



Brian Kemp, Governor

Mark Williams, Commissioner, Department of Natural Resources

Doug Haymans,
Director,
Coastal Resources Division

BOARD OF NATURAL RESOURCES

Nancy A. Addison, Chair

Delos Yancey III, Vice Chair

Alfred W. "Bill" Jones III, Secretary

**Nick Ayers** 

William Bagwell, Jr.

**Dwight Davis** 

**Patrick Denney** 

Dwight H. Evans

Joe Hatfield

Duncan N. Johnson, Jr.

**Ray Lambert** 

Robert D. Leebern, Jr.

Tim Lowe

Billy E. New, Jr.

Thomas "Mike" Phelps, Jr.

Paul Shailendra

Jeff "Bodine" Sinyard

Winbern E. "Brother" Stewart, Jr.
Miki Thomaston



COASTAL RESOURCES DIVISION

"Georgia's Coast" was published by the Coastal Resources Division, Department of Natural Resources, 1 Conservation Way,

Brunswick, Georgia, 31520

Inside this guide

Coastal Marshlands Protection Act, Pqs. 4-6 Natural Systems and Functions, Pqs. 7-11

> Sand sharing system, Pq. 7 Marshes, Pq. 8 Coastal Rivers and River Swamps, Pq. 9 Ground Water, Pq. 10 Island Gloughs, Pq. 11

Saltwater Fishing, Pgs. 12-15

Improved Clinch Knot, Pq. 12 Basic Tackle Box, Pq. 13 Types of Fishing Rigs, Pqs. 14-15 Oystering, Pq. 15

Selected Saltwater Species, Pas. 16-21

Red Drum, Pq. 16 Black Drum, Pq. 17 Spotted Seatrout, Pq. 18 Sheepshead, Pq. 19 Blue Crabs, Pqs. 20-21

Kayaking and Canoeing, Pgs. 22-26

Ebenezer Creek, Pq. 22 Cathead Creek, Pq. 24

#### Acknowledgments

This publication was produced to commemorate the 50th anniversary of the Coastal Marshlands Protection Act, which went into effect July 1, 1970.

The book was compiled by the Coastal Resources Division (CRD) of the Georgia Department of Natural Resources (DNR) using publications produced by DNR in the 1970s and early 1980s. Designed by CRD 's Tyler Jones in November 2020, it is the companion to the poster "Georgia's Coast: Wetlands and Geologic Resources," originally printed by DNR in 1976 and reprinted in 2020. The font used in this quide was created using the original handwriting of the 1976 poster. You can download this free font, which we have named "Explore Georgia," and order the companion poster at www.CoastalGaDNR.org/Poster.

The cover art is adapted from the cover of CRD's prior newsletter, "Coastlines Georgia," Vol. 3, No. 1, January-February 1980.

The division is particularly grateful to former employee Rick Pariani, who worked for CKD from 1976–1980 and provided many of the maps and illustrations seen in this quide. Without his assistance, this would not have been possible.

# Coastal Marshlands Protection Act

## A story of success

he story of the Coastal Marshlands Protection Act begins with a plastic bag, according to the bill's sponsor, the late state Rep. Reid W. Harris Jr. (1930–2010).

"A member of the House (of Representatives) came up to me and handed me a small plastic baq," recounted Harris in his 2008 memoir, "And The Coastline Waits".

Inside that inconspicuous baq was the mineral phosphate.

"I immediately recalled a trip I had taken that led through Florida's phosphate mining area," he wrote. "I remembered the slime pits, the bleak landscape the mining left in its wake after the phosphate had been extracted and wondered if this could be the fate of Georgia's countryside."



Harris

The experience inspired Harris to craft the Surface Mining Land Use Act of 1968, which regulated mines in Georgia and

forced companies to clean up mining sites after they had outlived their usefulness.

Initially, Harris thought that was the end of the issue, until another threat to Georgia's pristine 368,000 acres of marshlands arose. On May 25, 1968, a newspaper article announced that an Oklahoma-based mining company intended to mine phosphate from the marshes, beaches and riverbottoms near Tybee, Skidaway, Wassaw and Ossabaw islands.

Franjo Inc., a wholly-owned subsidiary of Oklahoma City-based Kerr-McGee mining company, had purchased Little Tybee Island and several other islands from Savannah antiques dealer Jim Williams, who was also featured in John Berendt's 1994 nonfiction novel "Midnight in the Garden of Good and Evil."

Kerr-McGee officials planned to dredge about 70-120 feet deep in marshlands to reach the underlying phosphate. They calculated they could extract between three and five million tons per year using this method. Once the phosphate has been exhausted, they would infill the marsh with hard dirt, presumably to create valuable real estate.

The plan caused Harris great concern, and he sought the expertise of Drs. Eugene Odom, Thomas Linton and Fred Marland of the Marine Institute on Sapelo Island,



An illustration of a typical Georgia Marsh, reprinted from "Coastlines Georgia," Vol. 3, No. 6, November-October 1980. Artwork by Nancy Hardwick.

operated by the University of Georgia. Odom, often referred to as the "Father of Modern Ecology," and his colleagues impressed upon Harris the importance of the marshes as nurseries for marine life and as a valuable economic resource for the coast.

