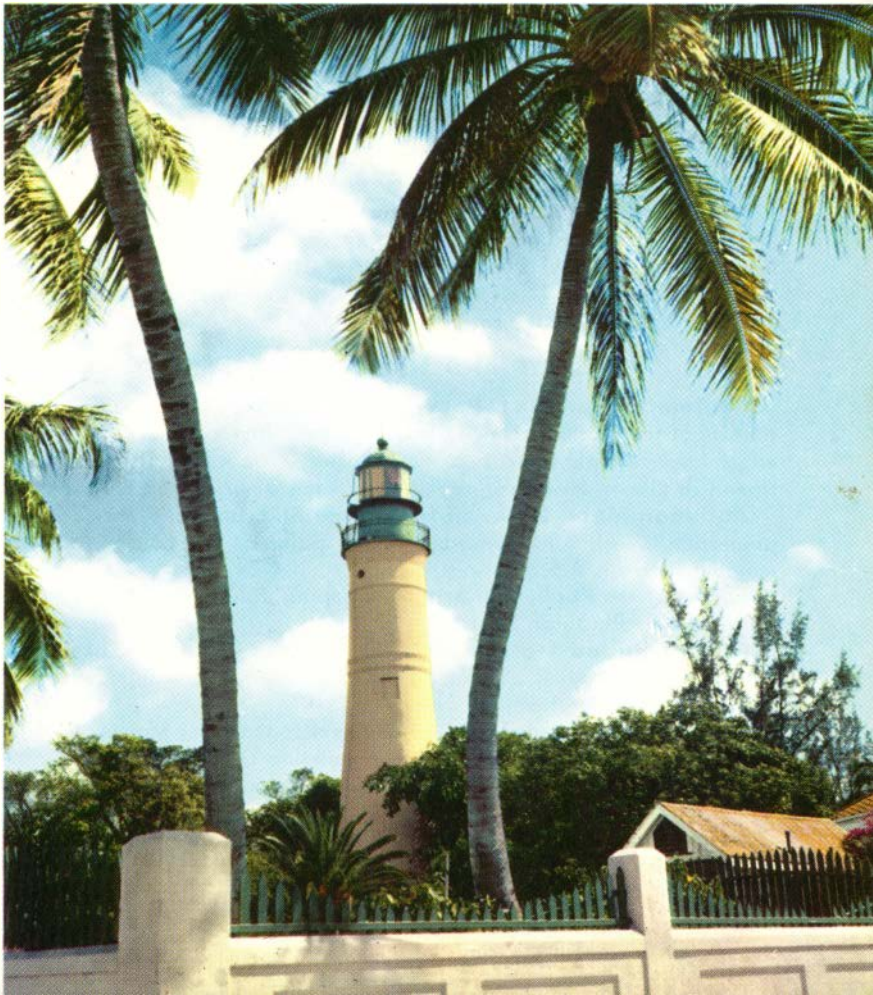
Bahia Honda Park—Florida Keys. FNB

THE FLORIDA KEYS are a chain of islands, mainly parts of an old coral reef, extending from Biscayne Bay south and west to the Dry Tortugas, a distance of over 200 miles. They come close to the tropics and their climate is essentially tropical—a dry and a rainy (July to Nov.) season, with frosts very rare in the northern keys and completely absent in the southern. The Overseas Highway goes to Key West over coral and rock islands connected by long bridges—the longest: 7 miles. Vegetation is tropical (p. 79) and some plant and animal life can be seen nowhere else. Most of the keys in shallow Florida Bay are part of Everglades Nat. Park (pp. 124 and 125). Excellent bird watching and fishing—notably for snapper, snook and tarpon. The ocean side of the keys is protected by a reef, beyond which is the Gulf Stream. Fishing is excellent for sailfish, marlin, kingfish and sundry bottom species. Unexcelled marine life can be studied on or off shore.

Key Largo still has fine hardwood hammocks. Local efforts are being made to protect them. Audubon tours (p. 133) leave from Tavernier. Ample accommodations and several roadside parks are found on the keys.

In Key West, most southern city in U.S., see the municipal aquarium, the Martello Towers (remains of two forts) and the lighthouse. Along the streets are many tropical trees—often labeled. See some of the older houses with their attractive gardens. Try local "Conch" dishes or Cuban cooking. Excellent fishing from piers and charter boats; fine public beach. Visit the shrimp docks and the turtle crawls (admission charge). An auto ferry and airline connect with Cuba.

