

Tributaries

A Publication
of the North
Carolina Maritime
History Council
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Fall 2021
Number 19

Letter from the Board

Letter from the Editor

The Port of Washington and the Fowle Family: An Intertwined Economic History

By: William Nassif

The Little *Ceres*: The Role of a New York Harbor Ferry in North Carolina during the American Civil War

By: Adam Parker

The *Estelle Randall* Shipwreck (1898-1910): Life and Death in Two Columbias

By: Nathan Richards

Wrecked on Chicamacomico: An Examination of the Shipwrecks along Wimble Shoals, Rodanthe, North Carolina

By: Allyson Ropp



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Chair

Lynn B. Harris

Editor

Jeremy Borrelli

Assistant Editor

Jillian Schuler

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Members

Chair

Lynn B. Harris, Ph.D.

Professor
Program in Maritime Studies
Department of History
East Carolina University
Admiral Eller House, Office 200
Greenville, NC 27858
(252) 328-1967
harrisly@ecu.edu

Vice Chair

William Sassorossi

Maritime Archaeologist
Monitor National Marine
Sanctuary
Newport News, VA 23606
(757) 591-7326
william.sassorossi@noaa.gov

Secretary

Lori Sanderlin

Museum Manager
North Carolina Maritime
Museum at Southport
204 Moore Street
Southport, NC 28461
(910) 477-5150
lori.sanderlin@ncdcr.gov

Treasurer

Christine Brin

Group and Volunteer
Coordinator
North Carolina Maritime
Museum
315 Front Street
Beaufort, NC 28584
(252) 504-7743
christine.brin@ncdcr.gov

Danny Bell

NC Commission of Indian
Affairs Appointee for Triangle
Native American Society
American Indian Studies Staff
(retired)
UNC Chapel Hill
919.606.2442
dbell@unc.edu

David Bennett

Curator of Maritime History
North Carolina Maritime
Museum
(252) 504-7756
david.bennett@ncdcr.gov

Jeremy Borrelli

Staff Archaeologist
Program in Maritime Studies
Department of History
East Carolina University
(252) 328-1965
borrellij16@ecu.edu

Andrew Duppstadt

Education and Interpretation
Supervisor
Division of State Historic Sites
North Carolina Department of
Natural and Cultural Resources
(252) 526-9600 ext. 227
andrew.duppstadt@ncdcr.gov

Charles R. Ewen, Ph.D.

Director
Phelps Archaeology Laboratory
Liaison
Queen Anne's Revenge
Conservation Laboratory
Professor
Department of Anthropology
East Carolina University
Greenville, NC 27858
(252) 328-9454
ewenc@ecu.edu

Amanda Irvin

Historic Interpreter III
Historic Edenton State Historic
Site
Division of State and Historic
Properties
North Carolina Department of
Natural and Cultural Resources
(252) 482-2637
amanda.irvin@ncdcr.gov

Valerie Johnson, Ph.D.

Dean
School of Arts, Sciences, and
Humanities
Professor
Department of Sociology
Shaw University
Raleigh, NC 27601
(919) 719-5061
valerie.johnson@shawu.edu

Leesa Payton Jones

Executive Director
Washington Waterfront
Underground Railroad Museum
Washington, NC 27889
(252) 833-0995

Nathan Richards, Ph.D.

Director and Professor
Program in Maritime Studies
Department of History
East Carolina University
Greenville, NC 27858
(252) 328-1968
richardsn@ecu.edu

Chris Southerly

Deputy State Archaeologist -
Underwater
North Carolina Department of
Natural and Cultural Resources
(910) 251-7323
chris.southerly@ncdcr.gov

Student Representatives

Matthew Pawelski

Program in Maritime Studies
Department of History
East Carolina University
Greenville, NC 27858

Jillian Schuler

Program in Maritime Studies
Department of History
East Carolina University
Greenville, NC 27858



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Letter from the Board

What is North Carolina's maritime history?

The maritime landscape of North Carolina is truly remarkable. Throughout prehistory, native inhabitants utilized dugout canoes to maintain lines of communication, trade, and relied on the marine environment for subsistence. Ships of exploration and colonial craft of every description plied coastal, sound, and riverine waters. Vessels of piracy, warfare, and commerce led to legendary shipwrecks, heroic rescues, and enduring maritime mysteries. Maritime industries flourished adjacent to and within the resource-rich waters of the Tar Heel State. All this combines to form an incredibly profound maritime heritage, one which only now is beginning to be understood in its broadest context.

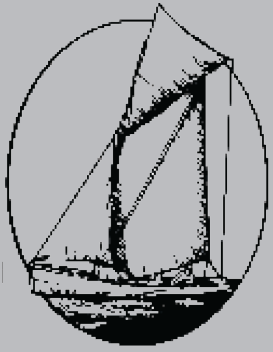
The North Carolina Maritime History Council came together in 1988 when a group of individuals involved in the maritime history field began meeting informally to share information and to discuss issues of mutual concern. In 1990 the North Carolina Maritime History Council was incorporated with the mission to identify and encourage historical and educational projects that have as their purpose the enhancement and preservation of the state's maritime history and culture, and that create public awareness of that heritage.

Council membership is open to any individuals and institutions interested in the maritime history of our region. We encourage this membership to seek ways to pool resources, share information, and discuss issues to benefit the dissemination of our mutual maritime heritage. It is our hope that you will continue to support the Council as we encourage and learn from more diverse scholarship in our field. No story is too small, no voice left unheard. Please consider renewing your membership or otherwise contributing to our mission.

Sincerely,
The Executive Board of the North Carolina Maritime History Council

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Letter from the Editor

Tributaries has been a part of the North Carolina Maritime History Council since its incorporation in 1990. It is the only history journal published in the state fully dedicated to North Carolina maritime historical and archaeological topics. As stated in the Council's mission, we seek to enhance understanding and promote our state's maritime history, and *Tributaries* is a major component towards that purpose. To that end, the Council and I would like to thank Chelsea Freeland for her efforts in reinstating the journal after a six-year hiatus. Chelsea's hard work and dedication has paved the way for the Council to continue publishing new research and stories related to North Carolina's maritime heritage.

In the previous issue of *Tributaries*, Chelsea put forth a call for a Special Edition of *Tributaries* on maritime historical perspectives of race and ethnicity in the Carolinas. This is something I want to reiterate as the new editor, and we will continue to encourage more diverse scholarship in this journal to elevate authors of color and other marginalized communities, as well as present historiography on this subject to further our holistic understanding of maritime history.

Additionally, North Carolina's maritime history is not limited to the well-known stories and sites that attract the attention of the public and researchers. It is my hope to utilize *Tributaries* as a repository for a wide range of histories related to specific ships, shipwrecks, maritime sites, people, events, and industries that might help inform broader research themes in our state. All members of the maritime history community, including independent researchers, local history groups, genealogical societies, oral historians, students, professors, and federal, state, or municipal governments are encouraged to submit articles to the journal.

Yours in continual learning,
Jeremy Borrelli

Editor, *Tributaries*
borrellij16@ecu.edu



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The Port of Washington and the Fowle Family: An Economic History

by Will Nassif
Abstract

The port of Washington, North Carolina became an economic hub for the eastern part of North Carolina during the nineteenth century. Its growth and expansion along the uppermost reaches of the Pamlico River can be attributed to the successful production and shipping of the region's resources, namely naval stores and lumber. Merchant families established warehouses, wharves, and industrial complexes along the waterfront, many of which survived and thrived for several generations. The Fowle family had commercial interests in all major facets of the Washington economy that enabled them to capitalize on the everchanging economic climate which brought long-term prosperity to the port. Historical data gathered from Fowle family ledgers, invoices, and shipping notes housed in archives at East Carolina University's Joyner Library and the Brown Library in Washington provide personal insight into those same trends and how they brought economic success to both the family and port community.

Introduction

Washington, North Carolina, a small town nestled on the banks of the saltwater Pamlico River at its transition from the freshwater Tar River, developed into a prominent center of maritime commercial activity for eastern North Carolina during the nineteenth century. Its location on the Pamlico enabled the town to become a terminus linking the state's resource rich Coastal Plain to other commercial centers in North Carolina and on the Atlantic seaboard (Figure 1). From its inception in the latter half of the eighteenth century, Washington served as a loading point for North Carolina's exportable goods and importable products from northern colonies and the West Indies. The port would

retain its importance until the twentieth century, when infrastructure improvements no longer necessitated regional ports such as Washington.

To better understand the economic growth and eventual decline of the port, the Fowle family will be used to contextualize the changing nature of the port's economy. Of the many families which established storefronts, factories, or other industrial complexes along the Washington waterfront, few had similar staying power as the Fowles. From New England, brothers Josiah and Luke moved to Washington in 1812. The brothers quickly established their mercantile footprint in the town. Six years after their relocation, they were joined by their brother Samuel and they established their shipbuilding business on Castle Island, an island located in the middle of the Pamlico River directly across from the Washington waterfront.¹ Their business quickly blossomed, offering a wide variety of commercial goods from their store which supplemented their shipbuilding venture. The Fowle family maintained a presence in the port through a variety of businesses and industries up through the twentieth century, including the production and exportation of naval stores and lumber. Their nineteenth century successes mirrored Washington's and the twentieth century decline of their lumber mill coincides with Washington's own demise as a working port. Therefore, using the Fowle family as a case study will allow for better conceptualization of the fluctuating economic trends which stimulated growth within the port of Washington and, ultimately, forced industry and commerce elsewhere.

Founding and Growth

As settlers descended on the Pamlico River region in the seventeenth century, they found

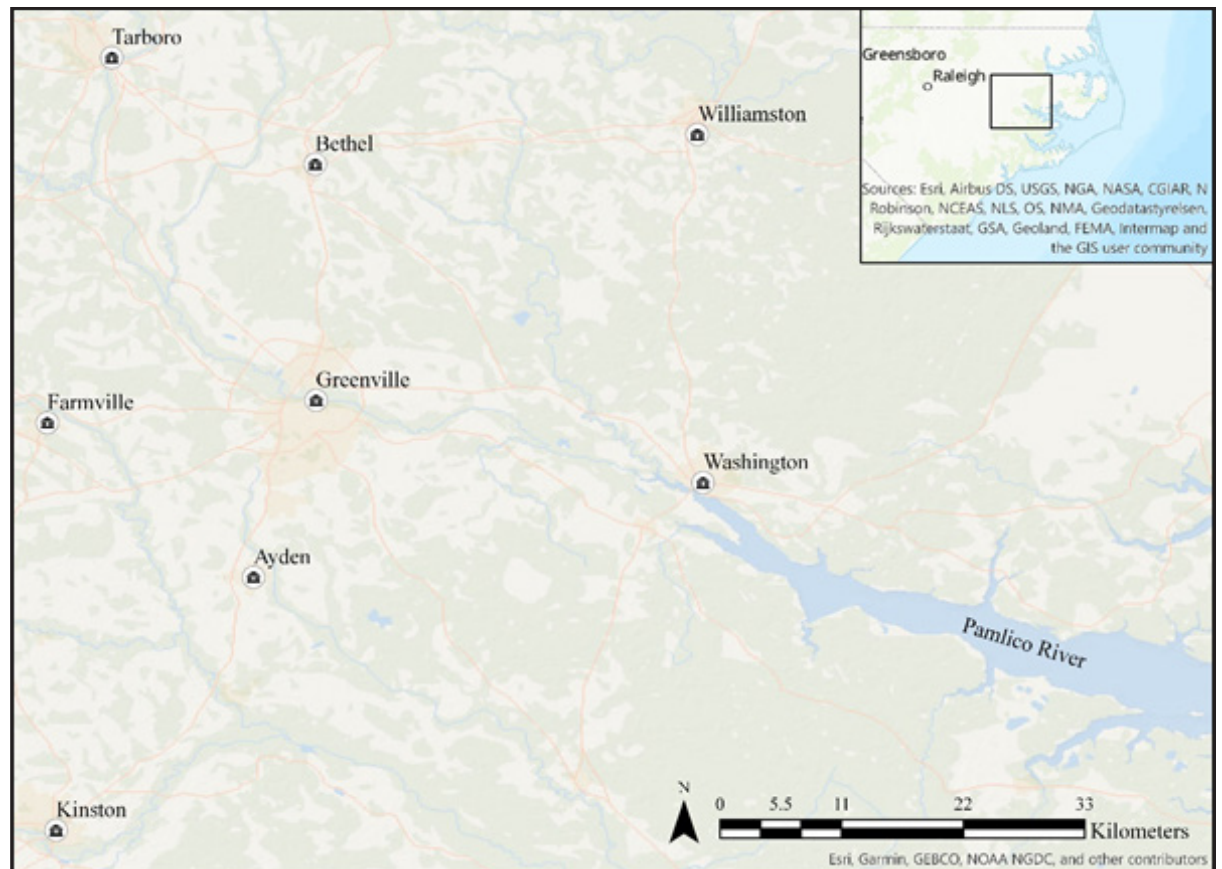


Figure 1. Washington and its location on the Tar/Pamlico River.

land teeming with natural resources and the potential for agricultural development. Once the population began to increase, settlers became aware of the need for a central location in order to gather for trade and commerce.² At first, Bath, slightly downriver from Washington, fulfilled this role and became a place of significant economic importance during the colonial period, even being named the first official port of entry for the province.³ Now, settlers in the Pamlico River region had a port linking them to the larger colonial trade network, as well as other settlements in the colony which were inaccessible by land. Prophetically, one visitor to Bath in the early eighteenth century declared the Pamlico area “not the unpleasantest part of the country ... nay, in all probability it will be the center of trade, as having the advantage of a better inlet for shipping and being surrounded with the most pleasant savannas very useful for raising cattle.”⁴ Rather than Bath, however, a more advantageous location along the river would attract the focus of planters and merchants to facilitate their waterborne trade.

Before official incorporation, settlers had previously congregated and traded on the riverbank that became the town of Washington. In 1726, the Lords Proprietors granted 337 acres of land, which included present-day Washington, to Chris Dudley.⁵ The landing upriver from Bath became a significant site for those settling in the resource rich back-country, linking them to the important trading centers

of the fledgling colony, like Bath and New Bern, through the colony’s eastern waterways.⁶ After changing ownership several times, and going by different names such as Forks of the Tar and Peatown, the land at the river confluence was bequeathed to Colonel James Bonner from his late father. He, in turn, laid out 30 acres of his farm adjacent to the river into 60 lots and six streets in 1776, and named his new community after the commander of the Continental Army, George Washington.⁷

In 1782, the town was incorporated by the General Assembly in Hillsborough and shortly thereafter replaced Bath as the county seat of Beaufort County in 1785.⁸ Now Washington, rather than Bath, was the primary economic focal point of the Tar-Pamlico communities, again being a vital link between the new state’s interior and the Atlantic. Years later, Herbert Paschal reflected upon the town’s blossoming industrial sector, and described Washington as an important trading center. “Several large wharves had been erected and sometimes as many as twenty sailing vessels could be seen lying in the harbor. From Washington, brisk trade was conducted with upriver settlements as far as Tarboro.”⁹ As such, Washington’s future became tied to what could be produced in Beaufort County and shipped to larger markets inside of North Carolina and abroad.

In North Carolina’s Coastal Plain, two important industries emerged during the colonial period: the production of naval stores

and lumber. Hugh Lefler and Albert Newsome emphasized the importance of the naval stores industry by concluding that, “in the eighteenth century, seven-tenths of the tar, more than one half the turpentine, and one-fifth of the pitch exported from all the colonies to England came from the longleaf pine forests of North Carolina.”¹⁰ In Washington, similar products appeared along its waterfront for export both upriver and out to the Atlantic. Paschal considers Washington’s chief exports from the eighteenth century to be tar, pitch, turpentine, rosin, tobacco, shingles, and boards.¹¹

William Attmore, a merchant from Philadelphia, travelled to eastern North Carolina in 1787 and relayed his observations of the developing region. Upon arriving in Washington, he remarked that the town contained “several convenient wharffes,” and that “there are sometimes lying here near 20 sail of sea Vessels.”¹² The travelling merchant even commented on the nature of trade flowing into the river port, noting that flatboats and scows carried up to seventy or eighty hogsheads of tobacco west along the Tar River to Tarboro, an assessment later repeated by Lefler and Newsome.¹³ In addition, Attmore noted that the town erected a rum distillery, possibly to offset the importation of the spirit.¹⁴

The production and exportation of both naval stores and lumber provided a relatively steady stream of commercial activity flowing through the port. Both goods could be easily floated down the Tar River to Washington, where they were loaded upon waiting merchant vessels.¹⁵ Wingate Reed asserts that “naval stores were Washington’s most important and profitable initial exports.”¹⁶ After the Revolutionary War, merchants exported tar, pitch, rosin, and turpentine north to the shipbuilding centers of Maine and Massachusetts, rather than England. Just as well, lumber exports formed an equally profitable venture for the port. In February 1787, the brig *Russell*, hailing from Washington, was captured by French privateers. The *North Carolina Gazette* described the ship as being “loaded entirely of lumber” destined for New Providence before altering course into the path of the privateers.¹⁷ *Russell* met a fate not too unfamiliar for many American merchants of this period, but that did not stop Washington’s merchants from exporting their valuable products northwards. There, North Carolina pine would be used in the construction of vessels, houses, and a variety of other industries that fueled the nineteenth century Industrial Revolution in the northern United States. At the turn of the century, Washington appeared set to dominate commerce in Beaufort County and occupy a significant role in the development of North Carolina.

Nineteenth Century Washington

The nineteenth century ushered in an era of growth thanks to Washington’s increasing levels of waterborne commerce, with only minor cessations during the trade wars with England and France. The same industries noted by William Attmore during his visit remained present amongst the wharves of the bustling port and the region’s abundance and proximity to natural resources permitted many alternative ventures to develop. Industry began to expand on the southern side of the river to prevent fire damage and the production of lumber became more commonplace in Beaufort County. As Thomas Clayton later commented in his chapter “Close to Land: North Carolina, 1820-1870,” “the primary factor stimulating the growth of towns was trade. Consequently, most were located at points convenient to water or overland transport.”¹⁸ Trade flowing in both directions from Washington increased economic development and, ultimately, brought prosperity to the waterfront town in the nineteenth century.

Perhaps indicative of the adapting economy, leading merchants began to explore the possibility of establishing lumber mills on the banks of the Pamlico River. John G. Blount, of the Washington Blount’s, the town’s premier merchant family, sought to capitalize on the growing significance of the lumber industry in Beaufort County. A letter from his Baltimore associate, Joseph Coppinger, urged Blount to buy and erect a machine to power his sawmill. He continued to say that “one or both of these machines as appendages to a lumber yard might I should suppose be made abundantly productive in your neighborhood in the supply of the West India Islands with lumber and plained boards.”¹⁹ Later, Blount enquired about building lumber mills in the vicinity of Washington to another associate in Massachusetts, who encouraged the Washington merchant to advance his plan.²⁰ While not indicative of an outright switch from naval stores to lumber, local merchants, like the Blount family, began to recognize the importance of embracing alternative industries. Diversifying mercantile interests insulated the town’s economy from a bad harvest and other failings, as well as promoted social and economic growth in Washington.

The successes of the Blounts and other mercantile families, as well as the general commercial outlook in Washington, added to the substantial economic growth taking place in the swelling town. Significant quantities of state money was invested into improving the Tar River above Washington in the following years with the hopes of improving navigation

for the larger, steam powered vessels.²¹ Within this context, entrepreneurs saw towns like Washington as places with tremendous opportunity to start businesses. Washington became the ideal location for individuals like the Fowle brothers to restart their lives and capitalize on the rapidly expanding economy there.

Early Fowle daybooks and records provide evidence of a business with transactions throughout the Atlantic Ocean. The Fowle enterprise exported a variety of agricultural products to large urban centers like Boston, New York, and Philadelphia, in addition to islands in the West Indies. Tangentially, their vessels returned laden with molasses and rum from the West Indies, as well as finished products from northern cities. In one entry of a Fowle company daybook, the Fowles sold four barrels of rum to W. Belfour for a total of \$93.75.²² Half a month later, another journal entry records that Thomas Latham purchased one barrel of New England rum worth \$27.60.²³ Their journal entries even reveal the intricacies of the early shipping industry, with one mentioning that another individual, Henry Austin, “paid freight of goods from Baltimore per Sch. *Joseph Watson*”, a total of \$50.²⁴ As shipbuilders, ship owners, and merchants themselves, the Fowles were reasonably well insulated from economic downturns and fulfilled many roles in the community. However, their business did more than provide Washington with liquor and general merchandise. Their records throughout this period of study reveal a business that mirrored the trends of Washington at large.

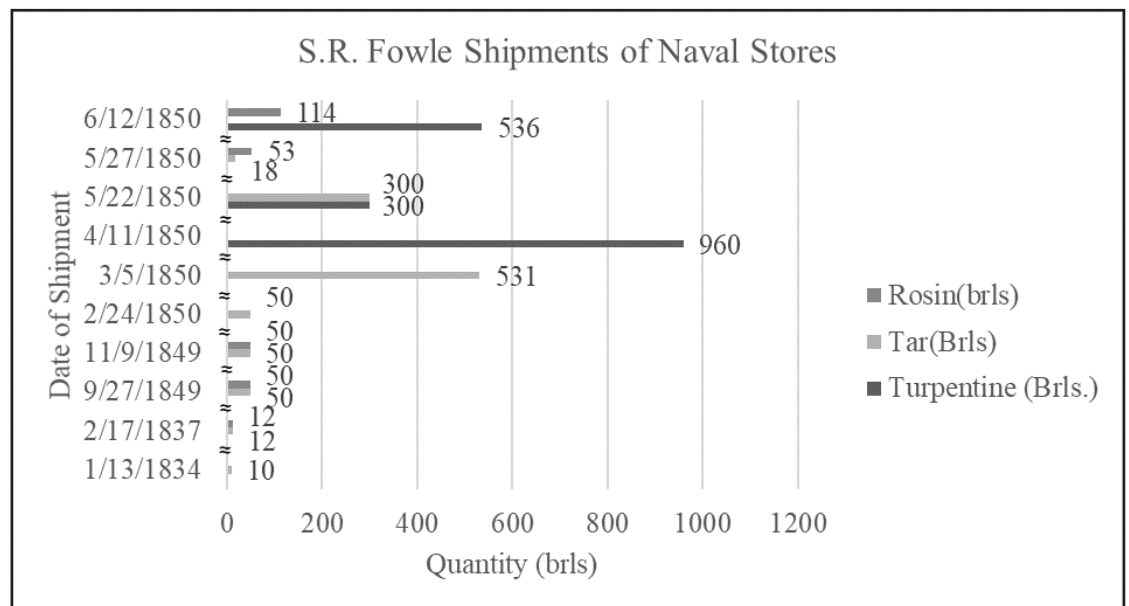
In terms of expansion and prosperity, a port’s primary exports deserve significantly more attention. Imports and exports contributed to historic economic development, but the latter was a true reflection of the commodities

which encouraged the enlargement of a port, and its continued relevance. Specifically, from Washington’s foundation through the first half of the nineteenth century, this was the exportation of naval stores. In *Tapping the Pines: The Naval Stores Industry in the American South*, Robert B. Outland states that “in 1842, three distilleries that together consumed up to two hundred barrels a day were operating in that town. Within four years, Washington, where naval stores represented nearly 75 percent of the value of all products leaving port, had seven turpentine distilleries in operation, and another under construction.”²⁵ Being one of the premier shipping merchants in town, the Fowles could easily capitalize on the plentiful naval stores produced throughout the region thanks to their mercantile success.

Within the Fowle daybooks are several entries which record transactions, both amongst the local community and abroad, of naval stores. While by no means a comprehensive or exhaustive account of their shipments, these entries highlight their role in propagating the profitable naval stores industry through their own business. Within Washington, the Fowle business supplied tar, pitch, rosin, and turpentine to individuals for many purposes. A Mr. Joseph purchased \$2 worth of rosin for his sloop *Polly*.²⁶ D. H. Havens, of the prominent Havens family, purchased fifteen barrels of turpentine worth \$33 in late November 1837.²⁷ Two weeks later, they recorded three sales of 12, 88, and 108 barrels of scrape turpentine to Mary and Loduwick Ridditt, as well as Peter Yeates, worth a grand total of \$139.60.²⁸

Yet, the more profitable option remained to export naval store products to the larger markets outside of North Carolina. Fowle-owned vessels sailed as far north as New York and Boston, as well as to the Caribbean. Two journal entries

Figure 2. S.R. Fowle Shipments of Naval Stores, 1834-1850. Data is not temporally contiguous (Bank of Cape Fear Account Book, 1838. S.R. Fowle Shipping Records, 1849).



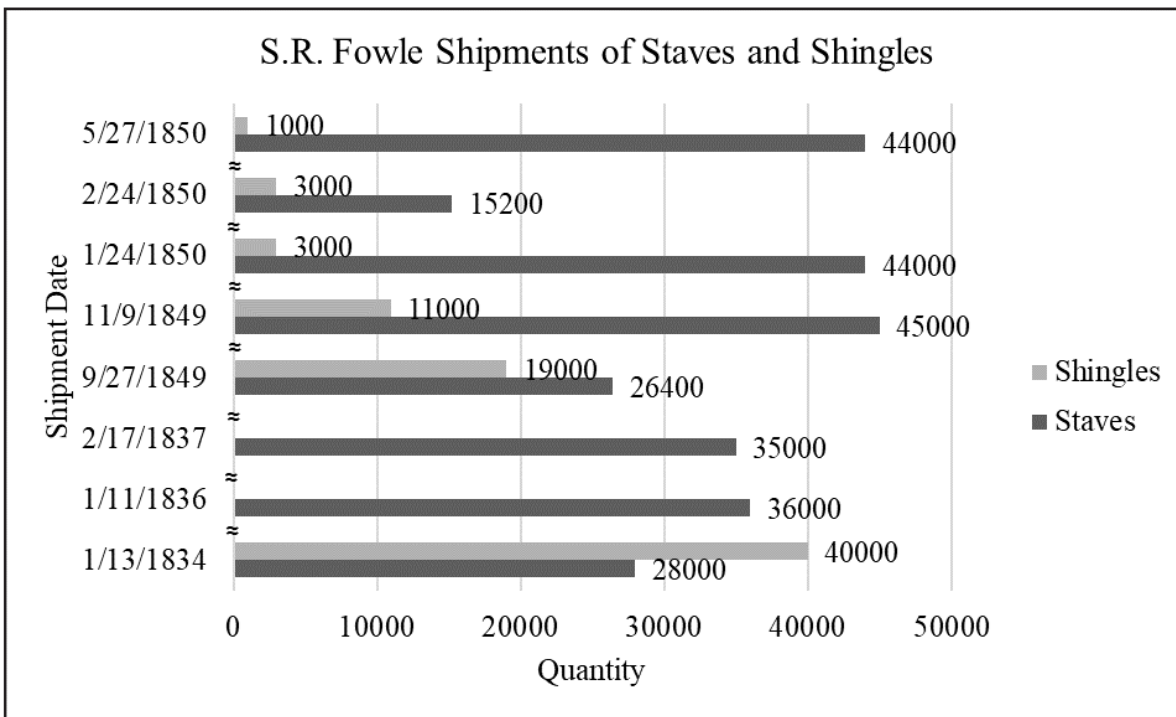


Figure 3. S. R. Fowle Shipments of Staves and Shingles, 1834-1850. Data is not temporally contiguous (Bank of Cape Fear Account Book, 1838. S. R. Fowle Shipping Records, 1849).

record several Fowle shipments of tar, rosin, and turpentine aboard company vessels. The schooners *James G. Stacey*, *Melville*, *Marion*, *Pamplico*, and the brig *Edmund Tillett* carried 1,796 barrels of turpentine, 1,021 barrels of tar, and 279 barrels of rosin in total over the span of sixteen years. *James G. Stacey*, in 1836 and 1837, brought its wares to the West Indies, the former being its first voyage to the Caribbean.²⁹ The other entries did not list a destination, or a monetary value, but one can reasonably assume their destinations from other separate entries. In another journal entry dated March 21, 1849, *Pamlico*, interchangeable with *Pamplico*, was recorded as having sailed \$773 worth of rosin and turpentine to New York City (Figure 2).³⁰

In addition to naval stores, Fowle vessels also carried large quantities of shingles, staves, and occasionally cut lumber. Staves and shingles had always been one of the town's primary exports since the land surrounding Washington was rich in woodland resources, namely pine and cypress trees.³¹ Both were vital products in the eighteenth century; staves were used for making barrels and wooden shingles in the construction of roofs and walls. On *James G. Stacy*, the Fowle's exported 99,000 staves and 40,000 shingles, with 71,000 of those going to the West Indies in 1834, 1836, and 1837. Later, *Melville* made two voyages, on November 9, 1849 and January 24, 1850, laden with a combined cargo of 94,000 staves and 14,000 shingles (Figure 3).

The inclusion of lumber amongst these entries is reflective of the emerging industries in Washington and North Carolina. With such an abundant resource surrounding Washington, it is odd that there were not more transactions including lumber within the Fowle papers.

Outland hypothesized that limited access to sawmills, especially prior to the steam engine, and difficulty in transporting lumber contributed to the state's malaise in capitalizing on their pine forests.³² Two early Fowle journal entries on August 17 and 30, 1817 record sales of 2,241 and 2,114 feet of plank to Rothly Latham and exported aboard *Happy Return*, respectively.³³ In the later shipping records, *Edmund Tillett* made two trips laden with lumber, one on September 27, 1849 and the other February 24, 1850. In total, the vessel carried 97,179 feet of lumber to unknown destinations.³⁴

With an excess of lumber, Washington, once reliant upon ships built from northern states, began to build their own vessels. Shipwrights plied their trade since the foundation of the town but experienced a revival during the 1830s. Many advances occurred during this period in terms of construction technology. Captain Hezekiah Farrow built the first marine railway in the town, which was used to raise vessels out of the water for repairs.³⁵ Local newspapers celebrated Farrow's railway and the obvious benefits it would bring. The *Roanoke Advocate* witnessed the railway being used to haul *Two Brothers*, a schooner from Bath, out of the water for repairs. The author exclaimed that all "our merchants are highly indebted to our enterprising fellow citizen" and thanked Farrow "for introducing this valuable improvement amongst us."³⁶ Farrow's railway, as well as others, afforded merchants the luxury of having speedy repairs conducted on their fleet. A well-maintained fleet of merchant ships sustained the constant shipping to and from Washington. Soon, additional railways could be seen along Washington's Pamlico River frontage, capable of

servicing a wide variety of vessels.³⁷

Scholars agree that both naval stores and lumber formed crucial components of North Carolina's economy, especially in Beaufort County. This, however, makes it difficult to understand which of these industries became Washington's dominant export or supplanted the other. In his historical research report of the Washington waterfront, Michael Hill asserts that "naval stores would remain central to the local economy through the antebellum period."³⁸ Naturally, Washington became the receiving point for upriver production of turpentine, as well as other byproducts from the distillation process. The Tar River flowing into Washington not only received its name due to its importance as a waterway for the vast production of tar, but also obtained the moniker "Turpentine Run" from a publisher at the *Tarboro Press*.³⁹

Overall, the state of North Carolina continued to invest tremendous amounts of capital and energy into the production of turpentine and naval stores. At the advent of the Civil War, Milton Ready considered the state to possess more than 1,600 turpentine distilleries.⁴⁰ In addition to Ready's assertion, William S. Powell exclaims that "turpentine was far and away the state's leading manufactured product by 1860."⁴¹ Washington and Beaufort County certainly contributed to these figures; Lefler and Newsome determined there to be 84 distilleries within the county.⁴² Already established as a terminal for the naval stores produced upriver and in Beaufort County's backcountry, Washington's merchants continued to benefit from this profitable venture. J. G. Blount continued to ship turpentine as far north as the northern metropolises of Boston and New York.⁴³

Even though the state's industrial revolution would not occur for several more decades, Washington's lumber industry also benefited from advances being made from steam technology. Work traditionally completed by hand could now rely on mechanical power to cut lumber in large quantities quickly and precisely. In Washington, business partners Tannyhill and Lavender constructed the first steam saw and planing mill. Located on Harvey Street, the mill was later sold to Benjamin F. Hanks, who regularly operated lumber barges from Washington to Norfolk and Baltimore.⁴⁴ Hanks expanded his lumber operation in the 1850s when he erected a new mill in town. *The North State Whig* reported that:

Mr. Hanks is putting up a new saw mill, we are glad to learn, and will speedily have it in operation. This will add the value of some millions of feet of lumber

to the productive labor of the place. Mr. Hanks has lately completed a new planing mill which prepares boards to the hands of the carpenter, tongued and grooved and planed. Besides this mill, when the one now building is completed—we have three saw mills in operation, cutting some nine million feet of lumber annually. . . . The steam saw mill of Messrs. Fowle & Son is working finely.⁴⁵

Due to Washington's location along the river, logs were easily transported to the mills lashed together or on flat-bottom boats. Upon arrival, mills worked to convert the raw wood into boards of lumber, staves, shingles, and a variety of other products.

Just prior to the Civil War, the antebellum city was "handling more than half of the water-borne commerce of the State."⁴⁶ Several merchants opened general stores along the waterfront of Washington, most notably that of the Fowle family, E. S. Hoyt, and Myers' and Son. Other merchants in the city specialized their craft and the goods they offered, demonstrating the continuing development of the town. Fish markets, wagon manufacturing, and many other commercial endeavors were established within the commercial district of the town.⁴⁷ Its commercial success and location along the Tar-Pamlico River system brought the Civil War to its doorstep, as military commanders from both the Union and Confederacy deemed Washington strategically important. Both sides occupied the town at various times during the war, virtually halting any economic activity. Unfortunately for the community, the impending Civil War brought fundamental changes to the nation, Washington included (Figure 4).

Post-Civil War

During the 1870s, North Carolina began to move away from its dependence on the production of cash crops and fully embraced the industrial endeavors that proved so fruitful in other regions of the United States. Lefler and Newsome state that "the decade of the 1870s was marked by transition, expansion, and the real beginning of the Industrial Revolution in North Carolina."⁴⁸ Washington's waterfront teemed with new industries and steamboats, plying their trade through the more navigable Tar-Pamlico River system. More and more people found employment in industries that previously were not present or readily available in the region. In addition, these technological advancements increased output from the town's growing number of factories, resulting in greater amounts of money passing through the hands of Washington's inhabitants.

