

The Savannah Riverkeeper's

4th Annual Coastal Plain Meander

an overview

Who: The Savannah Riverkeeper, Inc., an advocacy group committed to protecting the Savannah River, is again partnering with Bull River Cruises of Savannah to launch its premier fundraising event, the *Coastal Plain Meander*.

What: The *Coastal Plain Meander* is a guided tour on the Savannah River. Accompanied by a naturalist and expert river guides, participants will board the Island Explorer, a 45' triple pontoon, for an 186-mile adventure. Along the river's banks you'll come face-to-face with wildlife, remnants from the river's commercial past, an archeological dig, and the river's industrial residents. Programs are planned for the evenings and include marshmallows and a campfire.

When: The journey departs from Augusta's Riverfront Marina on Friday, September 29th and concludes at the docks on Savannah's River Street on Monday, October 2nd. Reservations are due by September 22nd.

Cost: A variety of packages are offered and include day trips, an over-nighter, a long weekend, and the full four-day meander. Prices start at \$200 and include camping or cabin accommodations, meals, and ground transportation.

Contact: For questions, comments, or additional information, call or email Frank in Augusta or Maria in Savannah. Be sure to check-out the events section on SavannahRiverkeeper.org.

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Savannah Riverkeeper, Inc.

Savannah

Maria T. Procopio Development Officer 2227 East 38th Street Savannah, GA 31404 912-228-5471

Augusta

Frank Carl, PhD. Executive Director 1226 River Ridge Road Augusta, GA 30909 706-364-5253

mtpro@comcast.net Frank.Carl@SavannahRiverkeeper.org



Meander the Savannah River

The Savannah Riverkeeper, Inc., an advocacy group committed to protecting the Savannah River, is again partnering with <u>Bull River Cruises of Savannah</u> to launch its premier fundraising event, the *Coastal Plain Meander*.

The *Coastal Plain Meander* is a guided tour on the Savannah River. Accompanied by a naturalist and expert river guides, participants will board the Island Explorer, a 45' triple pontoon boat, for an 186-mile adventure. Along the river's banks you'll come face-to-face with wildlife, remnants from the river's commercial past, an archeological dig, and the river's industrial residents. Programs are planned for most evenings and include marshmallows and a campfire.

The journey departs from Augusta's Riverfront Marina on Friday, September 29th and concludes at the docks on Savannah's River Street on Monday, October 2nd

A variety of packages are offered and include meals, ground transportation, and either camping or cabin accommodations:

Four days on the river and 10 meals:

- 3 nights camping (with your gear) \$675
- 3 nights with bed, roof and AC \$900

Three days on the river and 8 meals:

- 2 nights camping (with your gear) \$525
- 2 nights with bed, roof and AC \$675

Two days on the river and 6 meals:

- 1 night camping (with your gear) \$375
- 1 night with bed, roof and AC \$450

One day on the river and 3 meals:

- Day Trip or 1 night camping (with your gear) \$200
- 1 night with bed, roof and AC \$275

The Meander Itinerary

Day 1

Friday, September 29th Augusta's Riverfront Marina to Hancock Landing Journey: 48 miles

We will gather at the Riverfront Marina and Warehouse in Augusta, a historically significant site, it was a hub for traffic when the river's primary role was commercial transportation. From there the group will head upstream to the Fifth Street Marina for a formal send off. Progressing down the river we will get an on-the-water view of industrial Augusta. Soon we'll pass under the bridges at Beech Island, through the lock at the New Savannah Bluffs Lock and Dam, and proceed toward Savannah.

As we meander down river our surroundings become more remote and we slip into a primitive and pristine setting. We'll experience abundant wildlife, particularly birds and probably alligators. About noon, we will pass Jackson Landing and a bit later Shell Bluff, where seashells from an ancient time abound.

Our route becomes increasingly remote and the only signs of civilization are postings on the shore that warn of imminent dangers to those who dare trespass. Just beyond the bluff – when we enter the world of nuclear energy – the twin towers of Plant Vogtle come into view.

Our first evening will be spent at Hancock Landing, a beautifully-maintained private landing whose owners have invited us into their home to enjoy takeout from Taylor's BBQ – a longtime favorite Waynesboro takeout. After dinner we will spend some time around the campfire, telling stories and toasting marshmallows. Later, campers will bunk-down for the night and ground transportation will take day trippers back to their cars in Augusta and non-campers to the Days Inn in Waynesboro.

Day 2

Saturday, September 30th Hancock Landing to Cohen's Bluff Landing Journey: 48 miles

At 7 a.m., non-campers will be picked up at the hotel and transported, along with the day's provisions, back to the landing to share breakfast with their fellow travelers.

