May 2025 Volume 21

the NATURALIST newsletter

Louisiana Master Naturalists, Greater New Orleans

President's Note:

The Greater New Orleans chapter is working hard to bring our members a wide range of experiences. From the weekend-long Annual Gathering at Bogue Chitto State Park to the book club to Byron Almquist's micro-hikes in urban green spaces, we want to give everyone opportunities to be together and engage with the natural world. And Rendezvous 2025, the annual state-wide meeting of the Louisiana Master Naturalists, was held in Baton Rouge this year. The program had something for everyone.

Despite the coming hot weather, we are not slowing down. You can always work the LMNGNO table at a local event. You can come to the free OBSERVER film screening and stay after to help people make nature observations on the Lafitte Greenway. You can join us down at the end of the river near Triumph, LA to develop a new birding trail. You can volunteer to help the chapter with merchandise, fundraising, accessibility planning, and the Junior Master Naturalist program. All of these opportunities are on Point, or you can email me to get involved.

We also want to hear from you! In May, we will send out a survey to all members asking you three things: *What types of events or experiences would you like the LMNGNO to offer? What topics most interest you? How can we be more accessible?* Please be thinking about what you would like to see from our chapter going forward; new and creative ideas are very welcome.

Lastly, I want to acknowledge that the cuts to federal funding for environmental efforts have been painful for all of us, and especially for those whose careers have been directly affected. People working in other fields, myself included, have also been impacted. The Louisiana Master Naturalists are an apolitical organization, but I feel confident saying that you matter, your work matters, and that we need to do everything we can to support each other and the environment during this time.

I was inspired by what our general meeting speaker, Dr. Sunshine Van Bael said about bald cypress survival strategies.

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In This Issue

Bill Van der Meer photo

Orange-crowned Warbler
Leiothlypis celata

The Louisiana Master Naturalists of Greater New Orleans is a community of citizens interested in engaging with the natural environment through education, stewardship and volunteering.

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We all know about the big, charismatic bald cypress knees, which probably stabilize the tree in wet conditions and help with oxygen transfer. But the cypress also has microscopic beneficial bacteria and fungi living in and around its roots, helping it thrive in ways we do not fully understand. From that I take this- we should do the biggest and the smallest things we can for the greater good. Run for office and help a caterpillar cross the street. It all matters. As always, New Orleans needs naturalists. Let's go get our hands dirty..... *-Janna Wisniewski*
janna@louisianamasternaturalistsgno.org

GIVE NOLA DAY
GREATER NEW ORLEANS FOUNDATION

LMNGNO is participating in Give NOLA Day again this year. Last year you stepped up to help the Master Naturalist program by donating on GiveNOLA Day. Thanks to you, we raised $1,625. These dollars make all the difference in our program's success: they pay for scholarships, field trips, our expert workshop leaders, rent for meeting space, and supplies for classes and community outreach.

GiveNOLA Day this year is **May 6**, and early giving starts April 29. We hope that you can participate again, and that you can encourage others to follow your lead. Last year, you were one of 26 people donated – that's just 15% of our membership base. This year we've set an ambitious goal of $5,000, and we will make it if we boost the number of participants as well as the amount of each donation.

As you know, the GiveNOLA process is easy and takes just a couple of minutes. You can go to the GiveNOLA website and use their search or use our direct link: https://www.givenola.org/organization/lmngno

I know that you are aware of all the enriching experiences that the Master Naturalist program brings to your own life, but we also make a difference in our community – our 175 volunteers contributed 4,928 hours at 108 events in 2024, with an economic impact estimated at $157,000. With funding cuts all around us, this is one small action you can take to make a direct and positive difference in our community.

Any support you can give us will be much appreciated.

Thank you…. *-Sue Marchal*

2025 Events Calendar:

Board of Directors Meetings (5:30 pm)

Also open to all members in good standing

Location TBD

July 16
October 15
December (if needed)

General Membership Meetings

Begin at 5:30pm
Loyola University
Miller Hall, Room 114

August 6
October 22

Annual LMNGNO Gathering October 24-25

Bogue Chitto State Park

Visit us on the web

Classmates and Graduates

Combined Fall 2024 and Spring 2025 LMNGNO Classes at Elmer's Island, La.

