

An aerial photograph of Malloys Bay, showing several long, narrow wooden structures that are the remains of abandoned cargo ships. The ships are partially submerged in the dark water, with their hulls and masts visible. The surrounding area is lush with green trees and vegetation. A small, sandy island is visible on the left side of the image.

THE GHOST FLEET

Low tide reveals the hulks of abandoned World War I wooden cargo ships in an aerial view of Malloys Bay.



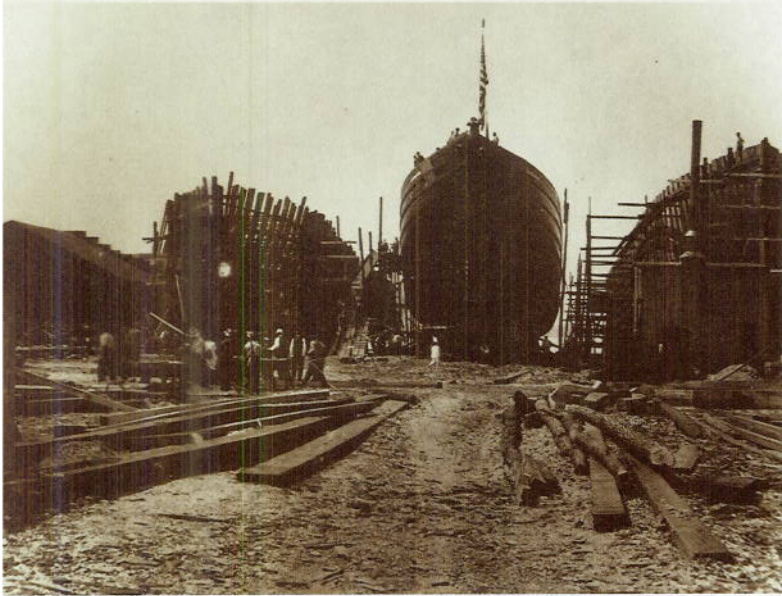
OF MALLOW'S BAY

WHAT IS AN ENTIRE DERELICT FLEET DOING
IN A SECLUDED CORNER OF THE POTOMAC?

Take a boat down the Potomac, thirty miles south of Washington, D.C., round the bend at Sandy Point, and enter Mallows Bay. Press forward through the shallow waters of the little bay, surrounded by tall, forested bluffs; thick algae, smelling of age and rot, will swirl about the prow of your boat as it pushes slowly ahead. The silence may be interrupted only by a great heron fleeing before you. You are entering an eerie, little-known region populated only by great and hoary relics of generations past. It holds the remains of shipwrecks, more than a hundred of them, disguised by a thick green man-

BY DONALD G. SHOMETTE

Color photographs by Dennis Brack



tle of vegetation and lying about in utter profusion. What are these giant, decaying wooden behemoths? How did they come to slumber in this backwater of the Potomac, more than 65 miles from the Chesapeake Bay and 150 miles from the Atlantic Ocean?