"It is hardly necessary to point out that the dredging and removal of these marshes and beaches preclude all other desirable uses such as nursery ground for fish and shellfish, aquaculture, boating, sportfishing, waterskiing, water fowl hunting, bird watching, etc.," wrote Marland in a May 30, 1968, letter to his scientific colleagues. "We believe the landscape should be preserved, and that the greatest benefit to the citizens of this country would require that the marshes, beaches and near-shore environment be spared of strip mining."

By June, a month later, numerous agencies had joined the fight against Kerr-McGee, sounding various alarm bells about the plan, including the Georgia Water Quality Control Board, which feared a breach of the coastal aguifer.

But it was not until January of 1969 that Harris began his official quest to preserve Georgia's coastal marshes. Harris filed House Bill 212, The Coastal Marshlands Protection Act, which was met with immediate consternation from many sides. A spirited public hearing was held in Atlanta on Feb. II, 1969, and the bill later went to a Georgia House subcommittee. On March 5, 1969, House Bill 212 came to a full vote on the floor of the Georgia House of Representatives. It failed by two votes.

Harris recounted this moment in his memoir. After the vote, a young woman approached him on the floor.

"Bad day?," she asked.

"Yes," Harris responded. "It was a very bad day."

"Are you going to try again?," she asked.

"You bet I am," he answered.

After much hand-wringing and a fair amount of glad-handing, Harris was able to secure a second House vote on the measure. On March 14, 1969, on its second vote, House Bill 212 was passed with the constitutionally required margin. The bill advanced to the state Senate, where it reached committee two days before the session was to end. Harris knew his work had no chance of passage that year.

Undeterred, Harris returned to the General Assembly in January 1970, and picked up where he'd left off at the end of the previous session. The state Senate held a public hearing on Feb. 3, 1970, during which a delegation from Coastal Georgia spoke out against the proposal. Harris thought it necessary to mention in his memoir that when the delegation left Atlanta and flew home on a Delta jetliner the next day, the cockpit window blew out at 9,000 feet and forced the plane to make an emergency landing. Thankfully, no one was injured, but Harris noted in his book, "some say that the accident was a sign that those opposing the marshlands bill were treading on forbidden ground. Others say the accident was pure coincidence."

The Senate passed House Bill 212 on Feb. 6, 1970, after which it returned to the House with amendments. Three days later, the bill came for a floor vote in the House, yet again. This time, however, Harris was triumphant. House Bill 212 passed 103 to 21.

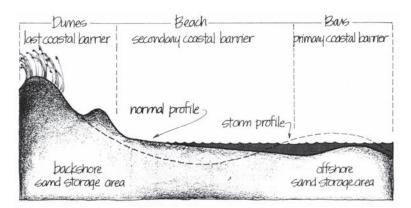
Then-Governor Lester Maddox signed the bill into law on March 27, 1970, the last possible day he could sign it before it automatically became law under the Georgia constitution.

Today, The Coastal Marshlands Protection Act continues to protect Georgia's coastal wetlands from unreasonable harm and development. This landmark legislation laid the groundwork for coastal conservation and remains a shining example of balancing coastal development with protection of natural resources for present and future generations, largely thanks to Rep. Harris.

## **GEORGIA'S COAST**

## Natural Systems and Functions

## The Sand Sharing System



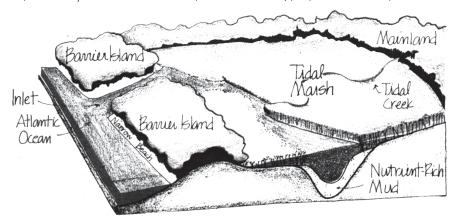
Sand dunes, beaches and offshore sand bars form a system which protects the coastal islands from the force of storm winds and waves. As waves strike the sand, their energy is broken up before it can do damage to property and homes behind the dunes. This system is called the "sand sharing system" because of the way it naturally maintains itself. During calm weather, wave action moves the sand into the beach and dune area from the offshore bars. The force of a storm, on the other hand, can reshape beach and dune areas, returning the sand to the bars.

"Natural Systems and Functions" was prepared by the Resources Planning Section, Office of Planning and Research, Georgia Department of Natural Resources, in March 1976. Technical assistance at that time was provided by Sam Pickering, Paul F. Huddleston, David E. Swanson – Earth and Water Division, DNK; Frederick C. Marland, Game and Fish Division, DNK; George Oertel, James I. Richardson, David M. Gillespie – University System of Georgia. It was originally funded in part by N.O.A.A., U.S. Department of Commerce, for the Georgia Coastal Zone Management Program.

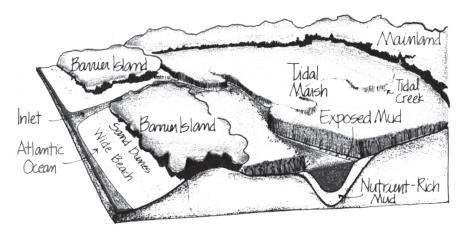
#### **Natural Systems and Functions**

#### Marshes

The marsh acts as home or feeding ground to many forms of ocean life. It is sheltered from wind and waves by barrier islands. Georgia is home to more than 368,000 acres of marshlands. They are protected from unreasonable development by the Coastal Marshlands Protection Act of 1970, which requires a permitting and citizen-review process for any proposed marsh project.



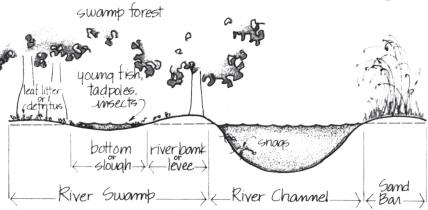
<u>The Marsh at High Tide</u> – Twice a day, the tide sweeps in, stirring up nutrients and bringing in ocean fish and microscopic marine life to feed.