Lighthouse—Key West, Florida. *FNB*



LOUISIANA

The coastal plain includes all of Louisiana, though this book touches only the southern third. But in this third, the natural and historic features of the state are at their best. At the hub of this area is famed New Orleans (p. 144). Other places to see and things to do are listed below:

CITIES AND TOWNS

Baton Rouge, state capital and center of sugar, chemical and petroleum industries. Sugar refineries and other industries have public tours. See the old and new state capitols, the latter a marble skyscraper. At Louisiana State University are museums of zoology and of Indian life.

Lake Charles, on US 90, is a deep-water port and center for sulfur and petroleum. To the south and east are extensive rice plantings.

New Iberia, 150 miles W. of New Orleans on US 90, is in the center of the "Acadian country" and of sugar plantations. Jefferson Is. and Avery Is. both have huge salt mines. The latter also has a tabasco plantation, bird sanctuary and commercial gardens (p. 153).

St. Martinville, near New Iberia, borders the Longfellow-Evangeline Mem. Park (see below). See the museum and sites associated with the Acadian (Cajun) French settlers, driven from Nova Scotia in 1755.

Thibodaux (Rte 1, west of New Orleans), with many old plantations is in the heart of the sugar country.

STATE AND NATIONAL PARKS

Chalmette Nat. Hist. Park, just south of N. O. on Rte 39, marks the site of the Battle of New Orleans. Andrew Jackson, in 1815, defeated a large British force two weeks after a peace treaty had been signed at Ghent. Historical markers show the American battle lines.

Audubon Mem. Park, off US 61 near St. Francisville, includes the plantation where Audubon worked and painted. The house is now a museum. There is a picnic area.

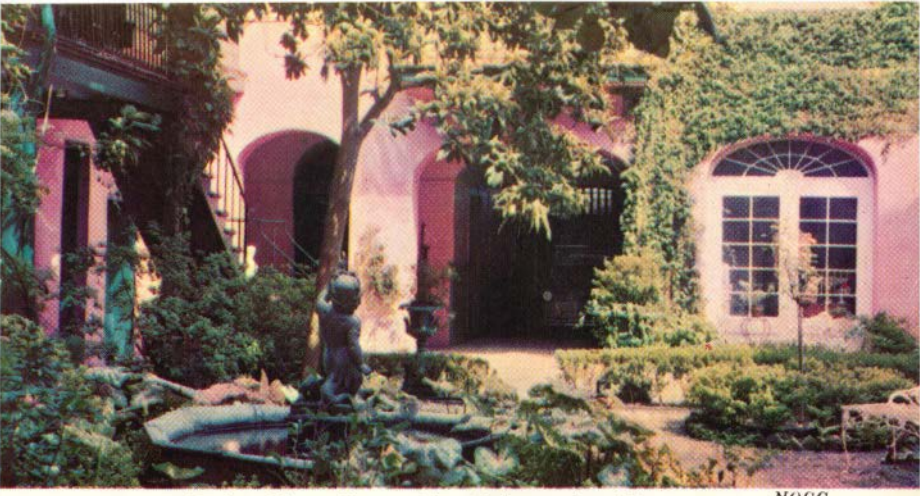
Chicot State Park, with boating, camping, fishing and picnicking, is north of Ville Platte on US 167.

Fontainebleau State Park, near the north end of the Lake Pontchartrain causeway, is part of an old plantation. Swimming and other water sports on the lake; also camping.

Longfellow-Evangeline Mem. Park, near St. Martinville, includes an old Acadian house, now a museum. Guided tours.

Sam Houston State Park offers fishing, boating and picnicking in woodlands north of Lake Charles, off US 90.

Other State Parks are found in the northern part of the state; also a number of smaller parks and recreational areas in the south.



Patio—Dixon House, New Orleans, Louisiana. NOCC

WILDLIFE REFUGES

Sabine N.W.R., off Rte 27, has 143,000 acres for waterfowl, wading birds and alligators. Accessible by road.

Lacassine N.W.R., south of Rte 14 and east of Rte 27; also a refuge for waterfowl and waders.

Delta N.W.R., near Venice at end of Rte 23, south of New Orleans; a refuge for ducks, geese and shorebirds. Bird watching excellent.

Several other Nat. Wildlife Refuges are less accessible. Louisiana has a number of state wildlife refuges and game preserves. The Nat. Audubon Soc. also operates a refuge near Abbeville.

OTHER THINGS TO SEE

Kisatchie Nat. For.: pine seedling nursery; W. of Alexandria.

Livestock Experimental Farm of the U. S. Dept. of Agriculture, east of New Iberia.