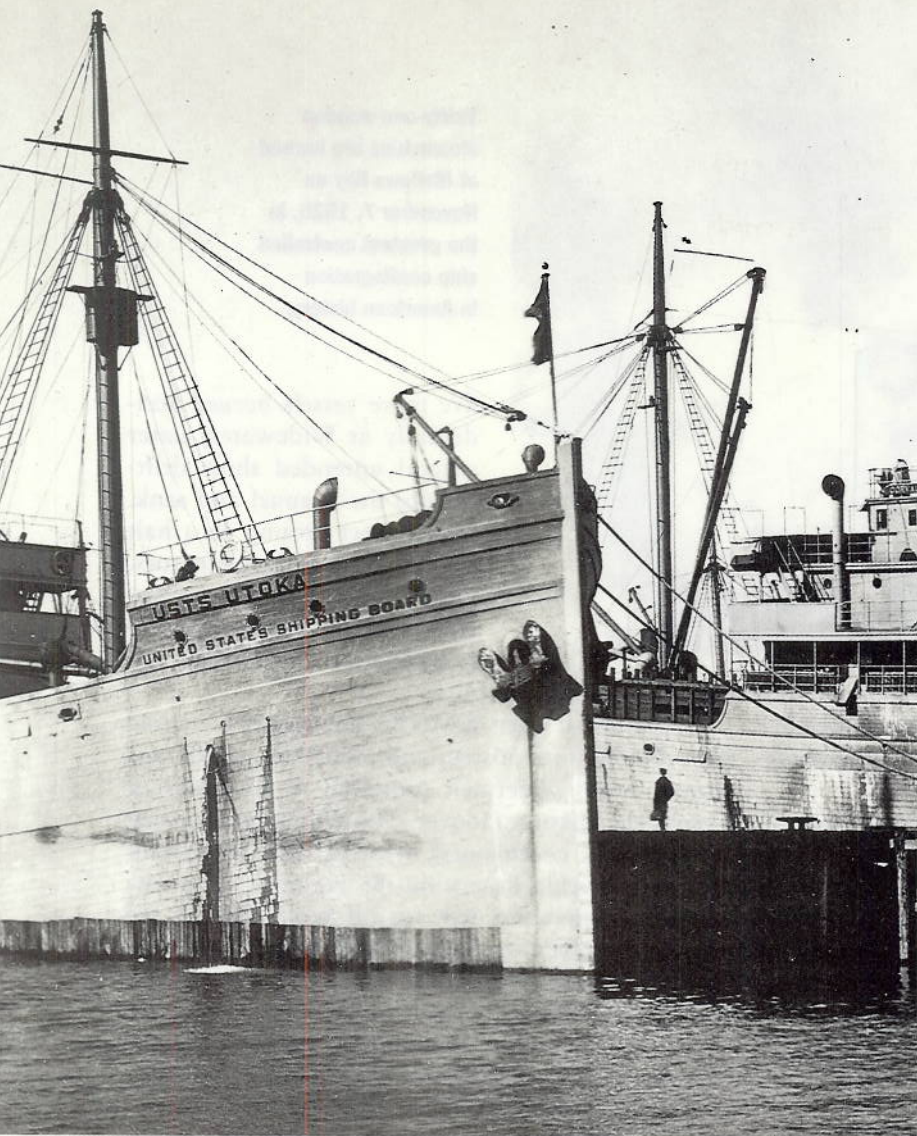
The story begins on April 2, 1917, the day President Woodrow Wilson issued a national call to arms against imperial Germany. Europe had been at war for more than two and a half years, and America's new allies were reeling from the devastating onslaught of Germany's campaign of unrestricted submarine warfare. Now that the United States had joined the fight, it needed to move almost everything required for waging war—men, arms, and supplies of all sorts—across the submarine-infested Atlantic. The logistics were intimidating. Between 1899 and 1915 the shipyards of America had launched only 540,000 tons of blue-water shipping; now, to maintain a large army in Europe and counter the losses imposed by the submarine offensive, the United States would have to build 6,000,000 tons in 18 months. To do so would require the greatest, most innovative and aggressive ship-building program in history, surpassing by 50 percent the total production of the Western world between 1899 and 1915.

In February 1917 Frederic Augustus Eustis, a well-known engineer and yachtsman, had submitted a scheme to William Denman, chairman of the infant United States Shipping Board, to meet the emergency need. In lieu of costly steel vessels, Eustis called for the establishment of a large wooden-ship-building program. It would be fast and cheap, it would not tie up shipyards engaged in naval construction, and it could produce vessels with easily trained semiskilled labor faster than German U-boats could sink them.



Denman saw merit in the concept and secured the blessing of President Wilson. The Shipping Board formed the Emergency Fleet Corporation (EFC) to oversee the construction of the ships by private contractors. Gen. George W. Goethals, the famed builder of the Panama Canal, was appointed general manager.