Congratulations to
Recent LMNGNO Graduates and Invitees!!!
at the general membership meeting, January, 2025

The New Basin Canal and Park

by Nicole Green -PhD

In the fall of 2024, Byron Almquist proposed a series of Walk Abouts throughout New Orleans to discover places that we all regularly pass but remain largely uninformed about. When he included the New Basin Canal Park (NBCP) as one of these spots, I volunteered to lead a group. I knew just a little bit about the Park's significance, but I wanted to learn more. The NBCP is situated in Lakeview and is bordered by Veterans' Boulevard in the south, Pontchartrain and West End Boulevards in the west and east. It extends nearly as far towards the lake as Alain Toussaint Boulevard. It was created when the New Basin Canal (NBC) was filled in during the 1950s.

The NBC, created between 1832 and 1838, was one of four major canals that have flowed into or through New Orleans: the others being the Carondelet Canal–also later known as the Old Basin Canal in 1794; the Industrial Canal in, 1923, and the infamous Mississippi River Gulf Outlet (MRGO) in 1960. The construction of the NBC was driven by the need to transport goods and accommodate shipping through New Orleans from the Mississippi River to Lake Pontchartrain.

It flourished in terms of tonnage and the variety of goods shipped through the city including building supplies and agricultural products. A former colleague recounts that in the early days of Xavier University, students could see barges transporting watermelons along the Canal where the Expressway now runs. Its success lasted until the advent of modern transportation systems where newer canals made it obsolete. By the early 1950s, the Canal had been filled in, where the southern section through the city became the present day Pontchartrain Expressway, and the northern Lakeview section.

New Basin Canal and West End in the early 1950's

The Canal itself was six miles long and dug in three sections: 1. The turning basin in the CBD known as Mobile Landing was at the intersection of Howard and Loyola Avenues, 1832-34; 2. Across Metairie Ridge, 1835; and, 3. Through the swamps of Lakeview and north to Lake Pontchartrain, 1836. It was fully operational by 1836. The canal was 60 feet wide and 6 feet deep, and over the next decade enlarged to 100 feet wide and 12 feet deep. The canal right of way was 300 feet wide.

The creation of the NBC was the idea of a group of bankers, "improvement bankers" as they were called, who formed the New Orleans Canal and Banking Company, the Federal Government being too weak to finance such a project. Richard Campanella writes that they sold "24,000 shares resulting in a capitalization of $4 million, the equivalent of $100 million today." One of the foremost bankers behind this effort was an Irishman from Tipperary, Maunsel White. At the age of thirteen, White had emigrated to Kentucky and arrived in New Orleans four years later. Like several other prominent Irish-American New Orleanians, he married a wealthy French Creole and later her sister when he became widowed.

He fought alongside Andrew Jackson in the war of 1812, was promoted to the ranks of Captain and Colonel, became a member of the Boston Club, and later owned a plantation in Plaquemines Parish with over 200 enslaved people. He was a brilliant businessman.

The Canal was dug by hand by Irish laborers, known as "ditchers." Maunsel and one of his partners, Simon Cameron, had recruited these Irish immigrants from Pennsylvania. The Old Basin Canal in the Creole section of town had been dug by enslaved labor, but by 1821, such enslaved labor was deemed too valuable. Irish laborers, immigrant sons of tenant farmers, were an expendable commodity that was skilled, plentiful and cheap.They came with their picks, shovels, and wheelbarrows and worked 12-15 hour days for $1 a day.

Working conditions were deplorable. From their meagre wages, the ditchers bought their food, clothes, and tools from the company stores; many worked barefoot. They lived in tents along the Canal; Irish women cooked their food and washed their clothes. Accidents were frequent, and the dead were buried where they fell, along the Canal under the earth they had dug. At one time, it was reported that between 5,000 and 20,000 Irish laborers had died digging the NBC, but Campanella argues that these estimates are not supported by the Irish population coming into the City.

The numbers of those who died from building the Canal were conflated with those who had died from the yellow fever and cholera epidemics which were rampant in New Orleans in the early 1830s. Nevertheless, it is estimated that between 6,000 and 10,000 Irish laborers perished during the construction of the NBC.

In 1990, through the collaboration of the Irish Government and the Irish Cultural Society of New Orleans, a 7-foot high Celtic Cross, carved in Kilkenny, Ireland, was erected at the northern end

Celtic Cross dedicated to honor those who died during construction of the New Basin Canal

of the NBCP to honor the Ditchers who died digging the Canal.