Shrimp and oyster fleets at Morgan City.

Old plantations around St. Francisville (admission fee).

Cajun villages of fishermen and farmers, S. and E. of New Orleans.

TEXAS

The Southeast area gradually merges with the west in the Texas coastal plain. Only the area around Beaumont is properly in this guide. Beaumont is a petroleum and chemical center. Its refineries are among the largest. Also a shipping center for lumber and rice, which is grown to the south. Port Arthur, on Sabine Lake, is a similar industrial city. Just north, on Rte 87, is the highest highway bridge in the south. Across the lake is the Sabine National Wildlife Refuge.

Mardi Gras—New Orleans, La. NOCC

NEW ORLEANS, founded in 1718, has had an exciting history. It still retains its historic charm amid its new industrial and commercial growth. The city, with its 25 miles of waterfront docks, is about 100 miles from the mouth of the Mississippi. The old city, which began on the river, has spread to Lake Pontchartrain, across which a fine causeway has recently been built. Probably the most European of all American cities, New Orleans has a distinct flavor and boasts scores of historic sites. The famed Mardi Gras, just before Lent, involves two weeks of festivals and a spectacular parade. Make reservations early if you want to go. Other things for the visitor to see include:

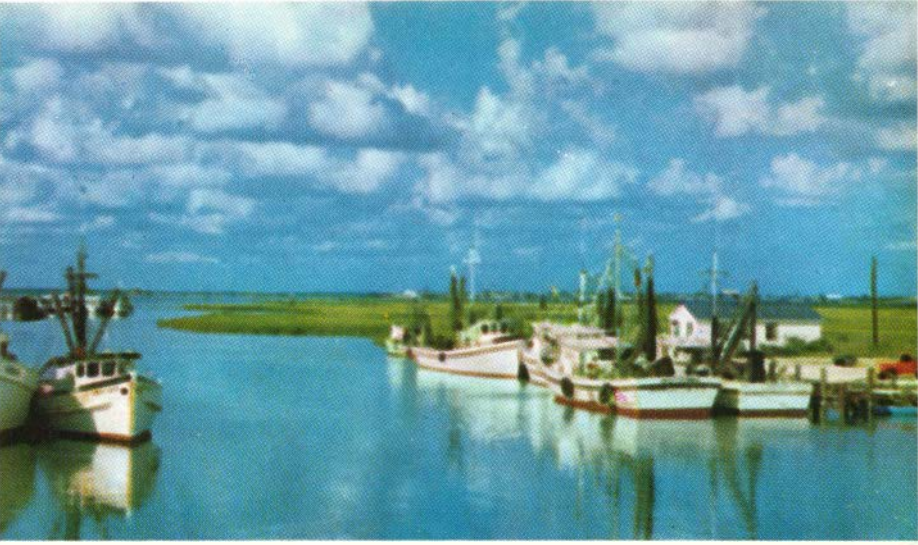
The Vieux Carré, the French Quarter, is marked by narrow streets, parks, old houses with delicate iron grillwork, and hidden patios. This area, extending about ten blocks back from the river and from Canal street, is the oldest part of town. Try the famous restaurants, noted for their Creole and French cooking. See the Cabildo, now the state museum, once used by the Spanish and French governments. Adjoining is St. Louis Cathedral and the Presbytère, now a Museum also.

City Park, housing the Delgado Art Museum with its famous collections, has an unusually large floral clock.

Audubon Park, on the Mississippi River, has an excellent zoo (with the only pair of breeding whooping cranes in captivity), an aquarium, swimming pool, golf course and playgrounds.

Lake Pontchartrain has beaches and amusement parks, boating and fishing. Drive across the 24-mile causeway, longest ever built.

Drive down Rte 1 to Grand Isle, headquarters of pirate Jean Laffite, or down Rte 23 to Venice, near the Mississippi's mouth.



Shrimp boats near Pascagoula, Mississippi. *HSZ*

MISSISSIPPI, like Louisiana, is completely within the coastal plain. And here also, it is the southern quarter of the state that is the oldest and has the most attractions for visitors. First explored by De Soto in 1542, this area has been under Spanish, French and British control. Agriculture was formerly centered on cotton. Recently, reforestation and soil conservation have started a comeback, and agriculture has been diversified. In the south, more cattle is raised, and there are new plantings of tung trees for oil, and such crops as peanuts, soybeans, sugar cane and strawberries. In an attempt to balance agriculture and industry, textile mills, lumber mills and shipyards have been built.