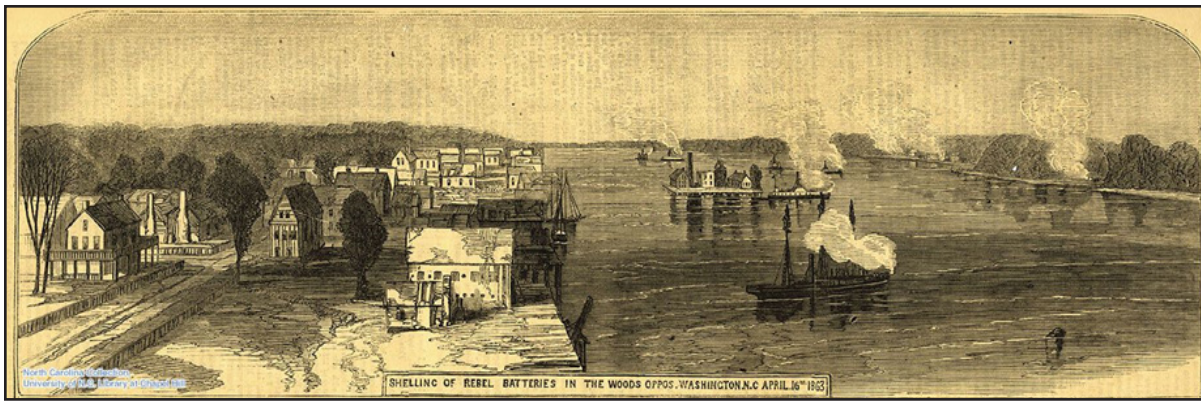


Figure 4. *The Civil War in Washington*. Note Castle Island in the middle of the Pamlico River ("Washington, North Carolina." Frank Leslie's Newspaper, May 16 1863, p.125. New York, N.Y.).

Yet, despite the South's postponed Industrial Revolution, many in Washington, as well as Beaufort County, continued to produce and export agricultural products. Those who had owned plantations and vast tracts of land still relied upon the traditional industries of the region, seemingly hesitant to embrace the transition to a modern, industrial economy. William Blount Rodman, a North Carolina Supreme Court Justice and owner of large tracts of land south of Washington in Beaufort County, sent his cotton to Baltimore and New York via steamer service at the conclusion of the war. Although his exports sold for substantial prices in Baltimore at first, when his agents directed him towards the New York markets his enterprise ultimately collapsed.⁴⁹

Even the Fowle family, who were not plantation owners or agrarians, continued to rely upon their naval store exports. In one shipping ledger alone, the S. R. Fowle & Son Company made 110 shipments using a combination of their own vessels and contracted shipping firms within Washington. Vessels owned by the Fowles included *Nelly Potter*, *Caroline*, and *Cora*, while they contracted shipping through the Clyde Steamship Company and the Old Dominion Steamship Company. Predominately, these records included large shipments of tar, rosin, and turpentine, in addition to lumber, shingles, and staves. Importantly, these records indicate the expansive trade network that revolved around Washington, with destinations including New York, Philadelphia, and many Caribbean islands.⁵⁰

Of the fifteen shipping records from 1877, eleven went to New York and the W. K. Hinman and Company sailmakers.⁵¹ *Nelly Potter* sailed monthly to New York, laden with large quantities of tar, rosin, and turpentine. One such shipment, on August 31, 1877, *Nelly Potter* carried 620 barrels of tar, 329 barrels of rosin, and 50 barrels of turpentine, which netted a revenue of \$2,278.73. Later that year, *Nelly Potter* again sailed to New York with 300 barrels of tar, 400 barrels of rosin, and 100 barrels of turpentine, in addition to 71 bales of cotton, netting a revenue of \$5,364.37. Within this year,

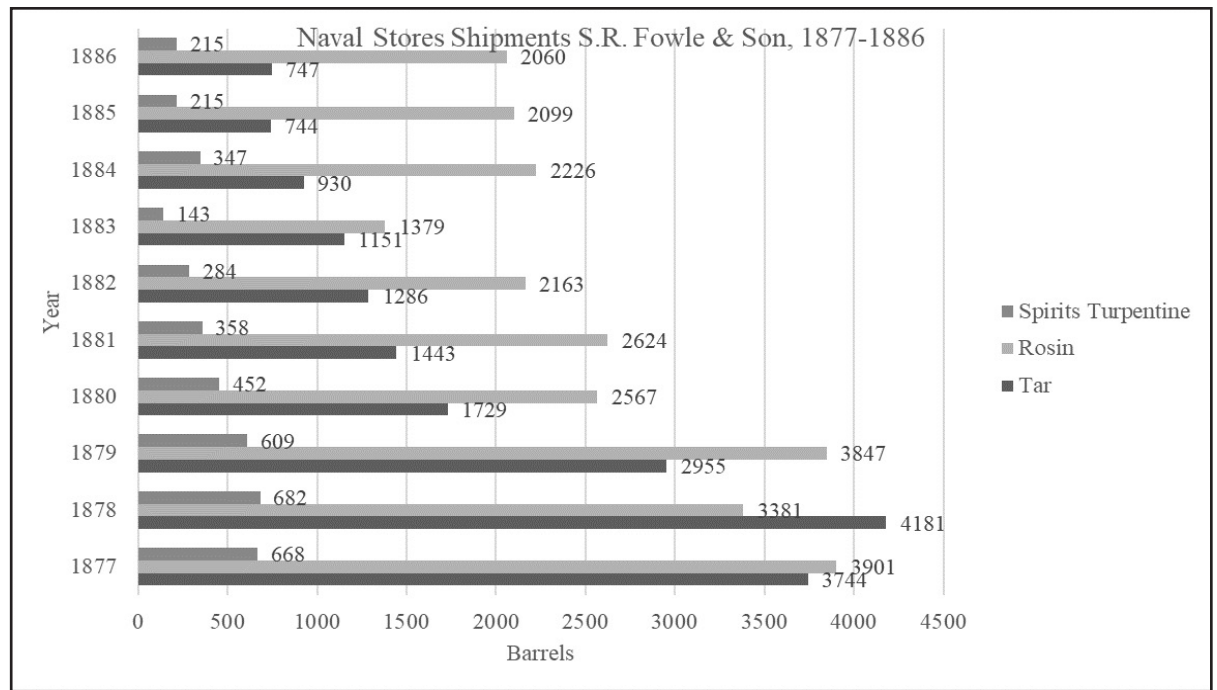
however, S. R. Fowle & Son made a solitary shipment to the Caribbean island of St. Vincent. On board *Caroline*, the Fowles sent relatively smaller amounts of naval stores compared to their cargos bound for New York, only 13 barrels of tar, 10 of rosin, and 6 of turpentine, but delivered significant quantities of lumber products, including 32,000 ft. of planks, 313,000 shingles, and 7,000 staves. While only a solitary shipment to the West Indies was recorded, the cargo composition on board became representative of the trade patterns established through these records. This would continue throughout the sampled records.⁵²

By 1880, trade to the West Indies had increased significantly. Fowle vessels made four trips to the Caribbean, three to St. Vincent and one to Barbados. Their cargo compositions continued the trends as before, with greater amounts of lumber products and less naval stores compared to their New York shipments. In one such shipment to St. Vincent on October 2, 1880, *Caroline* bore 300,000 shingles and 10,000 staves compared to 4 barrels of tar, 5 of rosin, and 2 of turpentine. In comparison, *Nelly Potter* bore 37 barrels of tar, 714 of rosin, and 28 of turpentine with no lumber products. Interestingly, the two shipments netted similar revenue totals whereby the Fowles earned \$1,165.39 from their St. Vincent shipment compared to \$1,292.60 from W. K. Hinman and Company in New York.⁵³

By 1886's conclusion, additional Caribbean islands had appeared amongst the S. R. Fowle and Son Company shipping records. Fowle vessels hailed at ports in St. Kitts and St. Martins, in addition to many records denoted "West Indies."⁵⁴ W. K. Hinman remained the predominant recipient of the northern shipments, but cities like Philadelphia, Baltimore, and Norfolk became ports of call for Fowle vessels.

The most revealing observation from these records remains the dramatic decrease of exported naval stores during this ten-year period. By compiling the total barrels shipped during each year, the data highlights naval stores diminishing importance amongst Washington's

Figure 5. S.R. Fowle and Son Company Naval Stores Shipments, 1877-1886 (Lumber Mill Order Records, 1894-1897).



exports. In 1877, S. R. Fowle & Son Company shipped a total of 3,744 barrels of tar, 3,901 of rosin, and 668 of turpentine. The following year, the totals roughly remained the same, with tar exports even increasing. Yet, for each subsequent year, naval store exports trended downwards with small exceptions (Figure 5).

With the advent of modern technology and the resultant shift towards industrial production, some of Washington's traditional industries diminished. Naval stores, the premier industry of the town, and the eastern part of the state, lost out to the production of lumber. Merchants and owners of sawmills shipped large quantities of readily available North Carolina lumber to northern states, as they did years earlier, but on a much larger scale.⁵⁵ The establishment of additional sawmills and lumber firms in Washington added to the production of others constructed prior to the war. C. W. Kugler, from New Jersey, opened his steam sawmill and planing mill in Washington in the 1880s. W. N. Archbell opened his own sawmill and planing mill in the same decade.⁵⁶

In addition to these newcomers, already recognized and established merchants began to advance their own lumber production. S. R. Fowle and Son, the company formed by the Fowle brothers upon their arrival to the town earlier in the nineteenth century, erected additional sawmills around Washington. Samuel's son, James, inherited the company's vast timber tracts and commercial holdings and expanded them. According to Louis May, in the 1880s the Fowles:

...decided to go into the lumber business. The family was the owner of large timber tracts near Blounts Creek and their first sawmill was

established at Blounts Creek in the mid 1880's. During the 1890's the Fowles decided to erect a large sawmill in Washington and chose a site on the south side of the Pamlico near the foot of the present bridge....[H]ere was erected a large band sawmill, four dry kilns, a large wharf and lumber storage and shipping building....[T]he mills capacity was forty to fifty thousand feet per day and was one of the largest to operate in Washington for many years thereafter.⁵⁷

Indicative of the time, S. R. Fowle & Son fully embraced the transition from naval stores production to lumber. Converted into boards, shingles, staves, and a host of other products, the Pamlico's rich pine forests supplied numerous customers up and down the east coast. Lumber production continued to become Washington's premier commercial interest through the nineteenth and into the early twentieth century.

Although they had owned and operated lumber mills throughout Beaufort County, this new mill gave the Fowles an industrial footprint within the port of Washington. The newly minted S. R. Fowle and Son Company Sawmill was incorporated in 1892.⁵⁸ It possessed a large band sawmill, five boilers, four dry kilns, and the capacity to load lumber directly into a barge from the mill. Thanks to its location within the port, at great convenience to receive cut lumber from the river, refine it, and export it, the Fowle Mill rapidly became one of the most important lumber mills in the town and continued to operate into the 1920s.⁵⁹

After a few months of operation, the S. R. Fowle and Son Mill had established itself as one of the premier lumber mills in town. Soon, it began to offer its services to individuals in the community, private enterprise, and for

material to be exported throughout the Atlantic. In Joyner Library at East Carolina University, one notebook contains over 800 individual, handwritten orders placed at the Fowle Mill. Included within are the names of prominent businesses which the Fowle's had exchanged with for decades, various local government projects which Fowle lumber created, and vessels which carried their lumber to various locations in North Carolina and abroad.⁶⁰

The Fowle family had established business relationships from their beginnings with other prominent Washington families. These prominent families, in turn, created their own businesses which became synonymous with the port of Washington. Many of these trading relationships were visible throughout these records. The mill consistently sent quantities of lumber to the Moss Planning Mill, of many different cuts and species. Also represented amongst the Fowle customers include Blounts, Havens, and William Blount Rodman. Other businesses include the Doughty Mill and the Washington Planning Mill, but neither ordered as much, or as frequently, as the Moss Planning Mill.⁶¹

Much like other lumber mills, the Fowle Mill supplied much of the local community with lumber for building houses, buildings downtown, and churches. One entry labelled "Gordon House," recorded over 5,025 feet of

flooring on July 19, 1894, which was followed up by another entry of 450 feet of flooring, 13 pieces of 1x10x16, 100 feet of 1.5x1.5x16, and 25 feet of 5x5x16 in September of that year. Other homes that the Fowle's cut and supplied lumber for include the Jackson House, the Crabtree House, and the Bennett House.⁶²

Also included amongst their residential customers were several Beaufort County projects and Washington churches. On July 17, 1894, Beaufort County ordered 860 feet of 1x6x16, 600 feet of 2x4x16, 155 feet of 2.5x12x22, 675 feet of 3x4x16, and several more cuts for the Washington Bridge. On April 2, 1896, the S. R. Fowle and Son Company Sawmill provided lumber material for the construction of the "colored" schoolhouse. It did so again on January 8, 1897, specifically 400 feet of flooring and 800 feet of ceiling. They also supplied lumber for the construction and renovation of two of downtown Washington's churches. On March 23, 1896, the Fowle lumber helped remodel the First Baptist Church.⁶³ Later, in January 1897, Fowle lumber again helped improve the First Presbyterian Church.⁶⁴

Finally, the S. R. Fowle and Son Sawmill propagated the same trading patterns which propelled the three brothers into prominent Washington citizens, exporting the region's rich natural resources north and abroad. Fowle owned vessels continued to sail to the many

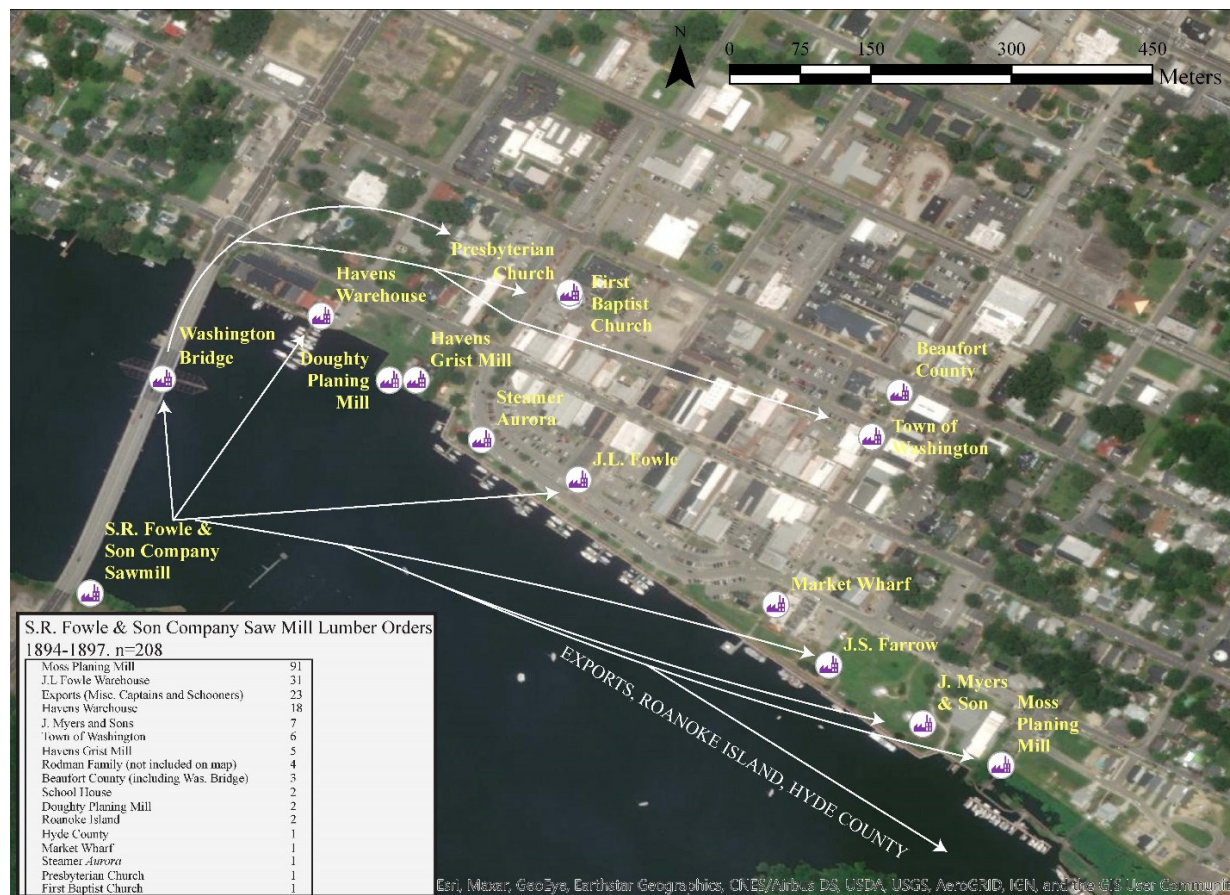


Figure 6. S.R. Fowle and Son Company Sawmill order forms, 1894-1897.

destinations, carrying cargo representing the new economy of Washington. On November 11, 1894, two shipments of Fowle lumber departed for Roanoke Island, where the Pamlico and Albemarle Sounds meet. One entry recorded a shipment of 4,000 feet of 3-inch heart pine and the other 1,000 feet of 1x10x16 cut and 500 feet of 4x12x16 cut. The schooner *Missouri* returned to Roanoke Island on June 30, 1896 carrying 7.5 cords of firewood. In July 1897, the schooner *Annie Wahab* transported 150 feet of 1x3 log run planking and 200 feet of cypress planking of the same measurement to an unknown destination. Lastly, *Cora* carried 50,000 feet of planed flooring to an unknown destination in 1897. While the records do not indicate the destination for this shipment, based on earlier Fowle shipping records in the previous section, it is reasonable to assume that this shipment was bound for the West Indies (Figure 6).⁶⁵

Beyond Fowle: Industrial Lumber in the Twentieth Century

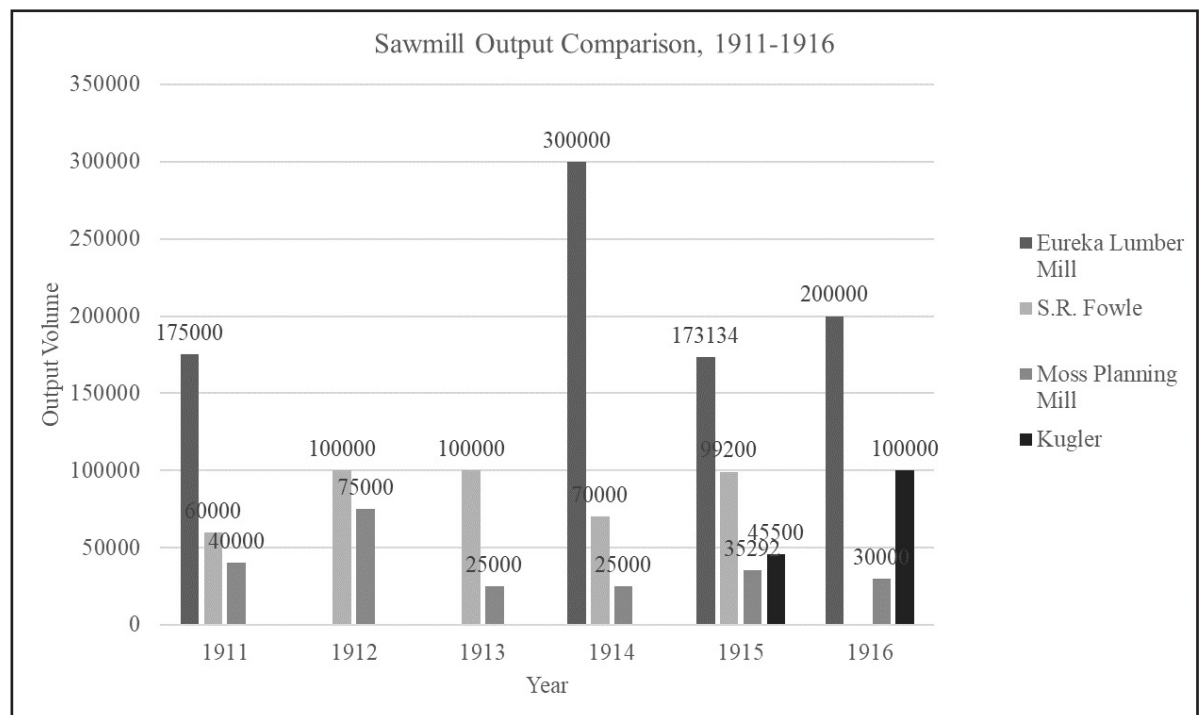
As lumber began to supplant the naval stores industry and agricultural products as Beaufort County's primary export, more and more lumber mills began to appear along Washington's Pamlico River. Founders George T. Leach, George A. Phillips, and W. T. Campen incorporated the Eureka Lumber Mill in 1893. Slightly upriver from downtown Washington, the Eureka Lumber Mill contrasted with the Fowle mill. It had multiple motorized tramways to and from the mill's wharf extending into the Pamlico River, lumber sheds on the wharf, and a massive industrial footprint on the riverbank, dwarfing the Fowle mill and others in Washington. The Eureka Lumber Company quickly grew into one of the most productive

mills on Washington's Pamlico River frontage and, eventually supplant the Fowle mill.⁶⁶

There is scant historical data documenting Eureka Lumber Company's rise to prominence. Historical ledgers, accounts, and other financial statements were not available to consult for the purpose of this study. Nevertheless, publications from North Carolina's Bureau of Labor recorded the annual production volume of the most prominent factories in each North Carolina county. These include the Eureka Mill, the S. R. Fowle Mill, the Kugler Mill, the Moss Planning Mill, and many other non-lumber industries. While the reports do not specify the units of output, the general level of output can be inferred to be recording feet of lumber.

Over a six-year period from 1911-1916, the Department of Labor and Printing compiled information regarding the output levels of four of the most prominent lumber mills in Washington, Eureka, S. R. Fowle, Kugler, and Moss. The only mill that was represented across each year was the Moss Planning Mill. The reason why the others were excluded are unclear; in some instances, they would be listed in the respective table of miscellaneous factories, but they were not accompanied by output data. The years where the Eureka Mill was included, their superiority in the marketplace was clear. Even in 1915, when the Bureau of Labor Statistics recorded the Fowle Mill's highest output level, the Eureka Mill outproduced them by close to 70,000 feet of lumber (Figure 7). While the Eureka Mill remained operational until the 1950s, the Fowle Mill ceased operations and was abandoned by the 1930s, with all its machinery being sold to another North Carolina lumber company outside of Washington.

Figure 7. Production comparison of four prominent Washington sawmills. (Source: Department of Labor and Printing, 1911-1916).



Conclusion

Washington found itself at a crossroads shortly after the beginning of the twentieth century. In terms of population and economic development, the town still appeared to be growing. At the turn of the century, the town had a population of 4,842 while Beaufort County had 26,404 inhabitants.⁶⁷ Unfortunately, the technological advances made in the previous century became obsolete and irrelevant due to factors beyond Washington's economic control. Steamers from the Norfolk Southern Railroad and Atlantic Coast Line continued to carry goods upriver and out towards the coast until transportation by rail, and eventually automobile, became the more economically viable option.⁶⁸ Washington's usefulness as a trade port declined as railways moved away from the town as well, taking with them the flow of trade. The port of Washington, the economic locus of Beaufort County since the eighteenth century, slowly began to lose the manufacturing and shipping businesses that had sustained the port. Despite this, a 1911 U.S. Army Corps of Engineers report observed that the city still possessed twenty-seven wharves and the capability to unload goods directly from a ship to freight, and vice-versa via the Norfolk Southern Railroad and Atlantic Coast Line (Figure 8).⁶⁹

Today, little can be seen of Washington's industrial past. The town, however, still possesses a strong connection to the river system which permitted incredible shipping and industrial development a century ago, albeit in different ways in accordance with the modern economy. Just like today, the historical town of Washington and its population responded to the contemporary economic trends. Amongst many other exportable products, naval stores and lumber dominated the ledgers of the town's merchants, especially in those of the Fowle family. Through the Fowle shipping ledgers, their financial data reflects that of the town at large. After the Civil War, both Washington and the Fowle family transitioned away from the exportation of naval stores to exporting lumber. This change permitted the family to remain major figures in Washington. While changing economies had often brought tremendous benefit to the Washington waterfront, many of them, like the railroad, eventually made the quaint river port obsolete. The Fowle financial data examined for this study illuminated and clarified the relationship between a port and a primary exportable good.

Tabulated statement of commerce on Pamlico and Tar Rivers, N. C., from 1883 to 1909—Continued.

— [In tons of 2,000 pounds.]

Commodities.	1891	1892	1893	1894	1895	1896
Coal and minerals.....	1,000	4,325	71	650	10,999	4,500
Cotton.....	7,000	3,794	3,392	3,568	2,711	3,722
Cotton seed.....		1,099	35	1,339	2,770	2,861
Cottonseed meal.....			77	438	698	1,013
Cottonseed oil.....			314	308		
Eggs.....					53	86
Fertilizers.....	2,000	2,500	1,000	2,991	20,050	10,162
Flax and oysters.....	8,000	5,220	23	320	270	449
Grain, hay, and straw.....	250	2,185	15	2	6,111	16,087
Live stock.....	200	44	31	13	20	376
Lumber, timber, etc.....	150,000	63,656	100,000	94,000	101,294	181,636
Machinery.....	1,000	30	1,000	201		80
Naval stores.....	1,900	427				
Poultry.....				15	15	12
Rice.....	500	568	631	320	1,650	88
Roan.....				90	145	212
Shingles.....			4,800	8,687	2,639	1,791
Tobacco.....	150	5	5	14	11	15
Tar.....		665	547			
Turpentine:						
Crude.....					230	174
Spirits.....			22	28	47	46
Wood.....					6,420	1,820
Unclassified.....	24,500	27,538	7,152	11,800	17,102	26,820
Total.....	195,900	107,097	119,508	119,961	183,230	251,990

Commodities.	1897	1898	1899	1900	1901	1902
Coal and minerals.....	5,200	2,850	2,085	4,939	7,904	4,250
Cotton.....	4,930	5,290	4,594	4,297	10,228	10,954
Cotton seed.....	3,450	5,070	18,328	4,752	9,375	12,804
Cottonseed meal.....	324	352	1,615	1,775	3,605	3,745
Cottonseed oil.....	575	731	647	622	1,054	3,481
Eggs.....	100	48	38	115	388	1,038
Fertilizers.....	18,000	22,982	34,083		11,570	23,390
Flax and oysters.....	1,106	3,564	6,477	22,842	16,485	18,428
Grain, hay, and straw.....	17,000	4,022	14,269	17,900	13,800	28,216
Live stock.....	107	190	240	230	400	988
Lumber, timber, etc.....	271,583	271,176	274,830	440,830	736,125	626,482
Machinery.....	3	100	40	390		1,757
Poultry.....	10	9	58	43	58	60
Rice.....	140	195	555	131	157	44
Roan.....	42	72	30	5	5	11
Shingles.....	342	606	1,000	22,025	423	4,067
Tobacco.....	14	3	20	34	21	1,135
Tar.....			114	8	31	50
Turpentine:						
Crude.....	150	85		3		50
Spirits.....	17	18	5			
Wood.....	1,880	1,885	11,135	34,226	8,190	10,333
Unclassified.....	36,246	28,902	126,043	37,757	111,832	76,984
Total.....	363,514	348,908	507,528	612,741	936,514	822,016

Figure 8. Commercial data from Tar/Pamlico River from 1883-1909.

By using this data as a representation of the larger port of Washington, an understanding of how individuals make decisions within that symbiotic relationship between ports and exports can be developed. The Fowle family, holding interests in shipping, merchandising, and industry, made tough decisions and risked capital investments to sustain their presence along Washington's waterfront for more than a century. Yet, these referenced shipping ledgers and transactional documents make up a mere fraction of the enormous qualitative and quantitative data within the larger S. R. Fowle and Son Company records in Greenville and the S. R. Fowle collection in Washington, in addition to the many other individuals, families, and businesses which utilized the working waterfront. Further research should consider other's ability to adapt to the marketplace and to ascertain the level of impact their individual decisions had on Washington's changing economy in the nineteenth century. This can provide a more complete picture of the port's economic history. While the port grew with the fortunes of many individuals, few dominated the economic landscape for as long as the Fowles, making them an excellent case study for analyzing Washington's economic history.

Endnotes

1. Pauline M. Worthy, "The Town Develops," in *Washington and the Pamlico*, eds. Ursula Loy and Pauline Worthy (Washington, N.C.: Washington-Beaufort County Bicentennial Commission, 1976), 11.
2. C. Wingate Reed, *Beaufort County: Two Centuries of its History* (Raleigh, N.C.: C. Wingate Reed, 1962), 43.
3. Hugh Talmage Lefler and Albert Ray Newsome, *North Carolina: The History of a Southern State* (Chapel Hill: The University of North Carolina Press, 1976), 55.
4. Reed, *Beaufort County*, 45-46.
5. Herbert Paschal, "In the Beginning," in *Washington and the Pamlico*, eds. Ursula Loy and Pauline Worthy (Washington, N.C.: Washington-Beaufort County Bicentennial Commission, 1976), 1.
6. Reed, *Beaufort County*, 106.
7. *Ibid.*, 102.
8. Paschal, "In the Beginning," 3; Reed, *Beaufort County*, 109.
9. Paschal, "In the Beginning," 3.
10. Lefler and Newsome, *North Carolina*, 97.
11. Paschal, "In the Beginning," 4.
12. William Attmore, "Journal of a Tour to North Carolina," in *The James Sprunt Historical Publications*, eds. J.G. de Roulhac Hamilton, Henry McGilbert Wagstaff, and William Whatley Pierson, Jr. (Chapel Hill: The University of North Carolina Press, 1787), 28.
13. Attmore, "Journal of a Tour to North Carolina," 28; Lefler and Newsome, *North Carolina*, 268.
14. Attmore, "Journal of a Tour to North Carolina," 29.
15. Harry L. Watson, "An Independent People: North Carolina, 1770-1820," in *The Way We Lived in North Carolina*, ed. Joe A. Mobley (Chapel Hill: The University of North Carolina Press, 2003), 113.
16. Reed, *Beaufort County*, 106.
17. "Extract of a letter from Washington, February 7," *North Carolina Gazette*, 4 February 1797.
18. Thomas H. Clayton, "Close to the Land: North Carolina, 1820-1870," in *The Way We Lived in North Carolina*, ed. Joe A. Mobley (Chapel Hill: The University of North Carolina Press, 2003), 318.
19. Joseph Coppinger to John Gray Blount, 19 October 1809, in *The John Gray Blount Papers*, vol. IV, 1803-1833, ed. David T. Morgan (Raleigh: Division of Archives and History, North Carolina Department of Cultural Resources, 1982), 110.
20. Thomas Bell to John Gray Blount, 24 April 1812, in *The John Gray Blount Papers*, vol. IV, 1803-1833, ed. David T. Morgan (Raleigh: Division of Archives and History, North Carolina Department of Cultural Resources, 1982), 166.
21. For more information on Internal Improvements in North Carolina, see Alan D. Watson, *Internal Improvements in Antebellum North Carolina*, (Raleigh: Division of Archives and History, North Carolina Department of Cultural Resources, 2002).
22. Fowle Daybook, 1817, Fowle Collection 2016.2 Box 7, John A. Wilkinson History Room, George H. & Laura Brown Library, Washington, N.C.
23. Fowle Daybook, 1817.
24. *Ibid.*
25. Robert B. Outland, *Tapping the Pines: The Naval Stores Industry in the American South* (Baton Rouge: The Louisiana State Press, 2004), 44-45.
26. Fowle Daybook, 1817.
27. Fowle Daybook, 1838, Fowle Collection 2016.2 Box 5, John A. Wilkinson History Room, George H. & Laura Brown Library, Washington, N.C.
28. Fowle Daybook, 1838.
29. Bank of Cape Fear Account Book, 1838, Fowle Collection 2016.2 Box 13, John A. Wilkinson History Room, George H. & Laura Brown Library, Washington, N.C.
30. S. R. Fowle Shipping Records, 1849, Fowle Collection 2016.2 Box 13, John A. Wilkinson History Room, George H. & Laura Brown Library, Washington, N.C.
31. Paschal, "In the Beginning," 4.
32. Outland, *Tapping the Pines*, 36.
33. Fowle Daybook, 1817.
34. S. R. Fowle Shipping Records, 1849.
35. William N. Still, "The Shipbuilding Industry in Washington, North Carolina," in *Of Tar Heel Towns, Shipbuilders, Reconstructionists, and Alliancemen: Papers in North Carolina History*, ed. Joseph F. Steelman (Greenville, N.C.: East Carolina University Publications, 1981), 33.
36. "Major Improvement in Washington," *Roanoke Advocate*, 13 May 1830, Halifax, N.C.
37. "Marine Railway" *The North State Whig*, 12 March 1851, Washington, N.C.
38. Michael Hill, *Historical Research Report: The Waterfront Area of Washington, North Carolina* (Raleigh: Division of Archives and History, North Carolina Department of Cultural Resources, 1984), 5.
39. "Editor's Correspondence," *Tarboro Press*, 1 March 1845, Tarboro, N.C.
40. Milton Ready, *The Tar Heel State: A History of North Carolina* (Columbia: The University of South Carolina Press, 2005), 183.
41. William S. Powell, *North Carolina Through Four Centuries* (Chapel Hill: The University of North Carolina Press, 1989), 316.
42. Lefler and Newsome, *North Carolina*, 398.
43. David Greene & Son to John Gray Blount, 16 November 1805, in *The John Gray Blount Papers*, vol. IV, 1803-1833, ed. David T. Morgan (Raleigh: Division of Archives and History, North Carolina Department of Cultural Resources, 1982), 75; J.B. Borland to John Gray Blount, 17 February 1812, in *The John Gray Blount Papers*, vol. IV, 1803-1833, ed. David T. Morgan (Raleigh: Division of Archives and History, North Carolina Department of Cultural Resources, 1982), 158; Blount & Jackson to John Gray Blount, 11 September 1820, in *The John Gray Blount Papers*, vol. IV, 1803-1833, ed. David T. Morgan (Raleigh: Division of Archives and History, North Carolina Department of Cultural Resources, 1982), 323.
44. Reed, *Beaufort County*, 171. Worthy, "The Town Develops," 11.
45. "New Steam Saw Mill," *The North State Whig*, 9 February 1853, Washington, N.C.
46. Reed, *Beaufort County*, 163.
47. *Ibid.*, 168-172.
48. Lefler and Newsome, *North Carolina*, 505.
49. See, William Blount Rodman, Robinson Company

Accounts of Sales, 1870-1886, William Blount Rodman Collection #329, Box 6, Folder G, East Carolina Manuscript Collection, J.Y. Joyner Library, East Carolina University, Greenville, N.C.

50. Shipping Records and Mill and Timber Account Book, 1877-1915, S. R. Fowle & Son Company Records #460, Box 208, East Carolina Manuscript Collection, J.Y. Joyner Library, East Carolina University, Greenville, N.C.

51. Board of Managers of the New York Produce Exchange, *Annual Report of the Board of Managers of the New York Produce Exchange for the Year Ending June 1, 1875, with the Charter, By-Laws, and the Several Trade Rates Adopted by the Exchange, and a List of its Members* (New York: E.H. Jones, Steam Printer, 1875), 207; Board of Aldermen of the City of New York, Documents of the Board of Aldermen of the City of New York, pt. II-1876 (New York: Brown, Printer and Stationer, 1877), 503.

52. Shipping Records and Mill and Timber Account Book, 1877-1915.

53. Ibid.

54. Ibid.

55. Ready, *The Tar Heel State*, 274.

56. Reed, *Beaufort County*, 171-172.

57. Louis G. May, "Lumber, Part 1: The Story of Beaufort County's Lumber Industry," in *Washington and the Pamlico*, eds. Ursula Loy and Pauline Worthy (Washington, N.C.: Washington-Beaufort County Bicentennial Commission, 1976), 339-340.