Soon after we get on the river we will pass Plant Vogtle. We'll stop to stretch our legs at Little Hell Landing, one of the nicest landings on the river with an ever-flowing artesian well. About ten miles below Little Hell Landing we'll pass the <u>Topper Site</u>, an archeological dig near the river that is setting theories of human habitation in the Western Hemisphere back several thousand years. The site is closed for hunting season, but we will stop nearby for lunch and a discussion of its meaning.

Early Saturday afternoon we'll reach the 301 bridge and Burton's Ferry Landing, where there is another artesian well. Then it's on to Cohen's Bluff Landing where we will spend the night. Cohen's Bluff has a dock, an artesian well, and plenty of camping space. Non-campers will stay at <u>Lakeview Plantation</u>, only 3.5 miles from the landing, where dinner and breakfast will be served for all the participants. Day trippers will be transported to their cars in Waynesboro and Augusta.

Day 3

Sunday, October 1st Cohen's Bluff Landing to Ebenezer Landing Journey: 59 miles

Soon after we get on the water Sunday morning, we will pass the mouth of Brier Creek, the largest tributary in the lower Savannah. In this stretch we'll see several places where the U.S. Army Corps of Engineers created a more direct route for the river, eliminating some of the meander. Indeed, our trip would be at least 40 miles longer if the Corps had not "straightened" the river. Despite the remoteness of the river between Augusta and Savannah, we will witness the impact of human activity through the "straightening" project, the three major (and one minor) Corps' dams upstream, and the navigational weirs along the lower river.

We'll stop for lunch at either Blue Springs Landing or Stokes' Bluff Landing. If it's a warm, sunny day we can expect to see several 'gators this afternoon. Whether it is warm or not, we are likely to see many different species of birds, possibly even an eagle or two. Just below Stoke's Bluff Landing we will pass under the Route 119 Bridge. In this stretch of the river we will begin to encounter other boaters – a gradual reintroduction to civilization.

About 15 miles beyond the bridge, we'll spend our last night at Ebenezer Landing. Up the bluff is New Ebenezer Retreat, where we'll have the opportunity to tour the Museum of the Georgia Salzburger Society and Jerusalem Lutheran Church – completed in 1769, it's the oldest church building in Georgia, We'll have dinner and relax with Beth Epling, the retreat's education coordinator. Beth will tell us of the story of the Salzburgers, the German peoples who founded the town of Ebenezer on the Savannah River in 1734.

Ebenezer Creek is close by, so we'll have the option of exploring the creek by canoe or kayak late Sunday afternoon.

Campers will bed down on the landing, non-campers will sleep in the retreat's cozy cabins, and day trippers will be taken back to their cars in Lakeview Plantation, Waynesboro, and Augusta.

Day 4

Monday, October 2nd Ebenezer Landing to Savannah's River Street docks Journey: 31 miles

Soon after leaving Ebenezer, we enter the Savannah National Wildlife Refuge. In spite of the urbanization around us, we will meander though a relatively pristine environment for the next twenty miles – stopping along the way to discover remnants of the old plantation's rice fields and irrigation systems.

In the midst of this beauty, we will cross under the I-95 bridge, and soon the Savannah River splits into the Front River and the Back River. At this point, while still within the refuge, we lose the distinction between Georgia and South Carolina, because the state line follows the Back River and we will take the Front River.

About two miles after the split we pass Mulberry Grove Plantation where Eli Whitney invented the cotton gin. Another three miles down river we will come to the Hoolihan Bridge, which introduces us to Port Wentworth and the industrial section of Savannah. First we see Weyerhaeuser, Plant Kraft, then Savannah Harbor and its huge container ships – capable of carrying up to 10,000 containers – and the enormous cranes used to unload them.

Our journey will end at the docks on <u>River Street in Savannah</u>, where we meet the vans and transport participants to the landing where they entered the Meander.

The Guide

Throughout the cruise Karen Grainey, the Meander's naturalist, will keep us informed on the river's flora and fauna. Karen is a certified Georgia Master Naturalist, and an active member of Clean Coast, Ogeechee Audubon, Coastal Georgia Sierra Club, and the Savannah Riverkeeper. She enjoys sharing her knowledge of Georgia's ecosystems and you'll enjoy her.

Transportation

Ground transportation is available at each landing to bring you back to the place where you started the Meander. Arrangements must be made in advance.

Meals

All meals are provided, Friday lunch through Monday lunch.

Accommodations

Tent sites are available for camping at each of the landings and for those who prefer a cabin or a room, we will make arrangements for your overnight stays in comfortable accommodations and provide you with transportation to and from each landing.

Luggage

Your tent, a sleeping bag, and a suitcase will travel by van. Bring along a daypack to take on the boat.

For additional information, check-out the <u>events</u> section on <u>SavannahRiverkeeper.org</u> and call Frank in Augusta at 706-364-5253 or Maria in Savannah at 912-228-5471. Reservations are due by September 22nd.