The coastal section itself is an area of sandy soils, where the sea and the climate make fishing and services to visitors the principal occupations. Moving inland, the coastal area merges with the "piney woods"—once rich forests, now cutover lands, some regrown with pine, some in small farms. Things to see and do in Mississippi are listed on the next page.

CITIES AND TOWNS

Picayune, on US 11 at the center of an area of tung oil plantations (p. 58), has the world's largest tung mill.

Bay St. Louis is the first of a series of resort towns beaded along US 90. Salt water fishing in the Gulf and Bay. Here a naval skirmish was fought (Dec. 1814)—the beginning of the battle of New Orleans.

Biloxi, best known resort on the Mississippi gulf, claims to be the first permanent white settlement in the Mississippi valley (1699). It is on a peninsula between the Gulf and the Bay, where a large shrimp and oyster fleet makes its headquarters. Swimming along miles of excellent beach; boating and fishing. See the old lighthouse, shrimp docks and packing plants, old houses, and Ft. Massachusetts. The latter is on Ship Island, a public recreation area, reached by boat. Beauvoir, the home of Jefferson Davis, is 5 miles west on US 90.

Ocean Springs, across the Bay from Biloxi, was the actual site of the first settlement. It has old estates and the Gulf Coast Research Lab.

Pascagoula, final coastal town as one moves east along US 90, was once an important lumber port. Now its industries include shipbuilding, shipping of pecans, fishing and shrimping. Good sport fishing. An old Spanish fort (1718) can be seen.

Hattiesburg is the largest city in southern Mississippi. It began its career as a lumber town and managed to maintain itself after the timber was gone. It is a city of diversified industry including textile mills, an oil refinery and two small colleges.

NATURAL AREAS WORTH VISITING

Mississippi has a number of national and state areas set aside for recreational and conservational use. In the southern part of the state, the visitor may find the following worth seeing.

De Soto Nat. Forest, north of Biloxi, includes three recreational areas: Ashe Lake, 2 mi. S. of Brooklyn off US 49; swimming, boating, camping. Big Biloxi area, 12 mi. N. of Gulfport on US 49, a similar area. Thompson Creek, 24 mi. S. of Laurel on Rte 15.

Homochitto Nat. Forest in southwest Mississippi includes Clear Spring Lake Rec. Area off US 84. Swimming, boating and camping.

Percy Quinn State Park, near McComb on Rte 24, has a lake with swimming, boating, fishing. Camping, cabins and picnic areas.

Shelby State Park, 12 mi. S. of Hattiesburg off US 49; boating, fishing and swimming.

Petit Bois Nat. Wildlife Refuge for pelicans and shorebirds; on an island at the Miss.-Alabama border. Accessible by boat only, as is nearby Horn Island, a new Wildlife Refuge just off Biloxi.

Several gardens and old homes near the coast cities are operated as commercial attractions. Make local inquiries for hours and fees.

Azaleas—Bellingrath Gardens, near Mobile, Alabama. *Holder*

ALABAMA differs from the two states to the west in that only a small part of it lies in the coastal plain, and that part must compete in productivity and interest with other attractive areas. Along the Gulf, Alabama is only 60 miles wide; this tongue is dominated by Mobile at the deltas of the intermixed Mobile and Tensaw rivers, which become the Alabama and the Tombigbee rivers to the north. The large navigable streams have recreational as well as industrial potentials. The southern extension of Alabama is similar to western Florida. The remainder of the state in the coastal plain is predominantly farming and forested pine country, flat or gently rolling with low ridges. Here the soils are poor and sandy in contrast to the rich, fertile "black belt" to the north. Cotton, tobacco, peanuts, watermelon, sugar cane and winter vegetables are major crops. Hogs, cattle and poultry are important, too. Alabama's industry is mainly to the north of this region, though Mobile is a great port and shipping center. For details on what to see and do in this area, see the next page.

CITIES AND TOWNS

Mobile, founded in 1711, is an older city than New Orleans, but with less of a continental flavor. Some traces of French, Spanish and British occupation remain, but, on the whole, Mobile is a modern industrial and commercial city, taking full advantage of being Alabama's only seaport. It has large shipyards, docks and a score of diversified industries. During the Civil War, Admiral Farragut's fleet fought the battle of Mobile Bay near the city in 1864. The Confederate ships were sunk and, soon after, the two forts guarding the bay (see below) fell to the Union forces, thus sealing off another Southern port. Visitors in early spring should follow the "Azalea Trail" through the best planted residential streets and roads. A Mardi Gras takes over the city before Lent. See such places as Bienville Square, the Federal Museum in the library building, the state and oyster dock, and many old buildings and monuments.