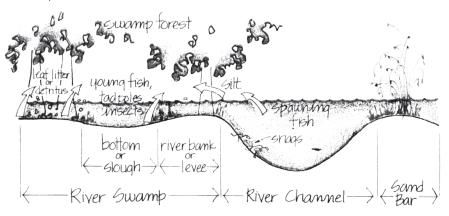
The Marsh at Low Tide - As the water recedes, it carries with it nutrients in the form of dissolved materials, decaying marsh grass, as well as living plants and animals which become part of the offshore food chain. The exposed mud is home for shellfish and insects, which are food for birds, raccoons and other animals.

#### **Natural Systems and Functions**

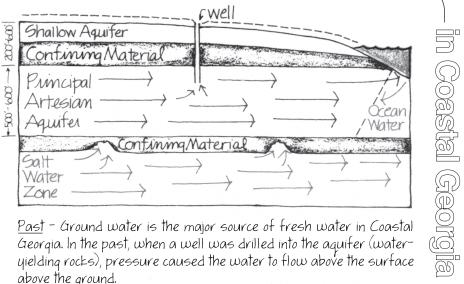
### —— Coastal Rivers and River Swamps



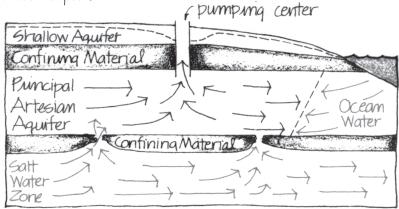
During low water, leaf litter collects on the dry forest floor. Young fish, tadpoles, insects, and other organisms mature in the sloughs, which serve as "nursery" areas. Vegetation grows on the levee and sand bars to help make the banks more stable. Snags (dead tree branches) prevent channels from washing away and give a home to many small organisms, which are an important source of food.



During high water, the detritus (decomposed leaf litter, bacteria and fungi), small fish, tadpoles, and insects are washed out of the swamp into the river channel. There, they become food for fish and animals in the river or ocean. The swamp also acts as a sponge when it absorbs extra water that the river cannot carry away. In doing so, it absorbs many pollutants carried by river waters and protects downstream areas from unwanted flooding.

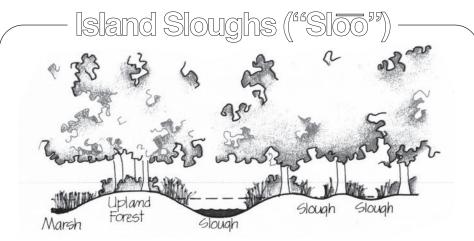


Past – Ground water is the major source of fresh water in Coastal Georgia. In the past, when a well was drilled into the aquifer (wateryielding rocks), pressure caused the water to flow above the surface above the ground.



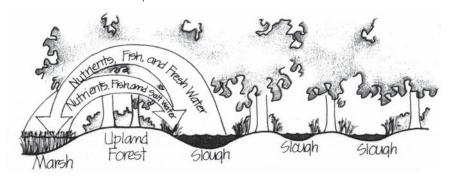
<u>Present</u> - The population of Coastal Georgia has grown, and the increased usage of ground water has caused pressure within the aguifer to decrease. This condition not only results in a lowering of the water level, but also can cause a problem called "salt water intrusion." When large volumes of water are withdrawn from the aguifer, saline water either from the ocean (such as northeast of Savannah), or, in some cases, from a deep saline zone beneath the aquifer (such as in Brunswick) may force its way into the fresh water, contaminating it for human and industrial use. Continuing concentrated use of ground water on the coast will result in increased salt water intrusion.

#### **Natural Systems and Functions**



Wet Period - During periods of rain, island sloughs collect water and provide breeding grounds for aquatic life, such as frogs, insects, and fish. Intruding terrestrial plants are drowned, re-establishing the open-water system.

Dry Period - During dry periods, water levels fall. Frogs and fish become concentrated, thereby an essential food source for birds. When sloughs completely dry, aquatic plants, which can choke the open water of a slough, are exposed and killed, perpetuating open-water conditions for the future. The decomposition of accumulated organic material (leaves and twigs) accelerates, recycling the most important nutrients to the island ecosystem as the sough bottom is "cleaned" and lowered.



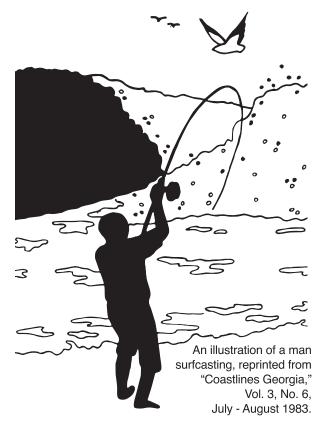
Certain sloughs are periodically inundated with salt water. Changes in salinity kill vegetation and maintain open-water conditions. Nutrients are exchanged between ocean and slough, maintaining these sloughs as highly productive systems. Fish enter from the ocean to breed in enormous numbers, providing an important food supply for island wildlife.

## **GEORGIA'S COAST**

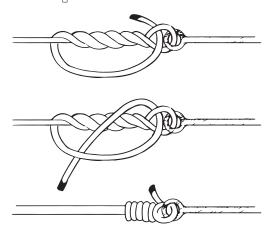
## Saltwater Fishing

altwater fishing can be an exciting activity along Georgia's 105-mile coastline. Whether you are an experienced saltwater angler, or novice looking for a new hobby, the Georgia Coast can provide you with limitless opportunities.