Lolling on the river

By Mary Landers Created 2006-08-10 23:26 Friday, August 11, 2006 at 12:30 am

Cruise offers a chance to know the Savannah



Controlled by a series of dams, the waters of the Savannah remain slow and peaceful year round. Some experts now argue that the river's steady flow endangers indigenous plants and wildlife. (Photo: <u>Stephen Berend</u>)

Don't expect to yak on the phone or shop or ogle tacky souvenirs on an upcoming cruise sponsored by the Savannah Riverkeeper.

The four-day, 200-mile trip down the Savannah River is more of a wilderness adventure.

With cocktails.

"There's almost no (human) contact from the time you leave Augusta to the time you get to Savannah," said Mike Neal, who operates Bull River Cruises and donates a portion of his service to the fundraising trip. "No marinas, no facilities, no cell coverage. Once you leave Augusta, there are a few stops we make, but it's pretty wild."

The annual "Savannah River Meander" began in 2003. Participants have ranged from 12-year-olds to 90-year-olds. Cruisers interact, tell stories at night and last year enjoyed cocktails on Neal's 45-foot triple pontoon boat.

James Marlow has gone each year. The Atlanta-based sales director for Yahoo! said his family has lived on the Savannah since the Revolutionary War. But he learns more about the river each cruise.

"It's a unique opportunity to experience the river and connect with people of varied backgrounds and interests," said Marlow, a Savannah Riverkeeper board member who plans to take three of his sons, ages 7, 9, 16, on the trip this year. "You learn from people who know the history and ecology of the river."

The trip is also meant to raise money for the nonprofit Savannah Riverkeeper, an advocacy group dedicated to protecting the waterway.

Previous trips haven't made money, but Savannah Riverkeeper Executive Director Frank Carl said he's hopeful this year's will. Regardless, the outings are worthwhile, according to Carl. "Educating people about the river is almost worth losing money over," he said.

The lessons include a peek at the river's controversial neighbors. On the South Carolina side, miles of river border the Savannah River Site, where nuclear material was processed for use in weapons during the Cold War. Then there's the jolt of seeing the cooling towers of Plant Vogtle along the river's shores in Waynesboro.

"One of most striking parts (of the trip) is coming down river around bend with fog in air and seeing the nuclear power plant," Neal said.

The trip now includes the opportunity to kayak part of the river. Those who want to paddle can jump ship before the end of each day and meet their fellow adventurers at the camp site. Early risers can take a kayak out in the morning and let the pontoon boat catch them later.

For long stretches, the banks of the Savannah are free of signs of civilization, Neal said. Boaters experience the same sights and sounds they would have centuries ago.

"It takes you away from the rush of cars and phones," he said.

"It's tranquility."



Mike Neal of Bull River Cruises

Trip explores river channel

By Rob Pavey | Staff Writer Sunday, August 13, 2006

Frank Carl calls it a first-class wilderness adventure - right in our own backyard.

"Anyone who goes on this trip is bound to learn something they didn't know before," said Dr. Carl, the executive director of Savannah Riverkeeper Inc.

The environmental group is recruiting willing sailors for its annual Coastal Plain Meander that will depart Augusta on Sept. 29 aboard a 45-foot pontoon boat and arrive in Savannah Harbor on Oct. 2.

Between Augusta and Savannah are 210 miles of dark wilderness with few bridges and almost no traffic.

"We'll pass by Plant Vogtle, the swamp at Savannah River Site, Little Hell Landing, Shell Bluff - all kinds of places and things," Dr Carl said.

Although it's not widely known, the channel that links Augusta and the port of Savannah was heavily modified by the U.S. Army Corps of Engineers in the early part of the last century.

"They did a lot of straightening to help barge traffic, but barge traffic was already on its way out, anyway," he said. Engineers reduced the "meander" of the channel by straightening out long bends, eventually shortening the river by about 40 miles. The leftover "dead river" areas will be part of the tour.

Last year, 26 people made the trip, although not all of them traveled the entire four days. This year, cruise patrons will travel through the New Savannah Bluff locks and camp along the river, he said.

Transportation to motels or quest lodging is also available each night for those who don't want to camp.

The tour also includes options to travel just partway downstream, with one-day and one-, two- or three-night packages available from \$200 to \$675 for campers, and as high as \$900 for those desiring a bed, a roof and air conditioning. Meals are included.

Reservations for the trip are due by Sept. 22. For details, call (706) 364-5253 or e-mail frankcarl@knology.net.

Reach Rob Pavey at (706) 868-1222, ext. 119, or <u>rob.pavey@augustachronicle.com</u>.