58. Department of Labor and Printing, *Twenty Fifth Annual Report of the Department of Labor and Printing of the State of North Carolina* (Raleigh: E.M. Uzzell & Co., State Printers and Binders, 1911), 39.

59. May, "The Story of Beaufort County's Lumber Industry," 339.

60. Lumber Mill Order Records, 1894-1897, S. R. Fowle & Son Company Records #460, Box 213, East Carolina Manuscript Collection, J.Y. Joyner Library, East Carolina University, Greenville, N.C.

61. Lumber Mill Order Records, 1894-1897.

62. Ibid.

63. Ibid; For information on the First Baptist Church, see Jill High, "Churches of Washington," in *Washington and the Pamlico*, eds. Ursula Loy and Pauline Worthy (Washington, N.C.: Washington-Beaufort County Bicentennial Commission, 1976), 300.

64. Ibid; For information on the First Presbyterian Church, see Jill High, "Churches of Washington," in *Washington and the Pamlico*, eds. Ursula Loy and Pauline Worthy (Washington, N.C.: Washington-Beaufort County Bicentennial Commission, 1976), 300.

65. Ibid.

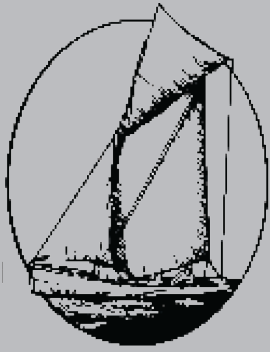
66. Department of Labor and Printing, *Twenty Second Annual Report of the Department of Labor and Printing of the State of North Carolina* (Raleigh: E.M. Uzzell & Co. 1909), 94; Louis Van Camp, *Images of America, Washington, NC* (Columbia, S.C.: Arcadia Publishing, 2000).

67. Reed, *Beaufort County*, 206.

68. Ysobel Dupree Litchfield, "Shipping," in *Washington and the Pamlico*, eds. Ursula Loy and Pauline Worthy (Washington, N.C.: Washington-Beaufort County Bicentennial Commission, 1976), 233-234.

69. William Rossell, Reports on Examination and Survey of Pamlico and Tar Rivers, with a View to Obtaining

Greater Depth and Width as Far up as Tarboro, N.C., 62nd Congress, 2nd Session, House of Representatives Document, no. 270, Washington, D.C., 1911.



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The Little *Ceres*:

The Role of a New York Harbor Ferry in North Carolina during the American Civil War

by Adam Parker

Abstract

Naval histories of the American Civil War often focus on the introduction of ironclads to naval warfare or the major Union victories. These works often pay little attention to the harbor ferries and tugs which were requisitioned by the U. S. Navy at the war's beginning, when purpose-built naval vessels were too few in number to effectively fight the war at sea. To mobilize a naval force quickly, Union naval agents began surveying harbor vessels in several seaports. This paper follows the service careers of USS *Ceres*, a sidewheel steamer and harbor ferry which saw combat throughout the war in North Carolina. *Ceres*' civilian and naval careers are both examined, to demonstrate the vital role in the war effort played by common harbor vessels typical of every northern seaport, particularly during the first year of the war.

Introduction

On March 9, 1862, the ironclads USS *Monitor* and CSS *Virginia* met in battle at Hampton Roads, Virginia. As the first meeting of two ironclad warships in combat, the battle was a watershed moment in naval warfare, and news of the engagement spread rapidly worldwide. The results led to the nearly immediate change in Union and Confederate shipbuilding efforts to focus on ironclad rams and *Monitor*-class warships.¹

The Battle of Hampton Roads occurred nearly a year into the hostilities between Union and Confederate forces. Many histories of the war tend to focus on land campaigns during the first year of the war; however, this time was not devoid of naval action. The Battles of

Port Royal, South Carolina and Hatteras Inlet were major naval victories for the Union, both occurring in the latter half of 1861, and the Battle of New Orleans followed in early 1862. Major amphibious operations leading to Union victories included the Battles of Roanoke Island and Fort Donelson in the first months of 1862. The historiography of the Civil War at sea tends to focus heavily on these early major battles and their respective campaigns or the overarching logistics involved in effecting the Union blockade.² While the narrative of these battles is important, as they constitute some of the earliest major Union victories on land or sea, they were only possible due to the requisition of many non-naval vessels by the Union Navy.

Little attention is paid to the harbor steamers and sailing craft which offered a means to quickly mobilize a naval presence off the Confederate coast, their contributions instead overshadowed by the larger conflict or by the introduction of ironclads. After the first shots fired on Fort Sumter, naval agents immediately began inspecting harbor steamers, ferries, and sailing vessels throughout northern ports to mobilize a naval force. Documents following the war show the Union Navy purchased over 560 vessels to prosecute the war. Of these, 207 were purchased in the first year of hostilities.³

This paper follows the civilian and naval careers of the sidewheel steamer USS *Ceres* during the first year of the war. Examining both aspects of *Ceres*' career demonstrate the value "every day" harbor vessels and ferries played in the Union Navy during the first months of the war, when establishing a naval presence was critical. While both belligerent navies modernized with ironclads, an effective mobilization for the

Union Navy lay almost entirely on steamers throughout northern ports in simultaneous combat and support roles.

The Dependable Tug *Ceres*

Ceres was launched at Benjamin Terry's Keyport, New Jersey shipyard in 1856. The bill of sale and vessel enrollment state *Ceres*' length as 120 feet, beam as 22 ft., and a depth of hold as 6 ft. 8 inches with a total tonnage of 144 77/95 tons. The U. S. Navy purchased the steamer from Mr. Humphrey H. Crary and Mr. Henry H. Storms of New York City.⁴ The *Official Records of the Union and Confederate Navies* (ORN) record *Ceres* as having a draft of 6 ft. 3 in. fully loaded and an empty draft of 4 ft. 10 in. *Ceres*' machinery included a single beam engine with a 30 in. diameter cylinder, a 6 ft. 8 in. piston stroke, and a single boiler and flue with two furnaces, giving the steamer a maximum speed of nine knots and an average speed of four knots.⁵ The vessel bill of sale additionally states that *Ceres* did not have a figurehead, gallery, or masts and had a round stern.⁶ It should be noted that the ORN and bill of sale and vessel enrollment documents disagree on the length, beam, depth of hold, and owner. The ORN record *Ceres*' length as 108 ft. 4 in., a beam of 22 ft. 4 in., and a depth of hold as 7 ft. 7 in., and that the steamer was purchased from Mr. Peter Craig through naval agent George D. Morgan.⁷ The nature of these differences is unknown; however, it is possible the ORN only recorded the agents who arranged the sale while the bill of sale names the ship owners, or a transcription error occurred during the compilation of the ORN. The difference in length may come from one source measuring along the steamer's deck and the other along the waterline.

Ceres first appears in newspapers on December 23, 1856 in the *New York Herald*. The packet ship *New York* was inbound from Liverpool with 300 passengers, but had run aground two miles off Barnegat Inlet, New Jersey. Passengers were stranded on *New York* in exposed conditions. In response

to the grounding, *New York*'s captain ordered the ship's longboat ashore with some of the passengers. After delivering the first group of passengers to safety, the captain returned to *New York* to find the cabin taken over by the crew. The mutiny resulted in the captain being severely beaten. While it was still grounded off Barnegat Inlet, *New York*'s owners dispatched *Ceres* with orders to intercept the steamer *Achilles* and report to the latter that it needed to rescue the remaining passengers.⁸

In late December 1858, *Ceres* appears in the *New York Herald* as a prospective business venture. The *Herald* advertised a share in *Ceres*' ownership, stating "For sale- Cheap, one-quarter part in the steam tug *Ceres*. Apply to L. Adams, 75 South Street, corner of Maiden Lane."⁹ The advertisement for the share in ownership only ran for two days. Later, in July 1859, the steamer was listed in an advertisement for the Irving Hotel, a bathing resort. The advertisement stated that *Ceres* departed the Catherine Market slip for the resort daily at 9:00 AM.¹⁰ *Ceres* is listed in August 1859 as one of 22 steamers available for

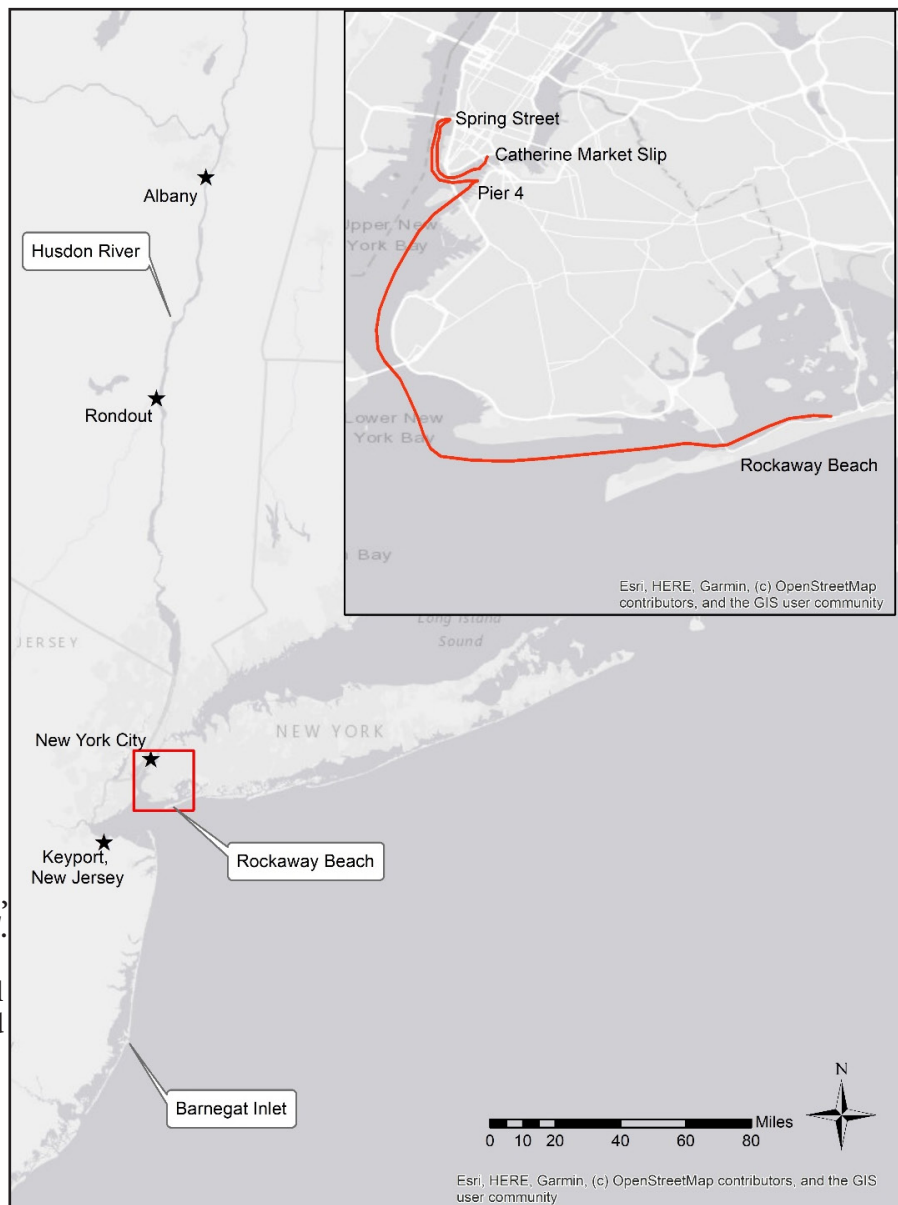


Figure 1. Locations in the northeastern USA associated with USS *Ceres* pre- and post-Civil War (inset map depicting a recreation of *Ceres*' summer 1860 excursion route [Map created by author]).

excursion cruise booking.¹¹

When not engaged in ferrying passengers to resorts during the summer months, *Ceres* continued operating as a harbor tug. In this role, it played a small part in the trial and execution of one of the last people tried for piracy in the United States. On March 21, 1860, *Ceres* and other vessels discovered the oyster sloop *E. A. Johnson* abandoned following a collision with the schooner *J. H. Mather*. *Ceres*' captain boarded the abandoned sloop, which was missing its bowsprit with rigging trailing in the water. There were obvious signs of a struggle and human hair and blood were found throughout the cabin. Detectives quickly deduced that a murder had occurred onboard and began searching for the perpetrator. *Ceres* towed the sloop back to the harbor as part of its regular harbor duties.¹² In the following days, the suspect was apprehended in Providence, Rhode Island, attempting to evade arrest. His name was Albert Hicks, alias William Johnson. Detectives learned that Hicks had murdered the captain and partial owner of the sloop, Captain Burr, and his two crewmates, brothers Oliver and Smith Watts. Following the murder, Hicks stole 150 dollars in gold and silver coins and Burr's watch before abandoning the sloop and rowing ashore in the sloop's yawl. Hicks was subsequently tried in May and hung in July for piracy.¹³

Between June and August 1860, *Ceres* ran a regular excursion route to Rockaway Beach, New York. Advertisements give the exact route and stops the steamer made along the way, "The steamboat *Ceres*... will leave Catherine Market Slip at 8:30 AM, Spring Street, North River at 9:00 AM, and Pier Number 4, North River at 9:30. Leave Rockaway at 4:00 PM... Fare 50 cents each way."¹⁴ The remainder of 1860 and first quarter of 1861 are silent regarding *Ceres*. Presumably, the summer excursion season ended, and the vessel continued in its regular harbor duties. In April 1861, amid rumors of war, USS *Powhatan* was being watched carefully at the New York Navy Yard, and civilians wondered if it would be transporting troops when it did embark. *Ceres* is noted as assisting the navy vessel depart the harbor, although it is not mentioned if troops were aboard the vessel.¹⁵ Following this, *Ceres* again ran excursion cruise routes during the summer of 1861. On August 24, 1861, reports indicated that the U. S. Navy purchased *Ceres* for \$12,100, and on September 11, the bill of sale was signed at the Washington Navy Yard by Crary and Storms.¹⁶

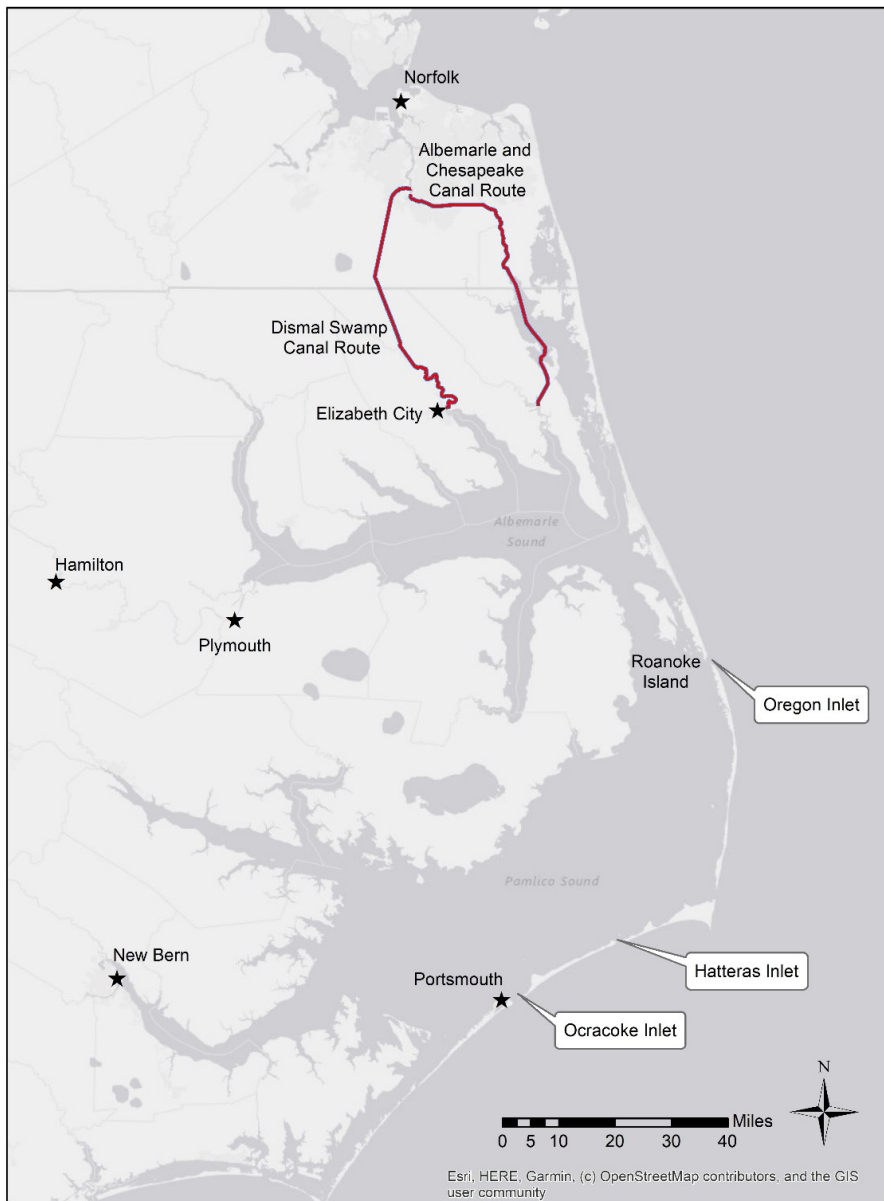
Ceres Goes to War

Ceres raises the question of why were ordinary harbor steamers so crucial to the Union naval

effort, particularly during the first year of the war? At the outset of hostilities, the Union Navy was not prepared to fight the war envisioned by President Lincoln. General-in-Chief Winfield Scott developed an overarching strategy, dubbed the Anaconda Plan, which called for a blockade of all Confederate held ports and additional steamers to assist an army of 80,000 troops to control the Mississippi River.¹⁷ The primary goals of the strategy was to strangle to Confederacy of importing military and civilian supplies and cut the southern states in half along the Mississippi River. On April 19, 1861, President Lincoln issued a proclamation to enact a blockade of the coast of those states already in a state of rebellion: South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas. Eight days later, on April 27, Lincoln extended the blockade to include the coasts of Virginia and North Carolina.¹⁸

The Anaconda Plan looked strong on paper; however, logistically, the Union Navy could not put it into effect immediately. The number of ships needed to assist in amphibious operations in the Mississippi River alone was immense, but it was the blockade of the Confederate coast, over 3,000 miles of shoreline, that made the number of ships required staggering. When Lincoln issued the blockade proclamation, the Union Navy consisted of 90 vessels, of which 52 were immediately serviceable, and of those 52, only 42 were commissioned.¹⁹ Additionally, of the 42 commissioned vessels, 24 were on foreign missions and would take months to return for reassignment. The steam frigates that formed the backbone of the Union Navy, *Wasbash*, *Minnesota*, *Niagara*, *Roanoke*, and *Colorado* were laid up in ordinary, and *Merrimac* had been lost when Confederate forces took control of Gosport Naval Yard in Norfolk, Virginia. Furthermore, those steam frigates were too deep drafted to effectively patrol the shallow waters off the Confederate coast. The waters off the North Carolina Outer Banks were known as a ship graveyard for good reason. When Lincoln enacted the blockade, the Union Navy had only a dozen ships, five of which were sailing vessels, able to perform blockading duties.²⁰

Many in the Lincoln administration failed to see the scale of the task ahead of them and considered the blockade a small matter that would be easily overcome. Secretary of the Navy Gideon Welles understood the true immensity of what was needed for the blockade. He began a shipbuilding initiative, leading to the construction of 23 new gunboats, 14 screw sloops, and 12 sidewheel steamers in 1861 alone.²¹ Despite the quick directives by Welles to construct new, purpose-built naval vessels, building new ships would take time and establishing an effective blockade became a



Chandler of USS *Dawn*, regarding that steamer's disabled engine.²⁶

Despite this early failure, Commander Rowan immediately ordered Elliot to take *Ceres* and begin reconnaissance of Pamlico Sound, sailing in consort with *General Putnam*. Elliot informed Rowan that he was to report to Captain John Chauncey, commanding USS *Susquehanna*, also off Hatteras Inlet.²⁷

Rowan questioned Chauncey as to whether the light-drafted *Ceres* might be put to better use scouting Pamlico Sound and gathering intelligence on Confederate movements.²⁸ At that time, Rowan received orders to sail for Washington, D.C., as his command, USS *Pawnee* was required in the city.²⁹ Rowan expected Commander Henry Stellwagen to relieve him aboard USS *Monticello* after the latter completed (ultimately unsuccessfully) orders to block Loggerhead, Oregon, and Ocracoke Inlets along North Carolina's Outer Banks.³⁰ Due to storms, Stellwagen was unable to rendezvous in time or send word.³¹

Figure 2. Locations in North Carolina associated with USS *Ceres* (Map created by author).

pressing matter as Confederate privateers began harassing Union shipping and the first blockade runners entered southern ports unopposed. While new keels were laid down, the Union Navy began purchasing harbor tugs and ferries typical of every northern seaport. This is the context in which *Ceres*, and over 500 other vessels, found themselves in naval service off the Confederate coast.²²

Ceres was outfitted at the Washington Navy Yard in September 1861 with a 30-pounder Parrot rifle and a 32-pounder Dahlgren gun and immediately commissioned for service under Acting Master Jared Elliot, who also held the title of Reverend.²³ On September 18, 1861, *Ceres* received orders to proceed to Hampton Roads, Virginia, and on September 23, further orders to meet Commander Stephen Rowan at Hatteras Inlet off North Carolina.²⁴ Sailing in consort with USS *General Putnam*, *Ceres* reached Hatteras on September 26, 1861.²⁵ Acting Master Elliot, however, failed to deliver a verbal communication to the squadron's commanding officer from Commander

Without word from Commander Stellwagen, Rowan stated that he intended to place Elliot in charge of provisions and supplies at anchor off Hatteras if no other officer was available during his absence.³² In addition, he relieved *Ceres* and *General Putnam* of the Potomac pilots and provided local, Pamlico pilots for each. In the same communication, Rowan also makes clear his dependence on the naval brigade off Hatteras and that the squadron had a lack of sailors, specifically stating that *Ceres* did not have even half its required complement.³³ On September 30, 1861, in two separate communications to Chauncey, Rowan pleaded for a trained naval officer to be placed in charge of provisions off Hatteras as the masters of both *Ceres* and *General Putnam* were from civilian careers. If no officer was available, Rowan stated his instructions to Elliot to report to Chauncey

for instructions if needed.³⁴ No senior officer was available and Elliot remained in charge of provisions because on October 3, Flag-Officer Louis Goldsborough relayed to Secretary of Navy Welles that *Ceres* continued to be stationed off Hatteras following Stellwagen's arrival.³⁵

The shallow waters and constantly shifting sands off North Carolina posed an immense difficulty to Union naval efforts to operate effectively. Lieutenant Lowry of the USS *Underwriter* reported on October 10 that storms off the coast shifted channels incredibly quickly.³⁶ Stellwagen echoed this sentiment the next day when reporting to Goldsborough that not only was it impossible to block the inlets, but also that none of the vessels at Hatteras could cross the bar, including *Ceres*, stating the tug grounded on almost every attempt to cross despite its light draft.³⁷ Lieutenant Reed Werden of USS *Stars and Stripes* again expressed the problem of going over the bar in order to block up the inlets from within Pamlico Sound after Goldsborough issued orders to him following Stellwagen's failure. He stated that *Underwriter* and *Stars and Stripes* would need to be lightened of all coal and artillery to cross over and place the obstructions, relying on *General Putnam* and *Ceres* to ferry supplies over the bar where they consistently grounded. Considering the poor condition of the ships to be sunk as obstacles, the presence of armed Confederate vessels in Pamlico Sound, and the loss of USS *Fanny* earlier in October to the same Confederate steamers, Werden, too, considered the operation too dangerous to enact.³⁸ After Goldsborough inquired as to traveling by sea to the inlets in order to block them, Werden called upon the *Ceres*' pilot, Jacob Westervelt, to give a statement that blocking the channels with sunken ships would only be temporary as he had once witnessed a ship bilge and block Swash Channel, only for the sands to shift within a week to allow passage through.³⁹

On October 27, Elliot wrote to Assistant Secretary of the Navy, Gustavus Fox, regarding *Ceres*' poor condition and outfit. Elliot complained of several issues in his letter, stating a lack of general equipment including chain and sufficient anchors, having to requisition them off hulks and prizes. He stated that lack of davits constantly put the vessel's boat at constant peril, either in the way when exercising the stern gun or at risk of getting afoul the rudder when they put the engines astern. He lamented the condition of the upper works, stating they leaked badly and that if carrying 20 tons of coal or cargo, *Ceres* would sit in the water below its copper sheathing, and within four hours, would require a long period of pumping to clear water from within the steamer. In addition, the steamer's draft, although light, could only occasionally be light enough to pass over the

bar.⁴⁰ His letter did not end with complaining about *Ceres*' condition. He discussed the lack of sailors, noting that the similarly sized *General Putnam* had a crew of 34 while he had only 20 at his command. The vessel had sailed to Hatteras without crucial navigation equipment and by October, the sailors were in dire want for necessities, including clothes and even soap. Finally, he complained of the ineffectiveness of his master's mate, William Ingraham. Ingraham, according to Elliot, spent more time on the sick list and was negligent during times of bad weather.⁴¹ *Ceres* had at first been intended for patrolling the Potomac River before being issued orders to Hatteras. Elliot ended his letter by stating none of the issues he lists would not have been of great inconvenience if so close to a friendly port.⁴²

Elliot's general apathy for being commanded away from the Potomac River to Hatteras Inlet and his own apparent negligence as a commander drew the attention of his superior officers in mid-October. On October 11, Secretary Welles wrote that Captain Chauncey had verbally communicated Elliot's inefficiency as commander of *Ceres*.⁴³ On October 14, Goldsborough relayed that report to Werden, asking about its validity.⁴⁴ On October 20, Werden stated he did not feel confident sending either *General Putnam* or *Ceres* into the sound with their commanders.⁴⁵ Soon after his October 27 letter to Fox, Elliot was replaced. Acting Master John MacDiarmid was in command of *Ceres* by November 5.⁴⁶

Command politics aside, Elliot's letter to Fox demonstrated that the vessel was performing duties like those it performed as a harbor tug, including mooring and unmooring vessels, towing other vessels off the bar if they grounded, and towing vessels to sea.⁴⁷ Presumably, though considering it impossible, Werden was attempting to cross the Hatteras bar to block the inlets, using *Ceres* for operations he knew it was capable of. On October 29, following a series of storms, *Ceres* was dispatched over Hatteras bar in order to replace a buoy when it sighted a sail. The steamer sailed further into the sound in order to hail the strange vessel. During its absence, an armed Confederate steamer opened fire on *Stars and Stripes* before sailing on, almost taunting the Federal fleet.⁴⁸

In the early afternoon of November 5, 1861, *General Putnam* fired a gun to call for assistance after spotting a steamer to the south.⁴⁹ Werden commanded Lowry to take *Underwriter*, *General Putnam*, *Ellen*, *O. M. Pettit*, and *Ceres* to investigate the cause for alarm. After clearing the bar, *Ceres* and *General Putnam* steamed ahead of *Underwriter*, which was experiencing engine issues. While five miles out from Ocracoke

Inlet, *Ceres* stood to and waited to report that a steamer was hard aground on the Ocracoke Inlet breakers, about a mile off Portsmouth.⁵⁰ Lowry then proceeded with the reconnaissance force to the stranded vessel. *Ceres* reached the steamer first and took on its boat which had come to relay information on the situation. The steamer was the French naval corvette *Prony*, and it had run aground in the early morning. When MacDiarmid offered to take the crew off the ship to shore, *Prony*'s lieutenant informed him that the captain still wished to attempt to lighten the steamer and refloat it. If refloating *Prony* was impossible, the captain would then abandon it.⁵¹

After MacDiarmid relayed this information to Lowry, he was ordered to take *Ceres*, *General Putnam*, and *O. M. Pettit* back to Hatteras to inform Werden of the situation. Given the late hour, the vessels could not reach Hatteras in time and stood to until daylight.⁵² Lowry stood to off *Prony* with *Underwriter*, noting a storm started forming. Later, when *Underwriter* began shipping water over the deck and the engines became too strained to keep itself off the breakers, Lowry was forced to abandon the rescue effort. The weather and high running sea prevented him from communicating his own distress to the French crew before his departure.⁵³ On the afternoon of November 7, an explosion was heard at Hatteras, and Werden supposed it was the French crew destroying *Prony*.⁵⁴ The French crew was eventually rescued by Confederate forces, and *Prony*'s captain immediately accused Lowry and Werden of inaction. The issue was a diplomatic inconvenience; however, in the end, no punitive measures were taken, and the event was blamed on the Confederates for extinguishing the lighthouses along the North Carolina coast.

A week following the *Prony* incident, Werden was finally able to successfully complete orders to block Ocracoke Inlet with sunken schooners. On November 14, *Ceres* and *General Putnam* joined *Underwriter* and the U. S. Coast Survey vessel *Corwin* in towing three schooners across the Ocracoke bar, chaining them together bow-to-stern, and sinking them in the deepest parts of the inlet channel.⁵⁵ Despite the success in blocking the channel, Werden and his officers warned that a new channel would inevitably cut through the obstacles and create a new passage.⁵⁶ The coming weeks were quiet off Hatteras, excepting occasional, brief gunfire exchanges with Confederate steamers. On December 5, following one exchange near Swash Channel, a strange steamer was spotted in Pamlico Sound and Werden ordered *Ceres* to overhaul it to ascertain its character. While attempting to hail the unknown vessel, *Ceres* ran aground, and the steamer sailed on.⁵⁷

Following the Union victory at Hatteras Inlet and subsequent failed attempts to block the channel, senior officers began to push the idea of using Hatteras a forward operation base for further initiatives to occupy eastern North Carolina. From the naval side, Goldsborough had communicated to Secretary Welles that using Hatteras as a base and further pushes into the North Carolina sounds would accomplish several strategic goals. These goals included eliminating the threat of harassment from Confederate steamers, the occupation of Roanoke Island, preventing further destruction of lighthouses allowing safer conditions for merchant shipping. Lastly, an invasion of eastern North Carolina could allow Union forces to block the southern termini of the Albemarle and Chesapeake and Dismal Swamp Canals,

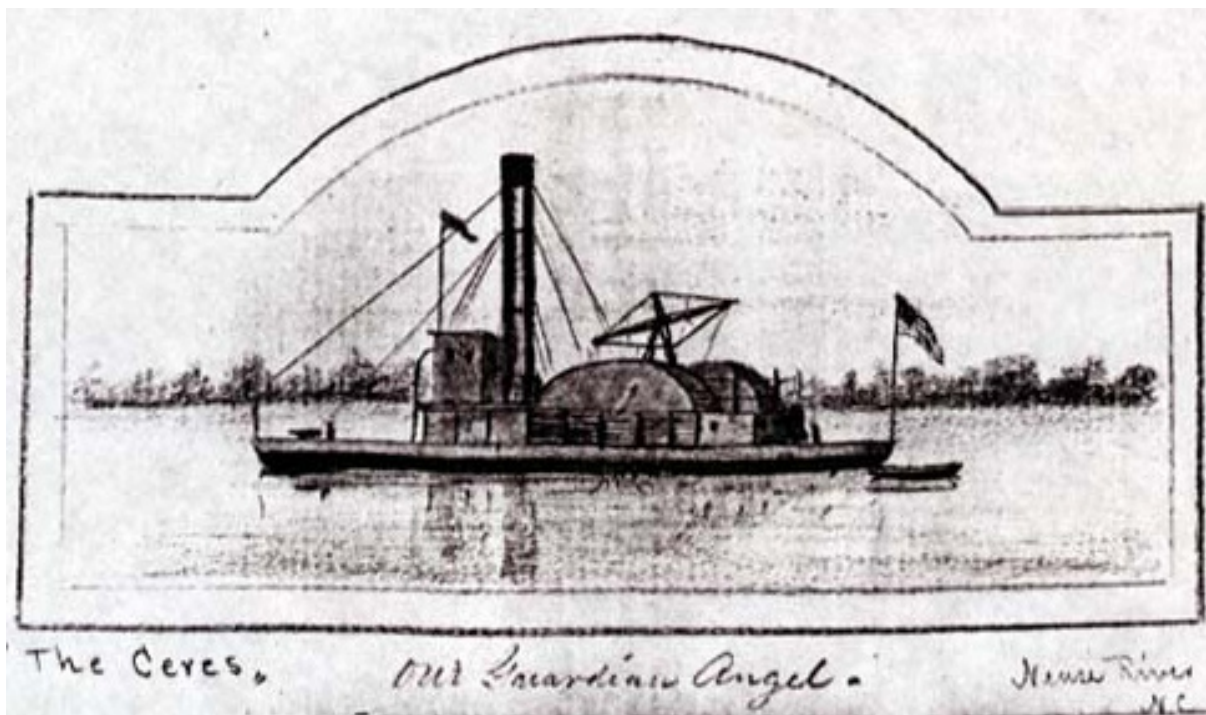


Figure 3. An 1863 hand drawn image of USS *Ceres* with the caption "Our Guardian Angel" (US Naval Historical Center).

severing communication and reinforcement lines to Norfolk.⁵⁸ From the Union Army's perspective, further pushes into eastern North Carolina could disrupt communications from Richmond to the southern Coastal Plain in addition to distracting Confederate forces from reinforcing armies in Virginia.⁵⁹ McClellan had already been planning an initiative along the Potomac River and in Chesapeake Bay; however, he switched the initiative to eastern North Carolina following consideration of the advantages it posed to the war effort.⁶⁰ This was the germination of a joint army-navy campaign commanded by Brigadier General Ambrose Burnside, later known later as the Burnside Expedition.

Ceres the Scout

Following McClellan's authorization, Burnside and Goldsborough began assembling their fleets in preparation for the expedition. During preparations, *Ceres* remained on station of Hatteras. Steamers began rendezvousing at Hatteras throughout January, with *Ceres* once again performing duties like those it once had in New York, towing and assisting other vessels across the Hatteras bar and marking channels.⁶¹ On February 5, 1862, all navy and army vessels intended for the expedition were over the bar and ready for service.⁶² Early on February 5, the Union flotilla started from Hatteras north, towards Roanoke Island, the first campaign objective.

