

COOPER RIVER UNDERWATER HERITAGE TRAIL



HISTORY OF THE COOPER RIVER

To the natives it was the "Etiwan," this river that flowed from from the heart of the land they called Chicora, to the natural harbor at Charlestowne formed by the convergence of two rivers. Following the settlement of the port city, the colonists began settling in the interior. The Cooper River, navigable for more than 30 miles, attracted a good portion of them. By 1700 small settlements, farms, and plantations were situated on both sides of the river.

In 1751 Governor James Glen, writing to the Commissioners for Trade and Plantations in England, noted that the "Cooper River appears sometimes a kind of floating market, and we have numbers of canoes, boats, and pettyaguas that ply incessantly, bringing down the country produce to town, and returning with such necessaries as are wanted by the planters "

The Cooper River has one of the richest histories on the eastern seaboard. The west branch of the river is the most popular inland diving area in South Carolina



Gunter Weber

FLORA AND FAUNA

In the upper Cooper River near Goose Creek, and upstream to the "Tee," where the east and west branches meet, brackish water becomes fresh. While many salt marsh species occur in the area, there is a trend towards greater diversity including species such as cattail, bulrushes, and giant cordgrass.

From your dive boat you can observe a variety of wildlife on this spectacular waterway. Alligators sun themselves on the riverbanks, mullet jump around the boat, and a great variety of birdlife inhabits the locale. Species include ospreys, the grey, great and blue herons, cormorants, American coots, bonaparte seagulls, and anhingas.



Gunter Weber

Diving into the Past

DIVING AND MOORING INFORMATION

Diving in South Carolina rivers is not for the inexperienced diver. Divers should use accepted safe diving practices, including the buddy system, the divers-down flag, and standard open water diving equipment, i.e., gloves and a sharp dive knife to cut monofilament line. Lights are also essential to illuminate these dark water dive sites. During the warmer months divers should be aware of the presence of alligators and snakes in the vicinity.

The best time to dive on these sites is during the incoming tide which counteracts the natural outflow of the river thereby lessening the strength of the current. Consult local tide tables for times of tides. Generally, tides in the trail area run about three and a half hours behind the listed times for Charleston harbor. Divers should descend down the mooring line to the monument which is equipped with signage that identifies the dive site and sponsors. A guide line is attached on the monument that leads to the site. Please do not anchor on or near the wreck. Use the mooring buoy.





Diving on historic wooden wrecks requires careful personal and equipment control to avoid damaging these fragile structures. All gauges, hoses, and other gear should be situated as to avoid entanglement. Avoid pulling on the structure to move about the site. During periods of heavy current divers should remain on the periphery of the site to lessen potentially adverse contact with the structure. When visiting each trail site please take only photographs and memories and leave only bubbles. To participate in an

organized charter contact a local scuba diving store. To report any damage to the site or mooring system contact SCIAA at (843) 762-6105. Please help by clearing the weeds on the mooring line and wiping mud off the monument plaque.

Many sport divers participated in the construction of this trail. Assistance was also provided by Hightower Construction, Berkeley County Public Works Department, the BCD Council of Governments, East Coast Dive Connection and Charleston Scuba. This Underwater Diving Trail was sponsored in part by the South Carolina Institute of Archaeology and Anthropology of the University of South Carolina and the National Recreational Trails Program in cooperation with the South Carolina Department of Parks, Recreation, and Tourism and the Federal Highway Administration of the US Department of Transportation

Cooper River Underwater Heritage Trail

Legend

-  Marsh
-  Water
-  Major Roads
-  Berkeley County

Underwater Sites

- 1 Strawberry Revolutionary War Shipwreck
- 2 Strawberry Ferry Landing
- 3 Pimlico Sailing Vessel
- 4 Pimlico Barge
- 5 Mepkin Plantation Boat
- 6 Mepkin Dock Structure



↑ to
Moncks Corner

Mepkin Abbey

Pimlico
Subdivision

Railroad Bridge

DR EVANS ROAD

PIMLICO BOULEVARD

52
PIMLICO BOULEVARD

City of
Goose Creek

Cypress
Landing

COOPER RIVER UNDERWATER HERITAGE TRAIL



Diving the Strawberry Shipwreck and Ferry Landing

HISTORY OF STRAWBERRY FERRY LANDING

Strawberry Ferry was established in 1705 on the western branch of the Cooper River. It was associated with the settlement of Childsburys. Like other colonial frontier towns, Childsburys strategic location on the inland water route was vitally important to the regions transportation infrastructure and economy.

Trade in diverse local resources and a variety of staple crops required the use of many different types of watercraft and suitable landings to load and unload produce. These craft included canoes, barges, sailing vessels, and steamboats. High ground was often separated from navigable water by vast expanses of tidal marsh. The problem of getting people, produce, and supplies to and from the waterways was solved by building causeways. Often a wharf or fixed pier where a vessel could tie up was added.

The Strawberry Ferry had two landings, one on either side of the river. The northeast landing is in pristine condition because of its location on the inside curve of the river and protection by heavy tree and sawgrass growth. The southwest landing, close to the shipwreck, is more eroded due to current action.

TRADE ALONG THE RIVERS

In the early days of the colony, European traders exchanged manufactured goods for valuable furs and skins from the Native Americans. The primary way to move these quantities of goods was by water. Following the deerskin trade on the lower riverine areas, came trade in lumber, cattle, indigo, and rice. Rice was a major and extremely lucrative crop in the 1700s and 1800s. Most of the plantations along the trail were involved in large scale rice production.

The lively plantation trade on the Cooper River was drastically interrupted by the American Revolution. Many plantations were evacuated and river traffic became centered on the transportation of military supplies. During



The Ferry Landing brick rubble extends 20 yards out from the riverbank. At low tide floor support rubble with stake and puncheon side support boards are visible. The beams have cut-outs for cross members. The brick floor is mixed with rubble and sand.

an expedition to chase the British out of Moncks Corner during the summer of 1781, Colonel Wade Hampton and his men, arrived at Strawberry Ferry on their way upriver. They found four vessels loaded with military supplies for the British and promptly burnt them.