IF YOU GO

What: Coastal Plain Meander, sponsored by Savannah Riverkeeper

Where: Augusta to Savannah How: 45-foot pontoon boat When: Sept. 29-Oct. 2

More details: Call (706) 364-5253

From the Monday, August 14, 2006 edition of the Augusta Chronicle

Meandering Down The Savannah To The Sea RIVERKEEPERS EYE INDUSTRY AND NUKES

the last day of September, I catch my ride before dawn to get down to Augusta, to a marina on the Savannah River, for a boat trip. Frank Carl, the Executive Director of the Savannah Riverkeeper (SRK), has assembled a group to travel the river from Augusta to Savannah: an educational trip he calls the "Coastal Plain Meander."

The name, while cute, carries some irony. The "Meander" part borrows the name given to the wide, oxbow-shaped bends that the river (or any river) makes as it curves and winds its way downstream through the soft, alluvial sediments of its Coastal Plain river valley. The irony comes in when one considers that the river lost 42 miles of its length to work done decades ago by the US Army Corps of Engineers to straighten the river out, to cut new, more direct channels across those sinuous meander curves so as to make the river trip shorter for barge traffic.

The double irony comes with the historical fact that as soon as the Corps finished with that work, some time in the '60s, barge traffic on the river was all but dead anyway. That's only one of many contradictions to be found on a river whose forested banks and jumping fish conceal an industrial past and, in places, a heavily industrial present.

WE LAUNCH

Our starting point in Augusta is a back-lot boat dock a little below downtown. The river there is wide, flat and calm. Frank refers to it as "the pond," because for 15 miles or so it's backed up by the New Savannah Bluffs Lock and Dam, a water-control structure built to make Augusta's port more manageable in the days when the city's commerce depended on the river. That is, the river isn't a river at all when you leave town on it. It's just a long, skinny pond in the shape of a river. Upstream loom a few big reservoirs (Hartwell, Russell and Strom Thurmond) plus a short stretch of free-running Fall Line shoals just above Augusta, and a small lock-and-dam downstream.

We motor pretty fast through the pond, though, in order to keep on schedule and make our appointment with the lockmaster. Our craft is a 45-foot pontoon boat, with a vinyl roof, several rows of cushioned bench seating, and twin 115-horsepower outboard motors. When he wants to, our captain can get the thing moving. Mike Snead, the pontoon's captain and owner, had the boat custom-built for eco-tours in the rivers and estuaries all around Savannah—"dolphin tours" and such. Frank chartered the boat for this event, one he hopes will grow from year to year (this is its third), a way to get interested citizens and Riverkeeper members, as well as himself, out on the water, out on the Savannah. Our crew on this trip includes Frank and his wife, Jan; Captain Mike and his first mate, Walt; several outdoorsy, birdwatching retirees from Augusta and Savannah; a science textbook-writer and avid outdoorswoman also from Savannah, my friend April Ingle, who is the Executive Director of the Georgia River Network (based in

When we get to the lock, a boat catches our attention, coming up from behind. It is a small Maine lobster boat—well, really a nice-looking, custom-made pleasure boat in the style of a lobster yawl—called the Acadiana. The Acadiana ties up to go through the lock with us, so we have a chance to ask her crew what in the world they are doing on the Savannah River. The man and woman on board tell us they've brought her all the way along the Atlantic coast through the Intracoastal Waterway, then up the Savannah to Augusta for a spell. Saying, "Yeah, she's a one of a kind on this river," the man tells me, "...I became a riverboat captain on the way up here." His yawl isn't built at all right for the twisty-turny currents in the big bends of a river like the Savannah. Captain Mike gives the fellow traveler some advice on how to navigate them. Once the water drops (some three or four yards in height!) and the lock gates open up, the Acadiana speeds away downstream, her wake beating at the river's muddy banks. Mike wonders aloud whether we'll see her again on our way downstream, pointing out that the steering is easier going upstream, and that there are an awful lot of submerged snags for a captain to watch out for. But we never do see the Acadiana again after she rounds the bend below the lock, so she must have made out okay.

INDUSTRY'S IMPACT

The lock itself, of course, is a relic from the days of the barges, but it still has its impact on the river. Once we're through it, Frank smiles to tell us that there will be no more impoundments damming the river's flow from here to the sea. On the other hand, it isn't long before we pass by some of the heaviest industry on the Savannah. One plant, a manufacturer of caustic sodas and chlorine,

has a small canal coming out to the river. Pointing at it, Frank grins and says, "They're used to seeing the Savannah Riverkeeper boat go up that channel." He has a 20-foot pontoon of his own that he uses for regular check-ups and water samples on the river.

Pointing at an industrial outfall a little way downstream, Frank tells us its plant has "about 600 pounds of mercury unaccounted-for each year." The implication, of course, is that the missing mercury is going to the river. Most freshwater is full of mercury anyway: it comes out of the air, where it exists as a product of coalfired power plants, and is deposited into water bodies. Mercury is the reason for the "fish consumption guidelines" put out by the Department of Natural Resources—more than one meal a week of a certain fish from a certain stretch of a certain stream is officially more than people ought to eat. But mercury going straight into the river from an industrial outfit? Yikes.