The naval fleet steamed out as the flotilla's vanguard in three columns. Although weather was good, the advance was slow, due to the number of ships. That night, *Ceres* took Lieutenant Jeffers ashore to retrieve a Union resident and gather intelligence on Confederate forces at Roanoke Island.⁶³ The next day, the combined fleets were ten miles south of Roanoke Island with *Ceres* and *General Putnam* a mile in advance of the fleet, reconnoitering for any obstacles or the Confederate fleet. The fleet did not encounter any active rebel batteries in the marshes on the southern end of Roanoke; however, rain and wind forced the fleet to anchor before engaging the enemy. From their anchorage, Union commanders were able to observe the Confederate fleet, commanded by Flag-Officer William Lynch, anchored close in to shore between Pork and Weir's Points, with *Ceres* and *Putnam* reporting as many as 15 steamers and ten sailing vessels.⁶⁴ Goldsborough's orders to the fleet were that the naval division would begin bombarding the shore batteries and attacking the enemy fleet, aided by available army combat vessels under Commander Samuel Hazard, while army transports and armed navy launches landed troops at Ashby's Harbor or Sandy Point.⁶⁵

On the morning of February 7, the order for a general advance towards Roanoke Island was again given as weather had cleared. *Ceres* and *General Putnam* were joined by *Underwriter* to reconnoiter with orders to stay within 400 yards of the main fleet. After passing through the narrow channel and entering Croatan Sound, *Underwriter* gave signal that no battery protected Sandy Point and the commanding officers made the choice to land troops at Ashby's Harbor.⁶⁶ At 10:45 AM, in advance of the right column, Acting Master MacDiarmid received orders from Commander Rowan that *Ceres* could open fire. Immediately, *Ceres* fired opened fire with its bow gun, a 30-pounder Parrot rifle. The first shot fell short, and *Ceres* steamed closer to the Confederate fleet until 11:00 AM, when it recommenced firing.⁶⁷

The Confederate fleet was drawn up behind an extensive network of obstacles spanning Croatan Sound, including pilings and sunken schooners.⁶⁸ For the next several hours, *Ceres* continued firing on the Confederate fleet with its bow gun while remaining below the obstructions. At 2:00 PM, MacDiarmid brought the steamer in towards one of the shore batteries until within range with *Ceres*' stern 32-pounder Dahlgren gun. At this point, *Ceres* began bombarding the fort with its stern gun and continued firing on the enemy fleet with its bow rifle.⁶⁹

At 4:00 PM, master's mate R. M. Coleman, and first loader, Alexander Hand, were wounded by the premature discharge of the stern gun. *Ceres* disengaged and ran alongside USS *Stars and Stripes* for medical attention of the two wounded sailors before running alongside the storeship *Howard* to take on an additional 65 32-pounder shells and two barrels of powder. After receiving ammunition, *Ceres* resumed its position under the fort and resumed firing with both guns. At 5:00 PM, a shell from the fort penetrated *Ceres*' upper deck and exploded under the boiler but damage was minimal, and the blast only destroyed one of the furnace grates. At sundown, the general order to cease fire was given, and *Ceres* stood out into the channel and anchored.⁷⁰

The next morning, February 8, *Ceres* began by firing on the battery at Pork Point but was ordered to stand down due to concerns of inflicting friendly fire on troops on shore.⁷¹ By this time, the Confederate fleet had dispersed and was nowhere in sight. At some point in the afternoon, Lieutenant Jeffers gathered the vessels under his command, including *Ceres*, to begin removing the obstructions blocking advance up Croatan Sound. While trying to find a suitable channel, *General Putnam* grounded. *Putnam* remained highly exposed and while other

vessels assisted in refloating it, Jeffers anchored *Underwriter* to provide cover fire if any of the rebel steamers reappeared. Jeffers sent *Ceres* to continue searching for a suitable channel, which it found between an unfinished line of pilings and a sunken schooner at about 4:00 PM. Jeffers then gave orders for *Ceres* to continue up Croatan Sound and find the position of Fulker's Shoals to avoid further groundings; however, after a quarter mile, Confederate forces were observed moving towards a shore battery at Weir's Point, and Jeffers recalled *Ceres*.⁷² At 4:45 PM, the Union flag was hoisted above the Pork Point battery, and Confederate forces began destroying the Redstone Point battery. The rebel steamer CSS *Curlew* had been disabled the previous day and was also fired to prevent it from being refloated and repaired. After this, Jeffers ordered the vessels under his command to join *Ceres* on the other side of the sunken obstructions.⁷³

The next day, at about 9:00 AM, *Ceres* was lying above the barrier obstruction when an unknown schooner was observed sailing close by. Later, the schooner's captain was brought aboard the fleet's flagship and reported that the schooner was carrying a load of coal for the Confederate fleet and mistook the Union gunboats for his intended goal. Later in the day a deserter from CSS *Fanny* relayed valuable information to Union commanders regard Lynch's position at Elizabeth City, North Carolina with the remaining Confederate steamers. A fleet was assembled from the naval division and placed under Commander Rowan to advance and attack Elizabeth City, on the Pasquotank River, approximately 40 miles north-northwest of Roanoke Island.⁷⁴ Control of Elizabeth City was of vital importance for the Burnside Expedition, as it was the eighth largest city in North Carolina and the main river port in the Albemarle region.⁷⁵ Controlling Elizabeth City would also allow Union forces to close the southern terminus of the Dismal Swamp Canal, which connected Albemarle Sound to Norfolk, thereby further isolating Norfolk.⁷⁶

At 3:00 PM, Commander Rowan gave signal, and the fleet began steaming north for the Pasquotank River mouth. The Union fleet sighted two Confederate steamers, CSS *Sea Bird* and CSS *Appomattox*, late in the afternoon and USS *Delaware* and USS *J. L. Lockwood* gave chase to be recalled later.⁷⁷ At 8:00 PM, the fleet anchored ten miles below Elizabeth City, and Commander Rowan issued his orders to the commanding officers. Rowan was unsure if Lynch had retreated up the Dismal Swamp Canal in order to regroup in Norfolk or if he had drawn up at Elizabeth City, intending to contest the Union fleet. In fact, the Dismal Swamp Canal locks were closed at the time

and undergoing repair under Lynch's orders should retreat be necessary. However, without knowing this, Rowan gave orders that the fleet would form into three columns with *Ceres* reconnoitering the fleet's starboard flank for shallow bars. In this formation, Rowan ensured his reconnaissance force could mobilize to a combat force quickly if it encountered the Confederate fleet. Additional orders were to wait until he gave the order to open fire, due to low ammunition, and if possible, board the enemy steamers to capture them. Rowan knew from intelligence reports that the small shore battery on Cobb Point south of Elizabeth City was vulnerable to flanking fire and ordered USS *Valley City* and USS *Whitehead* to attack the shore battery from the rear.⁷⁸

On the morning of February 10, at 6:50 AM, Rowan made signal to the fleet to begin their advance towards Elizabeth City. At 8:00 AM, they sighted the Lynch's fleet drawn up in a line abreast formation above Fort Cobb. When the Union fleet was two miles below Cobb Point, the Confederate fleet commenced firing. *Ceres* at this time continued patrolling the Union flotilla's right flank, off the vanguard column, for potential shallow spots in the river. Rowan noted that the Confederate fire fell "thick and fast among the vessels in the main columns."⁷⁹ Despite the salvos, the Union fleet continued steaming toward the enemy without answering in kind.

At 8:45 AM, the Union fleet was three-quarters of a mile below Cobb Point when Rowan made signal to "Dash at the enemy."⁸⁰ At this signal, the steamers in the first two columns advanced at full steam toward Lynch's fleet. *Ceres*, as part of the vanguard column, joined in the assault. USS *Commodore Perry* made a run on CSS *Sea Bird*, and USS *Underwriter* steamed ahead to pursue the retreating CSS *Beaufort* and CSS *Appomattox*. In Perry's pursuit of *Sea Bird*, it passed CSS *Ellis* who attempted to grapple for boarding action but missed and drifted downriver, allowing Perry to continue advancing on *Sea Bird*.⁸¹ After this, *Ellis*, under command of Lieutenant James Cooke, began circling around to re-engage the Union vanguard. Soon it grounded at Hospital Point. Acting Master MacDiarmid sighted the grounded *Ellis* and directed *Ceres* for it. *Ceres* closed in for boarding action, eventually grounding itself in the process. Confederate sailors began abandoning ship as Cooke gave orders to fire *Ellis*' magazine, hoping to blow the ship up. This was prevented and intense, hand-to-hand fighting ensued. During the melee, Cooke was severely injured and surrendered.⁸² By this point, the action was becoming general. Lynch's small fleet lie in ruin: *Commodore Perry* had rammed and sunk his flagship *Sea Bird*, two ships were

intentionally burned to prevent capture, two had retreated, and because of the actions by *Ceres* and its crew, one of Lynch's steamers had been captured and made a prize. At 10:40 PM, *Ceres* returned to Roanoke Island to report news of the Union victory at Elizabeth City to Flag-Officer Goldsborough.⁸³

On February 12, *Ceres* began undergoing repairs at Roanoke Island. Between February 23 and 25, *Ceres* was dispatched to Hatteras Inlet for unknown reasons. Following this, it made regular patrols of Pamlico Sound throughout early March.⁸⁴ Following Commander Rowan's departure from the Albemarle region, *Ceres* remained in a small fleet under the now-promoted Commander Werden in order to patrol and guard the Dismal Swamp Canal. It was during this time that *Ceres* was noted to be leaking badly and in need of extensive repairs.⁸⁵ On April 21, Commander Rowan ordered Acting Master MacDiarmid to take the tug to New Bern, North Carolina for its needed repairs.⁸⁶

Ceres' service record throughout the remainder of the war was impressive. In the latter half of 1862, it took at least two more prizes: the steamer *Alice*, loaded with a cargo a bacon for Confederate Army forces and church bells intended to be melted and cast into cannon, and the steamer *Wilson*, later requisitioned by the U. S. Army.⁸⁷ In addition to patrols, it also participated in military expeditions further into the interior including an expedition to Hamilton, North Carolina, which is on the upper reaches of the Roanoke River.⁸⁸ Union military occupation of Hamilton was short-lived, as later in the war, after the launch of CSS *Albemarle*, Union naval vessels were unable to penetrate the upper reaches of the Roanoke River until the Confederate ironclad was defeated.

On May 5, 1864, Lieutenant James Cooke again met *Ceres* in battle, this time commanding the ironclad ram CSS *Albemarle*. Under the command of Acting Master H. H. Foster, *Ceres* was in company with USS *Miami*, USS *Commodore Hull* and the army steamer *Trumpeter* near Plymouth, North Carolina when it encountered *Albemarle* and two accompanying steamers. The small Union fleet turned to escape, but was soon joined by other Union vessels, allowing for combat. A line of battle formed, and *Ceres* boarded the rebel steamer *Bombshell*. After *Bombshell's* surrender, *Ceres* then concentrated its firepower on *Albemarle*. The engagement ended in a standoff after USS *Sassacus* rammed *Albemarle* and the latter disengaged and retreated.⁸⁹ *Albemarle* was later destroyed in October 1864 in a night raid by Lieutenant William Cushing. *Ceres* remained in North Carolina for the remainder of the war,

towing *Albemarle* to Norfolk in April 1865 after the Union Navy refloated the ironclad ram.

Ceres the Veteran

Following the war, *Ceres* was sold at public auction to H. B. Farring by agents Burdett, Jones, and Company for \$6,600 and returned to civilian service.⁹⁰ It is unclear what *Ceres* was used for after its return to civilian service. Records indicate that the vessel was given the official number 4875, and it is recorded in 1868 as enrolled at Rondout, New York.⁹¹ It is possible that Farring had purchased for or sold *Ceres* to the Cornell Steamboat Company. The maritime village of Rondout is located at the mouth of Rondout Creek on the Hudson River between New York City and Albany and is cited as the location of the "best deep-water port in the Hudson Valley."⁹² Thomas Cornell had established the Cornell Steamboat Company at Rondout in the 1830s and, and the company engaged in both freight and passenger ferry service and towing barges.⁹³ *Ceres'* homeport of Rondout makes the Cornell Steamboat Company a likely candidate for where it served immediately after the war; however, if it was working the Hudson River with Cornell, it is unclear if it was engaged in barge towing or passenger and freight service. Records indicate the vessel may have undergone an extensive refit after being decommissioned, since its tonnage changed from 144 to 124.⁹⁴

By 1872, *Ceres'* homeport is recorded as New York City.⁹⁵ Two years later, the steamer was enrolled at Albany, New York.⁹⁶ The nature of these changes in homeport are unknown as it may be that the owners simply re-enrolled the vessel at different ports, or the vessel was sold and purchased numerous times. In any case, *Ceres* remained in Albany for the rest of its service life, no longer appearing in records for United States shipping after 1887.⁹⁷ According to the Lytle List, *Ceres* was ultimately abandoned in 1887 following over three decades of civilian and military service.⁹⁸

Conclusion

Ceres demonstrates that during the Civil War, the Union Navy required more than purpose-built naval vessels. The shallow waters off the North Carolina coast and in the sounds required light-drafted vessels to even attempt expeditions further inland. If deeper drafted vessels grounded, commissioned harbor tugs performed duties more closely associated their civilian careers. They delivered munitions and provisions to soldiers at occupied outposts. They towed hulks to obstruct locks or towed others out of the way to clear routes for offensive operations. Their speed allowed them

to chase down prizes and blockade runners; and with a simple battery, they proved to be a formidable fighting force in North Carolina's river systems. While the traditional fighting vessels of the Union Navy became obstacles in North Carolina's shallow waters and as the Navy transitioned to ironclads or *Monitor*-class vessels, *Ceres* and the tugs and ferries from throughout northern ports showed that civilian vessels were crucial in the first year of the war.

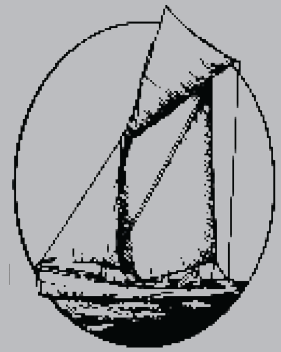
Endnotes

1. Spencer C. Tucker, *Blue and Grey Navies: The Civil War Afloat* (Annapolis, M.D.: Naval Institute Press, 2006), 175.
2. Donald L. Canney, *Lincoln's Navy: The Ships, Men, and Organization 1861-1865* (Annapolis, M.D.: Naval Institute Press, 1998); Tucker, *Blue and Grey Navies*; Craig L. Symonds, *Lincoln and His Admirals: Abraham Lincoln, the U.S. Navy, and the Civil War* (Oxford, U.K.: Oxford University Press, 2008); James M. McPherson, *War on the Waters: The Union and Confederate Navies 1861-1865* (Chapel Hill, N.C.: University of North Carolina Press, 2012).
3. Purchased steamers: Statement of the number and names of all vessels and tonnage thereof purchased by and for the government for the Navy Department since April 1, 1861, where, when and by whom purchased, the amount paid for each and the amount of commissions paid (if any) and to whom. Also showing what purchased vessels have been lost or destroyed, sold or otherwise disposed of and the names of those remaining in the Naval Service at this this date. 1865, Box 124, United States Navy Subject Files 1775-1910 Group 45, National Archives and Records Administration (NARA), Washington, D.C., United States of America. This number includes those vessels purchased for three "stone fleets" for three different operations. These fleets consisted of old schooners and whaling vessels. The explicit purpose of these vessels was for sinking as obstructions to channels and inlets. If these vessels are excluded, the Union Navy purchased 508 vessels throughout the war, with 151 of those purchased in 1861.
4. Bill of Sale for the Steamer *Ceres* from Crary and Storms to the United States Government, 11 September 1861, Box 124, United States Navy Subject File 1775-1910 Group 45, NARA, Washington, D.C.
5. United States Navy, "Statistical Data of Ships: U.S.S. *Ceres*," in *The Official Recorded of the Union and Confederate Navies in the War of Rebellion* (ORN), *Series 2, Volume 1*, ed. C.C. Marsh (Washington D.C., Government Printing Office, 1921), 54.
6. Bill of Sale for the Steamer *Ceres*, Box 124, United States Navy Subject File 1775-1910 Group 45, NARA, Washington, D.C.
7. United States Navy, "Statistical Data of Ships: U.S.S. *Ceres*," 54.
8. "The Wrecks on the Jersey Shore. Total Loss of the Packet Ship New York," *The New York Herald*, December 23, 1856, 1.
9. "Advertisement," *The New York Herald*, December 29, 1858, 3.
10. "Advertisement," *The New York Herald*, July 22, 1859, 12.
11. "The Season of Excursions. Great Increase of the Business-Lists of Excursion Steamers and Places," *The New York Herald*, August 25, 1859, 5.
12. "The Oyster Sloop Tragedy: Trial of Albert W. Hicks, Alias William Johnson, for Piracy on Board the Sloop Edwin A. Johnson," *The New York Herald*, May 15, 1860, 10.
13. "Execution of Hicks, the Pirate.; Twelve Thousand People at Bedloe's Island. Scenes at the Tombs, in the Bay, and at the Place of his Execution. His Confession," *The New York Times*, July 14, 1860, 1.
14. "Advertisement," *The New York Herald*, July 3, 1860, 2.
15. "The Approaching Civil War," *The New York Herald*, April 7, 1861, 1.
16. "Steamers Purchased by the Government," *The Philadelphia Inquirer*, August 24, 1861, 4.
17. Winfield Scott, "May 3, 1861 Correspondence between General-in-Chief Winfield Scott and Major General George McClellan," in *The War of Rebellion: A Compilation of the Official Records of the Union and Confederate Armies, Series 1, Volume 51, Part 1*, ed. Fred C Ainsworth and Joseph W. Kirkley (Washington D.C., Government Printing Office, 1902), 369-370; Winfield Scott, "May 21, 1861 Correspondence between General-in-Chief Winfield Scott and Major General George McClellan," in *The War of Rebellion: A Compilation of the Official Records of the Union and Confederate Armies, Series 1, Volume 51, Part 1*, ed. Fred C Ainsworth and Joseph W. Kirkley (Washington D.C., Government Printing Office, 1902), 387.
18. Tucker, *Blue and Grey Navies*, 79.
19. Tucker, *Blue and Grey Navies*, 1; Canney, *Lincoln's Navy*, 17, 178.
20. Symonds, *Lincoln and His Admirals*, 49; McPherson, *War on the Waters*, 25.
21. McPherson, *War on the Waters*, 25-26.
22. Symonds, *Lincoln and His Admirals*, 56-57; Purchased steamers, Box 124 Navy Subject Files 1775-1910 Group 45, NARA, Washington, D.C.
23. "The Arrest of Capt. Dove," *The Philadelphia Inquirer*, September 13, 1861, 4.
24. Gideon Welles, "September 18, 1861 Order of the Secretary of the Navy to Flag-Officer Goldsborough, U.S. Navy, orders to command Atlantic Blockading Squadron, regarding additional vessels for his squadron," in *ORN Series 1, Volume 6*, ed. Edward K Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 234; Louis M. Goldsborough, "September 23, 1861 Order of Flag-Officer Goldsborough, U.S. Navy, commanding Atlantic Blockading Squadron, to Acting Master Elliot, U.S. Navy, commanding U.S.S. *Ceres* to proceed to Hatteras Inlet, North Carolina," in *ORN Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 249.
25. Stephen Rowan, "September 26, 1861 Letter from Commander Rowan, U.S. Navy, Commanding U.S.S

- Pawnee*, to Captain Chauncey, U.S. Navy, Commanding U.S.S *Susquehanna*, Regarding the Disposition of Vessels," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 264-265.
26. William Chandler, "September 26, 1861 Report of Commander Chandler, U.S. Navy, Commanding U.S.S *Dawn*, Regarding the Disabled Condition of that Vessel," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 255-256.
27. Rowan, "September 26, 1861 Letter to Captain Chauncey," 264-265.
28. Ibid, 264.
29. Louis M Goldsborough, "September 26, 1861 Order of Flag-Officer Goldsborough, U.S. Navy, commanding Atlantic Blockading Squadron, to Commander Rowan, U.S. Navy, commanding U.S.S *Pawnee*, to proceed to Washington with that vessel," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 255.
30. Louis M Goldsborough, "September 29, 1861 Order of Flag-Officer Goldsborough, U.S. Navy, commanding Atlantic Blockading Squadron, to Commander Stellwagen, U.S. Navy, to proceed to obstructing the inlets of North Carolina by sinking vessels loaded with stone," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 267.
31. Henry S. Stellwagen, "October 2, 1861 Report of Commander Stellwagen, U.S. Navy, regarding the impossibility of blocking the inlets of North Carolina with vessels loaded with stone under the existing condition of affairs," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 279-280.
32. Stephen Rowan, "September 30, 1861 Report of Commander Rowan, U.S. Navy, Commanding U.S.S *Pawnee*, Regarding the Erection of Confederate Batteries on Roanoke Island, North Carolina," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 270-271.
33. Ibid, 271.
34. Stephen Rowan, "September 30, 1861 Letter from Commander Rowan, U.S. Navy commanding U.S.S *Pawnee* to Captain Chauncey, U.S. Navy commanding U.S.S *Susquehanna*, requesting lieutenant to command in his absence from the inlet," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 273; Stephen Rowan, "September 30, 1861 Letter from Commander Rowan, U.S. Navy, commanding U.S.S *Pawnee*, to Captain Chauncey, U.S. Navy, commanding U.S.S *Susquehanna*, regarding the prize schooner Henry Nutt," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 273-274.
35. Louis M. Goldsborough, "October 3, 1861 Report of Flag-Officer Goldsborough, U.S. Navy, commanding Atlantic Blockading Squadron, transmitting information regarding stations of vessels and instructions to commanding officers of his command," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 281-282.
36. R. B. Lowry, "October 10, 1861 Detailed Report of Lieutenant Lowry, U.S. Navy, commanding U.S.S *Underwriter*, regarding the condition of affairs at Hatteras Inlet, North Carolina, and the necessary requirements to hold that place," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 303-304.
37. Henry S. Stellwagen, "October 11, 1861 Report of Commander Stellwagen, U.S. Navy, stating the impossibility of blocking the inlets of North Carolina," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 309.
38. Reed Werden, "October 13, 1861 Report of Lieutenant Werden, U.S. Navy, commanding U.S.S *Stars and Stripes*, regarding the impossibility of blocking the inlets of North Carolina with vessels loaded with stone," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 315-316.
39. Reed Werden, "October 20, 1861 Report of Lieutenant Werden, U.S. Navy, commanding U.S.S *Stars and Stripes*, regarding the movement of Confederate vessels at Hatteras Inlet, and transmitting enclosure regarding the blocking of Ocracoke Inlet, North Carolina by sinking vessels loaded with stone," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 344-345.
40. J. L. Elliot, "October 27, 1861 Report of Acting Master Elliot, U.S. Navy, commanding U.S.S *Ceres*, regarding the incomplete outfit of that vessel," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 364-366.
41. J. L. Elliot, "October 27, 1861 Report of Acting Master Elliot," 364.
42. Ibid, 365.
43. Gideon Welles, "October 11, 1861 Letter from the Secretary of the Navy to Flag-Officer Goldsborough, U.S. Navy, commanding Atlantic Blockading Squadron, regarding the inefficiency of certain officers in command of tugs," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 308.
44. Louis M. Goldsborough, "October 14, 1861 Order of Flag-Officer Goldsborough, U.S. Navy, commanding Atlantic Blockading Squadron, to Lieutenant Werden, U.S. Navy, commanding U.S.S *Stars and Stripes*, in relation to inefficient commanding officers," in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 319.
45. Werden, "October 20, 1861 Report regarding movements of Confederate vessels at Hatteras Inlet," 344.
46. R. B. Lowry, "Wreck of the French war steamer *Prony*, November 5, 1861: November 7, 1861 Report of Lieutenant Werden, U.S. Navy, commanding U.S.S

- Stars and Stripes*, transmitting report of Lieutenant Lowry, U.S. Navy, commanding U.S.S *Underwriter*,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 398-399.
47. Elliot, “October 27, 1861 Report regarding incomplete outfit of *Ceres*,” 365.
48. Reed Werden, “November 2, 1861 Report of Lieutenant Werden, U.S. Navy, commanding U.S.S *Stars and Stripes*, of slight engagement with a Confederate steamer in Hatteras Inlet and transmitting report of reconnaissance of Ocracoke Inlet October 29, 1861, and the impracticability of blocking it by sinking stone vessels,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 377-378.
49. William J. Hotchkiss, “Wreck of the French war steamer *Prony*, November 5, 1861: November 28, 1861 Detailed Report of Lieutenant Werden, U.S. Navy, commanding U.S.S *Stars and Stripes*, transmitting additional reports,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 402-403.
50. Lowry, “Report of the wreck of the French war steamer *Prony*,” 398.
51. John MacDiarmid, “Wreck of the French war steamer *Prony*, November 5, 1861: November 28, 1861 Detailed Report of Lieutenant Werden, U.S. Navy, commanding U.S.S *Stars and Stripes*, transmitting additional reports,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 403-404.
52. John MacDiarmid, “Wreck of the French war steamer *Prony*,” 403.
53. Lowry, “Report of the wreck of the French war steamer *Prony*,” 398.
54. Reed Werden, “Wreck of the French war steamer *Prony*, November 5, 1861: November 7, 1861 Report of Lieutenant Werden, U.S. Navy, commanding U.S.S *Stars and Stripes*, transmitting report of Lieutenant Lowry, U.S. Navy, commanding U.S.S *Underwriter*,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 398.
55. William N. Jeffers, “November 17, 1861 Report of Lieutenant Werden, U.S. Navy, commanding U.S.S *Stars and Stripes*, transmitting reports regarding the blocking of Ocracoke Inlet with vessels loaded with stone, November 14, 1861,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 429.
56. Ibid, 429.
57. United States Navy, “Abstract log of the U.S.S *Stars and Stripes*, September 19, 1861 to March 7, 1862,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 697.
58. Louis M. Goldsborough, “November 11, 1861 Report of Flag-Officer Goldsborough, U.S. Navy, commanding North Atlantic Blockading Squadron, suggesting means to secure command of the sounds of North Carolina and capture Roanoke Island,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 421-422.
59. George B. McClellan, *The Army of the Potomac: Gen. McClellan’s Report of its Operations while under his Command* (New York, N.Y.: G.P. Putnam, 1864), 83-86.
60. George B. McClellan, “November 6, 1861 Letter to Major General John E. Wool,” in *The War of Rebellion: A Compilation of the Official Records of the Union and Confederate Armies, Series 1, Volume 4*, ed. Robert N. Scott (Washington D.C., Government Printing Office, 1882), 627-628.
61. Henry Van Brunt, “Rough notes of the naval expedition to Roanoke Island, etc., by Henry Van Brunt, secretary to flag-officer,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 582-584.
62. Louis M. Goldsborough, “February 18, 1862 Detailed report of Flag-Officer Goldsborough, U.S. Navy, commanding North Atlantic Blockading Squadron,” in ORN *Series 1, Volume 6*, ed. Edwards K Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 550-551.
63. Van Brunt, “Rough notes on the naval expedition to Roanoke Island,” 587.
64. Goldsborough, “February 18, 1862 Detailed report,” 552; Van Brunt, “Rough notes on the naval expedition to Roanoke Island,” 587.
65. Goldsborough, “February 18, 1862 Detailed report,” 550-552.
66. Ibid, 552.
67. John MacDiarmid, “February 15, 1862 Report of Acting Master MacDiarmid, U.S. Navy, commanding U.S.S *Ceres*,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 575-576.
68. Goldsborough, “February 18, 1862 Detailed report,” 552.
69. MacDiarmid, “February 15, 1862 Report,” 575.
70. Ibid, 575-576.
71. William N. Jeffers, “February 9, 1862 Report of Lieutenant Jeffers, U.S. Navy, commanding U.S.S *Underwriter*,” in ORN *Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 562; John MacDiarmid, “February 15, 1862 Report,” 576; Henry Van Brunt, “Rough notes on the naval expedition to Roanoke Island,” 589.
72. Jeffers, “February 9, 1862 Report,” 562.
73. Van Brunt, “Rough notes on the naval expedition to Roanoke Island,” 589-590.
74. Ibid, 590.
75. Alexander C. Meekins, *Elizabeth City, North Carolina, and the Civil War* (Charleston, S.C.: The History Press), 11.
76. Goldsborough, “November 11, 1861 Report suggesting means to secure command of the sounds of North Carolina and Capture Roanoke Island,” 421-422; Van Brunt, “Rough notes on the naval expedition to Roanoke Island,” 590.
77. S.P. Quackenbush, “February 11, 1862 Report of Lieutenant Quackenbush, U.S. Navy, commanding U.S.S *Delaware*,” in ORN *Series 1, Volume 6*, ed. Ed-

- ward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 612.
78. Stephen Rowan, "February 11, 1862 Detailed Report of Commander Rowan, U.S. Navy, commanding second division in the sounds of North Carolina," in *ORN Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 606-607.
79. *Ibid.*, 607.
80. Quackenbush, "February 11, 1862 Report," 612.
81. George H. Allen, *Forty-Six Months with the Fourth Rhode Island Volunteers* (Providence, R.I.: J. A. & R. A. Reid, 1887), 78-79.
82. William J. Hotchkiss, "February 11, 1862 Report of Acting Master Hotchkiss, U.S. Navy, commanding U.S.S General Putnam," in *ORN Series 1, Volume 6*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1897), 620-621.
83. Van Brunt, "Rough notes on the naval expedition to Roanoke Island," 590.
84. *Ibid.*, 591-592.
85. Stephen Rowan, "March 15, 1862 Order of Commander Rowan, U.S. Navy, to Lieutenant Werden, U.S. Navy, to assume command of the naval force in Albemarle Sound, North Carolina," in *ORN Series 1, Volume 7*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1898), 127; Reed Werden, "March 27, 1862 Report of Lieutenant Werden, U.S. Navy, transmitting information regarding the construction of Confederate gunboats at Norfolk," in *ORN Series 1, Volume 7*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1898), 172.
86. Stephen Rowan, "April 21, 1862 Order from Commander Rowan, U.S. Navy, to Acting Master MacDiarmid, U.S. Navy, to proceed to New Berne [sic], N.C. for repairs to the U.S.S *Ceres*," in *ORN Series 1, Volume 7*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1898), 254.
87. Stephen Rowan, "May 17, 1862 Report of Commander Rowan, U.S. Navy, regarding affairs at Elizabeth City, N.C., and enclosing report of Lieutenant Colhoun, U.S. Navy, commanding U.S.S *Hunchback*, of an expedition up the Chowan River, North Carolina," in *ORN Series 1, Volume 7*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1898), 375; H.K. Davenport, "October 20, 1862 Report of Commander Davenport, U.S. Navy, of capture of steamer *Wilson* and schooner *G.H. Smoot*," in *ORN Series 1, Volume 7*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1898), 561.
88. Charles W. Flusser, "Expedition to Hamilton, N.C., July 9, 1862: July 11, 1862 Report of Lieutenant Flusser, U.S. Navy, enclosing reports of Acting Masters MacDiarmid and Woodward, U.S. Navy," *ORN Series 1, Volume 7*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1898), 556; John MacDiarmid, "July 10, 1862 Report to Lieutenant Flusser," in *ORN Series 1, Volume 7*, ed. Edward K. Rawson and Robert H. Woods (Washington D.C.: Government Printing Office, 1898), 558.
89. United States Navy, "Abstract log of the U.S.S *Ceres*" in *ORN Series 1, Volume 9*, ed. Edward K. Rawson and Charles W. Stewart (Washington, D.C.: Government Printing Office, 1899), 773.
90. United States Navy, "Statistical Data of Ships: U.S.S. *Ceres*," 54.
91. William M. Lytle, *Merchant Steam Vessels of the United States 1807-1868* (Mystic, C.T.: The Steamship Historical Society of America, 1952), 28; United States Treasury Department, *List of Merchant Vessels of the United States, with the Official Numbers and Signal Letters Awarded to Them: Volume 2* (Washington, D.C.: Government Printing Office, 1869), 38.
92. Hudson River Maritime Museum, "Thomas Cornell and the Cornell Steamboat Company," in *Pilot Log 2001* (Kingston, N.Y.: New York, 2001), 1.
93. *Ibid.*, 2.
94. United States Treasury Department, *List of Merchant Vessel of the United States, Volume 2*, 38.
95. United States Treasury Department, *List of Merchant Vessels of the United States, with the Official Numbers and Signal Letters Awarded to Them: Volume 2* (Washington, D.C.: Government Printing Office, 1872), 44.
96. United States Treasury Department, *List of Merchant Vessels of the United States, with the Official Numbers and Signal Letters Awarded to Them: Volume 7* (Washington, D.C.: Government Printing Office, 1875), 50.
97. United States Treasury Department, *List of Merchant Vessels of the United States, with the Official Numbers and Signal Letters Awarded to Them: Volume 20* (Washington, D.C.: Government Printing Office, 1889), 270.
98. Lytle, *Merchant Steam Vessels of the United States*, 28.



The *Estelle Randall* Shipwreck (1898-1910)

Life and Death in Two Columbias

by Nathan Richards

Abstract

Estelle Randall's burning at a wharf in Columbia, North Carolina in 1910 has ensured the steamer a prominent place in the maritime history of the Scuppernong River and the Albemarle Sound region. But while the story of its loss is well known, the tale of its life has not been expanded upon. This paper will outline *Estelle Randall*'s short career, from its launch in Baltimore (to much fanfare) and its employment in Maryland, the District of Columbia, Virginia, and briefly in North Carolina (until its demise).

Introduction

The story of the loss of *Estelle Randall* in 1910 is well known in Tyrrell County. The wreck, whose location has never been forgotten, lies in the lower reaches of the Scuppernong River, a short distance from a relic wharf near the center of downtown Columbia (Figure 1). The wrecking of the palatial steamer on January 17, 1910, and the ensuing loss of life was a major event for the town culminating in one of the few identified shipwrecks of that waterway. What is not so well known is the life of the ship and the fact that it was built to serve the Maryland-District of Columbia region before moving into Virginia and North Carolina waters at the end of its career.

Of *Estelle Randall*'s dozen years afloat, less than six weeks were spent in the waters of southern Virginia and northeastern North Carolina. Nevertheless, the ship's story illuminates the

operation of a steamer service within North Carolina's Albemarle Sound region and illustrates the way that a vessel used in more populous centers of the eastern seaboard found its way to the waterways of eastern North Carolina. This paper will outline a biography of the shipwreck, from the circumstances of its construction in Baltimore, and its primary career in the rivers of Maryland and the District of Columbia, through controversy, and into a short-lived period of service in southern Virginia and North Carolina's Albemarle Sound (until its loss). Demonstrating more recent activities at the loss location of the steamer, the narrative will conclude with an account of rescue archaeological work undertaken under the direction of the North Carolina Underwater Archaeology Branch (NCUAB) in the late 1980s that saw the retrieval of machinery and material culture from its hull and a more recent investigation led by the author that recorded the preservation of the wreck's structure as a part of an exploration of Tyrrell County's maritime cultural resources in 2011.¹

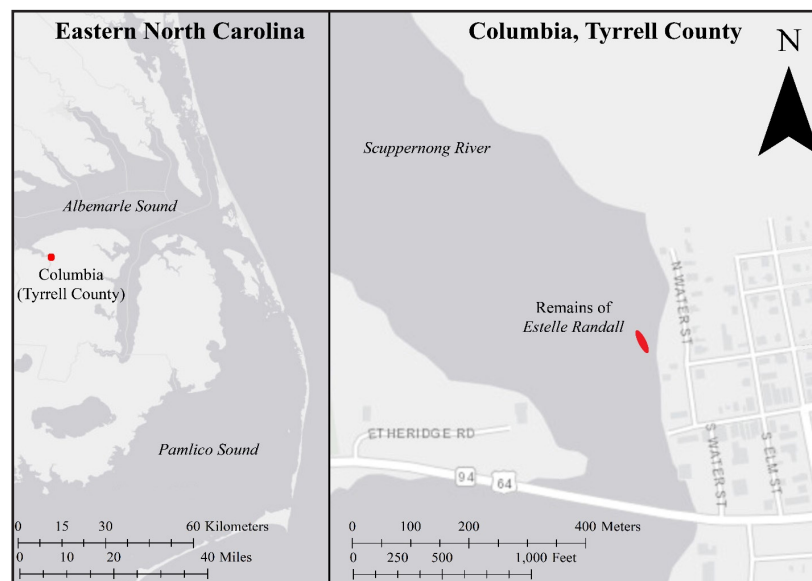


Figure 1. Map of present-day Columbia, NC on the Scuppernong River, showing the location and orientation of the remains of *Estelle Randall* along part of its eastern bank (Image by Nathan Richards).