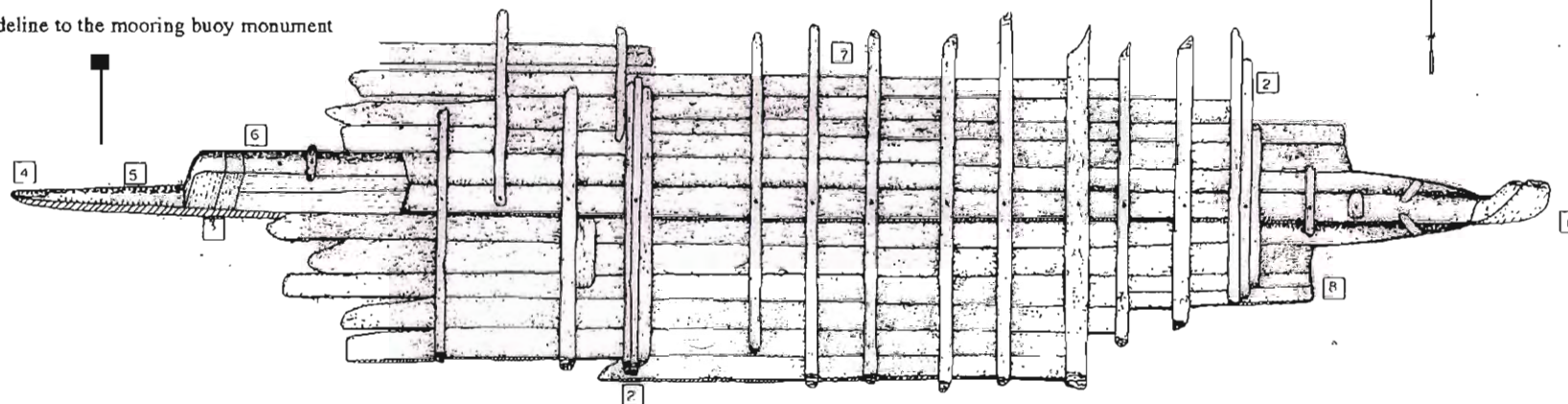
The Strawberry shipwreck displays evidence of burning on the timbers, and artifacts of British military origin are said to have been recovered by sport divers in the 1970s. Remaining components of the wreck include a stem and sternpost, keel, and 16 framing sets. The vessel lists to starboard with the bow pointing out into the river and is almost 13 meters in length.



Gunter Weber

Frame with Tag No. 6

44 foot guideline to the mooring buoy monument



STRAWBERRY SHIPWRECK
SOUTH CAROLINA INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY
MARCH 1986



- | | |
|----------------------|--------------------|
| 1. Stainpost | 5. Sheathing Tacks |
| 2. Bulkhead | 6. Deadwood |
| 3. Keel | 7. Floors |
| 4. Sternpost Morline | 8. Exterior Planks |

ARCHAEOLOGY

Numbered plastic tags mark each framing set, starting with number 1 on the starboard side in the bow area of the Strawberry shipwreck. Archaeologists use tags as a reference system when creating a site plan or map of a wreck. Timbers are drawn and measured. Observations are made about construction methods, repairs, types of fastenings used, hull shape, and the propulsion abilities of the vessel.

The Strawberry wreck was a sailing vessel--probably a small sloop or schooner. The keelson is missing, so it is not certain how many masts it carried. Frames number 4 and 13 are reinforced as triple framing sets. This additional strengthening could indicate the former presence of rigging, lifting, or mooring structures in these locations.

Small flat-headed copper sheathing tacks are embedded in outer hull planking in the starboard stern area and the stempost at the bow. Although the sheathing is missing, divers who visited the site in previous years report the presence of lead sheathing displaying the broad arrow, indicating that it once belonged to British Admiralty. In addition the vessel also had copper plates under the lead sheathing.

Until the latter part of the 18th-century ships were generally not sheathed with metal. As sheet metal became readily available with the application of steam power to

rolling mills, this material began to be used to sheath the better constructed ships. Cooper sheathing was introduced into the Royal Navy in 1761, to British merchantmen in 1770, the French followed in the 1790s, and it became common to U.S. craft after 1800.

Shipwrecks earlier than the 18th-century have been found with copper sheathing tacks. These were more likely to have been used for lead patches on more vulnerable parts of the hull. By the middle of the 19th-century, "yellow metal" or Muntz metal, a cheaper alloy of copper and zinc was introduced.

DIVING ADVICE

The distance from the monument to the wreck is 44 feet and the water depth is 21 feet. You will follow the guideline to the port stern section. The route to the wreck gives you a sense of the underwater environment comprised of a hard rocky marl bottom, sand, mud and silt. Logs are scattered along the route, making it an underwater obstacle course. When you reach the end of the guideline, look up at the wreckage towering above you (don't knock your head!).

Take note of the heavy construction to accommodate the rudder in this stern area. Swim along the interior length of the vessel following the line of plastic tags attached to the frames. The tags are located slightly starboard of the centerline.

Note that the keelson is missing. This is the long timber running down the length of the vessel to hold the frames in place.

When you reach the bow, swim around the outside to front, and look at the sheathing and tacks. Swim back around the outside starboard side looking up at the outer hull. If you want to, swim over the hull and down the frames back to the centerline of tags. These frames, that extend high up along the starboard interior, are fragile. Take care not to hang onto them.

If you continue swimming along the exterior starboard side, you will reach the stern configuration again. Notice the pattern of tacks and sheathing remnants in this area.

After your dive on the shipwreck, swim over to the landing on the surface. If you are facing the shore closer to the site, look to your right at a distinct clump of trees about 30 feet away from the mooring buoy. The landing extends out into the river from below this vegetation and is visible at low tide and a few hours afterwards. Swim along the brick rubble "road" out into the river. Take note of the log construct holding the rubble in place. Enjoy the underwater environment as you venture out along this historic aquatic pathway. Imagine the old boats pulling up here to land and load people, livestock, and produce.

COOPER RIVER UNDERWATER HERITAGE TRAIL



Diving the Pimlico Shipwreck

SHIPBUILDING

As the colony grew and began to thrive so did the boat and ship building industries. While not comparable with the shipbuilding activities of the northern colonies, shipbuilding became South Carolina's largest manufacturing industry. And just as important, was its impact on the local economy. In addition to shipwrights, the construction of a vessel needed the services of joiners, coopers, blacksmiths, timber merchants, painters, chandlers, glaziers, carvers, plumbers, sailmakers, blockmakers, caulkers, and oarmakers among others.