I'm not sure, anyway, whether Frank is exaggerating the 600 pounds or not. Being on the river with Frank Carl is a little bit that way: he is very knowledgeable about his river, and he's glad to share his knowledge—after all, it's his job—but as his everpresent subtle, sly smile suggests, there's no guarantee that in the right company, the information will come without an opinion attached

Of course, no one doubts that this is the right group for tallying some of the abuses the Savannah suffers. Before long, everyone gets the idea and starts pointing out pipes and culverts draining to the river. Frank is curious about any he didn't already know about. ("A pipe? What in the hell is that from?")

I begin to realize that this trip is a good opportunity for Frank himself to get out on the river and take note of its condition. He notes the mile mark of every unfamiliar pipe and culvert, as well as every pasture whose cows have free access to the river. Although farmers can pump river water out to water their herds, it's illegal for cattle to be unrestricted from actually entering the river, where they tend to enjoy standing around cooling off, chewing their cud, and performing other bodily functions regardless of any thoughts of keeping a downstream community's water source clean. We see several such spots on our first day alone, all on the Georgia side of the river. Frank is surprised; on last year's trip, he says, there weren't any cows in the river on the Georgia side. He makes a note to check in with some of those farmers after the trip.

NUCLEAR PRESENCE

Of course, there isn't much but woods on the South Carolina bank. We aren't far out of Augusta when we begin seeing menacing signs warning against trespassing on the land to our left: the Savannah River Site. In the 1950's the U.S. Department of Energy went looking for a big, empty tract of land on which to start up a nuclear facility. They found an area with vast undeveloped swampland, evicted a couple of small towns wholesale from the adjoining pine woods, and created a 310-square-

mile property that would become both a major part of the nation's nuclear program and an ideal locale for ecological studies (UGA's Savannah River Ecology Lab) in a largely undisturbed wilderness.

Today, there are several inactive nuclear reactors and a good deal of nuclear waste still on the site. Unfortunately, research has shown that some of the waste is not well-contained; the streams draining the site are bringing high levels of tritium down to the river. For this reason, Frank's boat is a frequent visitor to the mouths of these creeks, too. Because of the high level of security on the site, the mouths of its creeks are gated, but Frank has sampled the water they discharge into the river.

The government samples the water through there, too. It is a strange sight, every so often in that isolated, wooded section of river, to come upon a little miniature white boat, moored to a piling and facing upstream, with a little solar panel on top to power the automatic water-sampling equipment inside. These little robotskiffs occasionally come to life for a few seconds, some motor inside them cutting on to push against the current briefly and keep the little boat's bow pointed upstream.

Just around the bend from one of those automatic samplers, we come upon the private landing where a generous stranger's river house is our home for the night. Set back from the river, up on a low bluff with a grassy mowed lawn is a modest, pleasant-looking house with the customary large deck overlooking the river. Everyone, including Frank, is impressed with the peacefulness of

the surroundings. Frank has talked to the owner, a man named Hargrove, on the phone, but he hasn't seen the place.

Walking up the slope and around the front of the house we come upon a carved wooden sign hanging over the front porch: "Cliff's Folly." The front of the house, away from the river, looks out on a large, grassy field beyond which the two huge cooling towers of Plant Vogtle—a nuclear power plant on the Georgia side—loom over the trees. Huge clouds of steam issue from the tops of the towers, the only blemish (albeit a significant one) on the rustic scene.

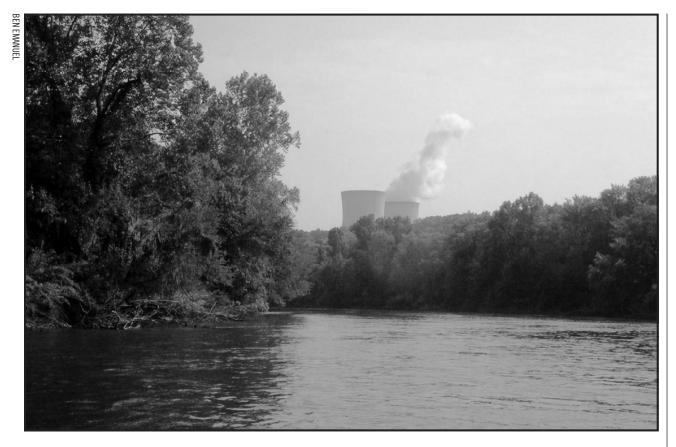
Inside, it is evident that the Hargroves have had their share of fun there at Cliff's Folly. Framed snapshot collages document a few years' worth of a big annual cookout called the "Spring Thaw." Others show smaller gatherings of drinking good old boys: one series is titled "A Dysfunctional Weekend Adventure at Hancock Landing." On the living room wall is a trophy mount, the snarling, massive head of a 350-pound wild hog shot in the swamps of the Savannah around Thanksgiving some years back. In the corner, a book of Tennyson's poems sits on the table. A 19th Century map of Burke County hangs on the kitchen wall. For a place so far back in the country, Hargrove's has its charm.