Estelle Randall: Magnificence in Maryland

Estelle Randall (Official Number 136664) was launched in Baltimore, Maryland in December 1897 (delivered in February 1898) by William E. Woodall and Company (Figure 1).² The Woodall Shipyard (1873-1929), located at Locust Point was well known in Baltimore for building schooners and passenger steamers.³

Owned by the E. S. Randall Company (also known as the E. S. Randall Steamboat & Excursion Company and the E. S. Randall Potomac River Line Company) and named after the owner Captain Ephraim S. Randall's oldest daughter, it was designed for use as an inland passenger steamer and U. S. mail carrier along the Potomac River, traveling between Washington, D.C. and Glymont, Maryland (Figures 3 and 4). For a time, it was a mainstay of a rotating lineup of steamers in E. S. Randall's fleet, which included *Harry Randall*, *Wakefield*, *T. V. Arrowsmith*, *Kent*, *Samuel J. Pentz*, and *Lovie Randall*. Built in a composite form (steel frames, wooden planks, single steel deck) and of 144 net tons burden (212 gross tons), the vessel was of dimensions 118 feet length, 24 feet width and 8 feet draft. *Estelle Randall* was completely illuminated via electricity and carried a powerful search light. The steamer's original engine was built by Campbell and Zell of Canton (Baltimore), Maryland. Details of its engine are given as being a 2-cylinder compounded engine. The working pressure of the engine was 150 pounds (Figure 5). The boiler had a 39 square foot heating surface and a 1200 square foot grate surface (Figure 6).⁴ A comprehensive picture of the original machinery is communicated in the *Nautical Gazette*.⁵

The launching of the vessel featured in the Washington D.C. newspaper, the *Times*,

“The new Washington and Glymont mail route steamer, the *Estelle Randall*, was launched at the yard of William E. Wordall [sic] and Co., in Baltimore yesterday morning, and in spite of the downpour of rain a crowd numbering several hundred witnessed the ceremony.

Miss Estelle Randall, of this city, after whom the steamer is named, acted as her sponsor, and as the new boat slid gracefully from the stocks into the water she broke a bottle of champagne, which had been handsomely decorated with red, white and blue ribbons by Mr. James E. Wordall [sic], upon the steamer's bow, saying “I christen thee the *Estelle Randall*.”

After the ceremony the launching party were entertained at dinner by Capt. E. S. Randall, the proprietor of the Randall line.

Those who attended the launching from this city were Mrs. E. S. Randall, Mrs. Harry S. Ran-



dall, Miss Estelle Randall, Miss Lovie Randall, Captain. E. S. Randall, the proprietor of the Randall line; Mr. William S. Moore, chief engineer; Mr. Nat Berry, Mr. Will F. Carne, general agent, River View, and Mr. Frank Carlin of Alexandria.”⁶

Extant marine insurance registers suggest that *Estelle Randall* was surveyed once in its life, in Baltimore soon after its construction (in March 1898), and never received an insurance classification. This may be because, as an intended mail and passenger steamer, the importance of carrying hull insurance was not as important to its owners, and they sought to self-insure the vessel.⁷ The *Annual List of Merchant Vessels of the United States* gives slightly different measurements for the craft of 143 net tons, and dimensions 111.5 feet length by 24.9 feet beam by 7.2 feet draft and stipulates the vessel's home port as Washington, D.C.⁸ The *Nautical Gazette* of 20 January 1898 provides additional details:

“The hull is of composite build, having steel frames and yellow pine planking. The combination gives great strength and has many advantages over the old style of hulls built entirely of wood ... the steel frames are 3x2 ½ in. and the outside planking is 3 in. in thickness. The keel is of oak, 8 in. wide by 6 in. deep.

There are two saloons, one being located on the main deck, after, and the other on the second deck. This latter is a very commodious and airy apartment, beautifully finished and furnished, and affords a delightful retreat for passengers in stormy or wintry weather.”⁹

Figure 2. Photograph of William Easley Woodall (1837-1884), founder of the Wm. E. Woodall shipyard (Photography by John Holyland, taken between 1865 and 1880).

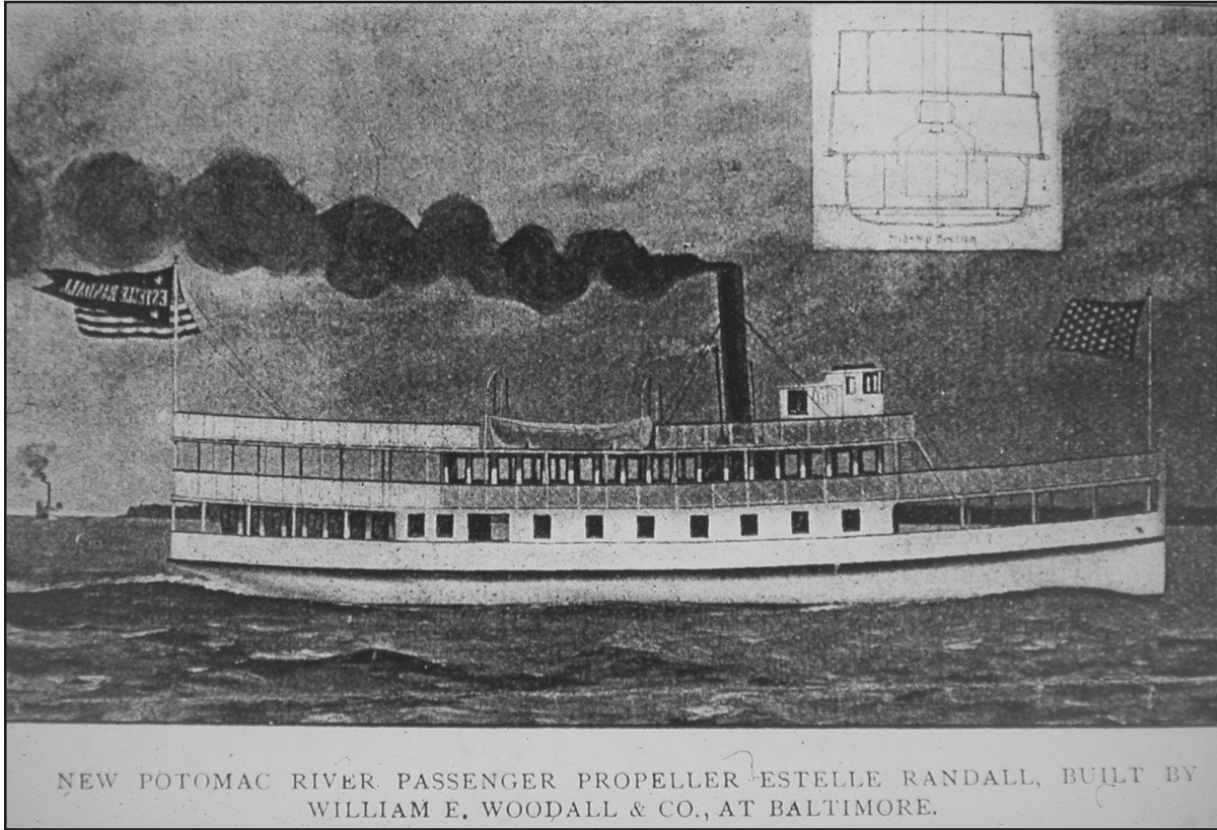


Figure 3. "New Potomac River passenger propeller Estelle Randall, built by William E. Woodall & Co., at Baltimore" (Image from the Nautical Gazette).



Figure 4. Photograph of Estelle Randall as a U.S. mail boat, date unknown (Photo courtesy of the Mariner's Museum, No. PB2876 C176).

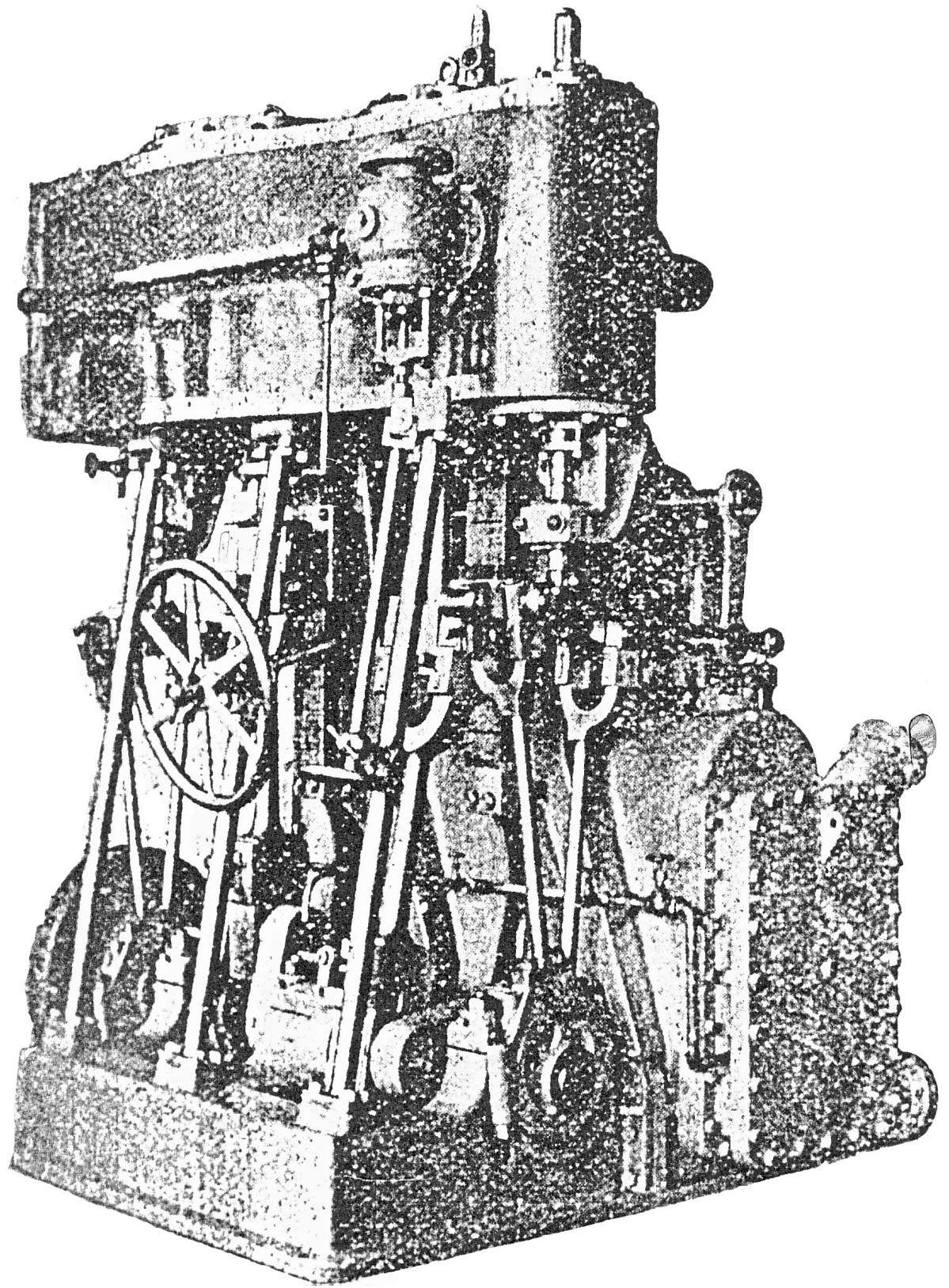


Figure 5. "Engine for propeller Estelle Randall, built by Campbell & Zell Co." Original engine of the steamer Estelle Randall (Image from the Nautical Gazette).

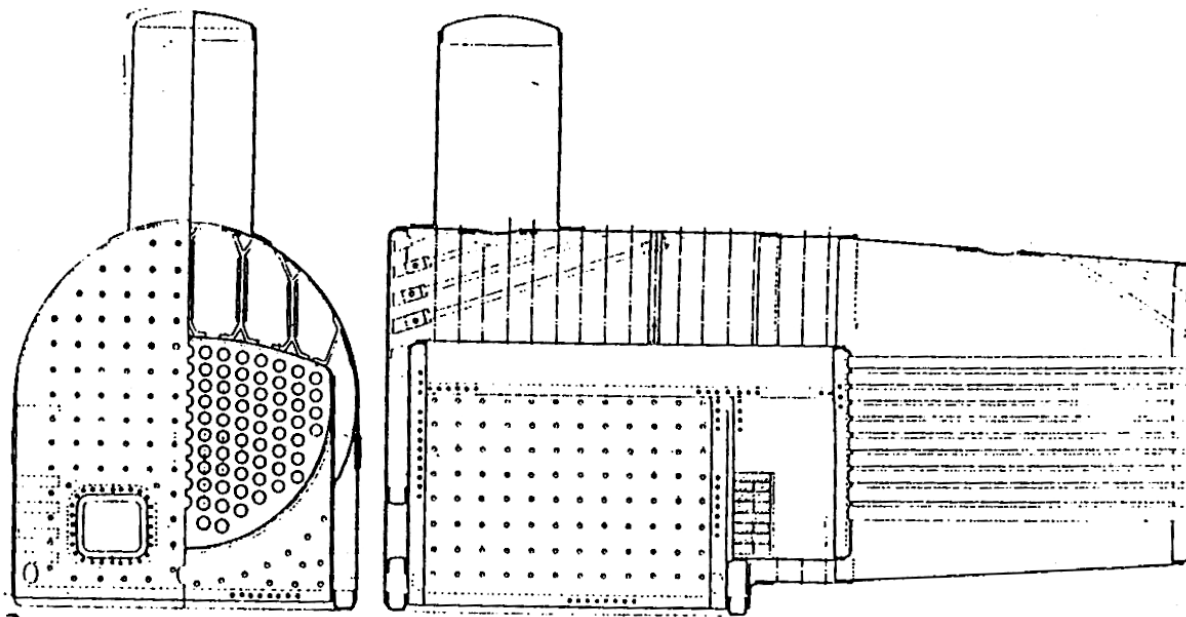


Figure 6. "Marine boiler, of locomotive type, built by Campbell & Zell Co., for propeller Estelle Randall" (Image from the *Nautical Gazette*).

A "Pretty Boat" Put to Work: E. S. Randall Company (1898-1905)

The original owner of the steamer (Captain Ephraim S. Randall) was a well-known ship owner, who operated "several large excursion and passenger steamers on the Potomac" and was "one of the most successful steamboat men in the South."¹⁰ The regular schedule of the steamer appears to have been a mail route "... for Glymont and intermediate points ..." during the week for at least the first six years of its existence.¹¹ However, in addition to being a mail boat, *Estelle Randall* was used extensively for pleasure excursions, as reported in Washington D.C. newspapers, such as the *Evening Times*,

"Excursions. Sunday at River View. The usual Sunday trips of the steamers *Samuel J. Pentz* and *Estelle Randall* will be made to River View tomorrow, and those who wish to spend a delightful day in the shade of the trees, where the cool breezes blow from the river, should not fail to visit the resort. These Sunday trips to the View are taken advantage of by many of Washington's business men, who spend the day there in order to rest for the next week's work. The concerts by the View orchestra, under the leadership of Prof. Chris Arth, jr., will be a feature of the day's entertainment, and there are dozens of other amusements to entertain the visitors. Tomorrow, in order to avoid crowding, trips will be made at 11 a.m., 2:45, 3:45, and 6:15 p.m.; and the return trips will be made at 1, 5, 7:30, and 9:30 p.m."¹²

Indeed, these weekend excursions appeared to have been exceedingly popular, and during the earliest years of its career, the steamer was extensively advertised for its trips to locations around the Chesapeake. One regularly advertised service was a Sunday route from River View Wharf

(Washington, D.C.) and Alexandria (Virginia) to Chapel Point (Maryland) for the purposes of "Fine Bathing, Crabbing, and Fishing." A round-trip ticket was 50 cents.¹³

Estelle Randall, by all accounts one of the "prettiest boats" in the area, was also often the venue for special events, as noted in an 1898 *Times* article,

"Italian Sailors Feasted. The shad bake given by Captain E. S. Randall and the Jolly Fat Men's Club at River View yesterday was one of the most enjoyable affairs that has been given by the club for some time. The guests of the day were Engineer Meechia Leonardo and Lieutenants Gughilmo Fiorante, E.V. Volpe and G. Marcucci of the Italian cruiser *Amerigo Vespucci*. The trip to the View was made on the steamer *Estelle Randall* and the dinner under the direction of Mr. Chas. Beverage, caterer, was served in the refreshment hall and was voted a great success. The Italian officers were well entertained by Captain Randall and Mr. J. H. Buscher of the club, and thoroughly enjoyed the American outing. The steamer started for home shortly after six o'clock, and stopping at Alexandria to Land the guests reached home before seven."¹⁴

Due to its pleasing looks, *Estelle Randall* periodically found itself with *Samuel L. Pentz* on high-profile excursions, such as one reported on May 1, 1899 as the "Saengerbund Outing,"

"The first big Sunday excursion of the season was held yesterday at River View. It was a red-letter occasion in the history of the United Singing Societies, and fully 3,000 members of the Saengerbund and Arion Societies, which compose the united organization, took advantage of the beautiful spring day for an

outing down the river. The weather was ideal and beautiful the lawns or River View were thronged with the crowds of German-Americans who thoroughly enjoyed their brief vacation.¹⁵

The large social gathering, with a big orchestra, rides, and many other amusements such as shooting galleries and merry-go-rounds greeted thousands of excursionists. Similarly, the *Times* advertised that *Estelle Randall* and *Samuel J. Pentz* were used for Independence Day music and dancing events in 1900. The steamer departed at 10:00 a.m., 2:15 p.m., 4:15 p.m., and 6:45 p.m. Adult tickets were 25 cents and children's tickets were 15 cents.¹⁶

However, *Estelle Randall* was not just a recreational craft and often found itself pressed into services that were not a part of its regular function. One particularly important series of events in its life occurred during the winter of 1899 when it was used to cut channels through the frozen-over Potomac River. On December 17 the Commissioners of the District of Columbia, convened a meeting due to the increased risk of flooding created by the frozen river (which in places was 6 inches thick). Also in attendance were several influential people, including the City Harbormaster (Commodore J. R. Sutton) and Captain E. S. Randall.¹⁷ The following agreement was reached:

“The various phases of the flood problem were thoroughly considered and steps taken to remedy this situation. An agreement was reached whereby the steamer *Estelle Randall* will be used to break the ice in the river at the price of \$100 per day. The steamer started out on its first trip about 1 o'clock and was accompanied by several tug boats. She proceeded up the Washington channel as far as the first section of the Long Bridge and turning started down stream for Alexandria. The object is to open up the river channel as far as Alexandria today and to continue the work below that point tomorrow. Small tugs which have already been engaged by the District will be used to keep the channel open and to push the broken ice down stream.”¹⁸

Because of this action, the harbormaster believed that the risk of flooding to Washington D.C. had been significantly reduced, but that continued icebreaking needed to occur. A continuing agreement was forged between the Commissioners and Captain Randall:

“Captain Randall informed the Commissioners that he would be willing to allow the steamer *Estelle Randall* to be used as long as she would last, at the rate of \$100 per day. The Commissioners agreed to this proposition, and Mr.

Randall proceeded to the wharves immediately and directed his men to prepare the vessel for service. The steamer is well equipped for battling with the ice, as it has a heavy ice plow on its prow and is propelled by powerful compound cylinders, which are capable of sending the boat through the thickest ice. The Commissioners were gratified at the offer of Captain Randall in view of the difficulty of obtaining other large vessels and the high prices sought by other steamship companies.”¹⁹

This agreement implies that other companies in the area did not think the fees outweighed the risk of damage to their vessels, or perhaps charged exorbitant rates for similar activities. The article explains that the Norfolk Steamboat Company, which owned two very suitable steel-hulled vessels that could be used for ice-breaking, refused to make its watercraft available for icebreaking at a price within the Board's budget of \$5,000 (a sum it had received from the U. S. Congress). This forced the use of much smaller craft, despite the apparent emergency.²⁰

Work on icebreaking continued for the next few days, with *Estelle Randall* (the largest of the icebreakers) accompanied by the smaller tugboats *Edith Winship*, *Minerva*, *Hugh McFadden*, *Fannie Gilbert*, *William H. Mohler*, and *J. C. Carter*. The vessels broke channels in the ice under the command of Commodore Sutton from Alexandria (Virginia) to Indian Head (Maryland) and along the Washington Channel to the Aqueduct Bridge with an eye to opening channels further away in the following days. This freed up many ships that were icebound at their wharves, allowing them to continue their business. In places ice was reported to be 15 inches thick.²¹ Many people were surprised at the effectiveness of *Estelle Randall* as an ice breaker:

“The *Randall* proved a very successful ice breaker, and surprised many of the river men, who were watching her movements. The opinion was generally expressed that she could break the ice nearly as well as the larger and heavier Norfolk boats. This was in a large measure due to the heavy steel and wood plows, which Captain Randall, the owner of the boat, had constructed when the ice first became troublesome in the river. His boat experienced scarcely any difficulty in making her way through the fields of ice, notwithstanding the fact that below the forks of the Georgetown and Washington channels the ice had gorged to a considerable extent, making it in many places several inches thick. She was not brought to a full stop except in one or two instances. The plan of attack was to run each boat far enough into the ice from the edge of the channel already cut by the steamer last night to allow the prow of the boat to gain sufficient hold to keep

her nose in the ice. If the boat ran too close to the channel the edges of the ice would keep her in the part where the ice was already broken and no headway could be made.”²²

Estelle Randall continued to serve with distinction until the threat of flooding and any impediment to navigation along the Potomac River was cleared, earning itself a reputation as a sturdy multi-functional vessel. The steamer was called upon to serve a similar role at least twice more in 1901 and 1902.²³

Estelle Randall was pressed into other uncharacteristic activities, including the May 1902 rescue of an incapacitated, passenger-laden, and drifting *Samuel J. Pentz* following the breaking of a crank pin and the May 1903 refloating of the sunken wreck of *Columbia*.²⁴ The steamer also made special deliveries. On March 11, 1901, the *Evening Star* reported, “Along the River Front: Fire-Fighting Force Organized at Fort Hunt—Provided with Hook and Ladder Truck—Condition of Market for Oysters and Fish,” and the following article,

“A fire-fighting force has been organized among the soldiers at the United States artillery station, Fort Hunt, Virginia, and today the steamer *Estelle Randall* carried down a handsome little hook and ladder truck to the fort for use of the fire fighters there if it shall be necessary. The truck is a handsome one, and is equipped with thirty-foot ladder, pike for shoving down burning walls and fences, axes, &c. It is intended to be drawn to the scene of the fire by hand, and has a hand-steering tongue and long rope by which to haul it.”²⁵

The same year, *Estelle Randall* made special deliveries of gunpowder to Fort Washington and Fort Hunt, and the following year was shipping “large quantities of hay and mill feed” to Fort Washington.²⁶

However, the life of *Estelle Randall* was not one of uninterrupted triumphs. According to the *Annual Report of the Supervising Inspector General, Steamboat Inspection Service*, on September 3, 1899, “The steamer *Estelle Randall* collided with the steamer *Kent* [also owned by Captain E. S. Randall] in Port Tobacco Creek. The case was investigated November 22, 1899, and the license of Harry S. Randall (Ephraim Randall’s son), master of the steamer *Estelle Randall*, was suspended for a period of fifteen days.”²⁷ Other unspecified damage was repaired during the latter part of July 1901.²⁸ Harry Randall would soon find himself at the center of additional controversy.

Captain Harry Randall and the Death of William Crowley (1905-1906)

In 1905, tragedy occurred on board *Estelle Randall*. The *Washington Times* of July 17, 1905 reported that Captain Harry Randall was in custody regarding the death of William Crowley, who drowned while Captain Randall was master of *Estelle Randall*. The man had jumped overboard “while in fear of, or to escape punishment at the hands of, Captain Harry S. Randall...” and Captain Randall was held responsible for the death.²⁹ This was also reported in a section of the 1906 *Report of the Secretary of Commerce and Labor and Reports of Bureaus* that reported on “Casualties, violations of the law, and investigations” up to December 31, 1905,

“July 14.—William Crowley, a member of the crew of steamer *Estelle Randall*, was drowned in the harbor of Washington. Case investigated October 12, and found that no licensed officer was responsible for said drowning while acting under the authority of his license.”³⁰

The story was expanded in depth in the *Baltimore Sun* on July 16, 1905:

“Negro Jumped to Death: Captain of Steamer Arrested in Washington [Special Dispatch to the Baltimore Sun]. Washington, July 15. — William Crowley, colored, 25 years old, jumped overboard from the steamer *Estelle Randall* at the wharf, at the foot of Eight street southwest, between 11 and 12 o’clock last night and was drowned. It is alleged that he was being pursued by Capt. Harry Randall at the time he jumped and that it was fear of punishment at Randall’s hands that caused him to leap to his death. Captain Randall was placed under arrest this morning.

The attention of the police was not called to the affair until after 9 o’clock this morning, although there were a number of people who knew that Crowley had jumped overboard and had not returned to the vicinity of the boat. The body was recovered about 9.30 o’clock and was taken to the morgue. The first intimation that the police had of the drowning was when James Stewart, who lives in the house at 100 Ridge Road, Benning, where Crowley lived, called at the harbor precinct and asked that a search be made.

Captain Randall and Crowley, who was a fireman on the steamer *Estelle Randall*, had some words last night on board the steamer *Wakefield* and the negro, it is claimed called the captain an objectionable name. Crowley soon afterward left the boat and went on board the *Estelle Randall*, going to the engine room, where, it is alleged, he was followed by Captain Randall. Crowley retreated and it is charged that in his frantic efforts to get away from his

pursuer he either fell or jumped overboard. This morning when the police were notified Captain Randall was on his way down the Potomac in charge of the steamer *Wakefield*. The authorities at Alexandria were asked to apprehend him. He was brought back to this city on the police boat and taken to police headquarters, where he explained to Captain Boardman that after Crowley had cursed him several passes were made by both of them and that Crowley had succeeded in striking him a blow on the face.

Captain Randall was taken to the Fourth Precinct Station, where he will be held until Monday when Coroner Nevitt will hold an inquest.³¹

The resulting case was covered by the *Washington Post* on July 17, 1905, where Captain Randall would “disclaim guilt.” In the newspaper’s account, two witnesses Thomas Dorsey and William Jefferson stated that “... Crowley was asleep in the firemen’s room when Randall came aboard accompanied by two young men, and that he came in search of Crowley. Crowley was awakened and came out on deck, and when he saw Randall was after him he ran and jumped overboard.” Captain Randall “flatly contradicted” this testimony instead stating that he knew “nothing about how Crowley came to his death.”³² On July 18, 1905 the *Baltimore Sun* would report that the July 17 coroner’s inquest culminated in jury recommending that Captain Randall be “held for the action of the grand jury” and that the accused provided \$5,000 for his bond. The article additionally communicated that “When the case comes up for trial Captain Randall will be represented by Attorney William Earl Ambrose. Assistant District Attorney Turner, who represented the United States at the inquest, this evening intimated that manslaughter would be the charge against Randall.”³³

The Steamboat-Inspection Service would ultimately note that “Case investigated October 12, and found no licensed office was responsible for said drowning while acting under the authority of his license”³⁴, and the *Baltimore Sun* would later report:

“Harry Randall Exonerated. Harry Randall, Jr., who in July last was held responsible for the death of William Crowley, a negro deck-hand, by a coroner’s jury, was today exonerated by the District grand jury, which ignored the charge of murder against him. Crowley was drowned from the deck of the *Estelle Randall* on the night of July 14 after he and Randall had quarreled. It was charged that he jumped into the river, crazed by fright while Randall was searching the deck for him.”³⁵

was sued by the Crowley estate (represented by his estate administrator and cousin Cornelius Crowley and their counsel Leonard J. Mather) to recover \$10,000 in damages.³⁶ In a *Baltimore Sun* article of July 8, 1906 regarding the civil lawsuit, the article notes that “Harry S. Randall was arrested following an inquest over the body of Crowley the day after the drowning and was held under bond for the action of the grand jury, which ignored the charge against him.”³⁷ We do not presently know what the outcome of the civil litigation was, though within a few years the company would undergo significant changes after the formation of a new company.³⁸

Company Restructuring and New Ownership (1906-1909)

In 1902, Captain E. S. Randall, Judge Charles E. Nicol, and A. O. Holtzman had purchased the Colonial Beach Improvement Company (which included a hotel, wharves, and “amusement portions.”) Captain Randall would purchase his partners share of these assets in 1906 (the same year as the civil lawsuit) and with these assets, along with his fleet of steamers became the Washington and Potomac Steamboat Company.³⁹ While the fallout from Crowley’s death played out for *Estelle Randall* it was business as usual. The steamer appears to have been in continuous service from 1906 through 1908 as a part of this company.⁴⁰ But Captain Ephraim S. Randall (born 1853) would die in April 1908, prompting a public auction of all Randall properties on 19 December of the same year. All of Randall’s assets were sold to W. B. Emmert of Bristol, Virginia, who intended to reorganize the two-year old company and continue to operate it.⁴¹ Other than advertisements for service in newspapers, historical research currently tells very little else about the life of the steamer up until the following report in the *Washington Herald* of May 1, 1909, following another apparent transfer of ownership:

“The steamer *Harry Randall*, which has been undergoing repairs in Baltimore, will reach Washington to-day, to take the place of the *Wakefield* on the river route. The *Randall* has been rechristened the *Capital City*. The propeller, the *Estelle Randall*, has been rechristened *Alexandria*. Both vessels belong to the fleet of the Potomac and Chesapeake Steamboat Company.”⁴²

Despite this report, there is no evidence in historical records that *Estelle Randall* was ever renamed, nor does any vessel named *Alexandria* matching these specifications (or associated with the Official Number 136664) show up in American insurance registers or merchant shipping lists after 1909. Certainly, the steamer continues to be listed as in service as a part of the Potomac

and Chesapeake Steamboat Company throughout August and September 1909.⁴³ Indeed, newspapers continue to call the vessel *Estelle Randall*. For example, on September 16, 1909, an article appeared in the *Evening Star* describing the loss of livestock from the steamer with its name unchanged.⁴⁴

Perhaps economic issues were the reason no name change occurred, as late November and December of 1909 would usher in major transitions for the steamer. On November 27, 1909, the *Evening Star* would report that *Estelle Randall* was out of commission,

“The steamer *Estelle Randall* of the fleet of the Potomac and Chesapeake Steamboat Company, which has been running on the route between this city and Grinders, Md., for several months, made her last trip of the season yesterday, and on her arrival here was laid up at the Colonial Beach excursion pier for the season. Her route will be taken up by the steamer *Wakefield* and three trips each week will be made into Grinders, which has become one of the most important wharves on the river.”⁴⁵

Soon after (November 29, 1909), the same newspaper would elaborate on the laying up of *Estelle Randall*,

“The laying up of the steamer *Estelle Randall* of the fleet of the Potomac & Chesapeake Steamboat Company steamers, will cause a change in the personnel of the crew of the steamer *Wakefield*. Capt. James Barker, who has been master of the *Estelle Randall*, relieves Capt. Jeff Posey on the *Wakefield* and Capt. Posey becomes pilot of that steamer. Purser John Hungerford from the *Estelle Randall* succeeds Purser Arthur Gouldman on the *Wakefield* and Mr. Gouldman returns to the pilothouse as quartermaster. Engineer Ratcliffe remains in charge of the *Estelle Randall*.”⁴⁶

Estelle Randall would soon leave the Potomac service permanently and would find itself in more southern waters.

Headed South: The Farmers’ and Merchants’ Line (1909-1910)

Such changes apparently did not work for the company, as the *Alexandria Gazette*, would report on December 4, 1909, “New River Steamer: The steamer *Estelle Randall*, which was recently withdrawn from the river route, has gone to Norfolk, and it is stated that the side-wheel steamer *City of Milford* is to be put on the Potomac in place of the *Randall*.”⁴⁷ These details would be confirmed by the *Evening Star* on December 24, 1909:

“New Steamer in Port – *City of Milford* Ready for Duty on the Potomac: The steamer *City of Milford*, purchased by the Potomac and Chesapeake Steamboat Company from parties in Norfolk when the steamer *Estelle Randall* was sold, about three weeks ago, arrived here yesterday and is lying at the Colonial Beach line pier, adjoining the harbor office. The *City of Milford* as a “big little boat,” and will be used in service on one of the river routes of her owners. She is a vessel of 204 net tons, and is 127.3 feet long, 26 feet wide and seven feet deep. She was built at Milford, Del., in 1900, and carries a crew of ten men. Coming up the bay Wednesday night the steamer struck bad weather, but was able to make the trip in about eighteen hours from Newport News a distance of about 200 miles. The vessel has a large freight carrying capacity, and her passenger accommodations are said to be very good. She has a large, roomy saloon, with nineteen staterooms, and on the hurricane deck is a smoking room. The vessel is to be cleaned up and made ready for service.”⁴⁸

On December 6, 1909 the *Evening Star* reported the sale of the steamer and reported:

“The propeller steamer *Estelle Randall*, which for the last eleven years has been running on a route between this city and Glymont, Md., and been sold by her owners, the Potomac and Chesapeake Steamboat Company, to parties in Norfolk. The steam has been turned over to them, having been delivered at Norfolk Friday last. She is to be used on a route between Norfolk and Elizabeth City, N. C., through the Dismal Swamp Canal.”⁴⁹

The Farmers’ and Merchants’ Line of North Carolina (in Currituck County) made the purchase putting the steamer into use much further south than the Dismal Swamp Canal, including its southern-most (and final) voyage to Columbia, North Carolina.⁵⁰ *Estelle Randall* would not be in such service long, as on January 18, 1910, the *Raleigh News and Observer* reports the burning of the steamer the night before (at 10:30 p.m.) while alongside a Columbia waterfront wharf. The accident is described:

“The steamer left here yesterday afternoon for Columbia and had unloaded her cargo at the port and was moored at the wharf. When the flames were first discovered the entire forward deck was enveloped until there was no way to check the flames. The crew, most of whom had retired, rushed out of their berths scantily clad and frightened. All reached safety except Exley who turned into the cabin to help others, and perished. The second engineer had a narrow escape, but jumped overboard and swam ashore.”⁵¹

On January 19, 1910 the *Daily Press*, elaborated upon the loss of Exley,

“The steamer *Estelle Randall*, of the Farmers & Merchants North Carolina Line, plying between here and Norfolk, Va., via Columbia, was destroyed by fire and William Exley, the cook, was burned to death last night while the vessel was at dock at Columbia.