The extant ship registers show that between 1735 and 1775 more than 300 ocean-going and coastal cargo vessels, ranging from five to 280 tons burthen, were built by South Carolina shipbuilders. This included ships, snows, brigantines, schooners, and sloops. These names referred to the vessel's rig, that is its mast and sail arrangement, and vessels were seldom mentioned without accompanying it with its type. This preoccupation with a vessel's rig is understandable. Denoting the rig distinguishes the schooner Betsy, from the brigantine Betsy, or the sloop Betsy. Even more, those tall wooden masts and billowing sails of the various rigs were easily its most recognizable feature and the first part of a vessel that appeared as it approached over the horizon.

Undoubtedly, Carolina-built vessels were quite similar in most ways to those being built in Britain and the other colonies including the West Indies. The wide, rounded hull-shape of the oceangoing cargo carrier, with its blunt bow and tapering stern at the waterline--meant to imitate the shape of a duck gliding through water--and square stern cabin, had become, like the rigs themselves, fairly standard and widely copied by shipbuilders after centuries of development, in-



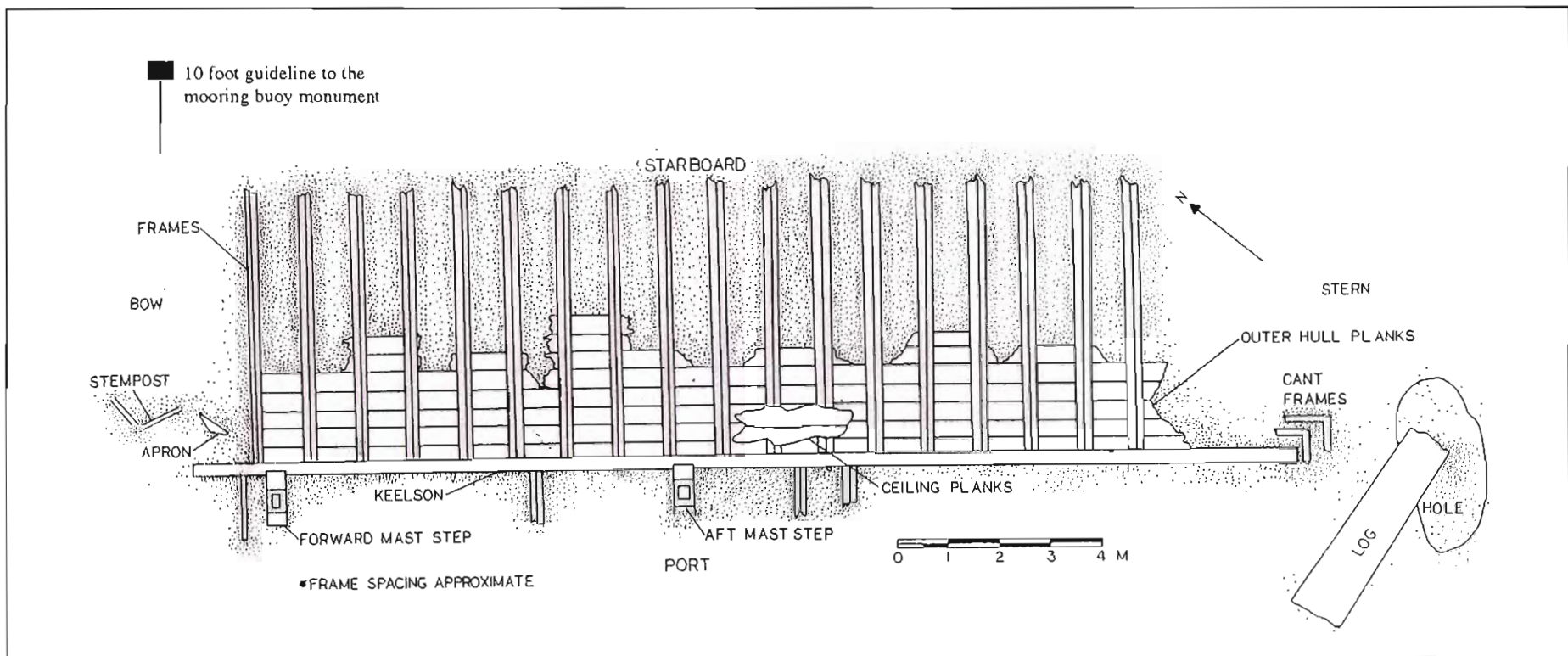
novation, and imitation. Since many of the shipwrights of colonial South Carolina were trained in the best English shipyards or in other parts of America, this is hardly surprising. Nevertheless, it would be hard to imagine that local shipwrights and boatbuilders weren't being influenced by local conditions and preferences and modifying the basic designs so that their vessels accommodated the needs of their customers.

SHIPBUILDERS

As early as 1703 and 1718, shipwrights were encouraged through bounties to emigrate to South Carolina and to construct large ocean-going ships. John Rose, the Hobcaw shipbuilder, had learned his trade on the Thames at the Deptford Naval Yard. His partner, James Stewart, had apprenticed at the Woolrich Naval Yard, also on the Thames, and many of the other prominent Carolina shipbuilders had learned the art of shipbuilding before arriving in the colony. Georgetown shipwright Benjamin Darling had come to Carolina from New England. Charles Minors who built vessels in Little River came from Bermuda, while Robert Watts who set up his shipbuilding business at the remote Bloody Point on Daufuskie Island, where he built the 170-ton ship St. Helena in 1766 and the 260-ton ship Friendship in 1771, had come to South Carolina from Philadelphia.

Once the shipbuilding industry was established, the use of skilled, cheap slave labor in shipyards became widespread. Planters soon realized that slaves trained as ship caulkers or carpenters were valuable assets. They were hired out to local shipyards, often causing tensions amongst white artisans. In 1744 Andrew Ruck petitioned the Carolina Commons House for attention to this problem. He requested relief from the great number of slaves, "employed in mending, repairing, and caulking ships...and working at the shipwrights trade." He stated that as a result white artisans, "could meet with little or no work to do."

Several ship carpenters and planters responded to the petition. They claimed that were entitled to work the slaves they trained. There was sufficient work for white artisans, but the main problem was that they requested exorbitant wages. The shipbuilding industry formed an important piece of South Carolina's dramatic mosaic of labor history.



THE DISAPPEARING SHIPWRECK

The large dimensions of this vessel and the robust scantlings, such as frames and planking, suggest that it was intended for offshore operation rather than on inland waterways. There is a possibility that it was used for the lumber trade, commerce, or even warfare. It may have sailed upstream to the "freshes" (freshwater zone in tidal rivers) as a measure to rid the vessel of marine organisms that attacked the bottoms of wooden ships in salt water. Alternatively, it may have been seeking shelter upriver during a hurricane.