Denman's initial plans called for launching 1,000 wooden steamships within 18 months, each powered by 1,500-horsepower engines, capable of a maximum speed of 10 knots, and averaging 3,500 dead-weight (cargo capacity) tons. They would be 240 to 300 feet long and up to 50 feet abeam. Each ship would be built from 1.5 million board feet of yellow pine or Douglas fir. A standard design, drawn up by the EFC's chief naval architect, Theodore Ferris, would serve as the basic pattern. All wooden components would be pre-cut, numbered, and finished to specifications before shipment to fabrication yards. New technologies would have to be developed to facilitate mass production, and a nationwide complex of special schools would have to be established to train personnel. It was a tall order, but soon 35 shipyards on the Pacific Coast, 33 on the Atlantic Coast, 18 on the Gulf Coast,



Opposite: Three U.S. Shipping Board steamers in varying stages of construction. Left: The *Utoka*, one of 152 ships that ended up at Mallows Bay.

and 1 on the Great Lakes were under contract to build wooden steamships. Many of the yards existed only on paper until the contracts were awarded. Some critics complained that all anyone needed to secure a government contract was “a piece of land and a keg of nails.”

Massive orders for timber suitable for keels, frames, and hull planking were being placed by July 1917, but a debilitating power struggle between Denman and Goethals over the direction of the program held up approval for the first 433 wooden steamers until October. Paperwork and bureaucracy proliferated, while opposition to the very idea of a wooden steamship program, much of it fostered by the steel industry, blossomed overnight.

By November chaos had befallen the program. Millions of feet of timber had accumulated at the shipyards, most of it still green and much of it cut to incorrect specifications. Yet somehow the program lurched forward. On December 1, 1917—eight months after America’s entry into the war—the first wooden bottom, the *North Bend*, was launched into the Pacific after 120 days of construction. Not until the next May

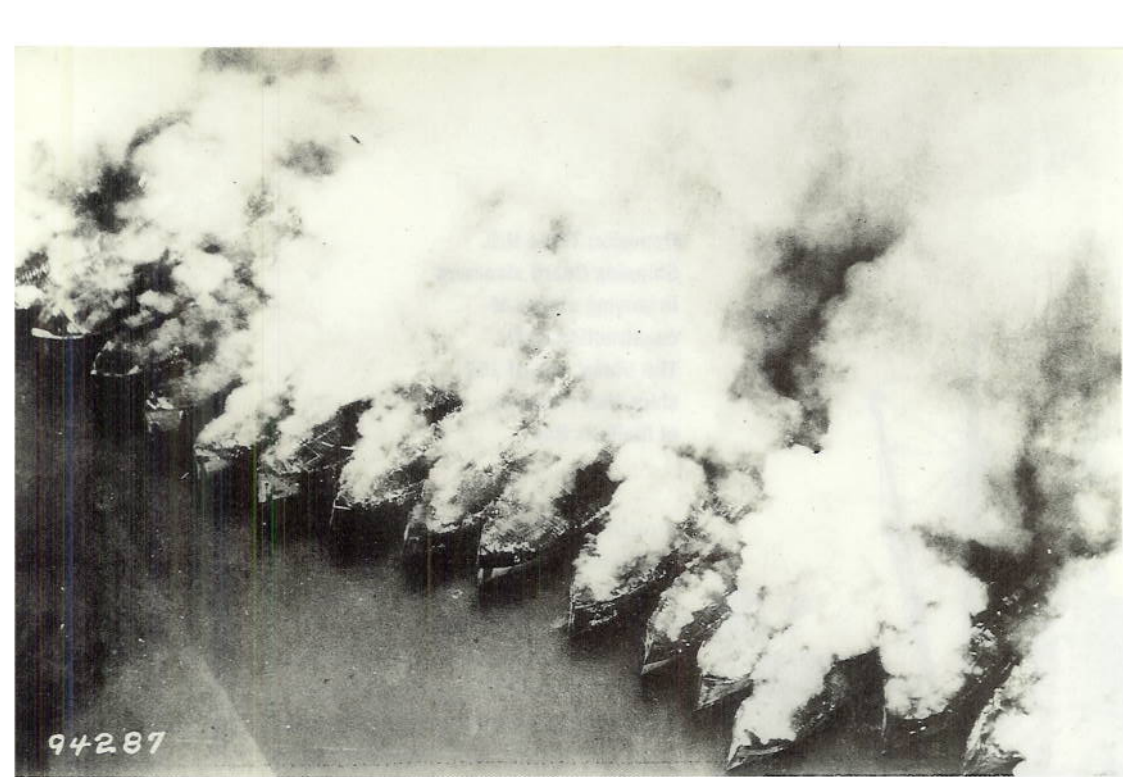
would the first wooden steamship (not the *North Bend*) finally be outfitted, undergo sea trials, and be readied for actual duty.