The vessel has unloaded her cargo and the forward deck was enveloped in flames when the fire was discovered. The crew, most of whom had retired, rushed from their berths scantily clad to safety, except Exley, who returned to help others and perished. The second engineer had a narrow escape, but jumped overboard and swam ashore. The steamer was a total loss, but was partially covered by insurance.”⁵²

William Exley, the cook on board the vessel, was described as a “white man, about 60 years old,” hailing from Coinjock, Currituck County and considered “a highly respected citizen,” was the only fatality.⁵³ This report also provides us other insights into the reputation, operation, and consequences of the complete loss of the steamer:

“The *Estelle Randall* was one of the largest and most magnificent passenger freight steamers in North Carolina and plied between this port and Norfolk, via Columbia. She had just resumed her route after having undergone extensive repairs on the railways. The loss of this costly steamer falls heavily on the stockholders, most of whom are merchants and farmers of Currituck county. There is no clue as to the origin of the fire.”⁵⁴

These details are corroborated by the *Annual Report of the United States Life Saving Service*

which described the total loss of *Estelle Randall* and its merchandise due to a fire.⁵⁵ The source also notes that the vessel had 14 crewmembers. Although *Estelle Randall*’s registration in marine insurance registers continues up until 1919, no other records concerning human interactions with the shipwreck have been located after its loss and the late 1980s, though one undated photograph found in the Tyrrell County Public Library remind us that the wreckage, sticking up out of the water for decades, was likely difficult to forget (Figure 7).

Waterfront Development and Earliest Archaeological Investigations (1988-1992)

In May 1988 an initial archaeological inspection of the site was carried out by Gerald N. Dunn. This culminated in measurements of the hull and engine (see Figure 8), as well as an inspection report.⁵⁶ A memo dated May 20, 1988 from the Underwater Archaeology Branch to Renee Gledhill-Early notes, “The vessel remains are in a good condition with a well-preserved structure and machinery. Artifacts within the hull can shed light on ship board life of the period.”⁵⁷

In May 1989 an additional report was completed by Jerry Dunn and Mark Wilde-Ramsing. This report was a synopsis of the April 15, 1988 diving inspection of *Estelle Randall* by the NCUAB. It expanded upon Dunn’s previous writing and gives us the first complete assessment of the site.⁵⁸ Dunn and Wilde-Ramsing’s site description reads:

“A small portion of the top of the wreck’s steam engine can be seen sticking above the water off the northwest corner of the former Exxon property ... The wreck itself is situated

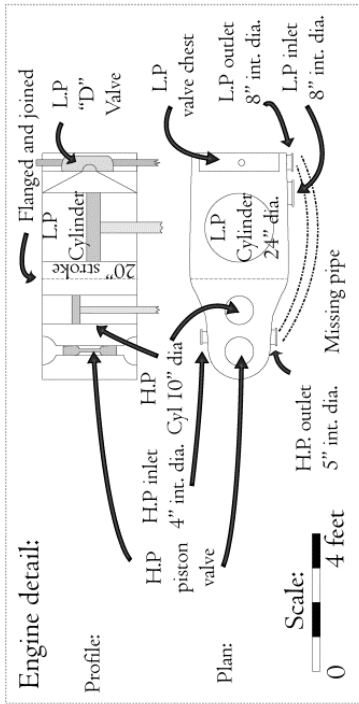
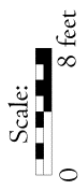


Figure 7. Remains of *Estelle Randall*, date unknown (Tyrrell County Public Library).

Estelle Randall (UAB#0001SCR)

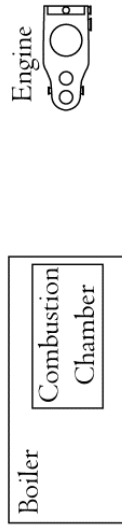
[After Dunn and Wilde-Ramsing 1990 and Dunn 1990]

Digitization by Nathan Richards March 2011



Starboard

Plan view:



Rudder Post
Stern

Bow

Port

Figure 8. Results of 1988 inspection of 0001SCR (By Nathan Richards, after Gerald N. Dunn).

parallel to shore, headed downstream and rests in 10 feet of water with a 30 degree list to port. Its starboard side is, on an average, 2 feet below the water's surface. Considerable in-filling of sediments had brought the bottom surface up to deck level thus encasing the hull. Because of the list, the upper portions of the port side are approximately 4 feet below the water surface, however sediments have not surrounded this side and therefore greater deterioration has taken place. Within the hull itself sediments range from 1-4 feet in thickness.

Although the wood planking on iron frame sides are intact nearly up to the main deck level, especially on the starboard side, most of the deck and supporting beams have fallen in. Forward of the boiler some deck beams may be in place, however it was difficult to discern articulated timbers in the jumble of debris."

Very little salvage of the major portions of the vessel appears to have taken place. Besides a well-preserved engine and boiler, the rudder and three-bladed (though Figure 7 suggests the ship had a four-bladed propeller), 6-foot diameter propeller were in place at the time of writing.⁵⁹ The dimensions of the wreckage conformed to those of the historical *Estelle Randall*, although Dunn and Wilde-Ramsing noted that the engine specifications were considerably different and surmised that the engine had been replaced when the vessel was overhauled at Elizabeth City, NC prior to 1909-1910.⁶⁰

On May 6, 1991 a memorandum sent to William S. Price, Jr., by David Brook (NC Department of Cultural Resources) noted that work commenced in 1988 was driven by "the Coastal Initiative Redevelopment/Master Plan" which included \$25,000-30,000 for the transformation

of the Columbia waterfront.⁶¹

Subsequently, on October 16, 1991, a Memorandum of Agreement (MOA) was signed between Tyrrell County and the NC Department of Cultural Resources (NCDRC) pertaining to the remains of *Estelle Randall*. The agreement related to long range plans to develop the waterfront of Columbia and the fact that *Estelle Randall's* remains were in the way of the development. The county entered into an agreement whereby they could remove "the remains of the *Estelle Randall* while preserving the information and artifacts contained within the shipwreck site."⁶² The MOA also outlined the NCDRC's desire to systematically recover small artifacts, create an inventory of them, and store them. They also agreed to recover "steam machinery (including the engine, condenser, associated pumps and valves, and the propeller and propeller shaft)," which they would also store.⁶³ In return, the county was to "refrain from disturbing the ... site, except in the pursuit of the activities outlined ... until these activities are completed, or October 1, 1992, whichever comes first."⁶⁴

Mark Wilde-Ramsing reported on the recovery of artifacts and machinery from the shipwreck in the Winter 1992 edition of the *Newsletter of the North Carolina Archaeological Society*. The article notes,

"The majority of the excavation, which was necessary for the recovery of the machinery, has been conducted by volunteer divers Eddie Congleton, Mitch Moore and Kenneth Bland. During this work they recovered a large variety of shipboard implements, personal effects, and machinery accessories such as steam gauges and grease lubricators. With the help of heavy

Table 1. List of recovered machinery and structural elements of *Estelle Randall* listed in UAB correspondence c.1991-1995. (NC-UAB).

Name	Description
Steam engine	Entirety of main steam engine (minus a cylinder head and steam manifold)
Horizontal water pump	5.25" pump, 3.5" water end, and 5" steam end
Steam gauges	Four steam gauges, each with different manufacturers were recovered: 1. "Smith & McCoy Dry Dock, Norfolk, VA" 2. High pressure gauge: "The Ashcroft Mfg. Co., New York" 3. "Campbell and Zell Co., Baltimore, MD" 4. Vacuum/pressure gauge: "Star Brass Mfg. Co., Boston"
Brass lubricator	Constructed by Powell
"Challenge" hand pump	Constructed by Gould
Duplex steam pump	5' long x 20" wide by 16" wide
Dynamo (steam powered generator)	28" long x 33" wide by 28" high
Auxiliary Steam Engine	2' long x 18" wide by 4' high
Rudder	45" side x 15" thick by 12' high
Windlass	40" long x 26" thick by 16" high
Two sections of propeller shaft	20'6" long, and 8'10" long, respectively

equipment and operators donated by Waff Contracting Inc. of Edenton, the machinery from the *Estelle Randall* was recovered in November 1992. The major items retrieved were a vertical, direct-acting, compound steam engine fitted with a surface condenser; a double-acting, vertical air pump; a duplex feed-water pump; an early Westinghouse generator housing and a ship's rudder.

The Unit is in the process of inventorying and stabilizing the many small artifacts. Within the next year restoration will begin on the machinery. A collection of small artifacts is now on display in Columbia and it is hoped that the interest generated will lead to a local museum that deals with the area's maritime history and features the *Estelle Randall*.⁶⁵

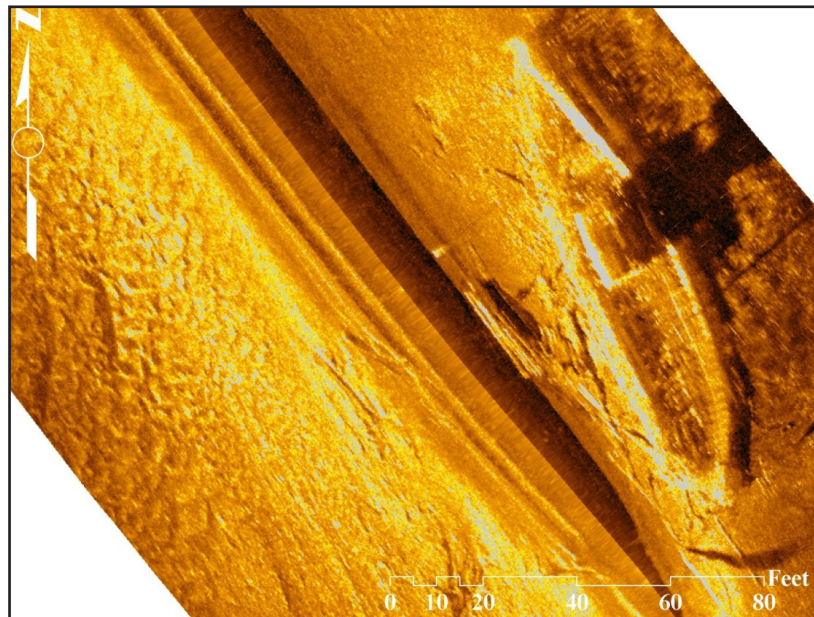


Figure 9. Georectified sonar imagery (600kHz) of the remains of *Estelle Randall*, 2011 (Image by Nathan Richards).

On June 22, 1992 a memorandum sent to David Brook by Richard Lawrence indicates that:

“A permit was issued last fall to Eddie Congleton and Kenny Bland to systematically excavate and recover small artifacts from the wreck site. They have already recovered several hundred artifacts from the wreck including tools, personal effects, and ship stores and equipment. These artifacts have been transported to our laboratory at Fort Fisher for storage. They are currently working every other weekend on the site, and will continue their efforts throughout the summer.”⁶⁶

By 1991, a considerable amount of machinery had been salvaged from the site, with additional machinery and some other parts of the vessel recovered by 1995 (see Table 1).⁶⁷ Much of this machinery has been conserved by the NCUAB and resides adjacent to their facility at Kure Beach where it is on display.

Additionally, a short list of artifacts recorded as retrieved by J. D. Brickhouse in September 1991 includes bottles (mostly clear glass), glass containers, and stoneware jugs. The correspondence between Richard Lawrence and Ellen Cassilly also notes a collection “including ships fittings, steam gauges, bottles, ceramics, cutlery, and early-twentieth-century electrical fittings.”⁶⁸ At the time these and other items from *Estelle Randall* were identified as good opportunities for museum display.

Such a museum display was considered in a

summary of the “Coastal Initiative” from September 16, 1992 which noted that the NCUAB’s investigations of *Estelle Randall*, the removal of artifacts (at a cost to the town and county of \$3,700), and the donation of a house to the town by a local church (which could be relocated to the waterfront) could culminate as a dual visitor center and museum for the shipwreck artifacts.⁶⁹ The plan never eventuated, though shipwreck artifacts were eventually put on display elsewhere. A recent comprehensive inventory of *Estelle Randall* material once held by the NCUAB indicated that shipwreck artifacts are housed at four collections located at State and locally-run museums and interpretive centers – the Columbia Theater Cultural Resource Center (65 objects), the North Carolina Transportation Museum at Spencer (154 objects), the Museum of the Albemarle at Elizabeth City (25 objects), and the Underwater Archaeology Branch at Kure Beach (the rudder of a small boat). Additionally, the location of six objects is currently unknown, and one (a bracket) was de-accessioned due to advanced corrosion.⁷⁰

Cultural Resources Survey (2011-2012)

The wreckage of *Estelle Randall* has never been lost – it is still very much in the memory of Tyrrell County’s people. Today the wreck of *Estelle Randall* is easily found, as it lies close to shore and is marked with a hazard to navigation buoy. In 2011, the author led a group of students on a project that came to be called the *Scuppernong River Project* (a collaboration of East Carolina University, the UNC-Coastal Studies Institute, and Pocosin Arts). In the fall of 2011, the participants carried out a broad maritime historical and archaeological survey of the Scuppernong River and Bull Bay (at the mouth of the river). The goal of the project was didactic (teaching maritime archaeological remote sensing techniques to graduate students), but

ultimately led to the survey of large tracts of the river's bottomland and culminated in two volumes encompassing a maritime historical survey of the area (Volume 1), and a maritime cultural resources inventory (Volume 2).⁷¹ As a part of the fieldwork, on September 13, 2011, the remains of *Estelle Randall* were recorded with a 600kHz Marine Sonics side scan sonar (Figure 8). The resulting imagery clearly shows the highly intact and contiguous hull of the vessel (port and starboard sites) as well as an articulated bow and stern, in addition to some remnant machinery or structural elements within the hull (very much in line with Dunn and Wilde-Ramsing's description of the site). Additionally, the area is surrounded by other debris likely from the wreck itself. While obviously impacted from salvage over the years and the more recent archaeological recovery efforts, much of the vessel remains embedded within Scuppernong sediments.

Conclusion

In the late nineteenth century, shipping on the Scuppernong River was already in decline. In their 1895 report, the U. S. Army Corps of Engineers had recommended that all navigation improvements on the waterway should cease.⁷² However, from 1894 to 1900 trade did pick up and in 1900 the USACE dredged a channel at the river's mouth 1,200 feet long, nine feet deep and 150 feet wide.⁷³ Such a channel would allow *Estelle Randall's* hull to scrape its way into what would become a final resting place almost ten years later.

Estelle Randall was not riding into Columbia on a current of economic promise when it arrived in the winter of 1910. The extension of the Norfolk and Southern Railroad from Mackey's Ferry to Creswell (and eventually Columbia) would be a nail in the coffin of maritime trade for the Scuppernong River. The extension, which was completed in 1908 redirected 50% of the lumber coming out of the region (about 10,000,000 feet of lumber) to the rail. The other half would continue to go to ships, but each subsequent year saw these numbers dwindle. Indeed, the USACE estimated that 26,653 tons of goods had been transported via watercraft in 1912 which by 1916 had dwindled to 10,443 tons.⁷⁴ *Estelle Randall* made only one visit to Columbia, NC and was lost forever. While its history is mostly "elsewhere" in some ways its biography epitomizes the economic transformations occurring in other states that drove vessels into new markets. But the steamer's story has some connection to a watershed period in Scuppernong River and Albemarle Sound maritime history. Around the remains of this shipwreck the utilization of the Scuppernong River contin-

ues to change. A waterway once dominated by commercial traffic and resource exploitation remains an important area for fishing but has now transitioned to recreational use.

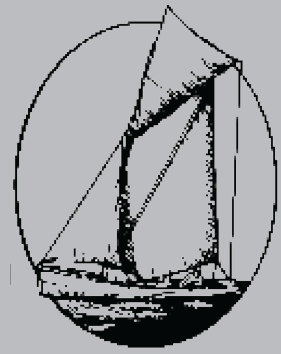
There is more work to do on this wreck. As noted by the NCUAB in the 1980s, the artifacts retrieved may illuminated life on board the ship. So too, the remains of *Estelle Randall* represent an opportunity to interpret the Scuppernong River's maritime heritage close to the shore, and future maritime archaeological work may seek to look at the submerged structures now lying under the water or the artifacts from the wreck, whether residing on the river floor or in museum collections.

Endnotes

1. Mark U. Wilde-Ramsing, "Estelle Randall," in *Newsletter of the North Carolina Archaeological Society* (Vol. 2, No. 4), 1992, 1; See Nathan Richards, Daniel Bera, Saxon Bisbee, John Bright, Dan Brown, David Buttarro, Jeff O'Neill and William Schilling, *The Scuppernong River Project, Volume 1: Explorations of Tyrrell County Maritime History* (Columbus, OH: PAST Foundation, 2012); Nathan Richards, Daniel Brown, and Saxon Bisbee, *The Scuppernong River Project, Volume 2: An Exploration of Tyrrell County Maritime Cultural Resources* (Columbus, OH: PAST Foundation, 2014). Excerpts of the text pertaining to *Estelle Randall* in Richards et al. (2014) written by the author have been reproduced in this paper with permission.
2. American Shipmaster's Association, *Record of American and Foreign Shipping [RAFR]* (New York, N.Y.: American Shipmaster's Association), 1899, 464; 1900, 453.
3. Robert C. Keith, *Baltimore Harbor: A Pictorial History*, 3rd edition (Baltimore, M.D.: The Johns Hopkins University Press, 2005) 89, 102-103; See also Tim Colton "William E. Woodall & Co.," in <http://shipbuildinghistory.com/shipyards/19thcentury/woodall.htm> (2020, accessed 6 July 2021).
4. "Captain Randall's New Steamer; The Estelle Randall to be Launched in Baltimore Next Monday," *Times*, 9 December 1897, 5, Washington, D.C.; American Shipmaster's Association RAFR 1899, 464; 1900, 453; "New Steamer for Potomac River," *Nautical Gazette*, 20 January 1898, 217; W. Andrew Boyd (compiler), *Boyd's Directory of the District of Columbia*, (Washington, D.C.: William H. Boyd, 1903, 807); *Boyd's Directory of the District of Columbia* (Washington, D.C.: R. L. Polk & Company, 1906, 936). According to the Colliery Engineer Company's, *A Treatise on Architecture and Building Construction Prepared for Students of the International Correspondence Schools, Scranton, PA, Volume IV: Plumbing and Gas-Fitting, Heating and Ventilation, Painting and Decorating, Estimating and Calculating Quantities with Practical Questions and Examples* (Scranton, P.A.: The Colliery Engineer Company, 1899, 88-89) from the time concerned with the use of boilers in

- buildings, the ratio of heating surface to grate surface in a return-tube boiler reflects the type of fuel used – this being “45 to 1 with bituminous coal, and 36 to 1 with anthracite.” Consequently, it is likely that *Estelle Randall* was designed to operate on anthracite coal (as 39 x 45 = 1755 ft² and 39 x 36 = 1404 ft²).
5. “New Steamer for Potomac River,” *Nautical Gazette*, 20 January 1898, 217.
 6. “Glymont Steamer Launches; Miss Estelle Randall Sponsor for Her Namesake,” *Times*, 15 December 1897, 8, Washington, D.C.
 7. American Shipmaster’s Association *RAFR* 1899, 464; 1900, 453
 8. U.S. Department of Treasury, *Annual List of Merchant Vessels of the United States* (Washington, D.C.: Government Printing Office, 1901), 237; *Annual List of Merchant Vessels of the United States* (Washington, D.C.: Government Printing Office, 1904), 223.
 9. “New Steamer for Potomac River,” *Nautical Gazette*, 20 January 1898, 217.
 10. *Ibid.*
 11. “Local Mention; Excursions Tomorrow,” *Evening Star*, 15 June 1899, 16, Washington, D.C.; “Potomac River Boats,” *Evening Star*, 21 March 1904, 16; “Excursions Tomorrow,” *Evening Star*, 26 May 1904, 16; “Local Mention; Excursions Tomorrow,” *Evening Star* (Washington, D.C.), 10 June 1904, 16; “Local Mention; Excursions Tomorrow,” *Evening Star*, 6 July 1904, 16; “Local Mention; Excursions Tomorrow,” *Evening Star*, 22 July 1904, 16; C. C. Miller (editor), “Advertisement” in *Gleanings from Bee Culture*, vol. 32., no. 9 (1 May 1904), 468; “E. S. Randall Potomac River Line Co; Daily Steamers for River Landings,” *Sunday Morning Globe*, 15 June 1902, 8, Washington, D.C.; “E. S. Randall Potomac River Line Co; Daily Steamers for River Landings,” *Sunday Morning Globe*, 29 June 1902, 8.
 12. “Excursions; Sunday at River View,” *Evening Times*, 20 July 1898, 3.
 13. “For Chapel Point,” *Evening Times*, 6 July 1900, 5; “For Chapel Point,” *Evening Times*, 7 July 1900, 5; “For Chapel Point,” *Evening Times*, 14 July 1900, 5; “For Chapel Point,” *Evening Times*, 19 July 1900, 5; “For Chapel Point,” *Evening Times*, 20 July 1900, 5; “For Chapel Point,” *Evening Times*, 21 July 1900, 5; “For Chapel Point,” *Evening Times*, 28 July 1900, 5; “For Chapel Point,” *Evening Times*, 11 August 1900, 5; “For Chapel Point,” *Times*, 14 July 1900, 5.
 14. “Italian Sailors Feasted,” *Times*, 19 April 1898, 2.
 15. “The Saengerbund Outing; Immense Crowds Participate in the River View Excursion,” *Times*, 1 May 1899, 2.
 16. “Excursions,” *Times*, 3 July 1900, 5.
 17. “To Cut a Channel Through the Ice; The Steamer *Estelle Randall* Engaged for the Work,” *Evening Times*, 17 February 1899, 1.
 18. *Ibid.*
 19. *Ibid.*
 20. *Ibid.*
 21. “Opening the Channel; Work of the Ice-Breakers in the Lower Potomac,” *Evening Times*, 18 February 1899, 1; “Opening the River,” *Times*, 18 February 1899, 2.
 22. *Ibid.*
 23. “Along the River Front; Fire-fighting Force Organized at Fort Hunt,” *Evening Star*, 11 March 1901, 8; “Along the River Front; Of General Interest,” *Evening Star*, 2 July 1901, 8.
 24. “A Broken Crank Pin Delays Steamer *Pentz*; Holiday Excursionists Brought to the City by the *Estelle Randall*,” *Evening Times*, 31 May 1902, 1; “Have Their Eyes on Many New Steamers; To Raise the Columbia,” *Washington Times*, 17 May 1903, 12, Washington, D.C.
 25. “Along the River Front; Fire-fighting Force Organized at Fort Hunt,” *Evening Star*, 11 March 1901, 8.
 26. “Along the River Front; Of General Interest,” *Evening Star*, 2 July 1901, 8; “Along the River Front: General Notes,” *Evening Star*, 4 February 1902, 8.
 27. U.S. Steamboat-Inspection Service, *Annual Report of the Supervising Inspector-General, Steamboat-Inspection Service, for the Fiscal Year Ended June 30, 1900* (Washington, D.C.: Government Printing Office), 53.
 28. “Local brevities,” *Alexandria Gazette and Virginia Advertiser*, 23 July 1901, 3, Alexandria, V.A.
 29. “Coroner’s Jury Decides Against Captain Randall,” *Washington Times*, 17 July 1905, 1.
 30. U.S. Secretary of Commerce and Labor, *Report of the Secretary of Commerce and Labor and Reports of Bureaus* (Washington, D.C.: Government Printing Office, 1906), 361.
 31. “Negro Jumped to Death: Captain of Steamer Arrested in Washington,” *Baltimore Sun*, 16 July 1905, 7.
 32. “Coroner’s Jury Decides Against Captain Randall,” *Washington Times*, 17 July 1905, 1.
 33. “Capt. Randall Held for Negro’s Death,” *Baltimore Sun*, 18 July 1905, 2.
 34. U.S. Department of Commerce and Labor, *Reports of the Department of Commerce and Labor, 1906* (Washington, D.C.: Government Printing Office, 1906), 361.
 35. “Harry Randall Exonerated,” *Baltimore Sun*, 3 April 1906, 2.
 36. “Capt. Randall Sued by Crowley Estate,” *Washington Times*, 7 July 1906, 9; “Lawsuits,” *Washington Times*, 8 July 1906, 3.
 37. “Negro’s Life Held to Be Worth \$10,000,” *Baltimore Sun*, 8 July 1906, 3.
 38. “Sold under Deeds of Trust; Transfer of Colonial Beach Property,” *Evening Star*, 20 December 1908, 26.
 39. *Ibid.*
 40. “Washington and Potomac Steamboat Co.,” *Alexandria Gazette and Virginia Advertiser*, 26 June 1908, 4; “Washington and Potomac Steamboat Co.,” *Alexandria Gazette and Virginia Advertiser*, 27 June 1908, 4; “Washington and Potomac Steamboat Co.,” *Alexandria Gazette and Virginia Advertiser*, 8 August 1908, 4; “Washington and Potomac Steamboat Co.,” *Alexandria Gazette and Virginia Advertiser*, 10 August 1908, 4; “Washington and Potomac Steamboat Co.,” *Alexandria Gazette and Virginia Advertiser*, 23 September 1908, 4;
 41. “Sold under Deeds of Trust; Transfer of Colonial Beach Property,” *Evening Star*, 20 December 1908, 26.
 42. “River Steamers Rechristened,” *Washington Herald*, 1 May 1909, 7, Washington, D.C.
 43. See “Potomac & Chesapeake Steamboat Co.,” *Alexandria Gazette and Virginia Advertiser*, 26 August 1909, 4; “Potomac & Chesapeake Steamboat Co.,” *Alexandria Gazette and Virginia Advertiser*, 8 September

- 1909, 4; Additionally, the name *Estelle Randall* continues to be registered in the *Record of American and Foreign Shipping* until at least 1919 – almost a decade after its sinking! One can only conclude that the name change did not go ahead or was not made official and that any plans reported by the *Washington Herald* must have changed soon after.
44. “Heard a Calf in the Drain? Well you May; For One is Lost Somewhere; It Jumped Overboard from the *Estelle Randall* and Kept Swimming,” *Evening Star*, 16 September 1909, 7.
45. “Steamer Out of Commission,” *Evening Star*, 27 November 1909, 10.
46. “Changes in Wakefield Crew,” *Evening Star*, 29 November 1909, 13.
47. “New River Steamer,” *Alexandria Gazette*, 4 December 1909, 3.
48. “New Steamer in Port – *City of Milford* Ready for Duty on the Potomac,” *Evening Star*, 24 December 1909, 12.
49. “Quits River Service: *Estelle Randall* Sold to Norfolk Parties for Dismal Swamp Canal,” *Evening Star*, 6 December 1909, 7.
50. “Steamer *Estelle Randall* Burned,” *Raleigh News and Observer*, 18 January 1910, 1.
51. *Ibid.*
52. “Trys to Help Others; He Burns to Death,” *Daily Press*, 19 January 1910, 1, Newport News, V.A.
53. “Steamer *Estelle Randall* Burned,” *Raleigh News and Observer*, 18 January 1910, 1.
54. *Ibid.*
55. United States Life Saving Service, *Annual Report of the United States Life-Saving Service for the Fiscal Year ended June 30, 1910* (Washington, D.C.: Government Printing Office, 1911), 219.
56. Gerald Dunn, “Report on steam engine located at Columbia, North Carolina 0001SCR,” Report to the Underwater Archaeology Branch, manuscript on file, Underwater Archaeology Branch, Kure Beach, North Carolina, 1988.
57. North Carolina Underwater Archaeology Branch (NCUAB), “Memo to Renee Gledhill-Early from the Underwater Archaeology Branch,” manuscript on file, Underwater Archaeology Branch, Kure Beach, North Carolina, 1988, 1.
58. Jerry Dunn and Mark U. Wilde-Ramsing, “*Estelle Randall* investigation dive: Columbia, Tyrrell County,” Report to the Underwater Archaeology Branch, manuscript on file, Underwater Archaeology Branch, Kure Beach, North Carolina, 1989.
59. Jerry Dunn and Mark U. Wilde-Ramsing, “*Estelle Randall* investigation dive,” 1-2.
60. *Ibid.*, 5.
61. David Brook, “Memorandum to William S. Price, Jr regarding the removal of *Estelle Randall* Columbia, Tyrrell County, May 6, 1991,” manuscript on file, Underwater Archaeology Branch, Kure Beach, North Carolina, 1991.
62. North Carolina Department of Cultural Resources (NCDCCR), “Memorandum of Agreement between Tyrrell County and the North Carolina Department of Cultural Resources, Division of Archives and History,” manuscript on file, Underwater Archaeology Branch, Kure Beach, 1991, 2.
63. NCDCCR, “Memorandum of Agreement”
64. *Ibid.*, 3.
65. Mark U. Wilde-Ramsing, “*Estelle Randall*,” in Newsletter of the North Carolina Archaeological Society, vol. 2, no. 4, 1992, 1.
66. Richard Lawrence, “Memorandum to David Brook regarding the status of the *Estelle Randall* project in Columbia, N.C., June 22, 1992,” manuscript on file, Underwater Archaeology Branch, Kure Beach, North Carolina, 1992, 1.
67. NCUAB, *Estelle Randall* site file, Underwater Archaeology Branch, Kure Beach, N.C., n.d; Richard Lawrence, “Letter to Ms. Cassilly, 11 October 1995,” manuscript on file, Underwater Archaeology Branch, Kure Beach, North Carolina.
68. Richard Lawrence, “Letter to Ms. Cassilly, 11 October 1995,” manuscript on file, Underwater Archaeology Branch, Kure Beach, North Carolina., 1.
69. Columbia/Tyrrell County, “Coastal Initiative Community Summary (16 September 1992),” letter on file, North Carolina Underwater Archaeology Branch, Kure Beach, N.C., 1-2.
70. NCUAB artifact database, 28 February 2011 and 1 February 2013. In 2013, Bran Mims was investigating the prospects of writing a thesis on the material culture from the wreck of *Estelle Randall*. While the thesis did not proceed, Bran is owed thanks for photographic material culture recovered from the wreck
71. See Richards et al. *The Scuppernong River Project, Volume 1, The Scuppernong River Project, Volume 2*; Michelle Wagner, “Survey uncovers shipwreck clues near Columbia,” Outer Banks Voice, 17 October 2011; Suzanne Storesbury, “History and Mystery in Columbia,” Eastern Living (Winter 2012), 20-25.
72. United States Army Corps of Engineers, *Annual Report of the Chief of Engineers* (Washington, D.C.: Government Printing Office, 1895), 1362, 1363; Richards et al., *The Scuppernong River Project, Volume 2*, 42.
73. United States Army Corps of Engineers, *Annual Report of the Chief of Engineers* (Washington, D.C.: Government Printing Office, 1902), 1542.
74. United States Army Corps of Engineers, *Annual Report of the Chief of Engineers* (Washington, D.C.: Government Printing Office, 1917), 552; Richards et al. *The Scuppernong River Project, Volume 2*, 41-42.



Wrecked on Chicamacomico: An Examination of the Shipwrecks along Wimble Shoals, Rodanthe, North Carolina

by Allyson Ropp

Abstract

Along the northern portion of Hatteras Island, like many places on the North Carolina coast, lies a set of submerged shoals, Wimble Shoals. These shoals have been agents of destruction in the area for centuries, playing a role in the wrecking of ships sailing the Atlantic shipping lanes. Many of the wrecking events led to harrowing rescues by passing ships or by the U. S. Life Saving Service units stationed along the island. The paper explores the histories of some of the vessels lost along Wimble Shoals and northern Hatteras Island. It further examines the overall nearshore and offshore wrecking trends of the area to understand various dynamics to the loss of vessels.

Introduction

In August 1918, sailing from New Orleans to Norfolk, the steamer *Mirlo* successfully navigated around Cape Hatteras and ran parallel to Hatteras Island. As the steamer approached the Wimble Shoals buoy, disaster struck and the hull exploded. Following two more explosions, the ship split in two, and sailors were stranded among the broken hull and burning water. Two lifeboats filled with men made their way away from the burning vessel. The third boat, which had flipped while it was lowered into the water, sat amid the burning sea as sixteen men hung on. What happened next can be described as nothing short of heroic, six men of the Chicamacomico Life Saving Station rowed out into the burning waters. They first rescued the sixteen sailors from the burning sea, before corralling the two other lifeboats. By the end of the day, the crew of the station had rescued all but nine of *Mirlo's* crew.¹

The loss and subsequent rescue of *Mirlo* may

be one of the most well-known tales of Wimble Shoals, yet it is only one of the myriads of wrecks and rescues that occurred there. Historical research indicates the area has claimed over two hundred ships: some with similar heroic stories, some more tragic, and some with not much of a story at all (Table 1).² These stories illuminated several trends in the wrecking patterns along the shoals. Using biographies of the individual wrecks, information was correlated and analyzed along spatial and statistical dimensions to examine relationships concerning the wrecking location, the era of wrecking, the reasons for wrecking, and the direction of travel when wrecked. Understanding individual shipwreck stories and the overall trends in wrecking patterns ascertained from them provides a fuller picture of the trials and tribulations of navigating along the Outer Banks. Further, illuminating these trends allows archaeologists and historians additional synthesized information to pinpoint potential wreck locations, trends in lifesaving and salvage operations along the shoreline, and understand the interconnectivity between maritime life and marine navigation off Hatteras Island.

Environment: Wimble Shoals

The Outer Banks of North Carolina is a wave-dominated barrier island system approximately 186 miles in length and approximately 1.5 miles wide. Hatteras Island is part of this barrier chain. About fifty miles in length, Hatteras Island is an L-shaped island just south of Oregon Inlet, and ranges in width between less than one mile to three miles.³

Immediately offshore of the island chain lie sediment deposits, or sand-holding areas. These areas are formed from sand being moved off the beach in receding waves and transported

through coastal currents. As the currents reach the end of an island or sharp bend in the shore, the sediments are deposited on the seafloor.⁴ Off the northern portion of Hatteras Island lies one of these deposits, known as Wimble Shoals. Wimble Shoals was first marked in 1738 on a map created by James Wimble. The shoals in the 1730s sat opposite an inlet, Chickinacommok Inlet, which split Hatteras Island at modern-day Rodanthe. The area of the shoals had previously been a cape, just like Cape Hatteras, called Cape Kenrick, which means “sinking-down sand” in Algonquin.⁵

Wimble Shoals, a morphological ridge complex, consists of five shore-oblique ridges upon a gentle sloping Pleistocene surface. The shoal covers a 150-kilometer area extending fifteen to seventeen kilometers along the shoreline and ten kilometers offshore. The five ridges are approximately 500 meters wide, 10-13

kilometers long, and up to 7 meters high. The ridges are arrayed in a fan-like arrangement, which is attached to shore with a connection point to the south and separating to the north. The subaqueous dunes atop the ridges are formed through varying current directions and speed from major storm events. The shoals consist of medium to fine sand atop discontinuous layers of silt, mud, and gravel.⁶ Figure 1 shows the Wimble Shoals and the survey area around the shoals used for this survey.