The Pimlico shipwreck is located directly off a small island opposite Pimlico subdivision. The depth is 20 feet and the distance along from the wreck to the mooring buoy monument is ten feet. The Pimlico shipwreck is periodically exposed and buried by sand. On some occasions, the shipwreck disappears completely! Generally, only half of the shipwreck is exposed on the starboard side.

The short guideline takes you to what we believe is the bow area. The stem and disarticulated apron lie offset to the starboard side of the wreck at the very end. You will see the tagged frames ends jutting out of the sand, sometimes extending down as far as the keelson. Swim along the frames towards the stern. You are heading out towards the river channel. The keelson extends 21 meters (69 feet) from fore to aft. If the wreck is exposed, you might be able to see the keelson and remnants of the outer hull planks.

Two saddle maststeps, which have separated from the wreck, lie on the port side of the keelson. These saddle steps were carved out of separate pieces of wood that were notched to fit over the keelson. In contrast to the maststeps on smaller vessels, that were essentially rectangular recesses carved directly into the keelson, the saddle steps provided greater versatility in altering the positioning of the mast. This was useful in the event of the function of the vessel changing, or re-balancing the vessel when adding or removing a mast. According to sailing lore, coins were traditionally placed in a maststep under the mast to bring the vessel luck!

At the stern end of the vessel, you will see some loose cant frames. These frames were used at vessel extremities (the bow and stern areas) where the hull shape became narrower. Cant frame were a steeper V-shape. At the stern, a large hole has been scoured out of the sand. It is filled with logs and artifacts such as green bottle bases, stoneware and creamware. These artifacts were left in place for the purpose of viewing.

COOPER RIVER UNDERWATER HERITAGE TRAIL



Diving the Pimlico Barge

PIMLICO PLANTATION

The barge is located off Pimlico subdivision, formerly Pimlicop plantation. After the Revolutionary War, many tracts of land under Loyalist ownership were split up and sold. Pimlico was a tract which was formerly part of Mepshaw plantation. It became the property of the Ball family, a prominent Cooper River family owning many plantations. Pimlico was owned by Hugh Swinton Ball who married Anne Channing. They had several children who all died very young. Mr. and Mrs. Ball both died in a fiery explosion aboard the steamer *Pulaski* on their way to Charleston from New York in 1838.

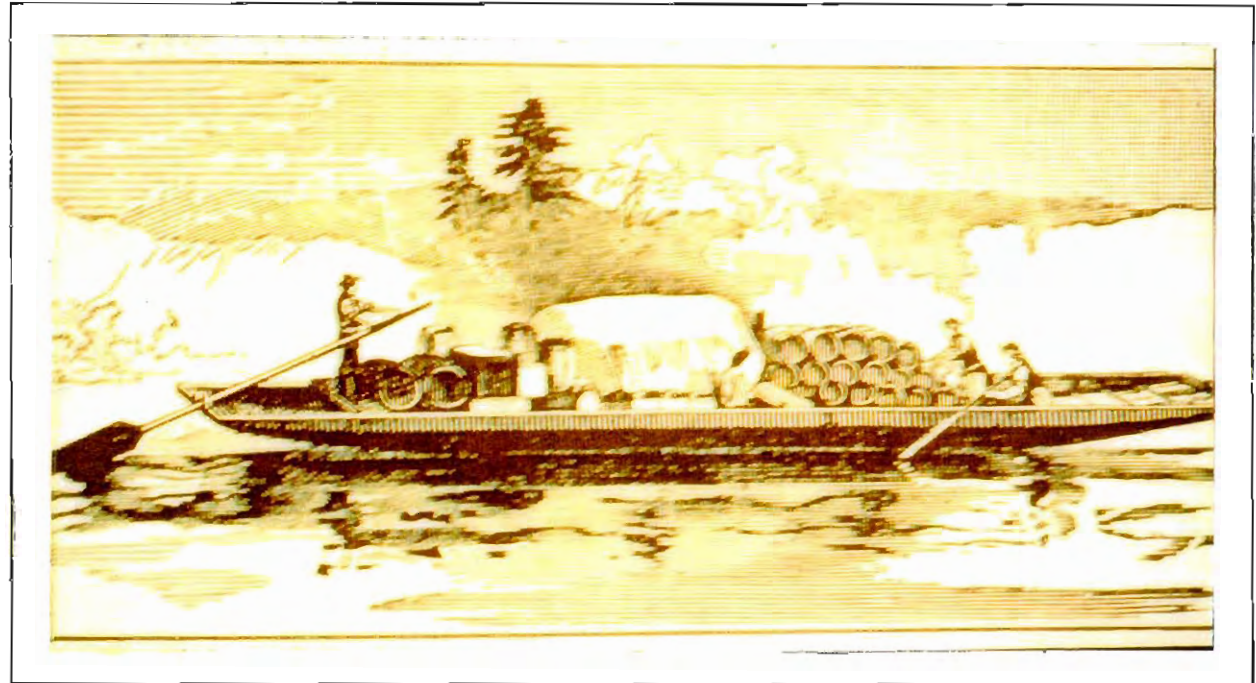
The lack of surviving family to inherit the property resulted in a lawsuit. The court ruled in favor of Mrs. Ball's family, the Channings of Boston and a parcel to a nephew, Elias Nonus Ball. Part of the property was split up and sold. The people of Cooper River were outraged and protested when, to make a greater profit, the Northerners who owned the land sold the slaves as individuals instead of the southern gentleman's custom of selling in families.

The father of Elias Nonus Ball, Elias Octavius Ball, invented the first mechanized rice thrasher on Pimlico plantation. It was run by the use of a water wheel shaft instead of the usual pestle.

RICE CULTIVATION

Rice plantations like Pimlico had the benefit of the tidal effects of the river for irrigation of the fertile swamp-like paddies. The maintenance of retaining mudbanks (dikes) of the paddies and the harvesting and threshing of rice was extremely labor-intensive, and a slave laborforce and the use of boats, especially the barge, was a vital part of the economic equation in South Carolina.

After the Civil War, the revival of the "plantation barge" may have occurred at a time when the abandoned rice fields became popular duck hunting preserves. The widespread adaptation of plantations into hunting preserves ensured continued survival of the dike system and the barge well into the mid-20th century.