This quide is intended to help beginner anglers learn how to fish Georgia's coast. For more information about fishing, including regulations, please visit www.CoastalGaDNR.org.



## Improved Clinch Knot



The improved clinch knot is ideal for saltwater fishing.

To begin, wrap the line around itself five times. Bring the end of the line back through the hole closest to the hook's eye. This will create another loop. Thread the end of the line through the second loop, and cinch the line tight. It will seize on itself.

lllustration provided by UGA Marine Extension/Georgia Sea Grant

#### Basic Tackle Box

Every tackle box should include some basic items every angler will need, whether he or she is fishing inshore or offshore. These items are available at sporting goods stores and bait and tackle shops.

Hooks: Use the right sized hook for the species you are targeting. We recommend using non-stainless steel, off-set circle hooks, because they are less likely to be swallowed by a fish and can help prevent internal injuries.

Sinkers/Weights: Have a variety of sizes and types of weights in your tackle box. Eqq, trolling, and pyramid weights are all handy for anglers.

Fish Dehooker: These simple tools will help make unhooking a fish safer and less likely to injure the fish. They are available at sporting good stores.

Hoats: (Adujstable and non-adjustable) these will help you keep your bait suspended at the correct depth.

Monofilament/Fluorocarbon Leader: Using monofilament/fluorocarbon between your hook and the main-line can add abrasion resistance when fishing areas like oyster reefs or around pilings.

Assortment of baits and lures specific to your target species.

Beads and Swivels: Help protect the knots on your main-line and keep your line from twisting.

Regulation Guide/Measuring Tape: If you're planning to keep some of your catch, you'll need to measure to make sure you're following all regulations. If you are practicing catch and release, it's always fun to measure for bragging rights.

Pliers/Knife/Multitool: These tools will come in handy if you need to cut a line, and may also help you tie knots.

**Sunglasses** (**Polarized**): A good pair of polarized sunglasses are vital to help protect your eyes from harmful UV rays, but also to help see fish just below the water's surface.



**Buq Spray and Sunscreen:** Two things that are a quarantee in Coastal Georgia are bugs and sun.

**Small First Aid Kit** Fish spines are sharp, hooks are sharp, knives are sharp. You will need it.

## Types of Fishing Rigs

Bottom Riq - This riq goes by many different names and has many variations. The most basic variation is two hooks tied above a sinker. The benefit of this riq is it keeps your bait just off the bottom. This riq can be used to catch lots of fish from Sheepshead inshore in 20 feet of water or Grouper offshore in 200 feet of water. The main differences would be increasing hook size, weight of the line, stronger swivels and heavier sinkers.

Inshore Bottom Kiq — This will be great for Whiting or Sheepshead fishing from a pier or anchored in a boat. Start with 30 to 50 lb. mono-filament and a No. 10-barrel swivel. Swivels come in pound ratings like fishing line. In general, you want the pound test of leaders and swivels to be slightly larger than the fish you plan to target. Bigger is not always better. Choose your sinker (lead) based on how fast the water is moving,

the depth fishing and the rod being used. In general, a 2 to 3 oz. sinker will work in Coastal Georgia, but sometimes you may need more.

Fish Finding Rig - This is a versatile rig that can be used with artificial and natural baits. This rig is often comprised of an egg sinker on the mail line with an 8 mm plastic bead followed by a barrel or snap swivel. Then attached to the snap swivel, there will be a heavier length of 20 - 50 lb. mono-filament leader and lastly the hook.

This riq using a 1 - 3 oz. eqq sinker will work well for catching Sheepshead next to a piling, rolling across the bottom for Flounders or fishing the bottom for Whiting.

If you need more weight because of current or waves, the egg sinker can be replaced with a fishfinder slide and a 3 - 6 oz. pyramid sinker (as pictured). The pyramid sinker will not roll like an egg sinker and will stay better in one place. In addition to the heavier sinker, a heavier mono-filament leader, 60 - 100 lbs., would be necessary. This rig would work well for fish in the surf like bull Red Drum or small sharks.

## Types of Fishing Rigs

The float riq, often called a trout riq, is used in combination with live shrimp or other live bait like Mummichoq. This riq allows the bait to float at a set depth and is usually fished along the water's edge, usually above an oyster bed or other structure.

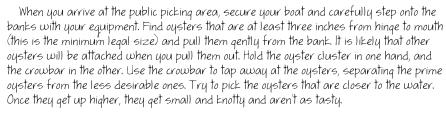
This rig is made up of a stopper knot and rubber band followed by a bead with an opening large enough to fit over the mainline, but small enough to be easily changed to fish deeper or shallower. Next, the 8-inch or 12-inch cork is on the line and followed by another bead and then trolling sinker, with a built-in swivel, or appropriate weight to keep the cork upright (2 to 3 ounces). The 20 pound leader is tied to the swivel with a 1/0 light wire circle hook.

## Oystering

During the cold, crisp months on the Georgia Coast, many folks make plans to pick wild oysters. Public picking areas are located in each of the state's coastal counties. For maps, visit us online at www.CoastalGaDNR.org/ApprovedHarvestAreas

To pick oysters, you will need: A **boat** (kayak or canoe will be fine in most areas); **Shoes** you don't mind getting muddy; A **basket** to hold the oysters (a heavy-duty laundry basket

will work); A crowbar or piece of rebar; Thick gloves; and a valid Georgia fishing license.