Fairhope on US 98 is internationally known as a town built on advanced social and educational ideals. It began as a single-tax colony in 1893. See its attractive public waterfront.

Dothan, in S.E. Alabama was a rough lumbering town which grew up into a rich agricultural center. Peanuts are the major local crop.

Enterprise, east of Dothan on US 84, gave up when the boll weevil took over the cotton. The area turned to peanuts and prospered. In gratitude, a monument to the boll weevil graces the square.

NATURAL AREAS WORTH SEEING

Conecuh Nat. Forest, east of Brewton, includes an experimental forest and a recreational area (camping, swimming and boating) at Open Pond, about 17 miles south of Andalusia.

Little River State Forest off US 11 north of Atmore, offers camping, swimming and fishing. There are several Indian village sites.

Gulf State Park, off Rte 3, S.E. of Mobile, is a recreational area on the Gulf which also has three fresh-water lakes. Cabins, dining room, beach; boating and fishing.

Other state lands include Meaher State Pk., Chattahoochee State Pk. in the very S.E. tip of the state, and Geneva State Forest.

HISTORIC SITES

Ft. Morgan State Park, on the east side of the entrance to Mobile Bay, surrounds a brick fort built in 1833 and taken by Union forces (with Ft. Gaines) during the Civil War. Cottages and restaurant.

Ft. Gaines on Dauphin Island, at the end of Rte 163, guarded the west side of the entrance to Mobile Bay. The fort was enlarged during the Spanish-American War. Now open to visitors.

Fort Mimms no longer exists. At the site, 4 miles W. of Tensaw on Rte 59, is a monument to 500 settlers killed there in 1813 by Creek Indians.

GEORGIA'S coastal plain is sandy, with swamps and low ridges. In the southeast is the famed Okefenokee Swamp, covering nearly 700 sq. miles. Other swamps follow the inlets and lie along the rivers. The Georgia shore is bounded by a group of famous sea islands. The coastal plain of Georgia is agricultural. Cotton was the prime crop for a century. Now the higher inland area is famous for its peaches. Pecans, peanuts, tobacco and grains supplement cotton, and poultry raising has become important. Forests are still producing lumber, pulp and chemicals.

CITIES AND TOWNS

Savannah (p. 15) is a typical southern city; large and modern, and at the same time, old and beautiful. It was the scene of batties during both the Revolutionary and Civil wars. Interesting old streets, the city parks (Forsyth, Colonial, Daffin) and the old homes and churches. Telfair Academy is a historical museum. A large paper mill (Union Bag and Paper), north of the city, has daily tours. Visitors are also welcome at the U.S.D.A. Experimental Farm (Bamboo farm) 12 mi. S. of the city on US 17.

Albany (Rtes 19, 82 and 50) on the Flint River is the largest pecan shipping center. To the S. is Radium Spring, largest spring in the state.

Sand dune and pines—Jekyll Island State Park, Georgia. *HSZ*

CITIES AND TOWNS (continued)

Brunswick, the second Georgia seaport, is a lumber and shrimping port. From here a causeway (toll) leads out to several sea islands. "Marshes of Glynn" are to the north of the city.

Thomasville (Rtes 3, 35 and US 84) is a residential town with attractive homes and a venerable oak, 22 ft. in circumference.

Waycross (on Rtes 1, 50 and US 84) is a tobacco and cotton town; it is better known as the gateway to the Okefenokee Swamp (see below).

NATURAL AREAS WORTH VISITING

Kolomoki Mounds State Park has camping and recreational facilities in addition to Indian mounds and an exhibit of their content. North of Blakey on Rte 27.

Chehaw State Park, near Albany off US 19, commemorates a group of Creek Indians. The wooded area is used mainly for picnics.

Georgia Vet. Mem. State Park, on Lake Blackshear (Flint River) N.E. of Albany, has camping and recreational facilities on a lake.

Little Ocmulgee State Park, just outside of McRae (Rtes 27 and 280), has a lake; fishing, camping and a picnic area.

Magnolia Spring State Park, N. of Statesboro on US 25, has a spring flowing six million gallons a day. Mainly a picnic area, with two small lakes for fishing and swimming.

Jekyll Is. State Park, near Brunswick, offers rare swimming and recreation facilities. Large estates are now guest houses and a museum.

Crooked River State Park, S. of Brunswick off Rte 40, offers saltwater fishing, swimming and birding.