By then bureaucratic infighting had squelched the EFC’s early optimism. Accusations of mismanagement had begun to appear in the national press in March: charges that the ships, built with unseasoned wood, were dangerously unseaworthy. The Shipping Board vehemently denied rumors that the first hull launched had sunk in ballast and the second had gone down after being outfitted. By October 1918 only 134 wooden steamships had been completed; another 263 were less than half finished. When Germany surrendered on November 11, not one of them had crossed the Atlantic.

Congressional charges of bureaucratic ineptitude within the program followed in the wake of the

Allied victory. Ten days after the surrender, Sen. Warren G. Harding of Ohio and Sen. William M. Calder of New York called for an investigation and an immediate end to production. The results of the Senate probe were shocking. Of the 731 wooden steamships contracted for, only 98 had been delivered. Of these, only 76 had carried cargo in trade, mostly in Pacific coastal waters. Charges flared that the vessels were badly designed, weakly constructed, and poorly caulked, that they leaked excessively and were too small and expensive for long-distance cargo hauling. Some were unable to withstand even their own engine vibrations. One foe of the programs declared that “a wooden freighter steamship is something that ought never to exist, and when built will not exist long.”

Despite congressional indignation, the ships continued to slide down the ways. By September 1919, 264 of them had been placed in operation, 195 had made an Atlantic passage, and 40 had done it twice. But their days were numbered. The dismal postwar world economy and the resul-



Thirty-one wooden steamships are burned at Mallows Bay on November 7, 1925, in the greatest controlled ship conflagration in American history.

five more vessels burned accidentally at Widewater. Later several untended ships drifted into the channel and sank. The project ground to a halt as government investigators, worried about the fleet's potential for becoming a hazard to navigation, demanded a full

reappraisal of the program. More than a tant glut of shipping soon resulted in the "great 1920 tie-up." Moreover, the introduction of the diesel engine had, almost overnight, made the reciprocating steam plants of the wooden fleet obsolete.

On December 27, 1920, the Shipping Board moved to dispose of what some critics called the grandest white elephant ever produced: 285 leaking wooden and composite wood-and-steel ships. Most of the fleet lay mothballed in Virginia's James River, kept afloat with two tugs and a small army of men at a cost of \$50,000 a month. This armada, which had cost American taxpayers between \$700,000 and \$1,000,000 per vessel, was offered for sale as a single unit "as is and where is."

The government repeatedly called for bids but rejected each one as too low. Finally, in September 1922, 233 ships of the fleet were sold for \$750,000 to the Western Marine and Salvage Company (WM&SC), an Alexandria, Virginia, firm. Its primary objective was anything but maritime: It intended to scavenge the ships for marketable scrap metal. WM&SC immediately sought permission from the War Department to haul the fleet from the James to the Potomac, where it would be kept at a 1,500-acre government-authorized mooring area off Widewater, Virginia, 30 miles below Washington, D.C. From there each ship was to be individually towed to Alexandria to have its machinery and other equipment suitable for scrapping removed, and then be turned back to the anchorage, where the hull would be burned to the water line, stripped of smaller fittings released by the fire, dragged into a nearby marsh, burned once more, and ultimately buried beneath dredge spoil.

In October 1922 the dismantling process began at Alexandria. Immediately the project suffered the first of many setbacks. When two vessels accidentally caught fire at dockside, the town's entire waterfront narrowly escaped total destruction. In April 1923

reappraisal of the program.

Five months later WM&SC submitted a revised plan. Bonds were posted, and a burning permit was issued. Local watermen protested to Secretary of Commerce Herbert Hoover. The Widewater burning ground, they complained, was the most important shad and herring fishery on the Potomac. Their arguments went unheeded, for on September 21 the steamer *Aberdeen* was burned, systematically stripped of all fittings, beached in the wetland, burned again, and totally reduced (burned to below the water line). The experiment was a complete success, although the remains littered the shoals. Subsequent tests, however, were anything but.