Each recreational picker is allowed to keep two bushels per day. A maximum of six bushels is allowed per boat with three or more fishermen. A bushel is 32 quarters, which is almost equal to one and a half five-gallon buckets. No recreationally harvested seafood can be sold commercially. Oysters can only be harvested during open season, and half an hour before sunrise until half an hour after sunset. The opening and closing of oyster season is dependent on water quality and temperature. Although the season is usually opened sometime in October and generally closes in May, check with Coastal Resources Division by visiting www.CoastalGaDNK.org before you head out.

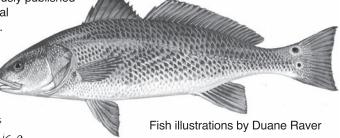


#### Red Drum

Adapted from "Know the Connection," previously published online by the Coastal

Resources Division.

The most commonly used method for Red Drum (Sciaenops ocellatus) fishing is a



standard deep floating terminal rig baited

with live or dead shrimp or small crabs. Although school—size Red Drum can be caught year—round in inshore estuarine waters, young Red Drum typically show up in June—August. However, fall is the best time to catch small school—size Drum.

Fishing for young Red Drum (less than 15 1b) employs the same basic tactics, gear, and areas used to catch Spotted Seatrout. In addition to shrimp and fiddler crabs, many anglers often use live finger-size Mullet or Mud Minnows to target medium-size red drum (5 - 15 1b) found on open mud flats adjacent to large expanses of salt marsh grass. Mud Minnows and small Mullet may be easily collected with two-funnel Minnow traps baited with bread or a piece of fat-back bacon and set in a tidal ditch. If the trap is left unattended for an extended period of time, insure the area will have adequate water depth during low tide.

Angling for large Red Drum is strictly a surf fishing proposition. Surf fishing requires a long surf rod for long distance casting. Most anglers use 30 pound test mono-filament line and terminal rigs consisting of 4 to 8 oz. pyramid or egg sinkers or 3 to 4 oz. storm sinkers rigged as a fish-finder rig with 7/0 (pronounced "seven ought") to 9/0 standard hooks.

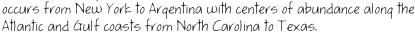
However, with size regulations requiring the release of the large-size Drum, 12/0 to 14/0 circle hooks are highly recommended. Circle hooks are self-setting, which generally results in more hook-ups and the circle hook generally hooks in the mouth region thus greatly reducing "gut-caught" Drum. The most popular bait is fresh-cut Mullet and blue crabs for targeting large (greater than 20 lb) Red Drum. Fish for large Drum in the spring and fall in heavy surf near inlets.

Note: Visit www.CoastalGaDNR.org for the most currrent fishing regulations regarded this managed species.

#### Black Drum

This article by former CRD employees Jim Music and John Pafford appeared in the March - April 1980 edition of "Coastlines Georgia."

A member of the Croaker family, the Black Drum (*Pogonias cromis*),



This bottomfish feeds on shrimp, crabs, clams, mussels, and other mollusks. The Black Drum prefers inshore sandy areas, such as bays, sounds, channels, and ocean surfs. Concentrations are often found near piers, docks, jetties, and bridges.

Most species of the Croaker family are characterized by the particular specializations of the air bladder, which enables the fish of this family to produce drumming or croaking sounds you may hear. The Black Drum, because of its large size and elaborate sound-producing apparatus, is probably one of the loudest and best known.

Using baits such as crabs, fiddler crabs, shrimp and clams is usually taken with a "fish finder" or "bottom riq." Although its strike is often a slow tuq, the fish puts up a strong fight. The spring run is in March and April in surf and channel waters and is abundant throughout the warm season until water temperatures cool down in December.

The flesh of small Drum (up to 5 to 10 pounds) is quite good for eating, but the flesh of larger individuals is coarse and poorly flavored. Larger fish can be deboned and made into fish patties. Adult fish are frequently infested with parasites in both the internal organs and flesh. These parasites, so far as known, are not harmful to man and thorough cooking would eliminate all possibility of infection.

#### Fun Fact

The state record for Black Drum weighed 92 pounds, was 54 inches, and was caught by John Thomas in 2010 in the Cumberland Sound.

## Spotted Seatrout

This article by former CRD employees Jim Music and John Pafford appeared in the January - February 1980 edition

of "Coastlines Georgia."

The Spotted Seatrout (Cynoscion nebulosus) is one of the

most popular inshore saltwater game and food fishes in Georgia's coastal waters. Its flesh is light and delicately flavored and ranks very high as a table fish. Also know as the Spotted Weakfish or trout, the Spotted Seatrout occurs throughout the Gulf of Mexico, in Florida waters and north of New York.

Shrimp are the preferred food of the Spotted Seatrout, and when crustaceans are in abundance, trout feed on them exclusively. Although live shrimp are the most commonly used bait, trout are widely caught on artificial lures as well. Artificial lures are very good from November through March in upper creeks and rivers with moderate to low salinities.

The following tips may aid the average angler in his or her guest for the Spotted Seatrout:

#### TACKLE

Use light spinning or spin cast reels with approximately 6-foot rods. The lighter the line, the easier it is to cast and/or trill (12 lb. test of lighter). Since local water conditions vary from one area to another, the average trout angler will find it beneficial to have a wide selection of artificial lures. Try curl tails, mirrolures, salty dogs, buck tails, silverspoons, beetle jigs, or stingray grubs.