THE PIMLICO BARGE

Barges were basically flat, rectangular platforms of shallow draft and minimal freeboard. They were rowed, poled and propelled by the tide. These work boats operated on plantations and in the calm waters of South Carolina rivers, most often as ferries. They carried people, produce, supplies, staple crops and were also used in later postbellum phosphate mining operations.

The Pimlico barge lies on a marl and sandy substrate. It has an overall length of 39 feet and beam of 15 feet. The planked sides are 3 feet high. The assembly of the ramps at either end consists of logs (forming a chine) with two planks attached on top for extra height. There are two layers of floor planks. The interior floor planks run transversely and the exterior planks longitudinally. Small backing pieces, more like thick planks, attach the side planking to the barge.

The presence of towing rings suggest that the barge, or a train of barges, may have been pulled behind a steamboat to carry additional cargo or supplies.

BARGES: THE UBIQUITOUS WORKBOATS OF THE RIVER

Barges represented part of a plantation fleet which included other boats such as canoes, sloops or schooners. A plantation diary describes the variety of craft as serving as "light carts and carriages" and that their purchase, building and handling was an integral part of the planters life.

The size of a barge seems to have been a significant factor in relation to its use. Larger barges were used for tasks such as harvesting rice and moving people and goods, whereas smaller ones were used for carrying rice seed, mud for breaks, and other light work. Barges carrying rice were often decked to protect cargoes. There is also mention of awnings or protective fabric covers.

Plantation records describe barges carrying the framework of a house, furniture, and supplies to river homes. In addition to their role as workboats, they were also used for important social occasions. Guests were occasionally rowed in decorated barges by slaves to important social occasions like weddings. The slave oarsmen were dressed in livery and, as they rowed, improvised songs in honor to the bride and groom.

PHOSPHATE MINING

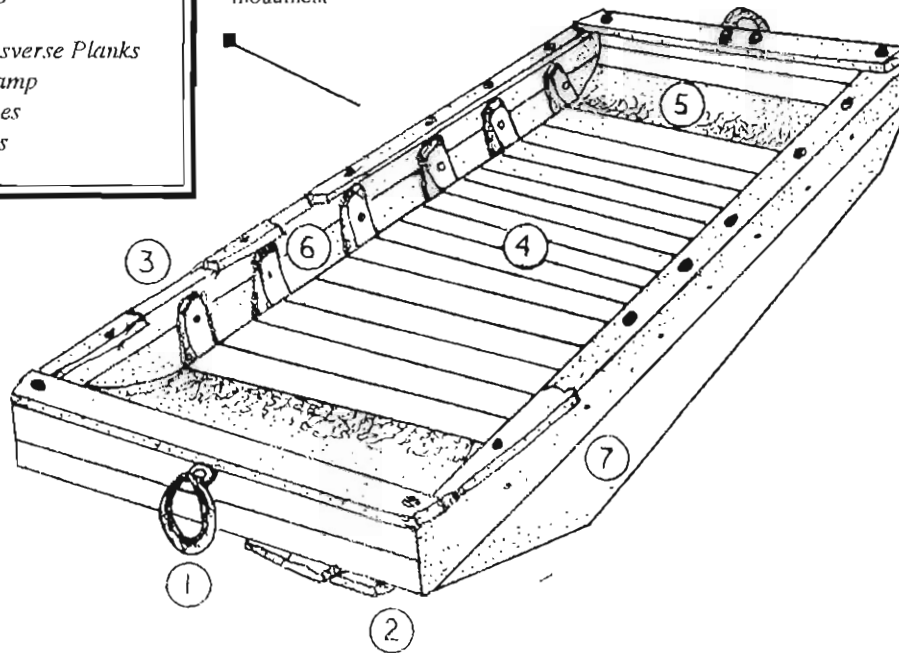
It was only after the Civil War that phosphate was mined extensively in South Carolina. It was dredged from rivers bottoms and mined in shallow trenches along riverbanks. The phosphate rock (also known as marl rock) was crushed and washed in preparation for supplying the main ingredient for fertilizers, greatly needed by farmers. Many years of crop production left the soil badly depleted. The rock was carried in sturdy barges and then transferred to schooners for shipments both at home and abroad.

INDUSTRIAL BARGES

Some of the wooden barges built in the state came from the carpentry shops of Santee-Cooper Public Service Authority. This organization built the Pinopolis Dam above the headwaters of the Cooper River. A fleet of barges was built on the Cooper River specifically for the purpose of transporting fill and machinery for the dam. Most had vertical transom stern designs and were used as "push barges."

1. Towing Ring
2. Exterior Longitudinal Planks
3. Gunwale
4. Interior Transverse Planks
5. Chine Log Ramp
6. Backing Pieces
7. Planked Sides

35 foot guideline to the mooring buoy monument



Artistic drawing of Pimlico Barge

DIVING ON THE PIMLICO BARGE

This is a residential waterfront area. Please be considerate towards homeowners when diving on this site. The distance from the monument to the wreck is 35 feet and the water depth is 36 feet. Start your dive on the barge by examining one of the towing rings on the outboard ramp at one end of the barge. Look underneath and observe the ends of the outer floor longitudinal planking which are coming loose from the inner layer above. The barge is lifting slightly off the marl substrate on the river bottom. A very large catfish has often been observed in the space beneath the barge and the bottom. Don't be frightened by two eyes peering back at you. He's, or she, is fat and complacent!

Swim over the side of the hull into the interior of the barge. Move slowly along the interior perimeter from one backing piece to the next. These backing pieces still have archaeological tags attached to them. When you reach the corner at the other ramp end, feel the chine log. Look over the edge of the ramp and see the other towing ring.

Work your way back to the starting point at the other end of the barge, again swimming along parallel to the backing pieces. Note the holes in the gunwales. These probably held oarlocks. The gunwale and gunwale cap are very eroded in places. Above each backing piece on the gunwale is a fastening or hole for a missing fastening. One side has a higher build-up of sand due to the orientation of the barge in relation to the prevailing tide. Alternatively, you can swim over the edge and move along the outside of the barge.

This barge is well preserved and divers have commented that it feels like being inside a giant bathtub. Keep your gauges secured and be careful about tangles of old fishing line.

COOPER RIVER UNDERWATER HERITAGE TRAIL



Diving the Mepkin Plantation Wreck

PLANTATION BOATS

Small plantation-owned schooners and sloops were used for commerce within the state, to other colonies, and to the West Indies. Compared to larger vessels, they paid less duty, and required less expenditure in construction, maintenance and operation. Only decked vessels (although this term was often open to interpretation) and those that ventured to ports outside of the colony were required to be registered. Non-registered vessels conducted trade in the rivers and short coastal voyages, carrying plantation produce to centers like Georgetown, Charlestown, Beaufort, and Savannah.