In addition to the shoals, the area off Hatteras Island also exhibits unique oceanographic conditions. Offshore of North Carolina lies the Gulf Stream and the southern end of the Labrador Current. The warm waters of the Gulf Stream coming north from the Straits of Florida are the closest to shore, and at Cape Hatteras, the current turns east. This turn is caused by

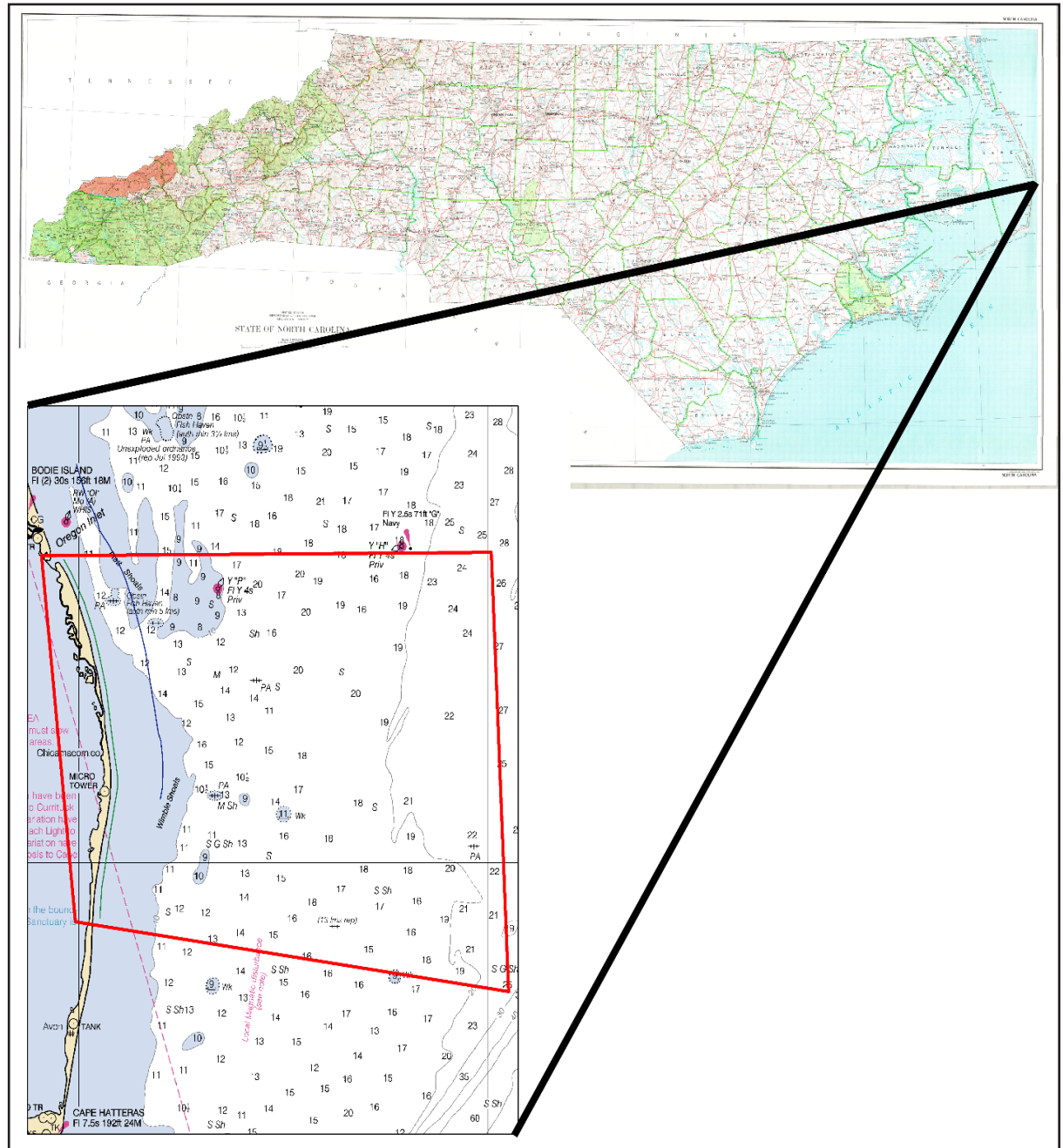


Figure 1. Map of historical survey area and inclusion in the study of Wimble Shoals shipwrecks (Map created by the author).

the colder winds and waters of the Labrador Current, which pushes south from Arctic waters around Greenland. When these two currents collide off North Carolina, they create a dense fog and unstable weather in these areas, similar to conditions off Georges Bank between Cape Cod and Nova Scotia.⁷

The Wrecks

Shipwrecks were associated with the waters around North Carolina since the arrival of Europeans. The first historically known wrecks in the Outer Banks date to the settlement of the Roanoke Colony.⁸ With the increase in colonists and the development of high traffic shipping back to Europe during the seventeenth and eighteenth centuries, wrecking events increased exponentially and skyrocketed through the nineteenth century. The centuries of wrecking inspired the naming of the area as “the Graveyard of the Atlantic.”⁹

There are several reasons for the number of wrecks off North Carolina. First, the oceanographic conditions that collide off the Outer Banks affect the weather patterns. The convergence of the Gulf Stream and Labrador Current creates unpredictable weather including dense fog, conflicting currents strengths, rough waters, and large temperature differences which enhance offshore weather systems. They also dictated the ability to sail off North Carolina. The northward flowing Gulf Stream is a strong current and is difficult to sail against. Though helpful to northbound vessels, southbound vessels typically sailed closer to shore to avoid the Gulf Stream, where they encountered other difficulties.¹⁰

Second, the geological formations of the nearshore and offshore areas played a vital role. The offshore shoals are ever-shifting and scattered along much of the coastline. The shoals were a danger to all vessels due to uncertainty as to their locations. They also affected decisions made by captains in the face of winds and currents. These captains had to decide between facing damaging winds and struggling against an opposing current, or risk grounding on the nearshore shoals.¹¹

The final reason is the extensive network of shipping lanes in the area. As cities grew, mercantile trade increased, which led to more traffic northbound and southbound along the Atlantic coast. Trade continued to grow through time, increasing traffic to such a degree that off Kinnakeet, North Carolina “there were sometimes as many as seventy-five or eighty sails in view.”¹² The number of vessels offshore at any given time provided another element of danger while at sea, particularly in an environment with

competing currents and hidden shoals.¹³

These factors proved to be instrumental in the loss of ships off North Carolina, each with their own individual story as to their loss. While there are over two hundred shipwrecks within the area of Wimble Shoals (Table 1), their individual stories are too numerous to tell.¹⁴ Instead, three shipwreck stories are detailed below. These stories represent three typically untold stories of the area, but also reflect the dangers of Wimble Shoals and the actions of the life-saving service to perform harrowing rescues in the area.

Governor Ames

Governor Ames was the first five-masted schooner built on the East Coast in Waldoboro, Maine by the Leavitt-Storer Shipyard in 1888 (Figure 2). After a disastrous first voyage, the 245-foot vessel was commissioned to transport lumber to Buenos Aires, Argentina in May 1889. Next, it voyaged to the Pacific in October 1890,¹⁵ arriving in San Francisco in March 1891,¹⁶ and eventually to Australia in July 1892.¹⁷ *Governor Ames* continued to transport lumber and coal along the West Coast until the fall of 1893 when it was commissioned to sail to England.¹⁸ Upon return to America, it traded between the following ports over the next fourteen years: Brunswick, Portsmouth, Portland, Newport News, New York, Boston, Norfolk, Hampton Roads, Bangor, Providence, Baltimore, Philadelphia, Galveston, Havana, Savannah, Key West, and Salem.¹⁹

After an illustrious career, *Governor Ames* left Brunswick, Georgia in 1919, unknowing that it would be its final journey. The vessel was under the captaincy of Captain A. King with a cargo of railroad ties destined for New York City. The vessel, upon leaving Brunswick turned north and followed the coastline. After two days at sea, the vessel encountered rough weather as it rounded Cape Hatteras and made its way north along Hatteras Island and Wimble Shoals. The weather forced the vessel to run aground and finally sink upon Wimble Shoals.

Accounts of the wrecking initially described the loss as any other lost vessel.²⁰ They stated the basic facts of the loss stating the loss location, time, and ship name, but did not provide additional information about the wrecking event or loss of life. The surviving crew member, Josiah Spearing, provided an account to *The Philadelphia Inquirer* about the events of 26 December 1919:

“The life boat was crushed in like an egg-shell, and the seas were so high that it would have been death itself to have attempted to launch the small boat. There were twelve persons on

board in all, Captain King, his wife, the first mate, the second mate, the cook, a “donkey-man,” and six sailors. Now I am the only one left....The schooner began to go to pieces from the stern. Every time a big sea broke over her she groaned as if she would go to pieces at once. About five o'clock in the afternoon, six hours after we had struck, the captain's wife was lashed to the lee of the main mast, as the safest place, but Captain King had no sooner made her secure when the mast broke off short, killing her before his eyes, killing a sailor and breaking the leg of another.... [T]he jigger mast snapped off twenty feet from deck, killing the captain and one or two of the crew. We were so busy holding on ourselves that we did not pay any attention when we saw that one of our companions had been killed. We were fighting for our own lives....I was washed from the jib-boom to the deck and crawled behind the broken off jigger mast, where there were three sailors holding on....We were washed overboard into the sea. I struck out and managed to catch hold of a tie. I did not see the other sailors again, but I heard several screams, as if the other men clinging on to the jigger mast on the deck had been crushed to death when it shifted.”²¹

The horrific wrecking of *Governor Ames* closed the life of a world-renowned schooner. The loss shows the unexpected dangers for a vessel that spent fourteen years sailing past North Carolina. The wreck happened far from shore, which made it improbable for the lifesaving stations to assist in the rescue of the ship.

Annie E. Blackman

Annie E. Blackman had a successful six-year career along the eastern seaboard. Constructed in Goshen, New Jersey in June 1883, the schooner *Annie E. Blackman* had an overall length of 119 feet. The schooner moved coal and lumber between ports of the eastern seaboard including the ports of Jacksonville, Philadelphia, Boston, Perth Amboy, New York, New Haven, Bridgeport, Fernandina, Baltimore, Lynn, Wilmington, NC, Wilmington, DE, Richmond, Norfolk, Savannah, Charleston, Bath, Newark, Salem, Brunswick, Allyn's Port, Dover, and Portsmouth.²² Throughout its life, the



schooner avoided any serious damage and major storms. The only major incident occurred on October 1884, when *Annie E. Blackman* collided with another schooner during which former's bow was damaged and the ship was forced to return to Philadelphia.²³

This streak of good fortune for *Annie E. Blackman* ended in the fall of 1889. While voyaging from Philadelphia to Jacksonville, the schooner succumbed to the “most destructive storm experienced on the Middle Atlantic coast” that year.²⁴ Not only was *Annie E. Blackman* wrecked during this storm, but the storm claimed at least two other vessels.²⁵ The U. S. Life Saving Service along the North Carolina coast dutifully attempted rescues for these wrecked vessels. The U.S. Life Saving Service Annual Report from the fiscal year 1890 reported:

Oct 24—The three-masted, coal-laden schooner *Annie E. Blackman*, of Somers Point, New Jersey, was lost at sea, some two or three miles off New Inlet, North Carolina, at half-past 3 o'clock in the morning of this date, while on a voyage from Philadelphia, Pennsylvania, to Jacksonville, Florida. The previous afternoon, the wind blowing a moderate gale from south-southeast, with threatening weather, the vessel was put on the offshore tack under reduced sail. As the wind backed gradually into the north-northeast it increased rapidly in violence, and sails were taken in and blown away until the schooner was hove to under a close-

Figure 2. Five-masted Maine schooner, Governor Ames (Library of Congress).

reefed spanker....She drove steadily toward the beach, and when yet far beyond the scope of operations of the life-savers, and invisible from the shore owing to the thick weather, was tripped by an unusually heavy sea and thrown upon her beam ends. Her crew of seven men were soon struggling in the storm-tossed sea, and, with the exception of the captain, who had fortunately taken the precaution to put on a cork life-belt earlier in the night, undoubtedly sunk in a very short time, as they were probably clad in heavy oil-skins and rubber boots. The captain floated through New Inlet, which is not far to the northward of the station of that name, (Sixth District,) and, at 5 o'clock, drifted ashore, or, rather, into shoal water, for the beach in the vicinity was submerged by the rising tide, and, with a small piece of line which he found in his pocket, made himself fast to a telephone pole, around which he walked to keep up necessary circulation.²⁶

The storm itself kept the schooner and its crew from being rescued. The lifesaving crew at New Inlet were unable to assist the vessel as they did not know it had wrecked until the captain of the ship arrived the following morning. The crew faced an investigation to show they did not renege on their duties, which they all passed.²⁷ The loss of *Annie E. Blackman* reflects the role of the environment in dictating the successes or failures of sailing and of rescuing stranded and wrecked vessels in the vicinity of Wimble Shoals. The shipwreck demonstrates the difficulties for those onshore to know about individual wrecking events and the resilience of sailors to survive such incidents.

George L Fessenden

The three-masted schooner *George L. Fessenden* began its twenty-four-year career in June 1874. The schooner was built in Belfast, Maine by C. P. Carter Jr. for L. V. Beebe & O. and G. F. Fessenden.²⁸ The 132-foot vessel voyaged around the eastern seaboard and the Gulf of Mexico. The major ports of call were New York, Boston, Philadelphia, Baltimore, and Charleston.²⁹ The schooner transported a variety of cargo including coal, crushed stone, ice, lumber, phosphate, and molasses.³⁰ It was involved in several misfortunate and somewhat mysterious events. In December 1874, only seven months after its launch, the schooner encountered a gale going to Galveston, during which it lost its mizzen and foretopmast, the jibboom, and the mizzenmast.³¹ The schooner lost an entire cargo of molasses in 1877 during a storm in which it also lost its foremast, it ran aground in Vineyard Haven in 1879, started leaking off Cape Lookout in 1896, and split the mainsail in 1896.³² Another strange occurrence happened in September 1897. The schooner arrived in Augusta, Maine

with coal for the psychiatric hospital. Upon payment, the captain disappeared and never returned.³³ The captain likely stole the money for himself.

George L. Fessenden added to its mystery when the schooner was loaded with crushed stone in Philadelphia, Pennsylvania for Fort Caswell near Southport, North Carolina in April 1898.³⁴ For unknown reasons, the schooner stopped in Hampton Roads.³⁵ Soon after leaving Hampton Roads, it anchored on a shoal four miles northeast of Chicamacomico Life-Saving Station. On 24 April, the steamer *Rio Grande* passed the anchored schooner noting that "its foremast head gone and flying signal of distress. They asked to be taken in tow but refused to leave the vessel."³⁶ By 30 April, due to a storm raging off the cape, the vessel had wrecked and four of the seven crewmen aboard, including the captain, had drowned.³⁷ The accounts reported in the newspaper differ from those of the U. S. Life Saving Service at Chicamacomico, who aided in the rescue of the three crew members. The account below details the observations and actions of the Chicamacomico crew:

"...the schooner stranded [and] her crew were gathered on the fore-castle deck, but the heavy waves at once began to sweep the whole hull, and the men were therefore compelled to seek refuge on the jib-boom. Even there they were constantly beaten by the crests of the great waves and their position was extremely precarious. The Lyle gun was instantly placed in position and a moment later sent out its first friendly shot, which was so well aimed that it laid its line fairly across the jib-boom, almost in the very hands of the shipwrecked men, who seized it at once and began, as well as they could, to haul it out in order to get the whip line and block aboard. Situated where they were, this task would have been hard under almost any conditions, but was not extremely so because of the swift longshore current which caught the line and swept the bight of it far to the southward. At times the men would almost fall from the boom, but nevertheless they were doing fairly well and would probably have succeeded had the hull of the vessel been sufficiently sound to stand the shocks of the sea for even a good half hour. One of the witnesses describes her as "rotten as a pear." Her dead weight cargo of 521 tons of stone fixed her as firmly in the sand as a breakwater, and under such circumstances her weakness made it impossible for her to hold together. While the poor sailors were desperately struggling to get the life-saving lines on board, and within not more than twenty minutes after stranding, she broke into a thousand pieces and the entire crew, still clinging to the jib-boom, were precipitated into the surf. Two of them, it was

stated by some of those present, were struck by pieces of wreckage and killed outright. The captain was said to have been washed overboard and drowned when the schooner struck and while all hands were still on deck.³⁸

The wrecking event and the efforts by the U. S. Life Saving crews were not anomalies, but rather in the actions of the crew and the voyage itself. The crew, according to the three survivors, did not know anything about their fellow seamen.³⁹ This seems strange as they had been together in confined quarters for over a month. Another oddity is that the newspaper reported the schooner signaling for help. On the other hand, the U. S. Life Saving Service stated that no signal occurred, even when they signaled to ensure the schooner did not want aid. Whether the crew of *George L. Fessenden* signaled for help is irrelevant to its final location; the performed rescue utilized a Lyle Gun since it was only yards from shore.

Characteristics of Wrecking Events

Using the stories of the 204 wrecks in the Wimble Shoals region, four areas were examined to determine generalizations through spatial and statistical analysis of the losses (Table 1).⁴⁰ The four variables were the proximity of the wrecking event to shore, the era of the wrecking event, the cause of the wrecking, and the direction of the vessel's travel at wrecking. The locational information used to plot the shipwrecks was based upon historical information provided in available primary and secondary resources.⁴¹ Some wreck locations had accompanying geospatial data, recorded in either Loran-C or Latitude-Longitude. The remainder of the wrecks were plotted based on verbal descriptions. These descriptions allowed wrecks to be plotted based on relation to shore or relation to life-saving stations. Due to a lack of available locale information, seventy-four wrecks were not plotted on the ArcGIS maps. These seventy-four wrecks were used, when possible, within the statistical analysis.

The first variable of analysis was the proximity to shore. Proximity categories were based upon plottable wreck locations gleaned from the historical records. The determination for proximity came from three arbitrary markers: 500 yards from the shoreline, three miles from the shoreline (or the line of state territorial waters), and an arbitrary decision to cut offshore wrecks at thirty miles from shore. From these markers, wreck locations were assigned to one of four categories—ashore (shore to 500 yards), nearshore (500 yards to 3 miles), offshore (beyond 3 miles), and unknown.

It is immediately evident that most wrecks occur

within 500 yards of shore (Figure 3). Of 204 wrecks, 109 or 53% of the wrecks are considered ashore in three clusters. The first set is clustered around the north end of Hatteras Island; a second set, and the largest, is around the area of modern-day Rodanthe, Salvo, and Waves; and the third further down the island around the historic Gull Shoals Life Saving Station. The nearshore wrecks, those between the 500-yard and 3-mile markers, comprise 12% of the data set. Visible in the spatial plotting, the wrecks in the nearshore category are denser towards shore and become sparser away from shore. The nearshore wrecks are spaced evenly along the island. The offshore wrecks comprised 11% of the data set. Like the nearshore category, the offshore wrecks are denser closer to shore than further from shore. The unknown wreck locations represent the remaining 24% of the data set.

The clustering and statistical breakdown of the data is a direct result of the geological and oceanographic conditions that forced captains to make decisions for safe passage. The presence of the northbound Gulf Stream and accompanying winds off Cape Hatteras forced southbound ships closer to shore. Its presence and convergence with the cooler waters of the Labrador also impacted northbound vessels. Northbound vessels had to leave the Gulf Stream and move into the water closer to shore to continue to mid-Atlantic ports. For both sets of vessels, this placed them closer to shore and in danger of running aground on the shoals. The need to avoid or leave the Gulf Stream forced ships closer to shoals and the weather created by the confluence of the two currents, in certain circumstances, forced ships further towards shore and eventually ashore.

The second variable of spatial analysis was the era of wrecking (Figure 4). The evaluation by era was conducted by year and by month. To evaluate the year, the wrecks were sorted by decade beginning with 1730 and ending with 1979. The decades, though analyzed separately as statistical data, were analyzed collectively during spatial analysis as centuries. By century, the 1700s had nine total wrecks consisting of 4% of the data set, the 1800s has 137 wrecks consisting of 67% of the data set, and the 1900s had thirty-nine wrecks accounting for 19% of the data set. The decade information is presented in Table 2.

In examining the data, most of the wrecks occurred during the 1800s. While each decade of the 19th century saw wrecks occur, the events clustered in two major waves. The first wave occurred between 1820 and 1849, and the second between 1870 and 1899. Between 1820 and 1849, several strong storms and gales

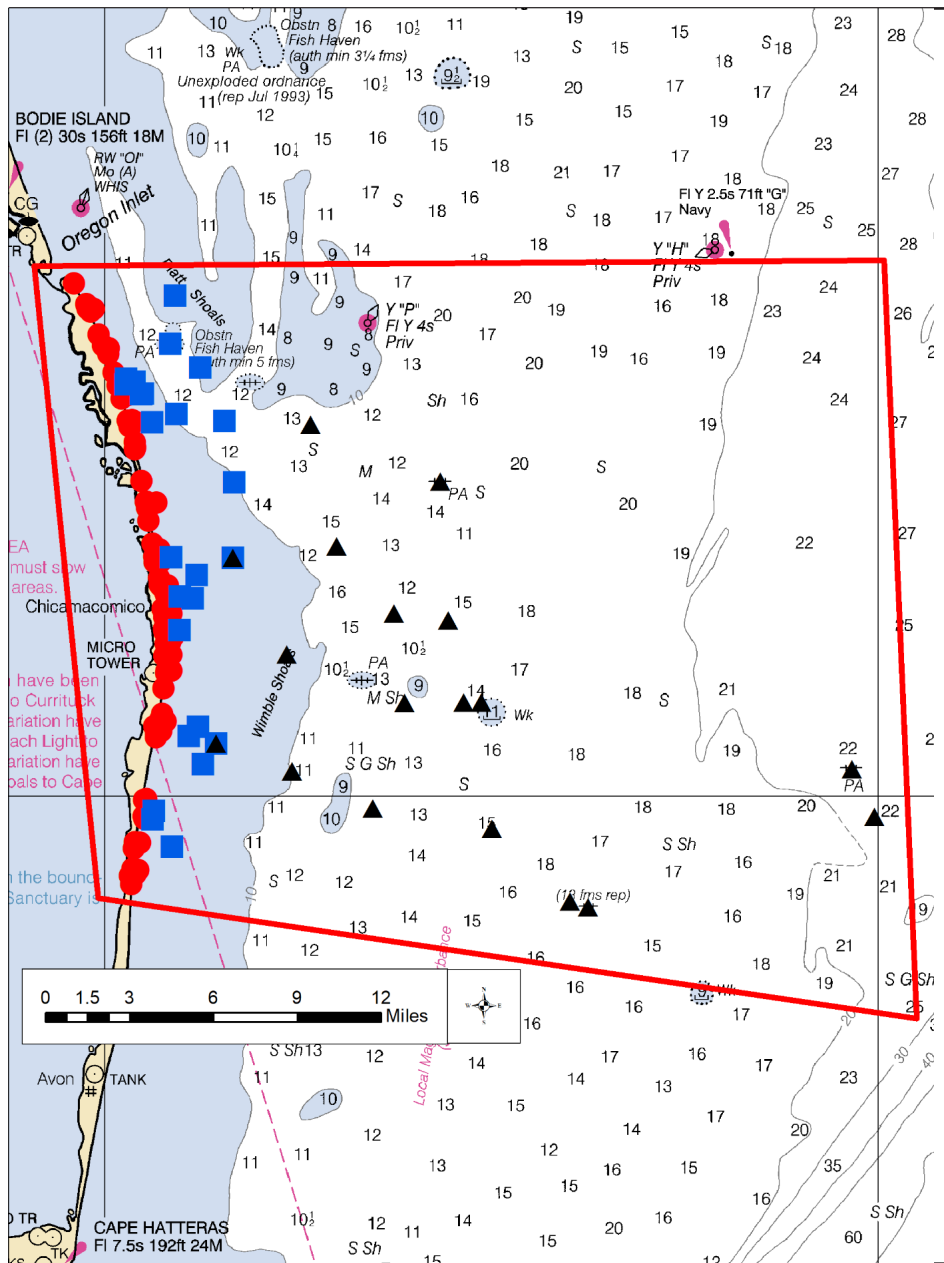


Figure 3. Spatial distribution of wrecks by proximity to shore. Red circles indicate ashore, blue squares indicate near shore, and black triangles indicate offshore.

account for multiple wrecks. A storm in July 1842 resulted in the loss of twelve vessels in ten days. During the second wave, while there are storms, such as that of April 1877 which took six ships, there were other events that account for groups of wrecks as well. The Civil War took place during this era and can account for the loss of three vessels. Further, a large number of losses during the entirety of the nineteenth century may also be a result of both more vessels on the water raising the probability of wrecking and the lack of reliable information regarding the various shoals around Chicamacomico. In looking at the spatial density of the wrecks of the 1800s, 58% of the vessels went ashore during their wrecking. These wrecks are clustered predominantly from the north point of the island to through the end of the modern town of Salvo. 10% of the 1800s wrecks are considered near shore, while only 6% are offshore. The remainder were not plotted as their locations were unknown (28%). The densities of the

wrecking locales are indicative of the extensive shoal systems in the area, lack of accurate knowledge about the area, and the dangerous waters that converge in the area.

The 1700s and the 1900s had significantly fewer wrecks. During the 1700s, only nine wrecks occurred, constituting 4% of the total data set. None of the eighteenth-century wrecks were plotted as there was no historical information regarding their wreck locations. During the 1900s, thirty-nine wrecks occurred, comprising 19% of the data set. Thirty-one of the thirty-nine (79%) of the twentieth wrecks occurred during the first twenty years of the century. Most of these thirty-one wrecks occurred due to vessels becoming stranded. While the stranding may have occurred for various reasons, including storms, the records do not indicate storm damage and therefore are listed as a stranding instead of storm loss. The twentieth century wrecks follow a similar spatial pattern to that

Table 1. Shipwrecks of the Chicamocomico Area.

Vessel	Month of Loss	Year of Loss	Reason of Loss	Direction of Travel	Proximity to Shore
AARON REPPARD	8	1899	storm	S	ashore
ADAMS	unknown	unknown	unknown	unknown	ashore
ALDERMAN	1	1846	unknown	S	near shore
ALFORD BRABROOK	3	1899	storm	S	nearshore
AMERICA	12	1876	ashore	W	ashore
AMICUS	10	1815	unknown	unknown	ashore
ANN AND DOROTHY	3	1770	storm	N	unknown
ANNIE E. BLACKMAN	10	1889	storm	S	nearshore
B. T. MARTIN	7	1861	war loss	S	ashore
BENJAMIN M. WALLACE	3	1904	ashore	S	ashore
BENJAMIN W. ROBINSON	4	1877	ashore	S	ashore
BERMUDIAN	3	1770	storm	unknown	unknown
BETELGEUSE	1	1976	storm	unknown	ashore
BLANCHE HOPKINS	4	1905	stranded	S	nearshore
BOSTON PACKET	5	1831	ashore	S	ashore
Captain Hibbs	3	1770	storm	N	unknown
CHARLES	10	1881	unknown	S	unknown
CHARLES HESSELTINE	11	1843	unknown	unknown	ashore
CHARLES J. DUMAS	12	1911	stranded	S	nearshore
CLARA JANE	1	1862	war loss	unknown	unknown
CLYDE	3	1905	ashore	N	ashore
COMET	1	1853	ashore	N	unknown
CORN PLANTER	1	1820	stranded	unknown	ashore
COUNSELLOR	10	1837	ashore	S	unknown
DAGGERY	1	1902	stranded	S	ashore
DEFIANCE	11	1731	storm	unknown	unknown
DEFIANCE	8	1821	ashore	N	unknown
DUNMORE	7	1842	unknown	S	unknown
E. S. NEWMAN	10	1896	storm	S	near shore
E. S. POWELL	6	1894	unknown	S	unknown
EDWARD STUART	11	1883	unknown	N	ashore
ELIZA	11	1851	unknown	unknown	unknown
ELIZABETH	3	1919	ashore	N	offshore
ELSIE A. BAYLES	4	1916	stranded	S	ashore
EMMA C. COTTON	12	1895	stranded	S	ashore
EMMA C. ROMMELL	1	1884	ashore	N	ashore
ENTERPRISE	10	1822	ashore	W	ashore
ERIN	1	1889	ashore	S	ashore
F. E. McDONALD	6	1883	unknown	S	ashore
FAIR	11	1842	collision	N	unknown
FANNY	4	1789	unknown	N	ashore
FANNY	8	1850	storm	N	ashore
FLORENCE	1	1884	storm	N	ashore
FRANCIS	6	1825	storm	unknown	ashore
FRANCIS A. TUPPER	3	1843	stranded	N	ashore
FREDDIE HENCKEN	2	1892	stranded	S	ashore
FRIENDS	6	1855	stranded	unknown	ashore
GA KOHLER	8	1933	storm	S	ashore
GENERAL S.E. MERWIN	3	1901	stranded	S	nearshore
GENEVA	1	1834	storm	S	ashore
GEORGE	1	1811	ashore	S	unknown
GEORGE L. FESSENDEN	4	1897	stranded	S	nearshore
GEORGE N. REED	1	1915	stranded	S	ashore
GOVERNOR AMES	12	1909	stranded	N	nearshore
HENRY	3	1839	stranded	unknown	ashore
HENRY NORWELL	7	1896	storm	S	nearshore
HERBERT A. CREEF	1	1914	unknown	unknown	ashore
HOPE	2	1807	ashore	S	ashore
HUMMINGBIRD	2	1831	storm	N	unknown
INEZ N. CARVER	5	1903	unknown	S	ashore
IONA	4	1877	ashore	S	ashore
J.H. LOCKWOOD	11	1876	unknown	N	ashore
J.W. GASKILL	2	1891	unknown	S	nearshore
JAMES WOODALL	1	1896	unknown	N	ashore
JENNIE LOCKWOOD	2	1906	stranded	S	nearshore

Joe Doughty	unknown	unknown	unknown	unknown	offshore
JOHN MAXWELL	11	1912	ashore	S	ashore
JOHN SHAY	4	1889	ashore	unknown	unknown
JOHN W. HALL	3	1902	unknown	S	ashore
JOSIE TROOP	2	1889	ashore	W	ashore
KEY WEST	10	1870	ashore	S	unknown
LASTHENA	3	1824	stranded	unknown	unknown
LIZZIE S. HAYNES	10	1889	ashore	N	ashore
LORING C. BALLARD	4	1915	stranded	S	ashore
LST #471	1	1949	unknown	unknown	ashore
LUCY AND NANCY	2	1740	ashore	unknown	unknown
LUCY H. RUSSELL	6	1903	stranded	S	ashore
M and E HENDERSON	11	1879	ashore	N	unknown
MAGGIE J. LAWRENCE	2	1896	storm	S	ashore
MAGNOLIA	12	1852	ashore	S	unknown
MARGARET SPENCER	5	1925	ashore	N	ashore
MARIA	3	1844	ashore	N	unknown
MARLYN	unknown	unknown	unknown	unknown	nearshore
MARORE	2	1942	war loss	N	offshore
MARSTONMOOR	1	1900	unknown	N	ashore
MARY	1	1829	unknown	S	unknown
MARY	1	1853	storm	N	unknown
MARY E. THOMPSON	4	1877	stranded	unknown	ashore
MARY L. VANKIRK	2	1882	unknown	N	ashore
MARY PATTON	7	1842	unknown	S	ashore
MARY PERRY	11	1836	ashore	W	ashore
MATILDA D. BORDA	7	1906	stranded	S	near shore
MAURICE R. SHAW	2	1916	stranded	N	offshore
MEMPHIS	7	1843	storm	N	ashore
MERCEL	unknown	unknown	unknown	unknown	offshore
MILLEDGEVILLE	8	1839	storm	N	ashore
MINNIE BERGEN	8	1899	ashore	S	ashore
MIRLO	8	1918	war loss	N	offshore
MOLLIE S. SANDERS	12	1890	unknown	unknown	nearshore
MONTANA	12	1904	storm	S	near shore
MORIANA 200	unknown	unknown	unknown	unknown	offshore
MYRA SPEAR	11	1904	stranded	N	ashore
NATHANIEL LANK	1	1891	stranded	N	nearshore
NELSON E. NEWBERRY	9	1906	storm	N	ashore
NIAGARA	1	1871	storm	N	ashore
OLE UGLY	6	1979	stranded	unknown	offshore
ONLY SON	5	1822	storm	S	ashore
ORIENTAL	5	1862	unknown	S	ashore
ORLEANS	3	1846	unknown	N	ashore
P.B. SAVERY	8	1851	ashore	N	ashore
PLANET MARS	1	1868	unknown	unknown	unknown
PLYMOUTH	1	1853	unknown	unknown	ashore
POCAHONTAS	1	1862	storm	S	ashore
PONCE	11	1848	storm	N	unknown
PRINCE MAURICE	11	1832	unknown	N	ashore
PRISICILLA	unknown	unknown	storm	unknown	ashore
R.B. HAYNE	1	1937	unknown	unknown	unknown
R.H. BOOTH/HR BOOTH	3	1843	ashore	unknown	ashore
R.W. BROWN	12	1848	ashore	unknown	offshore
RAVENWOOD	10	1893	storm	S	ashore
RAYMOND T MAULL	3	1906	storm	N	ashore
REBECCA H. QUEEN	12	1885	ashore	S	unknown
RELIANCE	unknown	unknown	ashore	unknown	nearshore
RESOLUTION	3	1824	unknown	S	ashore
RICHARD F.C. HARTLEY	9	1913	stranded	S	ashore
RICHMOND	1	1869	storm	S	ashore
ROSEANIA	10	1889	stranded	unknown	ashore
S.S. LEWIS	9	1876	stranded	N	ashore
SAMARITAN	7	1842	ashore	S	ashore
SAMUEL L. MITCHELL	10	1846	ashore	S	ashore
SAMUEL W. HALL	12	1897	ashore	N	ashore