By mid-October four vessels had been burned, but only two had been beached. The other two sank at anchor, impairing local navigation. Once more the watermen protested, and when, on October 15, the government announced that as many as 218 vessels were slated to be destroyed at Widewater, the barrage of protests increased to such a pitch that operations were temporarily halted.

It was becoming clear that WM&SC would have to acquire its own territory in which to burn the ships. In April 1924 the company bought 566 acres of farmland girding a small, remote indentation on the Maryland shoreline opposite Widewater, known locally as Mallows Bay. The acquisition came none too soon, for 123 ships already lay at the Widewater anchorage and at least 80 more were due to arrive from the James momentarily.

The company streamlined the wrecking process. Four great marine railways, wharves, offices, storage buildings, and workers' dormitories were erected at Sandy Point, on the northern lip of the bay, to facilitate the removal and burial of the burned-down hulks.

But WM&SC's difficulties proliferated. Maryland



Left: The bow of the *Bushrod*. Right: A map shows the positions of the derelict hulls. The rectangular shapes are barges.

watermen now began to protest the use of Mallows Bay. The company, faced with mushrooming expenditures, had yet to turn a profit. The Navy chimed in with its own concerns that the vessels at Widewater were obstructing navigation and might block strategic egress from the Washington Navy Yard.

WM&SC was forced to act—and dramatically. On November 7, 1925, 31 vessels were bound together in a line by a great steel cable. At 5:00 A.M., just before sunup, with government representatives, salvors, and press hovering nearby in tugs and motorboats and a lone biplane flitting about overhead, the greatest peacetime maritime *coup de grâce* up to that time was administered. On a signal, 10 men raced about the decks of the ships touching flaming torches to oil-soaked waste. “As the torch was applied,” the *Washington Post* reported, “a horde of squealing rats plunged into the water.” From the nearby Marine base at Quantico, Virginia, the flames appeared “like the red ball of the sun rising in the east.” Having, by some oversight, not been informed of the pending conflagration, the Marines were alarmed and turned out by the hundreds to fight the fire before being belatedly told of its cause.

The blaze was spectacular, and the program seemed to be back on track. The hulks were hauled to Mallows Bay and the wrecking process began anew. But soon, as before, owing to poor management and planning, work slowed to a crawl.

As the years slipped by, the company’s sales of salvaged goods failed to keep pace with its costs. By August 1929 WM&SC had brought a total of 169 ships of the emergency fleet into Mallows Bay to await final dismantling. Then, with the great stock market crash in October of that year, the price of scrap plunged. As the Depression deepened, WM&SC’s losses became acute. In March of 1931 it finally shut down operations. By the following year the company had lapsed into bankruptcy, without providing for the disposal of the Mallows Bay hulks.

In December 1934 a local circuit court ruled that the hulks belonged to no one and could be salvaged by anybody. Thereafter, almost every day, scores of independent salvors could be seen dynamiting and picking over the carcasses of the great fleet. A cottage industry in scrap salvage sprang up along the



Mallows Bay shoreline. It would eventually account for at least 15 percent of the income of adjacent Charles County. At least 5 floating brothels and no fewer than 26 illegal stills were reportedly erected nearby. The true heyday of “hulk scrapping” had yet to arrive, however.

When World War II began, the price of scrap metal skyrocketed, and on June 28, 1940, the federal government established the Metals Reserve Company to stockpile strategic metals. It spent \$200,000 on a project aiming to recover 20,000 tons of iron from 110 hulks still lying in the bay, hiring the giant Bethlehem Steel Corporation to manage the effort.

The recovery project took on industrial proportions. Bethlehem excavated a huge enclosed marine basin and sealed it off from the bay with giant earthen berms and massive floating gates that could be opened and closed. Ships could be towed into the basin, the gates locked, the creek-fed water pumped out, and the hulks burned down completely, leaving only their metal fittings.

Right: The remains of a rudder post from a Shipping Board vessel. Below: The author paddles through the wreck of the *Accomac*, a ferry built in 1928.