Its dedication is in both English and Irish. Nearly thirty years later, a four-acre memorial park was built around the Cross with a semi-circular path inlaid with six, brass Celtic knots. Around the path also are six, enclosed, panels, illustrating the history of the Irish in New Orleans and their contribution to the City from the eighteenth century to the present day.

On the day of the Walk About, Byron Almquist provided our group with a description of the trees in the Park. "The NBCP Is now dotted with hundreds of trees–some planted since Katrina. Scattered about are oaks (four or more species), winged elms, pecans, green ash, bald cypress, and native pines. Except for crepe myrtles, the area is largely free of nonnative trees. With no undergrowth for blocks, an admirer of trees has an uncommon freedom to wander about under the limbs or to stroll on the paths that border the old Canal grounds."

A place of commerce, toil, suffering, and death has been transformed to a place of quiet reflection, beauty, and life.

Shrimping With The Major

by John Hazlett

Is there anything more pleasurable than stepping for a moment into another person's world? It's a kind of foreign travel, but without having to pay for plane tickets and lodging. I recently had the chance to do this when an acquaintance of mine, Retired Major (USMC) Theodore "Ted" Rhodes, offered to take me out into the brackish marshes south of New Orleans to experience his recreational shrimping operation.

I had the option, he said, of joining him at 5am at the Myrtle Grove Marina, a 30-mile drive south on Highway 23 in the direction of Barataria Bay just off the Gulf of Mexico. Or I could wait until he'd completed his morning trawls—or "pulls" as he called them—and join him at 1pm in the same location. I took the latter option and pulled into the Marina at the agreed upon time.

It was 95 degrees and humid, with a three- to four-mile an hour breeze. Reasonable people were not out in the sun, which, at 1pm, was just beginning to apply its bellows to the temperature index and extra malice to the UVB rays.

Five minutes later, Major Ted could be seen at the helm of his 18-foot jonboat, sliding up the canal in the no-wake zone. As he pulled up to the pier, I immediately saw that I was underdressed for the occasion. He was going to be on the water for a full 12 hours and clearly knew how to ward off skin cancer and solar burns. The only parts of his body exposed to the sun were his eyes and hands; the rest was under cover.

His 18-foot Alweld "Marsh" series jonboat had several elements that separated it from the classic jonboat I had used in my youth. His included a vee bottomed hull and center console. In addition, Ted had hired a metal fabricator to add two fantails to the stern. These structures are flat aluminum plates that brought the boat's full length to twenty-one feet and provided him with places

Ted Rhodes customized shrimping jon boat

to stand when putting out and hauling in his nets. The customization also included two removable "pulling posts," one on each gunwale. When deployed, the shrimp nets were attached to these by ropes called "bridles." In the bow, he'd added decking and hatches, and athwart the deck, just in front of the console, he'd put in a "picking box," an aluminum trough where the harvested shrimp were dumped from the net and separated from the bycatch.

As soon as I was seated on one of the three large ice chests situated between the picking box and the front deck, Ted backed his boat out of the launch site and pointed it up Wilkinson Canal, which runs all the way from the Marina to Barataria Bay and the barrier islands of Grande Terre and Grand Isle. The distance from the Marina to Grand Isle via the Wilkinson Canal is about 25 miles. But Ted wasn't planning to go that far. He had picked out two spots that were likely to produce the shrimp he was looking for. Bay 5 and Bay Round are both smaller bays off the west bank of the canal and about 6 miles south of the Marina.

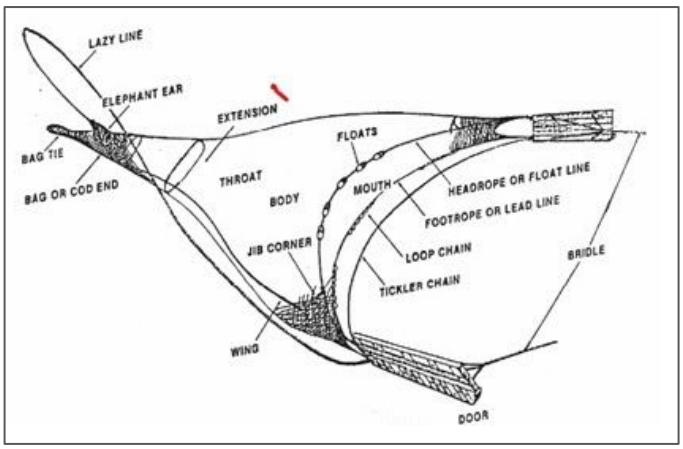
We continued up the canal at a slow pace for three-fourths of a mile until we reached the far edge of the no-wake zone. Then Ted opened up the 90hp Suzuki outboard and we were off, tearing down the

canal and creating a breeze that took the edge off the afternoon heat. Just short of five miles, we passed between the outlets to Bay Round on the west side of the canal and Bay Laurier on the east.