I pitch my tent on the lawn beside the river and sleep well there. A couple of times I wake in the night and think I see lightning, but it is only the bright strobe lights ringing the tops of the cooling towers at the power plant. In the morning, our benefactor, David Hargrove, shows up to ready the house for the rest of the weekend, and we have a chance to chat with him before we launch for the day. He tells us a little bit about the recent history of the place. His father bought the land in the '50s, and before long Georgia Power came through condemning land to build Plant Vogtle. But the family was able to hold out, and Hargrove says he doesn't mind having the cooling towers in view, or the Savannah River Site just across the river. He hunts and fishes there just the same, and he remembers when the industries upstream, towards Augusta, treated the river like dirt.

"When my father bought this place in 1956," he tells us, "this river ran red and stunk to high heavens." Frank, ever the teacher, then turns to the group and enjoins us: "Remember that, what he just said. That's the Clean Water Act." Frank is pointing out a fact underlying most all of the work being done under the auspices of the Riverkeeper movement. In the last three decades, the Clean Water Act has made improvements by leaps and bounds in cutting back on large-scale, unregulated industrial discharges into surface waters in this country, resulting in dramatic and salient changes for the better on a lot of rivers. But there's still a lot of work to be done: the growth of an urban area like Augusta, for instance, in-

EN EMANUEL



creases drinking water withdrawal, wastewater input, and polluted stormwater runoff. All that industry we'd seen the day before, although it's cleaner now, is still there.

Not to mention all the nuclear material at SRS. Hargrove spends enough time hunting and fishing on the river to know a little bit about what goes on there. He tells us that every now and then, a spent nuclear reactor comes upriver by barge for storage at SRS. At such times, the Corps of Engineers lets a lot of extra water out of the dams upstream so the river will run high, making passage easier, and the barge with its special payload slips quietly upriver from the coast.

CHANGING TERRAIN

Our crew gains some new members on the second day: SRK board member James Marlow and his two sons, Tyler and Zack, drive down from Atlanta to join us. Tyler's a sophomore at the newest high school in Gwinnett County, and his brother's in middle school there. They are talkative, outgoing kids who'll fit in well in Athens in a few years: they both see the folly of the current development trends in their home county. I am quickly impressed with their grasp on Gwinnett's dire situation and their willingness to talk about it. While I am chatting with Tyler about all the land he's seen cleared recently, Zack walks up hyper and excited about a plan he's just hatched, having heard me say I live in Athens. "We need to find out where they're gonna cut the trees down," he says, "and set up a stage at the entrance, and get R.E.M. to play, so they won't be able to go in and cut the trees."

"Why R.E.M.?" I ask.

Zack shrugs. "Because they're hippies."

Tyler sighs and looks away at the river going by, then groans lackadaisically: "I'm gonna chain myself to a bulldozer."

That day on the river, we go through many of the 66 artificial cuts that the Corps of Engineers made, removing so many looping meander curves and oxbows from the river's course. Frank and Mike talk about the Corps' efforts to resuscitate the dying barge traffic decades ago. Because of competition from railroads and trucking, barge commerce died anyway. Mike said, "They spent billions and billions of dollars, and as soon as they finished, there was no traffic"

But the effects of the Corps' work are still there. Anywhere they altered the river's course, there is "riprap" on the river's banks—chunky granite rocks placed there to prevent the bank from eroding away. If it not for the riprap, it would be hard to tell that the river has been so drastically altered. (After all, over time the river itself cuts off those looping oxbows anyway, physics and gravity always pushing the water to seek a shorter course to the sea.) But even down there in the swamp, in the middle of nowhere, there are the signs of what people have done to change the river. In addition to the riprap, we frequently come upon old groupings of wooden pilings in the water, erected long ago to catch snags and sediment and keep them out of the navigational channel.

That day and the next, traveling the river is a study in contrasts. We are on an isolated stream buffered on both sides by wide swamps. We see egrets, herons, ibis, osprey, even a young bald eagle. We pass by bluffs with magnolia, beech, redbay, and bluff white oak towering over the river. Overcup oak, cypress, willow, ash and all the other swamp hardwoods are plentiful elsewhere. We see dozens of alligators and one raccoon, scare away countless turtles and hear owls at night. But the industry upstream

is fresh in our minds, and the legacy of the river's commercial past is nearly everywhere to see, if you look for it.