#### TROLLING OR CASTING

Troll or retrieve lure as slowly as possible allowing the lure to occasionally strike the bottom.

#### AREAS

The Spotted Seatrout is basically a schooling fish and concentrations are likely to be found in areas of hard bottoms of sand and shell, especially in areas with a lot of dead white shell or oyster beds.

## Sheepshead

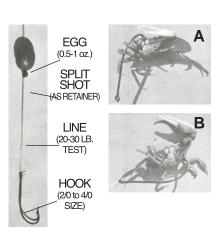
This article by former CRD employees Jim Music and John Pafford appeared in the November-December 1979 edition of "Coastlines Georgia."

Found from Cape Cod,
Massachusetts, to Tampico,
Mexico, the Sheepshead
(Archosargus probatcephalus) is a
popular game and food fish of considerable
commercial importance. An experienced bait stealer, the Sheepshead got
its name from the resemblance of its teeth to those of a sheep. These
strong teeth are used to pick, gnaw, and scrape oysters, barnacles,
crabs, and clams off underwater pilings and rocks. Concentrations of
Sheepshead thus can be found where shellfish are plentiful.

The most common bait for Sheepshead on the Georgia Coast is the china-back or purple fiddler crab. Fiddler crabs can be collected by hand on any high sand flat located within the coastal salt marshes during low tide levels. Only time, experience and a little luck will give the average angler the skill he or she needs to land the elusive Sheepshead. The novice may find it helpful to fish near pilings or docks with his line hanging vertically and his bait just off the bottom. A typical method of rigging for Sheepshead fishing is depicted in the following illustrations.

1. Thread line through egg sinker
2. Tie on a 2/0 or 4/0 size number hook
3. Clamp the split shot to the line
between the hook and sinker 4-12
inches above the hook.

The recommended methods to bait a hook with a fiddler crab are to (A) insert the hook through the mouth or (B) through the side between the walking legs of the crab, taking care to leave the barbs of the hook inside the crab.



## Crabbing

nother popular fishery in Coastal Georgia is blue crabs. In 2019, commercial crabbers landed more than 3.3 million pounds of hard blue crabs with a dockside value of about 4.3 million dollars.

But you don't need to make a living off of crabs to be a crabber. Anyone with a Georgia recreational fishing license can crab in the state year-round.

Many people use crab traps, or "pots," which can be purchased at hardware stores and marine suppliers. You can use up to six crab traps that are no larger than two feet by two feet. The traps must have two escape rings that are at least 2 and 3/8 inch to allow juveniles and small fish to escape. Diamondback terrapin excluder devices can also be purchased and help ensure terrapins can escape crab traps. We highly recommend attaching a 10-15 pound weight to the trap to help prevent loss due to strong currents.

Place raw chicken or other legal bait in the bait box in the center of the trap and drop it to the water bottom in any estuarine location other than those marked for navigation. Recreational crabbers are required to mark their trap with a fluorescent green buoy with the owner's name in at least one inch lettering. Leave your trap on the water bottom for several hours before retrieving it with - hopefully - your fresh blue crabs.

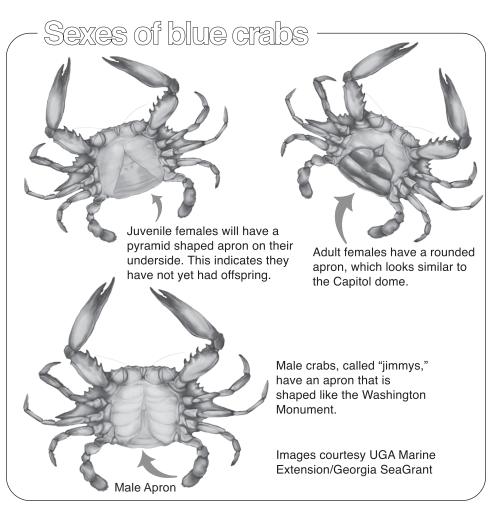
Also popularly used are crab ring nets with hand lines, which can likewise be purchased at hardware and marine supply stores. Place bait in the net and drop it to the water bottom, making sure to tie the end of the line to the dock. Check it frequently

and remove crabs. Use weights to keep the net stationary in strong currents.

Crab traps, like
the one seen here,
can be purchased
at hardware and
marine supply
stores. Mark your
trap with a fluorescent
green buoy with your name in
at least one-inch lettering.

## Crabbing regulations

It is unlawful to take or possess any crab less than five inches from spike to spike across the back. Exceptions to this law include "peelers," which must be at least three inches from spike to spike, and mature adult female crabs, which can be any size.. Peelers are blue crabs that are about to molt. In peelers, you will see a new soft shell visible beneath the hard, outer shell. The new shell will look like a white line around the edge, gradually turning pink and then red. No sponge (egg-bearing) crabs can be harvested. Recreational crabbers may take no more than one bushel in any 24-hour period. A bushel is 32 quarters, or about one and a half five-gallon buckets. For boats with more than one person aboard, no more than two bushels may be harvested in a 24-hour period. Visit www.CoastalGaDNR.org for the most current regulations.