Many of these plantation vessels had names and the hulls were painted a variety of colors. The hull might be bright blue with a black waterline, contrasting sharply with the bottom of the hull coated in white lead to prevent barnacles and other bottom fouling growth from proliferating. Newspaper snippets describe plantation boats as ranging from 40 to 45 feet with a draft of 5 to 6 feet. Another important quality was how many barrels of cargo could be carried by the boat and how much water it would draw when loaded.

The plantation boat crew were primarily slaves, including the captain or patroon. The patroon was in charge of the boats and training the boatmen in boating skills and rowing songs. Boatmen represented a stratified segment of slave society having more independence and freedom of movement than field hands. They often wore boating uniforms or osnabergs and are mentioned by name in plantation records. Correspondence to and from Mepkin Plantation discusses several boatmen. Among the slave boatmen who worked on this plantation were distinctive personalities like Achilles, Tom Peas, and Scaramouche—who were important sources of information about the outside world for others.



Plantation Sloop

MEPKIN PLANTATION

In June 1761, several editions of the South Carolina Gazette advertise Mepkin plantation as "Containing 5000 acres old measure, situated on the north side of the Cooper River, near Strawberry, whereon is a high and pleasant bluff close to the river, and a good landing place. Any vessel that comes here may go to the said landing." The Mepkin wreck is located adjacent to the former plantation which belonged to the Laurens family since the late 1600s. The most famous member of the family was Henry Laurens.

HENRY LAURENS: A PLANTER, MERCHANT AND POLITICIAN

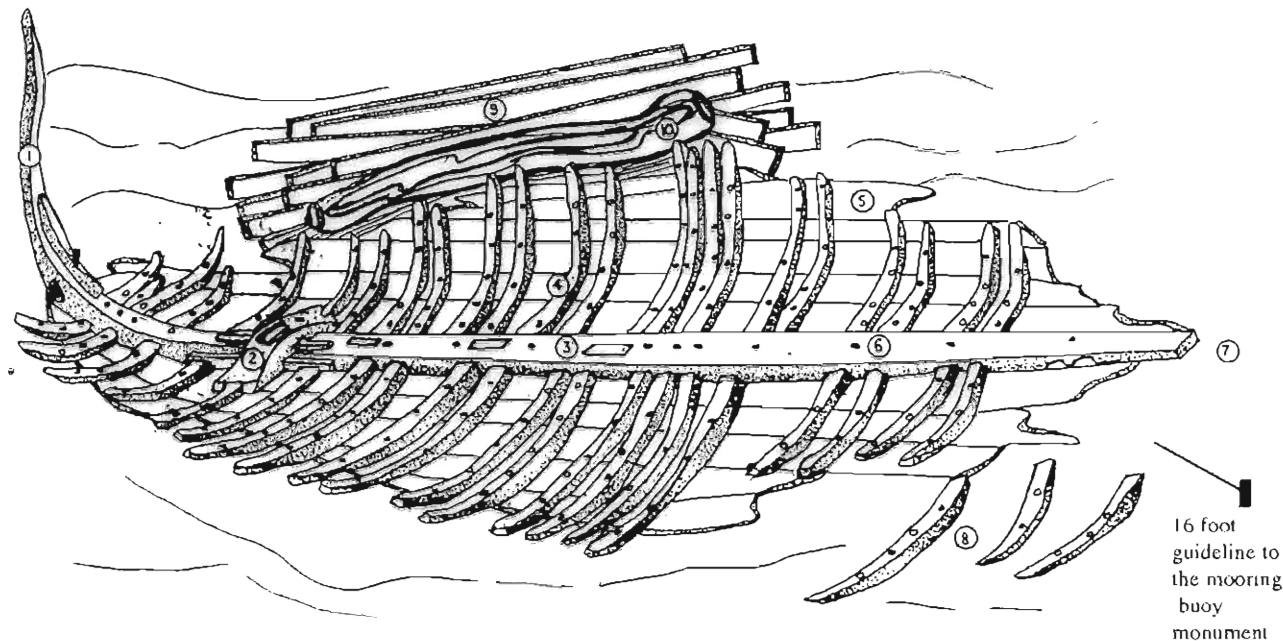
A leading entrepreneur, Laurens was not only a merchant but a prominent planter, ship owner, slave trader, and owner of several other plantations. In 1744 he was sent to London to obtain training as a merchant, and in 1746 he was instrumental in organizing the first fire insurance company in the United States. As a leader and an army officer he participated in the French and Indian Wars. In 1761 he was commissioned to collect recruits and march into the Appalachian Mountains. He was elected to the House of Assembly in South Carolina in 1757 and was a member almost continuously until the Revolution. He was also the selected first and second president of the Councils of Safety and President of the First Provincial Congress of South Carolina in 1775.

Other interesting details about Laurens was that he was captured during the Revolutionary War and held in the Tower of London for fourteen months. He was released in exchange for Lord Cornwallis. With the exception of the Native Americans, Henry Laurens was the first documented case of cremation, through his personal request, in the nation.

The former plantation is now a monastery which is open to the public. If you are interested in exploring the grounds of the Abbey by land, stop at the reception center to meet with the Guestmaster. The grounds are open to the public seven days a week from 8:30 am to 4:30 pm. No reservation or fee is required. For large group organized tours or overnight stays, reservations are necessary. The plantation house is gone, but there are paths leading through the old oak trees to the river. Visitors can also tour the cemetery down near the bluff. Many of the Cooper River families are buried there.