CAN'T REST

On the trip's fourth and final day, we make our way into Savannah. Most of the day, the Savannah National Wildlife Refuge is on one or both banks, so we are presented with more undisturbed, serene, wooded floodplain. In the morning, we see several wood storks, auspices of a good last leg to the trip. Several miles upstream of the city, the river splits up into the different channels of its delta. Though we take the Front River into town, we first explore the top end of the Middle River, in scrub marshes that used to be rice fields. Here and there, narrow canals lead off through the marsh—canals dug 200 years ago to drain the marsh for rice crops. We even see the remains of an old sluice gate, used to control the height of the water in the fields.

Before long, on the right bank of the Front River, we come upon more of the present-day industry: a Weyerhauser paper mill, another power plant (this one coal-fired), a sugar refinery, and then the remarkable Port of Savannah. A collection of huge new cranes is helping to load and unload the cargo of the massive freighters in the port. On our left, the wildlife refuge eventually has given way to a long island with high banks and scant vegetation: the dumping ground for the dredge spoils from the harbor. Mike describes for us the huge controversy brewing these days over proposals to dredge the harbor a few feet deeper so as to keep up with the shipping industry and accommodate even bigger ships in the port.

It is then that I start to realize the immensity of the tasks before Frank's fledgling Riverkeeper organization. The range of issues to address throughout the watershed is daunting. From the port, we quickly reach River Street and disembark in the bustle of a Monday afternoon in downtown Savannah, the last bluff on the river. Here our crew splits up, and those who are headed back upstate pile into a van whose route roughly parallels our downriver voyage in reverse. Riding back through the pine woods and cotton and soybean fields beyond the river's floodplain on the South Carolina side, I have a chance to talk with Frank some more about the SRK's future. He tells me his goal is to give the organization a solid foundation for growth. At some point he'll hire a development staffer and then, later, someone who can be out on the river full-time, more than he's able to be right now. We talk about the various challenges facing the river itself: from the urbanized watershed in Augusta to way up in Clayton, Georgia, where Stekoa Creek has been filled with sediment by the mountain-valley sprawl along US 441, hundreds of miles away from the harbor that may soon be deepened. Then there are the chemical and thermal pollution from the various factories and power plants, plus the contamination at SRS.

The van takes the lone two-lane highway through SRS on the way back, and Frank points out with pride the names of the various creeks we cross there, the same ones whose mouths we'd seen at the river. It's hard for him to learn much about even the geography at SRS; security is such that you're not allowed out of your car on that highway, not even to pick up trash, much less to sample those streams. It was encouraging to see Frank doing his damnedest to learn what he can about those creeks anyway. More than that, I admire him for taking on the bigger task before him. He's got a whole river to keep.

Ben Emanuel

Topper Site Allendale County South Carolina



Radiocarbon tests of carbonized plant remains where artifacts were unearthed last May along the Savannah River in Allendale County by University of South Carolina archaeologist Dr. Albert Goodyear indicate that the sediments containing these artifacts are at least 50,000 years old, meaning that humans inhabited North American long before the last ice age.

The findings are significant because they suggest that humans inhabited North America well before the last ice age more than 20,000 years ago, a potentially explosive revelation in American archaeology.

Goodyear, who has garnered international attention for his discoveries of tools that pre-date what is believed to be humans' arrival in North America, announced the test results, which were done by the University of California at Irvine Laboratory, Wednesday (Nov .17).

"The dates could actually be older," Goodyear says. "Fifty-thousand should be a minimum age since there may be little detectable activity left."

The dawn of modern homo sapiens occurred in Africa between 60,000 and 80,000 years ago. Evidence of modern man's migration out of the African continent has been documented in Australia and Central Asia at 50,000 years and in Europe at 40,000 years. The fact that humans could have been in North America at or near the same time is expected to spark debate among archaeologists worldwide, raising new questions on the origin and migration of the human species.

"Topper is the oldest radiocarbon dated site in North America," Goodyear says. "However, other early sites in Brazil and Chile, as well as a site in Oklahoma also suggest that humans were in the Western Hemisphere as early as 30,000 years ago to perhaps 60,000."

In 1998, Goodyear, nationally known for his research on the ice age PaleoIndian cultures dug below the 13,000-year Clovis level at the Topper site and found unusual stone tools up to a meter deeper. The Topper excavation site is on the bank of the Savannah River on property owned by Clariant Corp., a chemical corporation head-quartered near Basel, Switzerland. He recovered numerous stone tool artifacts in soils that were later dated by an outside team of geologists to be 16,000 years old.

For five years, Goodyear continued to add artifacts and evidence that a pre-Clovis people existed, slowly eroding the long-held theory by archaeologists that man arrived in North America around 13,000 years ago.

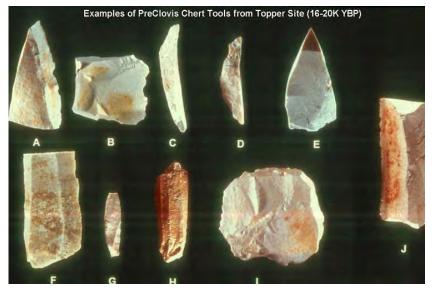
Last May, Goodyear dug even deeper to see whether man's existence extended further back in time. Using a backhoe and hand excavations, Goodyear's team dug through the Pleistocene terrace soil, some 4 meters below the ground surface. Goodyear found a number of artifacts similar to the pre-Clovis forms he has excavated in recent years.