Slowing down, we passed through another no-wake zone established for camps that lined Wilkinson Canal. We motored past these for another mile and reached our first destination—Bay 5, or, as the Google Map has it, Lake 5. Ted turned into the bay and pointed out the large commercial shrimp boat on the far side that was already working the water.

This was a good sign. It meant that the likelihood of finding shrimp was good. The commercial shrimpers have elegant white trawlers with butterfly nets stretched out high on each side, like the wings of a large bird. When lowered, these are pushed through the shallow water of the marshes to scoop up shrimp. They often work at night, when the shrimp rise to the surface and make their way to the Gulf of Mexico on the outgoing tide, but today the commercial shrimpers were out under the full sun just like us.

Ted motored toward the center of the bay, put the wind at our back, slowed the boat to a crawl, stepped onto one of the rear fantails, and began playing out his own net, called an otter trawl. The trawl consists of a net held open when deployed by a pair of boards or "doors" positioned at the end of each wing of the net. The doors exert a downward and outward force once his boat reaches towing speed (Ted likes 2.8 MPH), the two yawning wings of the net spread out and, in theory, funnel the shrimp into the "cod end" or "tail bag" of the net.



Otter Trawl and Components

In addition to the doors, Ted threw out the "tickler chain," which is what it sounds like, a long chain attached to the bottom of the front of the net. It drags along the marsh floor and "tickles" up the shrimp that are hugging close to the marsh bottoms. Once the net has been played out, the ropes attached to the doors of the net are hitched onto the pulling posts on each side of the rear of the jonboat.

Thus arranged, Ted resumed his position at the boat's helm and accelerated slowly. The boat moved forward, the doors spread out the mouth of the otter trawl, the tickler chain began tickling the muddy bottom of the marsh, the shrimp, presumably, were aroused from their aquatic slumbers, and we were launched on our first thirty-minute "pull." One of my jobs as newbie on this operation was to keep time. Ted's was to move the boat forward in an S-shaped track that kept the net out of the boat's wake.

At the conclusion of that first 30-minute pull, Ted positioned the boat upwind from the net and cut the engine. He didn't want the boat to drift over the net while we were pulling it in. He began this process with deliberation, lifting the tickler chain and doors out of the water and placing them neatly in the stern of the boat, then lifting and shaking the long net as he folded it onto the deck. The shaking moved any of the shrimp in the forward part of the net back into the "bag" or pocket at the end of the net.

Picking Box with shrimp and bycatch

Inevitably, a lot more than shrimp get funneled into the net, and one of the tasks of both commercial and small-time recreational shrimpers is to separate the catch that you want to keep—shrimp and crabs usually—and the bycatch that you don't want to keep. The bycatch that we hauled in consisted of a variety of small marine life— menhaden, spots, croakers, catfish, flounder, mullets, small crabs—which were pushed out of the picking box through a sliding hatch-door back into the marsh. Some of this bycatch managed to survive the crush of the net, but the majority were dead and would be recycled as food for the gulls, terns, pelicans, crabs, and other predators of the marsh.

When I asked him about this, Ted acknowledged that recreational shrimpers know that bycatch can negatively affect fish populations and are happy when the numbers in their nets are small. It's a kind of collateral damage. "Cast your nets wide!" is a phrase you hear in many contexts, but the wider the cast, the likelier you'll catch a whole lot that you don't want or shouldn't be catching. When Ted has a helper along, that person serves as a "picker," and his or her job is to pull the shrimp and blue crabs out of the picking box and throw them into the two large baskets, called "champagnes." All the rest are shoveled back into the water.