Laura S. Walker State Park, S.E. of Waycross, is mainly for group camping. It has a lake for fishing, boating and swimming.

National Wildlife Refuges—four of the five in Georgia are in this coastal region. Three (Blackbeard Is., Savannah, Tybee and Wolf Is.) are on islands between Savannah and Brunswick. Okefenokee Nat. Wild. Ref. covers the main part of Okefenokee Swamp. Guides are needed.

Other natural areas include the state forests and the sea islands. Of the latter, Jekyll Is. and St. Simons are accessible from Brunswick.

HISTORIC SITES

Ft. Pulaski Nat. Mon. at the mouth of the Savannah River on Cockspur Is., is a great fort, 20 years a-building. It protected Savannah early in the Civil War, but was taken in 1862, thus cutting off the city.

Ft. Frederica Nat. Mon. on St. Simons Is. preserves an English fort and town begun by Gen. Oglethorpe in 1736. In 1742 the English defeated the Spanish here in the "War of Jenkins' Ear."

Jefferson Davis Mem. State Park, N.E. of Tifton, marks the spot where the Confederate president was captured. A museum.

Charleston Museum—oldest in the U.S. *HSZ*

SOUTH CAROLINA rounds out the area covered by this book, though the coastal plain extends northeast till it peters out at Cape Cod. Nearly half of South Carolina is in tne plain, which is low and swampy along the coast, and which rises into rolling sand hills inland. The soil is poor. Pine forests predominate, with a good yield of timber, and agriculture is important. Cotton is still king, but corn and other grains are grown—also tobacco, sweet potatoes, peanuts, peaches, pecans and early vegetables. The value of livestock and poultry is increasing. The salt-water fisheries center on oysters, but also include shrimp and several kinds of fish. Industry includes textile mills, dams for electric power, tobacco and wood products.

The "up country" in South Carolina is resort area, not the "low country" of the coastal plains. However, there is an abundance of trees (pine and hardwoods) and of wildlife here. The shore area is especially attractive because it is not as well developed as areas to the south. It has an enticing "back country" aspect, and a full share of historic and natural sites worth seeing.

CITIES AND TOWNS

Beaufort, on US 21, is an old port on one of the S. Carolina sea islands. Buildings go back to 1690. Nearby is the Marines' training base at Parris Island. Boating, fishing and swimming in the sheltered harbor.

Charleston is often considered *the* southern city—old (founded 1670), historic and beautiful. Walk the downtown streets (from King St. east) to flavor the city and see its buildings. Do not miss the museum—oldest in this country and the Gibbes Art Gallery. Churches and public buildings are admission-free. Other attractions have a charge of one dollar or less. Near Charleston are several old garden estates which have been developed as commercial attractions.

Summerville, 14 mi. N.W. of Charleston, has municipal azalea gardens blooming in early spring. Nearby is Fort Dorchester, built in 1750.

Orangeburg, still farther west on US 178, supports the Edisto Gardens with camellias, azaleas and a fine rose collection. Free.

Georgetown, north of Charleston, has a fine harbor and excellent fishing. The town houses one of the largest paper mills.

Myrtle Beach is a summer resort with a wide, sandy beach. Three miles south is a state park (see below) and about 15 miles farther is Brookgreen Gardens, with exhibits of native plants and animals. Free.

HISTORIC SITES

Charleston is the most historic site in the area, along with **Fort Sumter Nat. Monument,** marking the fort at which the Civil War officially began. Fort Sumter can be reached by boat from downtown Charleston. There are other fortifications on Sullivans and James Is.

Rivers Bridge Conf. Mem. Park, S. of Ehrhardt on the Big Salkehatchie River, has a museum—also picnicking and swimming.

NATURAL AREAS WORTH SEEING

Three National Wildlife Refuges in this area mainly protect ducks, geese and other waterfowl. Savannah N.W.R. is just across the river from Savannah, Ga.

Ft. Marion Nat. Forest, N. of Charleston, has mainly large stands of yellow pine, some cypress and hardwoods. No recreational facilities.

Barnwell State Park, S. of Blackville, forest land with lake, swimming, boating and camping.

Edisto Beach State Pk., on Rte 174, on beautiful Edisto Island.

Givhan's Ferry St. Pk., on Edisto river off Rte 61; cabins, swimming.

Hunting Is. State Pk., end of US 21; a wild forest area on the coast; well worth visiting. Cabins, camping, picnicking.

Myrtle Beach State Pk., S. of Myrtle Beach; swimming, fishing and camping. Wooded dunes and beach.