## **GEORGIA'S COAST**

## Canoeing and Kayaking

eorgia's coast is home to a variety of Eayaking and canoeing opportunities. The following canoe trail quides were produced by CRD employees in 1980 and are appropriate for beginners. Because of the age of these quides, CRD today cannot quarantee their accuracy. Never Eayak alone and always wear your life jacket. Let someone know where you are going and when you expect to return. Remember to bring fresh water and something to eat. Be sure to check the weather. You can also check water levels by searching "U.S.G.S. stream gauge" followed by the name of the waterway. Additional Georgia canoeing quides are available at your local public library.

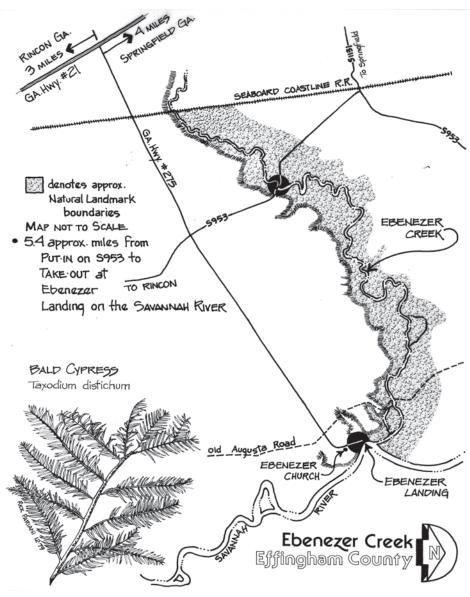
#### Ebenezer Creek

This article by former CRD employee Rick Pariani appeared in the March - April 1980 edition of "Coastlines Georgia."

Ebenezer is that perfect stream for anyone who wants to canoe, regardless of seasonal low water. Although the water level in Ebenezer Creek may fluctuate in a range of up to eight feet or more, seldom will the water be too low to provide a remarkable canoeing experience.

Ebenezer Creek lies in a broad flattened basin contained on the south by a high bluff, which over time has eroded from the south and west banks of the Savannah River. Tidal backwaters and normal winter flooding on the Savannah River create a sort of "water-dam" and directly influence (and maintain) the water levels in the creek. The "damming effect" has created a series of elongated lakes on the lower portion of the Ebenezer. The water levels fluctuate a great deal, remaining high for extended periods, but rarely will the flow be greatly accelerated, even during winter floods. The backwater condition is just right for float-fishing, photography, study, and just plain escape.

Bald cypress and Tupelo qum, the predominant trees along the creek, exhibit noticeable and unusually enlarged buttressed bases. The Tupelo has a curious counter-clockwise twisting of its buttresses. These occurrences, coupled with an over-all dwarfed nature of growth, produce a most striking swamp forest unique to this backwater-type system. The growth characteristics are probably attributed to year-round flooding, low oxygen levels, and hydrostatic pressure.



When to go

As you might quess, Ebenezer Creek will provide year-round canoeing opportunities. In the summer, the water is darkly stained and lower water levels will expose and enhance the extent of the buttressing. Fishing is good beginning in late spring and lasting throughout fall. During winter and early spring, certain anadromous fish (shad and blueback herring, for example) may use the area for spawning. In April or May, you might just hear the bellowing of an American alligator on occasion. Somewhat higher water levels will enable you to explore the section from 5953 to the railroad bridge, an area which is influenced to a lesser extent by the 'damming effect'. In any event, take your time and gear yourself to the Ebenezer's slow lazy pace.

#### Kayaking and Canoeing

#### Cathead Creek

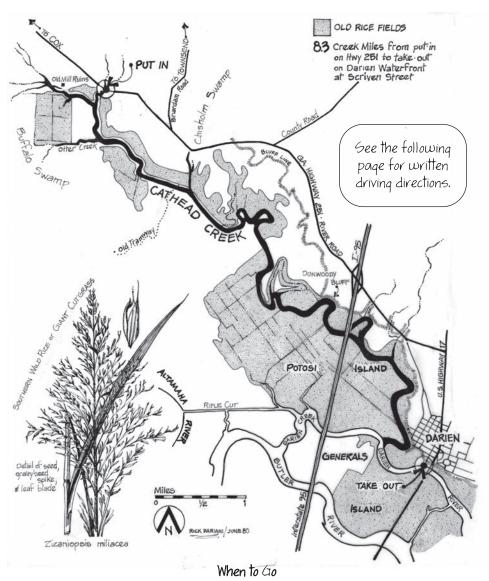
This article by former CRD employee Rick Pariani appeared in the March - April 1980 edition of "Coastlines Georgia."

An old favorite of coastal dwellers, jambalaya is a savory mixture of shrimp and rice. McIntosh County's Cathead Creek provides a similar combination, blending the aura of the rice plantation era together with the vitality of the Darien shrimping fleet to create an ambiance unique to this coastal canoe trip.

Slipping away from the bank, you soon sense that you're in the midst of a vast fallow field, acres of marsh once used in the production of rice. When slavery was introduced in 1749, rice cultivation set its roots in Savannah and soon spread up and down the coast along the major rivers. The deltas of rivers such as the Savannah, Ogeechee and Altamaha, which poured abundant fresh water into the estuaries, were developed into rice fields. Rice plantations flourished and continued in cultivation for over 100 years. The plantations suffered numerous hardships during these times. Ravenous rice birds, searing white hot summers and epidemics of malaria and yellow fever taxed the successfulness of the farmers. Hurricanes dealt lethal blows on many occasions as they destroyed flood gates, broke levees, flooded fields, and ruined the soils with salt water. The final demise of the plantations was the result of Gulf Coast and Arkansas competition coupled with the advent of sophisticated machinery not adaptable to the boggy nature of Georgia's tidal marsh soils.