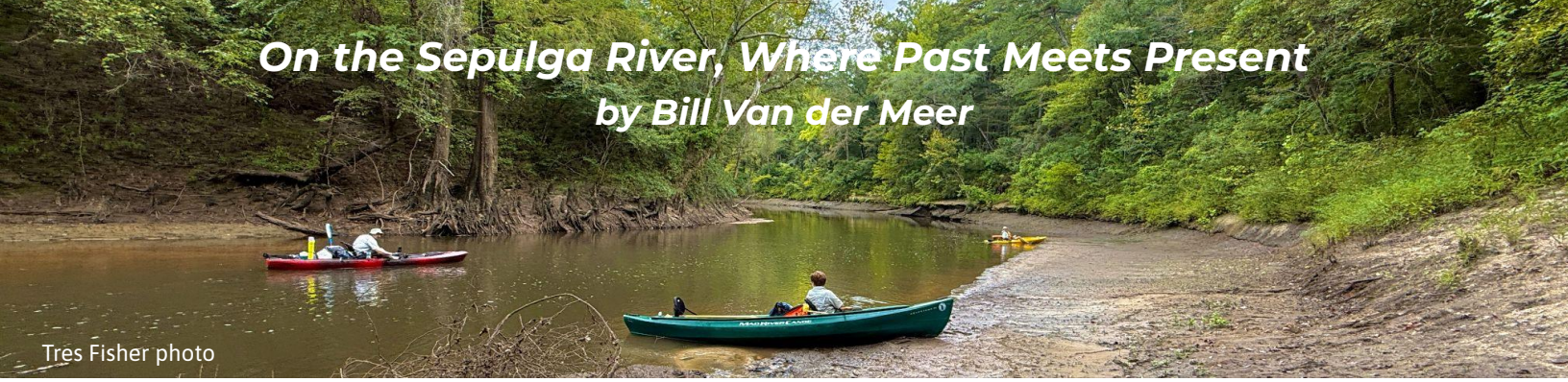
When we completed the picking process on Bay 5, we grabbed the handles on the "champagne basket" containing the shrimp and lowered it over the side of the boat. Lowering and raising it repeatedly, the marsh waters poured in through the latticed sides and back out again, washing away the mud and debris that clung to the shrimp.

Once thoroughly rinsed, we poured the bounty into one of the three coolers on the deck and covered them with ice. It was about 10 pounds of medium-sized shrimp. And so we concluded our work in Bay 5. We then repeated this entire process on Bay Round, where we harvested another ten pounds of shrimp.

Ted's morning haul, completed before he picked me up at the Marina, had been somewhat more successful, and he had a full 70 pounds of shrimp and a nice pile of blue crabs packed away in his coolers in addition to the 20 pounds of shrimp we had hauled in. The afternoon, however, was beginning to wane despite a still blistering sun, and it was time to head back.

Ted turned the jonboat in the direction of the Marina and we arrived there just before seven o'clock. I'd enjoyed my journey into a local shrimper's water world and was grateful for the opportunity to share in his pleasures and his work for a day. Sights, smells, and sounds of the day filled my thoughts on the long slow drive back to New Orleans. The oil refineries, gas plants, marine terminals, and other businesses along the great Mississippi River corridor were all changing work shifts, and the workers in their beefy pickups were streaming onto the lone highway headed north in the darkness. The 30-mile trip home took well over an hour in the stop-and-go traffic.

Ted's was an even longer drive to Waggaman, Louisiana. Once there, he'll no doubt be welcomed as the benevolent provider of the marsh riches. Neighbors will gather in his driveway, and he'll open the coolers, full now with shrimp and crabs, and distribute them generously to the grateful recipients.



On the Sepulga River, Where Past Meets Present

by Bill Van der Meer

Tres Fisher photo

Although largely unknown, "Alabama is home to more than 450 fish species, the most in any state or province in North America." (AI Overview) The Mobile River system alone, which drains 94% of the state, is said to be the most biodiverse inland delta in North America.

It was the gift of a book titled "Saving America's Amazon" by Ben Raines with its beautifully rendered photographs that inspired me to delve more deeply into it's natural wonders. In addition to its expertly described prehistorical and present-day habitats, the author brings attention to habitat loss and industrial development that continually pose an existential threat to its natural state.