Santee State Pk., on Lake Marion; one of the large twin artificial lakes N. of Charleston. All water sports; cabins.

COMMERCIAL ATTRACTIONS

Feeding porpoise (Dolphin) Marine Studios, Florida. FNB

Within this area are over a hundred museums, exhibits, gardens, plantations and other attractions that charge admission. This does not include state parks or public institutions charging a nominal fee. A few commercial attractions are owned by the state or a municipality. Most are run privately. Some operators have gone to great lengths to make their exhibits educational and to promote research. Many—perhaps most—of these commercial attractions are worth seeing. On the following pages are some of the better known ones. Cost listed is for an adult. Children are usually less, and fees may vary with the season. Make local inquiries, and check places making exaggerated and improbable claims.

LOUISIANA

Avery Island Jungle Gardens include a fine, private wildlife sanctuary. Large areas of native and exotic plants. Admission $1.

St. Francisville Nearby are several plantation mansions where the home and grounds are open. Look up Afton Villa and Cottage Plantation; admission $1. and .85.

MISSISSIPPI

Bay St. Louis Holly Bluff and Darwood, two gardens located on the Jordan river, west and north of here. Both have plantings of azalea, camellias, and antique collections. Both $1.

Biloxi Five miles west on US 90 is Beauvoir, the home of Jefferson Davis, kept as a museum and shrine. Admission, $1.

MISSISSIPPI (continued)

Natchez, just past the edge of our region, is the center of ante bellum gardens, houses, and plantations. Most are open all the year, at admission of 60 cents and up. In March the garden clubs sponor a "pilgrimage" to outstanding houses and gardens, some of which cannot be visited at other times.

Pascagoula Not far off US 90 is an old Spanish fort built in 1718, now a historical museum. Admission, 50 cents.

ALABAMA

Mobile To the west and south off Rte 90 is Bellingrath Gardens, built in 1936. The house contains a collection of European antiques. The gardens include large plantings of azaleas, camellias and dogwoods. At their best in early spring. Admission, $2 and $4.50.

GEORGIA

Waycross Okefenokee Swamp Park is in this great swamp and wilderness area. Animal exhibits, trails and guided tour. Admission, $1.25.

SOUTH CAROLINA

Charleston Northwest of the city is a group of gardens and plantations featuring azaleas and camellias, and houses of historic interest. Admission, $1.25; $2 during spring season.

Cypress Gardens, off Rte 52, about 25 miles north.

Magnolia Gardens, off Rte 61, about 10 miles northwest.

Middleton Gardens, off Rte 61, about 12 miles northwest.

Pierates Cruze Gardens, off US 17, 6 miles northeast.

McClellanville Hampton Plantation, with a fine Georgian house and well-planted gardens is 7 mi. north, off US 17. Adm., $1.50.

FLORIDA

Boca Raton Africa, U.S.A., has many species of African animals on a large, open tract visited by motor train. Also plantings of tropical plants and a boat cruise. Admission, $1.75.

Bonita Springs Everglades Wonder Gardens is a fine zoo, specializing in local animals, with a large collection of alligators and crocodiles. Labeled exotic trees, and guide service. Admission, $1.

Bradenton South Florida Museum, small and compact, is filled with a wide range of exhibits, including a living manatee. Adm., .50.

Daytona Beach Cruises on the Halifax River leave the municipal docks morning and afternoon. $1.65. South on U.S. 1 is the Sea Zoo with a variety of fishes and other animals. Admission, $1.50.

Dunnellon Rainbow Springs, about 5 miles north off Rte 41, is one of the larger Florida springs. "Submarine" boats. Trip, $2.

Ringling Museum—Sarasota, Florida. *FNB*

Everglades From here boat trips into the wilder parts of the Everglades National Park (p. 124) are available. Cost, $3.30.

Fort Lauderdale Two "jungle cruises" cover the Bahia-Mar beach area, the Inland Waterway, and the New River. Cost, $2 and $2.50.

Fort Myers Edison Winter Home and Laboratory includes workshops and a botanical garden (Adm. $1). Also several cruises in the river and bay from Yacht Basin Park ($1.75 and $2).

Fort Walton Beach The Florida Gulfarium, east on US 98, has a large collection of fishes. Trained porpoises, too. Admission, $1.50.

Homestead To the north, on Newton Rd., is the Orchid Jungle, with greenhouses and naturalized plantings. Admission, $1.