Then on the last day of the last week of digging, Goodyear's team uncovered a black stain in the soil where artifacts lay, providing him the charcoal needed for radiocarbon dating. Dr. Tom Stafford of Stafford Laboratories in Boulder, Colo., came to Topper and collected charcoal samples for dating.



"Three radiocarbon dates were obtained from deep in the terrace at Topper with two dates of 50,300 and 51,700 on burnt plant remains. One modern date related to an intrusion," Stafford says. "The two 50,000 dates indicate that they are at least 50,300 years. The absolute age is not known."

The revelation of an even older date for Topper is expected to heighten speculation about when man got to the Western Hemisphere and add to the debate over other pre-Clovis sites in the Eastern United States such as Meadowcroft Rockshelter, Pa., and Cactus Hill, Va.



USC's Topper: A Timeline

May, 1998 — Dr. Al Goodyear and his team dig up to a meter below the Clovis level and encounter unusual stone tools up to two meters below surface.

May 1999 — Team of outside geologists led by Mike Waters, a researcher at Texas A&M, visit Topper site and propose a thorough geological study of locality.

May 2000 — Geology study done by consultants; ice age soil confirmed for pre-Clovis artifacts.

May 2001 — Geologists revisit Topper and obtain ancient plant remains deep down in the Pleistocene terrace. OSL (optically stimulated luminescence) dates on soils above ice age strata show pre-Clovis is at least older than 14,000.

May 2002 — Geologists find new profile showing ancient soil lying between Clovis and pre-Clovis, confirming the age of ice age soils between 16,000 - 20,000 years.

May 2003 — Archaeologists continue to excavate pre-Clovis artifacts above the terrace, as well as new, significant Clovis finds.

May 2004 — Using backhoe and hand excavations, Goodyear and his team dig deeper, down into the Pleistocene terrace, some 4 meters below the ground surface. Artifacts, similar to pre-Clovis forms excavated in previous years, recovered deep in the terrace. A black stain in the soil provides charcoal for radio carbon dating.

November 2004 — Radiocarbon dating report indicates that artifacts excavated from Pleistocene terrace in May were recovered from soil that dates some 50,000 years. The dates imply an even earlier arrival for humans in this hemisphere than previously believed, well before the last ice age.

DR. ALBERT C. GOODYEAR III

University of South Carolina archaeologist Albert C. Goodyear joined the South Carolina Institute of Archaeology and Anthropology in 1974 and has been associated with the Research Division since 1976. He is also the founder and director of the Allendale PaleoIndian Expedition, a program that involves members of the public in helping to excavate PaleoAmerican sites in the central Savannah River Valley of South Carolina.

Goodyear is the author of over 100 articles, reports and books and regularly presents public lectures and professional papers on his PaleoIndian discoveries in South Carolina.

For above information is an excerpt from the expedition's Webpage at allendale-expedition.net.

Suggested Items to Bring Along on the Coastal Plain Meander

Bring along a daypack to keep with you on the boat (binoculars, sunscreen, rain gear, camera, medications). The remainder of your gear will be transported in our van.

Everyone	should	bring:

☐ Flashlight (campers will need this, but others may too)
☐ Mosquito repellant
☐ Toiletries
☐ Sunscreen (for afternoons at landings, boat is covered)
☐ Medications (for the time you will be with us)
☐ Sunglasses (may be glare from the water)
☐ At least one change of clothes in a dry bag (in case you get wet)
☐ Binoculars (some wildlife will be pretty far away)
☐ Rain gear (the boat is covered, but you may need it for traveling to and from the boat)
☐ Camera (we guarantee that you will want some pictures to take home)
☐ Towels
☐ BYOB? (ice and cups will be available, alcohol not allowed in New Ebenezer Retreat)
In addition, campers will need to bring:
☐ Tent
☐ Sleeping bag and mattress
☐ Camping shower bag (if you want to take showers, see below)
☐ Biodegradable soap
☐ Bathing suit (see below)
☐ Towel (you will be responsible for drying your towel daily)
5 5 5 5 5 7

Toilets

There is a toilet on the boat, everyone will use during the day and campers will use it at night.

Showers and Bathing

Non-campers will have access to full-use bathrooms, including showers, but should bring your own towels.

Campers can either pay a \$3 fee to the site for shower access, or bring a bathing suit and wash-up in the river. Each landing has a concrete base to stand on while you bathe. Use only biodegradable soap in the river.

Meals

All meals are included with the package price. Let us know if you have kosher, vegan, or vegetarian needs.