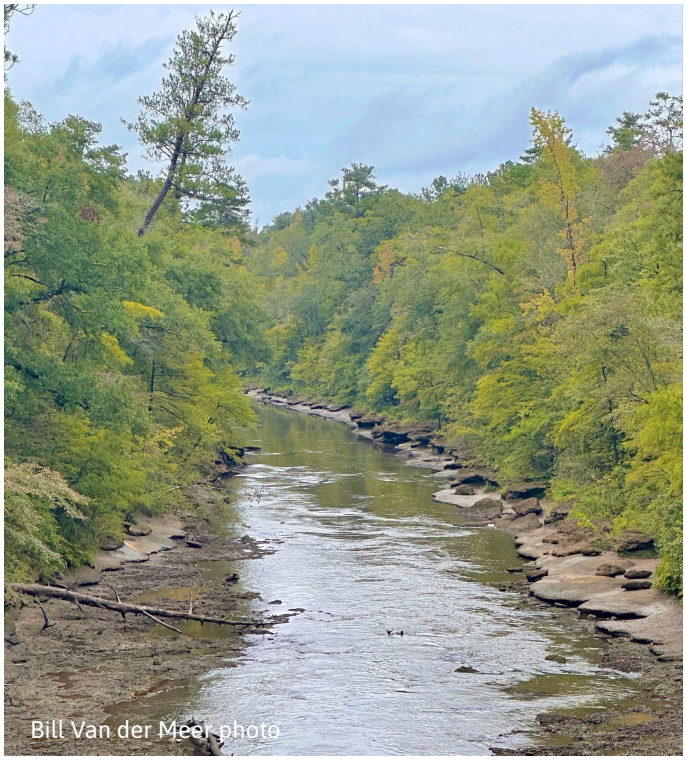
The book was merely a start. Further research caused me to want to pay a visit to at least one riverine segment of this vast ecosystem. And what better way to do so than with kayak or canoe and tempt others in our little circle of naturalist friends to join? As with any adventure into uncharted waters, there's safety in numbers and careful preparation.

The Sepulga River is a tributary of Conecuh River which flows southwest for 258 miles before emptying into Pensacola Bay and ultimately the Gulf of Mexico. And not unlike many of our New Orleanian boulevards that inexplicably change names every few blocks, the Sepulga becomes the Conecuh. One more name change takes place as it crosses into the Florida panhandle where it becomes the Escambia river.

Located roughly 25 miles east of the town of Evergreen there are several put-in and take-out locations along a 19-mile stretch known as the Sepulga River canoe trail.

Our group, consisting of Justin Fauth, Tres Fisher, his 10 year old son, Will, and myself, chose to float a 7.5-mile segment from the Bull Slough Bridge to the tiny hamlet of Brooklyn, AL. The reasons for this choice became abundantly clear as we launched from underneath the Bull Slough bridge on the bright fall morning of October 5th after a hearty breakfast at the local Waffle House.

What initially drew us to this location was the promise of fossils. But as we would soon learn, there was so much more we were about to discover about this river system than by being simply focused on the past. Our two-day river trip was to include an overnight stay on some as yet to be identified sand bar located at about the halfway point.



Bill Van der Meer photo

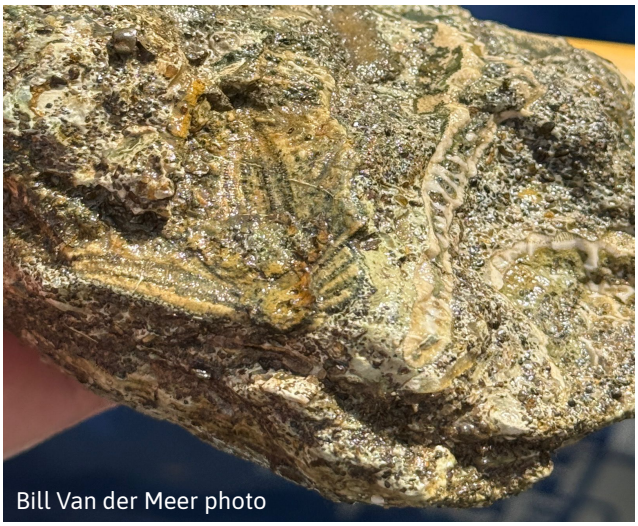
The upper reaches of Alabama's Sepulga River

In addition to its temperate climate over time, Alabama is defined by its geology and habitat where the most notable factor responsible for its present-day landforms is climate change. This brought about a multimillion year series of sea level changes which has varied by hundreds of feet in the water column.

Some forty million years ago to the middle Eocene epoch over half of Alabama was submerged by an ocean. This is evident in stream beds where the remnants of numerous vertebrate and invertebrate marine species are preserved and exposed in the limestone rich marls known as the Moody's Branch Formation.

No sooner had we dipped our paddles into the stream on the following morning when we discovered a mother lode of *Periarchus lyelli* (sand dollars) and a few *Chlamys deshayesii* (scallops) in a soft matrix. A couple of swift blows of a rock hammer on one of the limestone ledges revealed thick layers of crushed molluscan bivalve casts.