But the process proved too exhausting and expensive even for Bethlehem. By the end of 1943 the company had spent \$360,000, fewer than a dozen vessels had been burned down, and the amount of iron salvaged had been minimal. On September 22, 1944, Bethlehem ordered a shutdown of its Mallows Bay operations.

After two decades of efforts, the scrapping of the U.S. Shipping Board's wooden steamship fleet had finally come to an end. Yet nearly 100 EFC hulks remained in the bay, along with the bones of numerous other vessels. For the next two decades the Mallows Bay ghost fleet would sleep undisturbed.

In 1963, at the instigation of a group of local watermen and a real estate development firm called Idamont, Inc., which eventually acquired the support of Gov. Spiro Agnew, the Army Corps of Engineers began a \$350,000 removal effort, and in 1968 Congress, acting under a special provision of the landmark Rivers and Harbors Act, ordered the hulks destroyed. Then the project languished while congressional hearings disclosed revelations that would ultimately abort it entirely. It emerged that Idamont was little more than a straw corporation, or front, employed by the Potomac Electric Power Company to acquire

the Sandy Point tract for a giant coal-fired generating plant without having to go through public disclosure or reveal its intentions to stockholders. Removal of the hulks (at government expense) would have permitted unimpeded passage of coal barges.

The company's actions had been a clear violation of Securities and Exchange Commission regulations and state disclosure laws. Moreover, subsequent testimony by the Chesapeake Biological Laboratory, the National Audubon Society, and the Department of the Interior suggested that over the years the wrecks had become integral components of the environment. To remove them would contribute to pollution and severely injure the natural habitats of life forms that had begun to repopulate the area after the trauma wrought by the wrecking operations. The Mallows Bay wreck-removal project was quietly shelved.

In March 1993, with the support of the St. Clements Island/Potomac River Museum of Colton Point, Maryland, and a small grant from the Maryland Historical Trust, I initiated the first organized effort to evaluate the historical maritime resources existing in Mallows Bay. (I am an underwater archeologist and have been interested in the wrecks since I first saw them on a family sailing trip as a child.) According to my plan, for the first time the embayment, the remains of the great EFC fleet, and all else therein would be historically researched, systematically inventoried, and archeologically documented.

The field program's first objective, in the spring of 1993, was to locate, inventory, and assess the condition of all historical resources lying within and around Mallows Bay. Over the next two years, we identified a total of 81 wooden EFC ships, one of which was the *North Bend*, the first of the fleet to splash into the ocean. She was a 3,024-gross-ton screw steamer, 275.2 feet long, 46 feet abeam, and 28 feet deep, built at North Bend, Oregon, by Kruse and Banks. Numerous





other vessels and sites were recorded, including a great steel-hulled seagoing car ferry named *Accomac*, 11 wooden barges, a possible Revolutionary-era longboat, two mid-nineteenth-century centerboard five-log canoes, a 1949 North Carolina-built menhaden-fishing boat named *Mermentau*, a World War II-era PT boat, a houseboat raised on stilts (possibly a converted brothel), three unidentified workboats of the late nineteenth and early twentieth centuries, and the disarticulated remains of an EFC ship lying completely buried 500 feet inland at Sandy Point. Also discovered were primitive log-and-earth marine railways, remains of a unique steam-powered hauling system to transfer scrap to transport trucks ashore, the residue of the Sandy Point wharf, and pieces of the Bethlehem burning-basin dam, gates, and support facilities.

Of 285 wooden EFC steamships known to have been built by August 1, 1920, at least 152, totaling 554,000 dead-weight tons, ended up in Mallows Bay within nine years. That is more than 53 percent of all American wooden steamships pro-

duced in the EFC program and surpasses the total tonnage of all American blue-water ships built in the 16 years preceding the war. Today the remains of at least 30 percent of the entire EFC wooden steamship fleet (and one composite ship of the same program) still lie in the mud of the embayment, surrounded by derelict vessels of all kinds dating from the late