THE MEPKIN SHIPWRECK

1. Stempost
2. Mast Step
3. Stanchion notches
4. Frame
5. Outer hull planking
6. Keelson
7. Stern area
8. Loose frames
9. Cargo of Shingles
10. Log



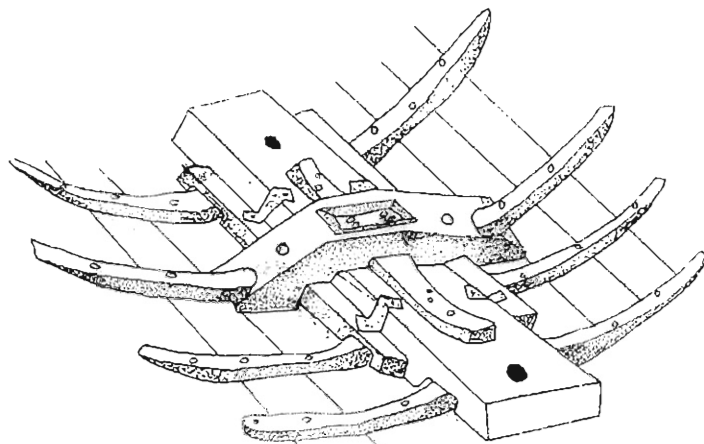
Artistic Sketch of Site

DIVING ON THE SHIPWRECK

The shipwreck lies on the river bottom listing to the port side where it rests on a hard marl bottom. Many big logs are strewn around the site. The distance from the monument to the shipwreck is 16 feet and the water depth is 22 feet. This site is close to a monastery. Please be considerate of the residents who often wander down to the water's edge for meditation. Enjoy the sound of the ringing church bells and the view of the unusual anchor-shaped cross on the steeple.

Start your dive at the stern. You will notice that the rudder is missing (it was recovered in the 1970s). Swim back to the bow following the keelson centerline. Look along the side of the keelson to see how it is notched to fit over the floor timber part of the frame. These floor timbers are sandwiched from the keelson to the keel, and held in place by through-bolts visible on top of the keelson. There are a total of 23 frames. Cut into the top of the keelson are three shallow rectangular notches, five and a half feet apart. These were probably used to step stanchions to support a ridgepole for holding a tarp over the cargo area. Go to the ends of the frames to see on the starboard side to see the pile of cargo shingles embedded in the riverbank above the wreck.

As you approach the bow area, note the heavily constructed mast step that straddles the keelson. In the center of the step are the shallow auger marks made by the boatbuilder. The mast step configuration is notched to fit over the keelson and the two short sister keelsons. For even more support, the mast is braced fore and aft by two curved pieces of wood secured to the keelson by iron bolts and square nails. When you reach the bow end of the wreck, note the height of the stempost and the hole at the bottom-possibly for hauling the boat onto beaches for loading or careening.

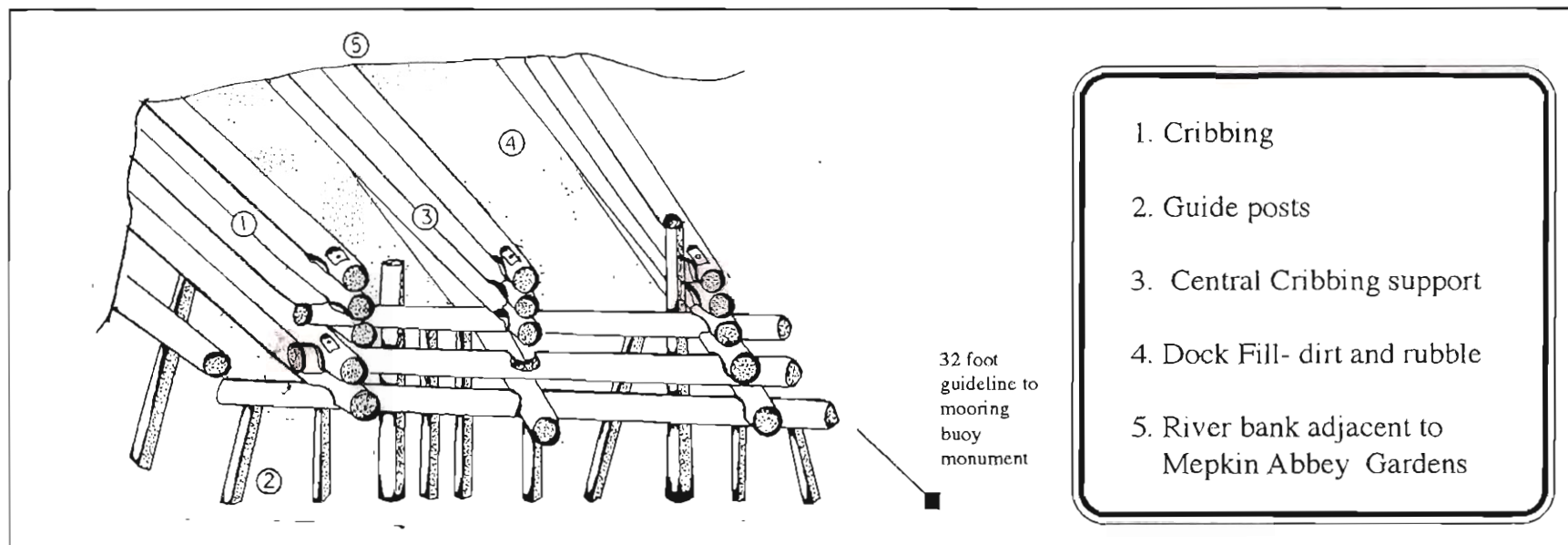


Mast Step



COOPER RIVER UNDERWATER HERITAGE TRAIL

Diving the Mepkin Dock



PLANTATION DOCKS STRUCTURES

A submerged rectangular wooden structure, resembling a log cabin without a roof, is currently a home to catfish and tiny hogfish in the bend of the Cooper River near Mepkin Abbey. The site is located 32 feet from the monument at 22 feet of water depth. It is an example of a typical wooden dock structure historically used by early riverside residences in South Carolina. A dock or wharf served as a platform to load and unload plantation boats.

Inter-locking palmetto logs were used to construct a crib which was weighted down and sunk in the river. The logs are attached by means of long wooden guide posts visible at the bottom of the cribbing

structure. In addition to the cribbing forming the sides of the rectangle on the Mepkin dock, a layer of cribbing was added to the middle of the rectangle dividing it into two compartments. This provided extra stability and strength for the structure.