It has been documented that the river channel holds remains of aquatic mammals and localized heavy concentrations of sharks teeth, stingray plates, etc. The only condition is that they must be dived upon and only then when good water clarity allows. Justin was, however, able to sift a few small sharks teeth from eddy traps in potholes on a hard limestone shoal. Poking about on an exposed gravel bed produced a beautiful stingray barb.



Periarchus lyelli in limestone matrix. Note sand dollar tube-feet imprints and endoskeleton cross sections

Stingray barb

Layers of molluscan bivalve casts In hard matrix

Eocene oyster shells extracted from creek bed

About a mile downstream at the mouth of Robinson Creek, we paddled into the advertised ruins of an old grist mill where much of its structure still spans across the mouth of the creek, appearing much like that of a fortress. After a few requisite photos of Will and all scrambling around on the ramparts we headed down a particularly challenging set of rapids. It was challenging in the sense that you had to zig zag through them to find enough water without bottoming out. And bottoming out is exactly what I did.

After skirting around a few log jambs here and there we continued to follow the serpentine course of the river through late afternoon. at which time we spied a tree studded sand bar along a river bend where we chose to settle in for the night.

What better way to close an exhilarating day than to have a raucous fireside chat with friends before literally pouring ourselves into our tent hammocks. They now gently swayed when applying a little motion. The silhouettes of tall trees backlit by the Milky Way soared upward towards the rim of the canyon, appearing as sentries in the night. A Barred Owl did call, further allowing the imagination to run amok. Sleep doesn't come easy on the first night in a hammock when one is accustomed to king size and the ambient light of Mid City.

The following day found us refreshed and much more attentive to the natural stimuli around us as we slowly plied along, ducking into numerous

The Old Grist Mill
A mile downstream from the Bull Slough bridge put-in

creeks lined with fern covered rock faces. Tres could barely keep up with the number of fruiting bodies of exotic fungi emerging throughout the mixed hardwood forest.

As we loaded up our water craft onto Justin's trailer at the Bottle Creek take-out on Sunday afternoon there were plenty of laughs to go around about how no one could claim that they didn't take one or more falls on one of many mud encrusted banks. There were not only witnesses but the proof was on our backsides. One thing did appear certain towards the end of this run. The experience had a profound effect on all and especially so on Will the Younger, whose extreme youthful exuberance was only occasionally tempered by his dad's advice, to which he graciously heeded.

Bottle Creek Take-Out at Brooklyn, AL

Amanita cinereoconia mushroom
American Gray Dust Lepidella

In his seminal 1795 publication "Theory of the Earth", author James Hutton advanced the concept of Uniformitarianism, which presupposes that the processes of sedimentation and erosion occurring in the present have been occurring for millions of years. In other words, as he wrote, "The key to the past lies in the present".

Conversely, Hutton recognized that "rocks record the evidence of the past action of processes which still operate today." Among the contributions made by the then infant sciences of geology and evolutionary theory during the late 18th and early 19th centuries, Hutton provided invaluable resources to those who followed. They included the likes of Charles Lyell, the father of modern geology, and Charles Darwin and his treatise on natural selection.

Most now hold these truths to be fairly obvious, but it was not always so. Persistence about their data driven contentions eventually prevailed over centuries of what was then widely being viewed as antiquated belief systems.

Rivers have always been among my favorite teachers. The Sepulga is no exception as it continues to erode and redistribute the significant depth of unconsolidated sands and gravels that overlie the 40 million year old marine deposits of the Moody's Branch. To view evidence of past and present evolutionary explosions laid bare and in contact with each other is pretty special. One may speculate that the juxtaposition of these modern terrestrial and much older marine sediments may very well be what is known in the field as a geological "unconformity" in the making.

Postscript

Here's a few words of caution to those making plans to paddle this or any other stream where sharp river bends, rapids, and dead falls are the norm. Pay particular attention to the weather in the headwaters located upstream of your planned launch. Consult the USGS river gauge height and discharge rates. They provide current and/or historical conditions that will help decision making on whether or not to make or break a trip. The arrival of tropical weather systems notwithstanding, historical Sepulga river height and discharge rates trend to be at the their lowest levels from around mid September through mid November.

So plan well and be safe!

Liverworts and mosses on rock faces. are primitive plants that herald primary succession

Ferns and angiosperms take hold in soils overlying the Moody's Branch Formation.