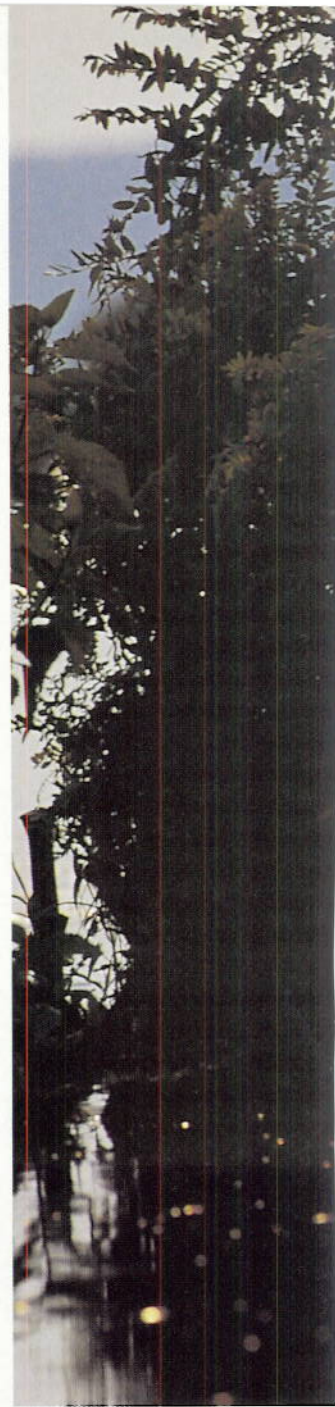
18th century through the 1980s.

The consolidation of such a great population of wrecks within so small an area could not fail to affect the local environment. Some vessels are anchored in place by gravel and sand dumped on them to keep them from floating off, while others have settled into the river's mud and are held in place by soft bottom sediment. Many stand eight to ten feet off the bay floor, their iron cross straps still holding them together just as Theodore Ferris had intended. Some are braced with poured-concrete frames, usually near the shaft tunnels, probably intended as last-minute additions designed to counter the engine-vibration problems reported during many sea trials.

The shipwrecks of Mallows Bay have created a synthetic environment that in its slow but certain evolution has held and enriched the sediments. This environment counteracts the pollution of the Potomac's water, filtering it and providing habitats and food sources to a wide range of life forms. In the process, each vessel has become a mini-ecosystem. Just as it was once the last refuge of the Potomac snowy egret and the site of Maryland's last sturgeon fishery, so Mallows Bay has again blossomed with biodiversity. In many ways it is a giant artificial reef to which the creatures of the sea flock to flourish, reclaiming this stretch of the river once and for all from the trauma of industrial salvage and pollution.

We also found that deer and beaver have taken up residence among the dense mini-forests of eastern red cedar, green ash, persimmon, red swamp maple, and sweet gum and the scores of species of woody shrubs, herbaceous perennials and annuals, and vines growing onboard many of the more exposed ships. Birds and mammals that were once endangered or had left the region altogether have begun to repopulate

Right: A blue heron stands amid vegetation sprouting from the wreck of the *Calala*. Below: An osprey makes its nest on the *Accomac*'s deck.



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the area on and around the wrecks. Scaups, sea ducks, dabbling ducks, Canada geese, whistling swans, ospreys, and American bald eagles have taken up habitation, many onboard the fleet itself. Muskrat, beaver, river otter, nutria, and white-tailed deer have been observed in residence on innumerable hulks. Returning to a section of the river once declared dead, striped bass, American shad, white perch, American eel, and many other species of fish, as well as a variety of crustaceans and mollusks, amphibians, and reptiles, are there in abundance.

Over the centuries, Mallows Bay has been many things to many people. Today it is a historical and archeological chronicle of unique and unparalleled importance whose secrets we have only begun to decipher. And for the first time, even as its past is still being discovered, its future is clear. On Febru-

ary 24, 1996, J. Rodney Little, Maryland's state historic preservation officer, formally announced Maryland's intention of designating the shipwrecks of Mallows Bay—the largest, most comprehensive archeological assemblage of American maritime industry in one place at one time—a state historic shipwreck preserve. In so doing, he ensured that amid the wrecks and ruins of a century or more, much of the record of maritime America will continue to sleep serenely in this small, remote crevice of the Maryland shore. ★

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