Homosassa Springs Nature's Giant Fish Bowl, a group of springs connected to the Gulf, is rich in marine life. Adm., $1.24.

Hypoluxo, on US 1 near Lake Worth; the James Melton Autorama, a collection of antique cars, toys and a cyclorama. Admission, $1.50.

Islamorada Just north, Theater of the Sea with numerous pools of ocean fishes; guided tour and trained porpoise show. Adm., $1.50.

Key West East Martello Tower is the remains of a brick Civil War fort now housing art and historical exhibits. Worth seeing. Adm., .50.

Marathon S.E. Mus. of N. Amer. Indian. Excellent collection of implements, ornaments, and many aspects of Indian life. Adm., $1.

Marineland, 17 miles south of St. Augustine on route A1A, has the famed Marine Studios, first and best known of the large aquarium exhibits. One of the best of its kind. Admission, $1.10.

Miami has a score of commercial attractions. Get a local map for locations. Some of unusual educational value are:

Monkey Jungle—largest collection of monkeys and apes. Adm., $1.40.

Parrot Jungle—many parrots, flamingos and other birds. Adm., $2.20.

Seaquarium—a new, large, attractive aquarium exhibit. Adm., $2.20.
Serpentarium—unusual exhibits of rare snakes. Adm., $1.30.
Vizcaya—a pretentious estate, now an unique museum. Adm., $1.75.

Naples Caribbean Gardens feature exotic birds and tropical plants in an attractive natural setting. Admission, $1.15.

Ocala To the south, Birds of Prey, an outstanding educational exhibit of tethered birds, with demonstrations of falconry. Adm., $1.13.

St. Augustine abounds in commercial attractions. Outside of town are the St. Augustine Alligator Farm (Adm., .90) and Casper's Alligator Jungle ($1.25). Closer in, visitors may take their choice of: Old Spanish Treasury (.50), School House (.50), Oldest House (.50), Fountain-of-Youth Park (.80), Lightner Museum of Hobbies ($1), Believe-It-or-Not Museum ($1), Potter's Wax Museum ($1.25).

St. Petersburg has commercial attractions, all on or near N. 4th St.
Florida Wild Animal Ranch—exhibits and an animal show, $1.
Sunken Gardens—plantings and botanical displays, Adm., $1.
Wedding's Gardens—plantings of tropical species, Adm., $1.

Sarasota has three state-owned Ringling museums, including the famous Ringling Museum of Art ($1), the Ringling Mansion with its fine gardens ($1), and the Museum of the Circus (.50). Also note:
Circus Hall of Fame—exhibits and circus acts. Adm., $1.25.
Circus Winter Quarters—animal exhibits and training acts. Adm., $1.
Horn's Cars of Yesterday—antique cars and music boxes. Adm., $1.
Sarasota Reptile Farm and Zoo—large animal exhibits. Adm., $1.
Sunshine Gardens—plantings and water-skiing exhibits. Adm., $1.

Silver Springs includes the famous springs themselves (tour, $2.20) and also the Ross Allen Reptile Institute with exhibits and demonstrations of "milking" rattlers. (Adm., $1.15). The Carriage Cavalcade exhibits antique cars ($1.13), and deer of many kinds are seen at Bartlett's Deer Ranch (Adm., 71 cents).

Tarpon Springs Sponge-diving exhibits and demonstrations. ($1)

Tavernier McKee's Sunken Treasure Fortress exhibits relics from ancient wrecks found along the Florida Keys ($1.15).

Vero Beach McKee Jungle Gardens has unusual plantings of native and exotic species, also exhibits of birds and mammals ($1.85).

Wakulla Wakulla Springs to the west is one of the largest springs in the state (p. 43). Glass-bottomed boat tours; also sightseeing cruises for plants and birds ($1.65).

Weeki Wachee Springs features underwater shows, sightseeing trips, and a view of another large spring. Admission, $1.75.

Winter Haven Cypress Gardens offers colorful plantings and landscaping in addition to its famous shows. Several rides and tours are available. Admission, $1.50.

Winter Park The city-owned Mead Botanical Gardens, with orchid greenhouse and open plantings. Many tropical species. Adm., 50 cents.

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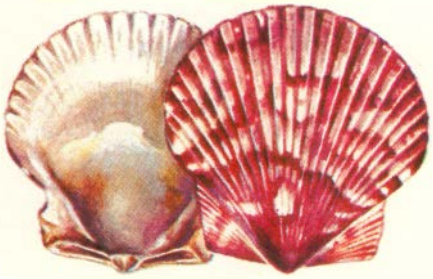

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