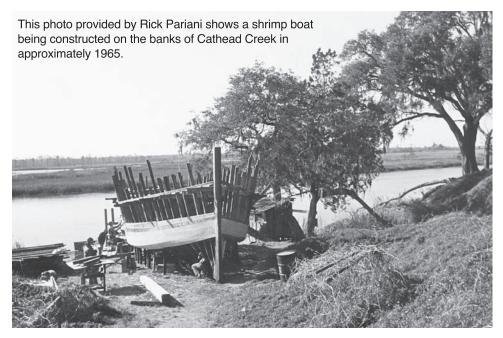
The aggressive and competitive perennial Southern Wild Rice (Zizaniopsis miliacea) and to a lesser extent Wild Rice (Zizania aquatica) quickly populated the old rice fields along Cathead Creek replacing domestic varieties once in cultivation. Large fields of Southern Wild Rice are laced with canals and ditches, remnants of the support system developed to alternately flood and drain the crops. Today the canals afford access deep into the old fields of the delta. If you climb Dunwoody Bluff, 25 feet straight up, you can command a southwest panoramic view across the fields on Potosi island to the distant tree line.

Canoeing Cathead Creek provides an excellent way in which to experience the watery world of an old rice plantation. In addition, it is a short float trip. There is time to explore the old mill ruins at the head of the creek or to venture into the hardwood hammocks of Buffalo Swamp via the old logging tramway. Only one bridge marks time and after passing beneath it, the houses of fishermen and boat builders become frequent.



Southern Wild Rice blooms from May to July and is at its peak from mid-June to mid-July. Wild Rice, an annual form found usually on mud banks and bars or newly formed deposits, blooms throughout summer from May to October. The grasses are golden brown from late fall to early spring. Obtain a high tide reading and add from 3.5 to 4.5 hours to that reading to arrive at your put-in time. Cathead Creek carries a large tidal flow, so you want to insure you are able to float out with the tide rather than fight against it. If you follow this precaution, the tide will have turned and begun to ebb at the time you are putting in. On Cathead Creek, you will be canoeing predominantly straight into the wind. Take into account the effect on the tide and your progress. If all conditions are right and you catch the creek on maximum ebb (which starts approximately two hours after the tide turns), you can literally fly down the creek. Fast or slow, Cathead offers a variety of pleasures.

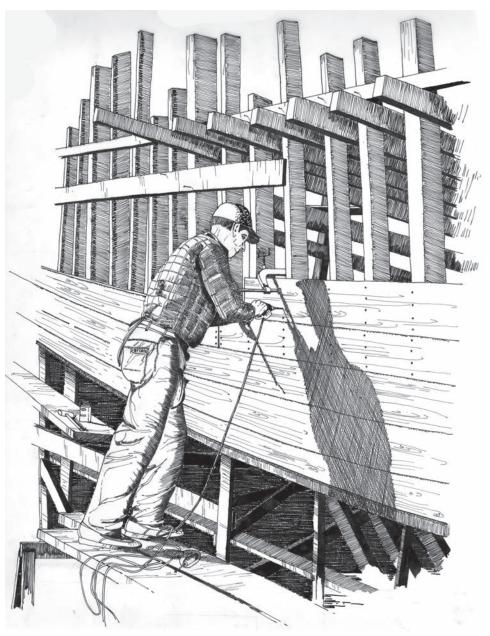
#### **Kayaking and Canoeing**



How to Get to Cathead Creek:

(Note: These directions are from 1980 and should be verified before use.)

In Darien, turn west off Highway 17 onto Broad Street at the first traffic light north of the Darien River. Travel 300 feet on Broad and take the first left on Scriven Street. The narrow two-story tabby building with 'hand-wrought' iron shutters on the corner of Broad and Scriven is one of the oldest buildings in Darien. Scriven Street ends on the Darien River with a public ramp (GPS coordinates: 31.368286, -81.436947). Go down and get an idea of what the boat ramp may look like from the water. Notice how many shrimp docks are around it so you can recognize the ramp when you reach this destination. Leave a car in the dirt parking lot here. In another car, go back to Highway 17. Go 1.3 miles north on US 17 and take a left on Highway 251. Travel 5.3 miles on Highway 251 to the put-in point. As you can see from the map, this put-in is on the second bend after the Briardam Road to Townsend. Do not confuse it with the sharp bend in Highway 251 between the Briardam Road and the County Road. The access point (GPS coordinates: 31.426993, -81.496796) is nothing more than a large concrete box culvert beneath the roadbed. In other words, if you're going 60 m.p.h. trying to identify as many wildflowers as you can, you'll miss it. Look for a break in the tree canopy and people fishing. The tributary stream here is only 20' to 35' across but quickly widens before meeting Cathead Creek. You will have to leave your car on the shoulder of 251 and walk your canoe down to the water. For this 8.3-mile trip, allow three to five hours between here and the boat ramp in Darien.



An illustration of a shrimp trawler being constructed, reprinted from "Coastlines Georgia," Vol. 3, No. 4, July-August 1980. Artwork by Rick Pariani.



#### **COASTAL RESOURCES DIVISION**

One Conservation Way Brunswick, Ga., 31520 912-264-7218 www.coastalgadnr.org