Bricks, packed soil, ballast stone, shell, brick rubble, gravel, and even household trash such as broken crockery provided the necessary weight and filled the inside of the cribbing. Archaeological investigations of landing and docks exhibit differences in fill materials. This may be the result simply of the availability of materials or a conscious effort to make a dock stronger or heavier. A heavier dock might be used to

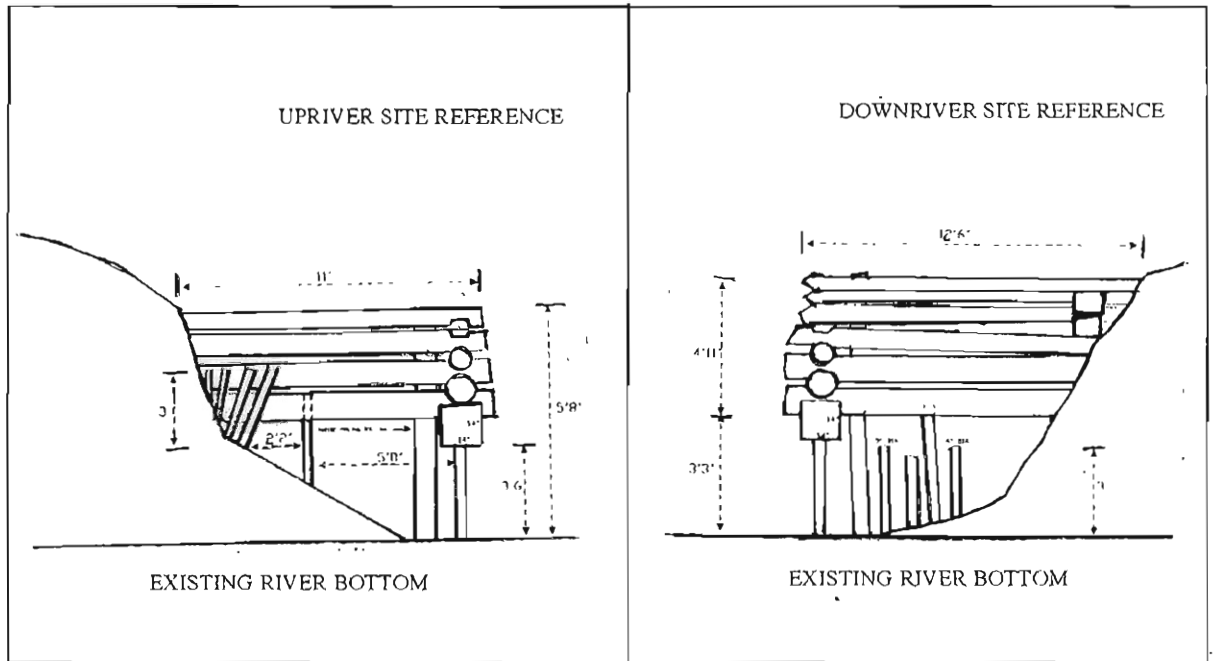
careen vessels or accommodate heavy loads of antebellum rice or phosphate. Some docks may have been rebuilt or recycled for changing industries or land use through time. With information on more docks in South Carolina rivers, it might be possible to trace the engineering evolution from small-scale plantation use to more large-scale plantation agriculture. The more data accumulated, the more evident these patterns become.

This particular dock was probably used by the adjacent property owners—the Laurens family. Numerous items such as pipe, bottles, buttons, and a pen with the name of the Laurens family inscribed on it have been found in vicinity of the structure.

AVOCATIONAL ARCHAEOLOGY

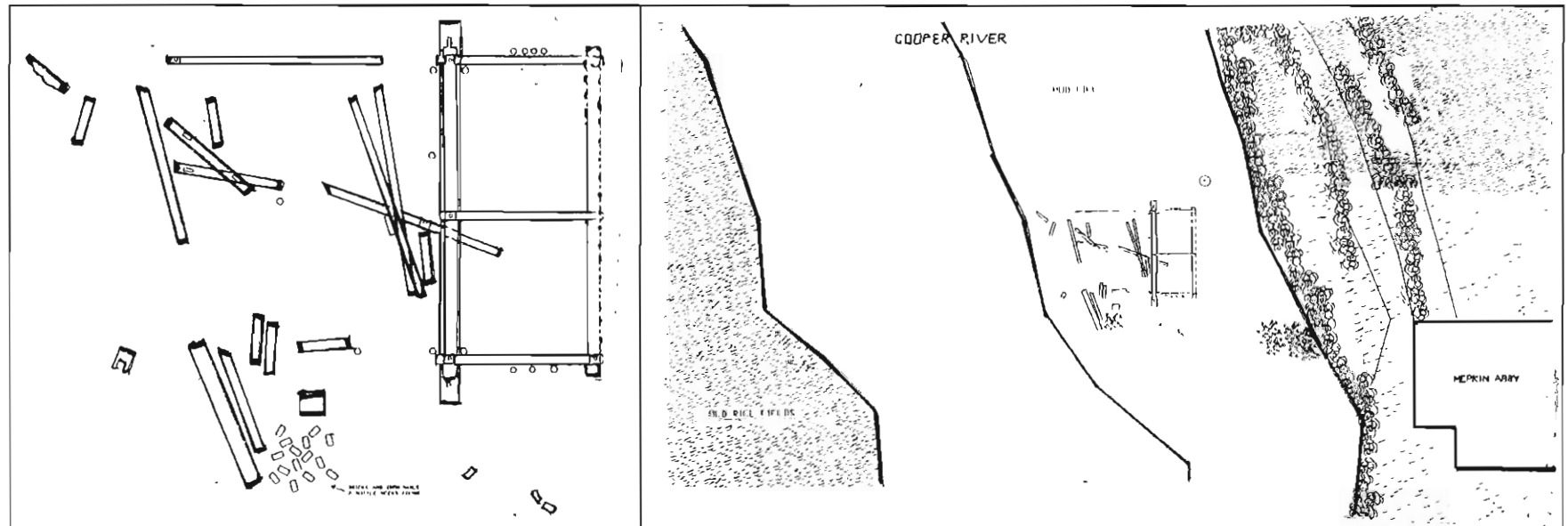
For many divers in South Carolina, crib-built dock structures have simply been used as landmarks or as artifact collecting sites. Once stripped of their fill and surrounding debris field, they are forgotten. Like shipwrecks, the remaining structures represent examples of past engineering, construction and craftsmanship techniques. They also form artificial riverine reefs and attract a variety of fish.

Drew Ruddy and Fred Wood, local divers with avocation archaeological skills, mapped the dock design at this Mepkin Abbey. Equipped with plastic tape measures, underwater slates, and attempting to look through the eyes of construction engineers they intricately measured each remaining timber. The locations of debris field scatter were ascertained to add to the overall picture. Using a computer-aided drawing package, the measurements were translated into a three dimensional drawing of the site.



View of Dock from Upriver and Downriver Sides

Drawing by Fred Wood and Drew Ruddy



Dock and Debris Scatter

Drawing by Fred Wood and Drew Ruddy