SAMUEL W. TILTON	2	1898	stranded	N	ashore
SANTA ROSALIE	1	1814	stranded	W	unknown
SARAH JANE AND ABIGAIL	7	1842	storm	unknown	ashore
SAXON	unknown	unknown	unknown	unknown	ashore
SIGNAL	1	1843	unknown	unknown	unknown
ST. CATHARIS	4	1891	unknown	unknown	ashore
STAR	12	1836	ashore	S	unknown
STRATHAIRLY	3	1891	ashore	N	ashore
SUCCESS	1	1778	ashore	unknown	unknown
SUE WILLIAMS	3	1890	stranded	N	near shore
SUPERIOR	2	1844	storm	N	unknown
THETIS	2	1852	unknown	unknown	ashore
THOMAS HUNT	11	1887	unknown	unknown	unknown
THOMAS J. LANCASTER	10	1881	unknown	S	ashore
Unidentified	unknown	unknown	unknown	unknown	offshore
Unknown 10	unknown	unknown	unknown	unknown	nearshore
Unknown 2	unknown	unknown	unknown	unknown	offshore
Unknown 3	unknown	unknown	unknown	unknown	nearshore
Unknown 4	unknown	unknown	unknown	unknown	ashore
Unknown 5	unknown	unknown	unknown	unknown	ashore
Unknown 6	unknown	unknown	unknown	unknown	ashore
Unknown 8	unknown	unknown	unknown	unknown	offshore
Unknown 9	unknown	unknown	unknown	unknown	ashore
Unknown Barge	unknown	unknown	unknown	unknown	offshore
Unknown Brig	6	1821	unknown	unknown	unknown
UNKNOWN BRIG	1	1837	unknown	unknown	ashore
Unknown Brig	1	1868	unknown	unknown	ashore
Unknown Sailboat	10	1894	stranded	unknown	nearshore
UNKNOWN SCHOONER	5	1819	unknown	unknown	ashore
Unknown Schooner	8	1827	ashore	unknown	unknown
Unknown Schooner	8	1827	ashore	unknown	unknown
Unknown Schooner	8	1827	storm	unknown	unknown
Unknown Schooner	7	1831	ashore	unknown	nearshore
Unknown Schooner	3	1839	stranded	unknown	ashore
Unknown Schooner	1	1868	unknown	unknown	nearshore
Unknown Schooner	4	1877	storm	unknown	ashore
Unknown Schooner	4	1877	storm	unknown	ashore
Unknown Schooner	4	1877	storm	unknown	ashore
Unknown Schooner	4	1877	storm	unknown	ashore
Unknown Schooners (1 of 7)	7	1842	storm	unknown	offshore
Unknown Schooners (2 of 7)	7	1842	storm	unknown	offshore
Unknown Schooners (3 of 7)	7	1842	storm	unknown	offshore
Unknown Schooners (4 of 7)	7	1842	storm	unknown	offshore
Unknown Schooners (5 of 7)	7	1842	storm	unknown	offshore
Unknown Schooners (6 of 7)	7	1842	storm	unknown	offshore
Unknown Schooners (7 of 7)	7	1842	storm	unknown	offshore
UNKNOWN SPANISH BRIG	2	1831	unknown	unknown	unknown
Unknown Vessel	6	1875	stranded	unknown	ashore
Unknown Vessel	4	1877	storm	unknown	ashore
Unknown Vessel	1	1881	unknown	unknown	ashore
Unknown Vessel	12	1905	storm	unknown	unknown
UNKNOWN VESSEL	unknown	unknown	unknown	unknown	offshore
Unknown Vessel (1 of 2)	9	1915	ashore	unknown	ashore
Unknown Vessel (1 of 5)	8	1827	storm	unknown	ashore
Unknown Vessel 1 of 2	3	1770	storm	unknown	unknown
Unknown Vessel 2 of 2	3	1770	storm	unknown	unknown
Unknown Vessel 2 of 2	9	1815	storm	unknown	ashore
VALIANT	3	1846	unknown	S	ashore
VIOLA W. BURTON	5	1889	unknown	S	unknown
VOLANT	9	1862	ashore	unknown	unknown
VOUCHER	11	1817	ashore	S	ashore
WARRINGTON	11	1835	ashore	S	ashore
WASHINGTON	10	1839	ashore	S	unknown
WILLIAM	2	1873	ashore	N	ashore
WILLIAM GIBBONS	10	1836	ashore	N	unknown
WILLIAM H. KEENEY	3	1890	stranded	S	ashore
WILLIE H. CHILD	8	1911	stranded	S	ashore
WOLSELEY	4	1889	ashore	N	unknown
WRECKAGE	1	1910	stranded	unknown	offshore
YAG-14	9	1944	storm	unknown	ashore
YORK	8	1861	war loss	unknown	unknown
ZACCHEUS SHERMAN	2	1913	stranded	N	nearshore

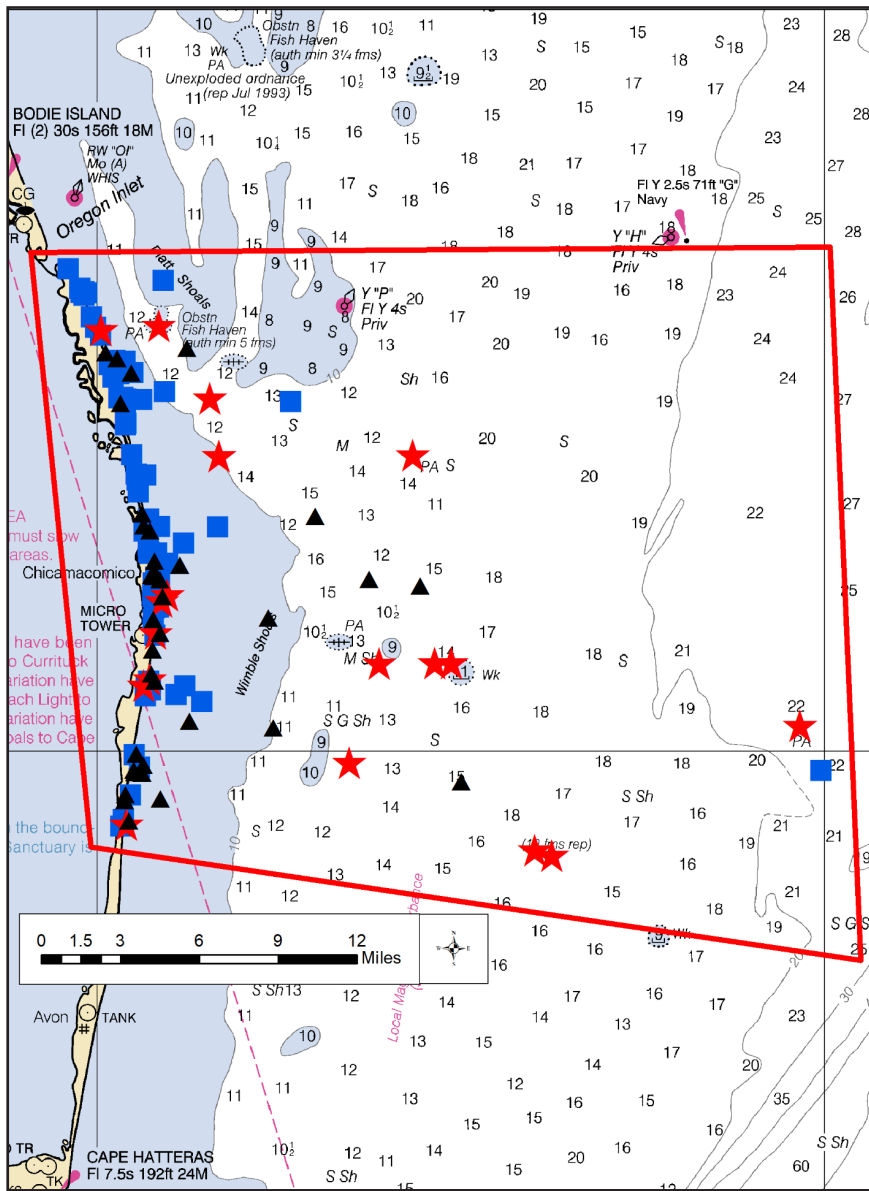


Figure 4. Spatial distribution of wrecks according to century. Blue squares indicate the 1800s, black triangles indicate the 1900s, and red stars indicate the unknown era of wrecking.

Decade	Number of Wrecks	Percentage of Wrecks
1730-39	1	0.4%
1740-49	1	0.4%
1750-59	0	0%
1760-69	0	0%
1770-79	6	3%
1780-89	1	0.4%
1790-99	0	0%
1700s	9	4%
1800-09	1	0.4%
1810-19	6	3%
1820-29	13	6%
1830-39	16	8%
1840-49	25	12%
1850-59	9	4%
1860-69	10	5%
1870-79	17	8%
1880-89	18	9%
1890-99	22	11%
1800s	137	67%
1900-09	17	8%
1910-19	14	7%
1920-29	1	0.4%
1930-39	2	0.9%
1940-49	3	3%
1950-59	0	0%
1960-69	0	0%
1970-79	2	0.9%
1900s	39	19%
Unknown	19	9%

Table 2. Breakdown of shipwrecks off Wimble Shoals by decade.

of the nineteenth century wrecks. Fifty-nine percent of the twentieth century vessels wrecked in the shore vicinity; while 21% wrecked in the nearshore area and 15% wrecked offshore.

The differences between the three centuries likely are a result of the availability of information or lack thereof. During the 1700s, when the least number of shipwrecks are noted in the dataset, it is not because these vessels were not wrecking. Many ships wrecked throughout North Carolina at that time, but wreck information provided at the time was nondescript. The historical information available for the wrecks during the 1800s was more descriptive, allowing for more wrecks to be accurately recorded for the dataset. The number of wrecks that occurred, however, was a result of limited knowledge of the ever-shifting shoals and shorelines as well as the inability to track and report inclement weather. With the turn of the century, information improved resulting in a decrease in wrecking events in the area.

The wrecks were further analyzed by wrecking month. Figure 5 provides a breakdown of the number of shipwrecks per month. As with the wrecking events by year, nineteen vessels had unknown dates and are not displayed in the chart. The monthly data shows there are significantly more wrecks that occur at the beginning of the year. This is followed by a lull in the middle of the year, before spiking again towards the end of the year. These visible patterns are expressive of the weather patterns that affect coastal North Carolina. Hurricane seasons extend between June and November. This season accounts for an increase in wrecks after June. The nor'easter season extends typically between November and April but can occur anytime throughout the year as low-

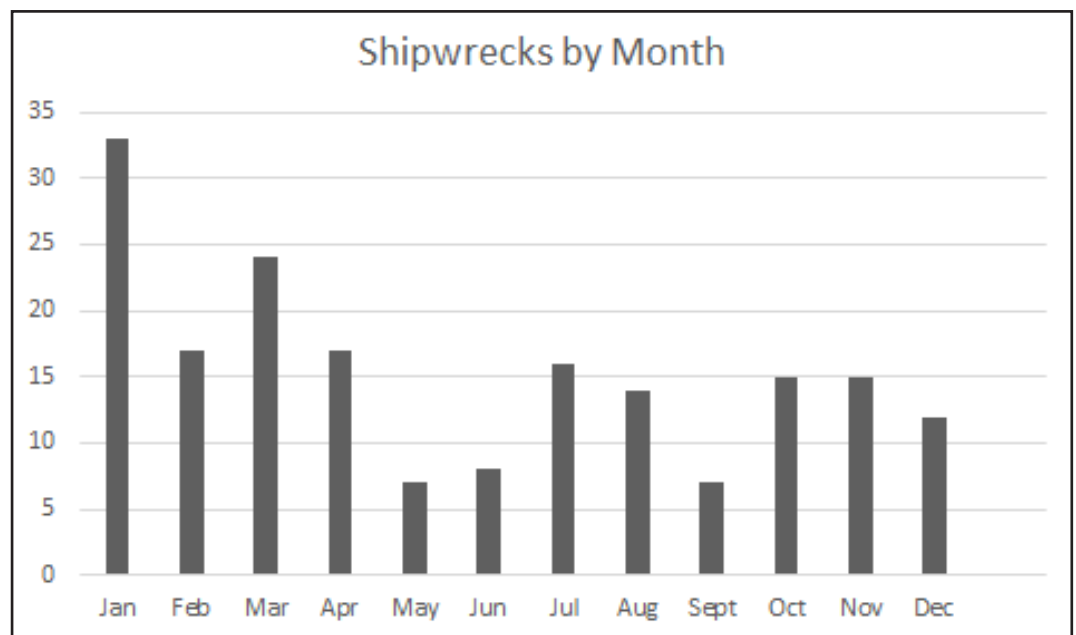
pressure systems develop and move up the Atlantic coast to cooler waters. Nor'easters likely account for the increase in the early months (January through March). Vessels during each season faced intense winds and surging seas, both of which makes seafaring extremely difficult and forces that drove ships towards shoals and shores.⁴²

The third variable of analysis was the cause of the wrecking. To evaluate the reasons for wrecking, available historical information was used to sort the vessels into six categories: vessels lost in storms, vessels lost by groundings, vessels lost by stranding, vessels lost through war efforts, vessels lost by collisions, and vessels lost by unknown means. These categories have significant overlap. Because of this overlap, the reasons for wrecking were assigned based on language within historical records. For example, vessels reported as "went ashore in heavy gale" were categorized as wrecking during a storm instead of running aground.

Using these categories, the reasons for wrecking are represented statistically and spatially. Statistically, the reasons for wrecking are as follows: storm loss 25%; vessel aground 24%; stranded vessels 18%; war loss 2%; collisions 0.4%; and unknown losses 29%. From this information, excluding the unknown loss, the three most common reasons for a loss were during storms, running aground, and stranding.

When examined spatially, these three categories are clustered predominately within 500 yards of the shoreline. This clustering is not unexpected as was previously outlined in the other variables above. It has already been shown that most of the vessels wrecked within 500 yards of shore. The impacts of the natural environment already

Figure 5. Breakdown of shipwrecks by month.



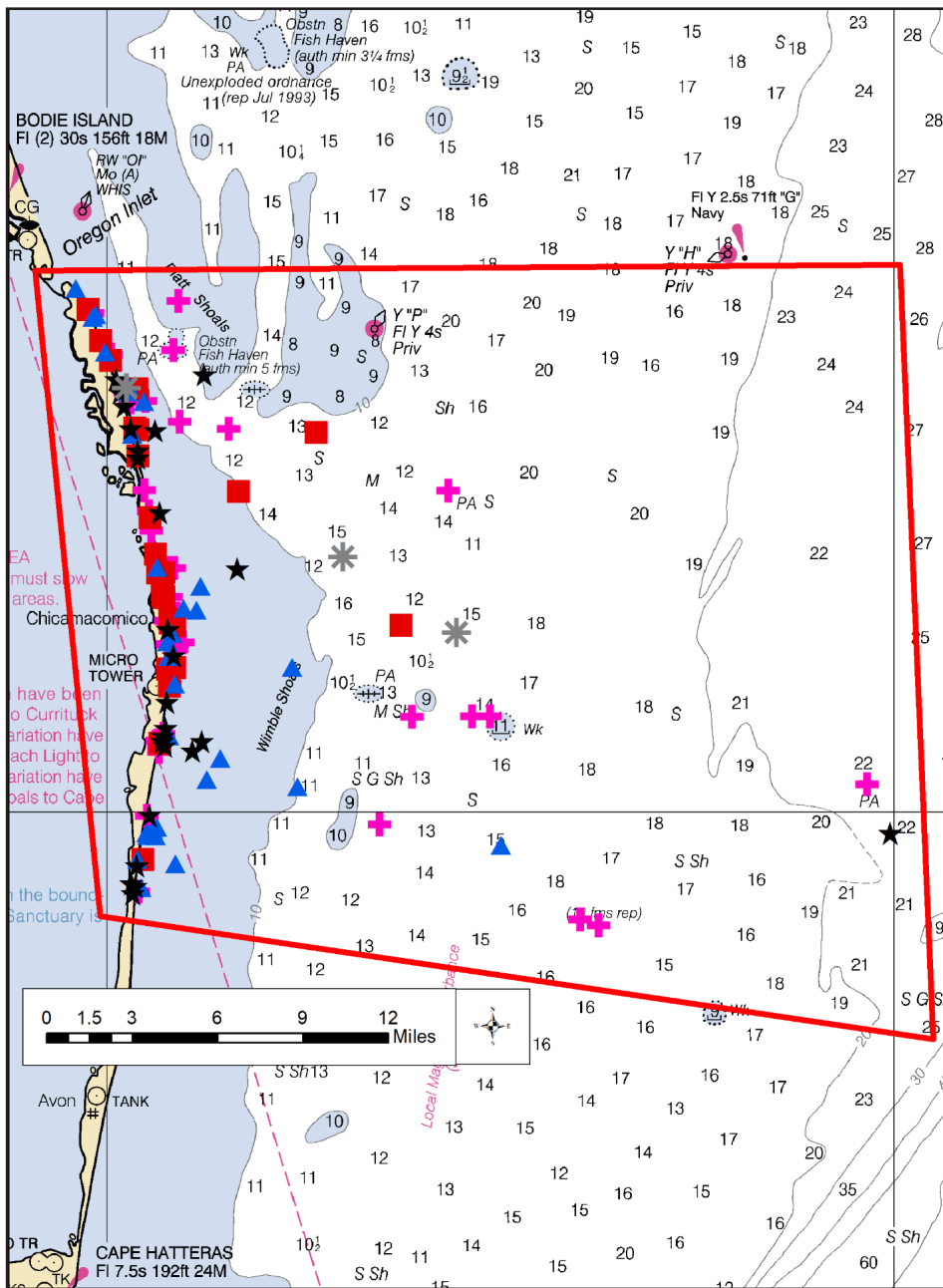


Figure 6. Spatial distribution of wrecks by reason for wrecking. Black stars indicate storm loss, red squares indicate grounding, blue triangles indicate stranding, gray starbursts indicate war loss and pink crosses represent a loss for an unknown reason.

have shown vessels were pushed closer to shore. This proximity would mean that regardless of the reason for wrecking, the wrecks would occur ashore or near shore (Figure 6).

Interestingly, there are not more wrecks offshore caused by storms. The reason for this lack of storm-related wrecks offshore could be related to the role of wind and surges within these storms. Both hurricanes and nor'easters circulate in a counterclockwise motion. The northeasterly direction of the winds, depending on the location of the storm, caused ships to abandon their routes and anchor closer to shore to ride out the storm or sail further out to sea. This could explain the lack of wrecks within the offshore area.

The final factor for evaluation was the direction of travel at the time of wrecking. The direction of travel was assessed using information from the historical resources. The shipping news

section of historical newspapers and United States Life Saving Wreck reports offered cities from and to where these ships were heading. This information allowed for the direction of travel to be determined. The three directions noted from the resources were north, south, and west. Those with indeterminable directions of travel were listed as unknown. Of the 204 wrecks, 48 (23%) vessels were traveling north, 64 (31%) were traveling south, and 5 were traveling westerly (2%). Eighty-seven (42%) vessels had directions of travel that were indeterminable.

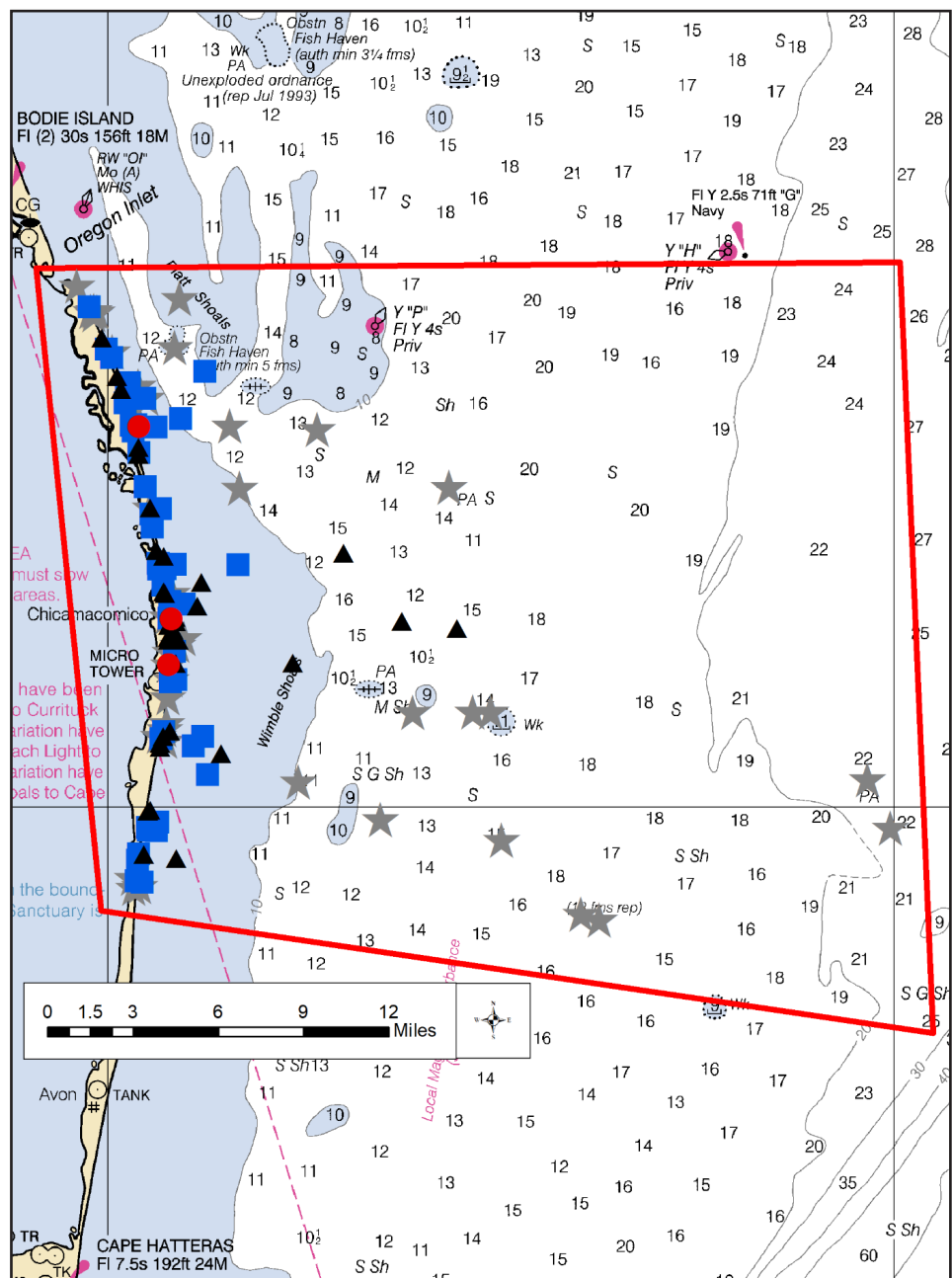
The routes were examined in greater detail, based upon the available intended route information. In looking at the northbound ships, the vessels came from two main areas. Sixty-eight percent of the vessels were departing from southern states, while 23% were departing from the Caribbean and South American ports. The remaining 8% of the vessels came from the Gulf ports. Unsurprisingly, the intended ports

were in the mid-Atlantic region at 81% of the vessels, and New England at 14% of the vessels. The remaining 4% of the north-bound vessels were bound for ports in North Carolina before they were lost along its shorelines.

The southbound vessels were almost a mirror image of the northbound vessels with inbound-outbound reversed. Like the northbound vessels, southbound vessels left from and arrived in two main areas. Southbound vessels were predominantly leaving from mid-Atlantic ports (67%), followed by New England ports (29%). A small portion, 2%, left from North Carolina ports. The intended ports were predominantly ports in the southern states at 84%, followed by 11% to South American ports, and finally 3% to Gulf ports. The westbound vessels were in-bound from European ports for areas in the south, including both southern states and the Caribbean.

In assessing the spatial distribution of the direction of the vessels, there is a distinct difference between the northbound vessels and southbound vessels. All the southbound vessels are clustered ashore with a few in the nearshore area. Opposite of the southbound vessels, the northbound vessels, though still predominantly clustered ashore extend in larger quantities in the nearshore and offshore areas (Figure 7). The reasoning behind the variance in directional clusters like based upon the impact of offshore currents. The Gulf Stream, the strong northerly current, sits near the coastline and creates difficulty for southbound vessels. Southbound vessels either had to hug the shoreline and risk grounding on shoals or go further out to sea to avoid the Gulf Stream. Northbound vessels easily sailed north on within the Gulf Stream until it began to curve out to sea. Because southbound vessels were already closer to shore, the clustering ashore and near shore of these vessels correlates with the environment. The

Figure 7. Spatial distribution of wrecks by direction travel. Black triangles indicate northbound vessels, blue squares indicate southbound vessels, red circles indicate westbound vessels, and gray stars indicate the unknown direction of travel.



same is evident with the northbound vessels. As they are already further from shore, it correlates that the wrecking events for northbound vessels would be in the nearshore and offshore areas.

Conclusions

The wrecks off Wimble Shoals each have their individual stories. Each wreck story adds to the overall story of the Graveyard of the Atlantic and the history of north Hatteras Island. The wreck histories, both discussed above and examined throughout the research process, show the difficulties of navigation in the Wimble Shoals area, the dangers of the natural environment, and the valor and bravery of the sailors and lifesavers of the area.

To further understand the overall story of wrecking in the Wimble Shoals area, the wrecks identified for this historical survey were analyzed in four categories. These categories—proximity to shore, the era of wrecking event, the reason for wrecking, and the direction of travel—provide insight into general characteristics of wrecking patterns along Wimble Shoals. The data shows several trends that aid in this formation. Concerning proximity to shore, wrecks are clustered ashore and decrease moving away from shore. Concerning the era of wrecking, most wrecks occurred during the nineteenth century with a significant decrease during the first twenty years of the twentieth century. Additionally, most wrecks occurred during the first four months of the year and the last four months of the year. Concerning the reason for wrecking, there is no distinctive reason for all wrecking events; they were evenly spread across grounding, stranding, and storm loss. Concerning the direction of travel, statistically, there was no difference between northbound and southbound. When looking at the spatial distribution, however, almost all southbound vessels were wrecked ashore, while the northbound wrecked vessels occurred in all three areas.

These characteristics built from the individual wreck stories reflect the role of the natural environment in regulating the wrecking patterns off Wimble Shoals. The role the natural forces played in creating the wrecking patterns is evident by the histories of the lost vessels. These stories also indicate the human role in wrecking events and risk evaluation at sea. By examining the losses individually and collectively, a grander picture can be created of the Wimble Shoals area and its interconnectedness to the wrecks within its waters.

Endnotes

1. U. S. Coast Guard, *Annual Report on the Operation of the U. S. Coast Guard for fiscal year ending June 30, 1918* (Washington, D.C.: Government Printing Office 1918), 11; Captain C.C. Marsh, *German Submarine Activities on the Atlantic Coast of the United States and Canada* (Washington, D.C.: Navy Department, Government Printing Office, 1919), 128-129; Edwin C. Bearss, "The 'Mirlo' Rescue," *The North Carolina Historical Review* 45, no. 4 (1968): 387-389, 390-395; John Bright, "Loss British Tanker Mirlo Revisited: New Considerations Regarding the Vessel's Loss off the North Carolina Coast during the First World War," in *ACUA Underwater Proceedings 2017*, eds. John Albertson and Frederick Hanselmann (Rockville, M.D.: Advisory Council on Underwater Archaeology, 2017), 93; Kevin Duffus, *Into the Burning Sea: The 1918 Mirlo Rescue and the Spirit of Dauntless Devotion to Duty* (Cruso, N.C.: Looking Glass Publications, Inc. 2018), 33-48.
2. David Stick, *Graveyard of the Atlantic: Shipwrecks of the North Carolina Coast* (Chapel Hill: The University of North Carolina Press, 1952); Bruce D. Berman, *Encyclopedia of American Shipwrecks* (Boston: The Mariners Press, 1972); Roderick Farb, *Shipwrecks: Diving the Graveyard of the Atlantic* (Birmingham, A.L.: Menasha Ridge Press, 1985); Gary Gentile, *Shipwrecks of North Carolina from Diamond Shoals North* (Philadelphia: Gary Gentile Productions, 1993); Norbert Freitag, *Shipwrecks Unforgotten from New Jersey to the Gulf of Florida: A Reference Guide* (Island Park, N.Y.: Finley-Greene Publications, Inc., 1998); Joan Charles, *North Carolina Shipwreck Accounts: 1709 to 1950 including over 1100 names wrecks* (Hampton, V.A.: Published by Author, 2004); James D. Charlet, *Shipwrecks of the Outer Banks: Dramatic Rescues and Fantastic Wrecks in the Graveyard of the Atlantic* (Guilford, C.T.: Globe Pequot, 2020).
3. Gary S. Dunbar, *Historical Geography of the North Carolina Outer Banks* (Baton Rouge: Louisiana State University Press, 1958), 1; William Paul Anderson, Jr., "The Hydrology of Hatteras Island, North Carolina" (PhD. diss., North Carolina State University, 1999), 54; Impact Assessment, Inc., "Final Technical Report-Volume One: Ethnohistorical Description of the Eight Villages adjoining Cape Hatteras National Seashore and Interpretive Themes of History and Heritage" (report, Cape Hatteras National Seashore, Manteo, N.C., 2005), 25.
4. Dirk Frankenberg, *The Nature of the Outer Banks: Environmental Processes, Field Sites, and Development Issues, Corolla to Ocracoke* (Chapel Hill: The University of North Carolina Press, 1995), 17-18.
5. William S. Powell and Michael Hill, *The North Carolina Gazetteer*, 2nd ed. (Chapel Hill: University of North Carolina Press, 2010), <https://library-biblioboard-com.jproxy.lib.ecu.edu>.
6. Ryan Gibbons, "Morphology, Geological History and Dynamics of Wimble Shoals, Rodanthe, NC (master's thesis, East Carolina University, 2017), 23.
7. Frankenberg, *The Nature of the Outer Banks*, 120; Richard W. Lawrence, "An Overview of North Caroli-

- na Shipwrecks with an Emphasis on Eighteenth-Century Vessel Losses at Beaufort Inlet" (report, QAR-R-08-01, N.C. Office of Archives and History, Raleigh, N.C., 2008), 3-4.
8. Stick, *Graveyard of the Atlantic*, 244.
 9. Stick, *Graveyard of the Atlantic*, 1.
 10. Stick, *Graveyard of the Atlantic*, 2-3; Frankenberg, *The Nature of the Outer Banks*, 17; Lawrence, "An Overview of North Carolina Shipwrecks," 3-4.
 11. Frankenberg, *The Nature of the Outer Banks*, 17-19; Gibbons, "Morphology, Geological History and Dynamics," 53.
 12. Stick, *Graveyard of the Atlantic*, 170.
 13. Lawrence, "An Overview of North Carolina Shipwrecks," 6-9.
 14. Bernam, *Encyclopedia of American Shipwrecks*; Farb, *Shipwrecks: Diving the Graveyard of the Atlantic*; Gentile, *Shipwrecks of North Carolina from Diamond Shoals North*; Freitag, *Shipwrecks Unforgotten from New Jersey to the Gulf of Florida*; Charles, *North Carolina Shipwreck Accounts*; Charlet, *Shipwrecks of the Outer Banks*.
 15. "The Biggest Five-Master Vessel," *New York Times*, December 16, 1888, 13; "A Large Cargo of Lumber," *New York Times*, May 1, 1889, 12; Ingrid Grenon, *Lost Maine Coastal Schooners: From Glory Days to Ghost Ships* (Charleston, S.C.: History Press, 2010), 62-64.
 16. "Afloat and Ashore: Description of the Five-Masted Schooner *Governor Ames*," *Daily Alta California*, March 18, 1891, 2; "Afloat and Ashore: Hundreds of Persons Inspect the Schooner *Governor Ames*," *Daily Alta California*, March 23, 1891, 8; "Items from Sea and Shores: Return of the *Governor Ames* from a Trip on the Coast," *San Francisco Call*, May 10, 1891, 3.
 17. "The *Governor Ames*," *South Australian Register*, July 13, 1892, 7; "Exports," *Newcastle Morning Herald and Miner's Advocate*, September 1, 1892, 4.
 18. "Mercantile Shipping News," *The Standard*, June 5, 1894, 7; "Mercantile Shipping News," *The Standard*, July 10, 1894, 8; "Liverpool Shipping News," *Manchester Courier and Lancashire General Advertiser*, July 10, 1894, 6; "Shipping News," *Boston Journal*, July 28, 1894, 6.
 19. "Shipping News: From Norfolk," *The Sun*, March 5, 1895, 7; "Shipping News," *The Sun*, May 20, 1898, 9; "Shipping News," *The Sun*, May 4, 1899, 9; "Shipping News," *The Sun*, July 21, 1900, 9; "Shipping News," *The Philadelphia Inquirer*, April 18, 1898, 5; "Shipping News," *The Philadelphia Inquirer*, June 1, 1899, 9; "Shipping News," *New York Herald*, October 3, 1894, 16; "Shipping News," *New York Herald*, October 6, 1894, 12; "Shipping News," *New York Herald*, March 2, 1895, 12; "Crew of Six Lost," *Boston Daily Advertiser*, October 12, 1894, 1; "Shipping News," *Baltimore American*, January 29, 1903, 9; "Shipping News," *Baltimore American*, June 13, 1906, 11.
 20. "Schooner Sinks, 14 Drown," *Sacramento Union*, December 16, 1909, 2; "Schooner Wreck, Fourteen Drowned," *Stockton Independent*, December 16, 1909, 1; "Captain, Wife and Crew Perish when Ship Sinks," *Los Angeles Herald*, December 16, 1909, 1; "Schooner Ames is Wrecked," *Christian Science Monitor*, December 16, 1909, 5; "One Survivor of Crew among Crew of Twelve," *Anaconda Standard*, December 16, 1909, 1; "New Cape Hatteras: Schooner is Wrecked, struck a Rock and all aboard Lost their Lives," *Augusta Chronicle*, December 16, 1909, 6; "Twelve Sailors Killed in Wreck of Schooner," *Daily Oklahoman*, December 16, 1909, 1; "Only One Survives Schooner Wreck," *Fort Worth Star Telegram*, December 16, 1909, 2; "No Title," *Greensboro Record*, December 16, 1909, 6; "A Schooner Sank with Fourteen, the Only Survivor of a Wreck off Cape Hatteras Tells the Story," *Kansas City Star*, December 16, 1909, 11; "Governor Ames Lost," *Pawtucket Times*, December 16, 1909, 8; "Survivor Reports Fourteen Drown," *State*, December 16, 1909, 1; "Fourteen Perish, Captain of Schooner and Wife among Storm Victims, Tie-laden Vessel Strikes Rocks," *Times-Picayune*, December 16, 1909, 2; "Governor Ames Lost," *The Montgomery Advertiser*, December 17, 1909, 1; "First Five Master Lost," *Patriot*, December 17, 1909, 2; "Goes down with all Hands, Five-masted Schooner *Governor Ames* a Total Wreck," *St. Albans Daily Messenger*, December 17, 1909, 1; "Governor Ames, a Big Schooner, Wrecked at Sea," *The Brunswick News*, December 17, 1909, 1; "Maritime News," *The Philadelphia Inquirer*, December 18, 1909, 13.
 21. "Only One Survives when Angry Waves Wreck Schooner," *The Philadelphia Inquirer*, December 26, 1909, 1-2.
 22. "Shipping News," *New York Herald*, August 20, 1884, 10; "Shipping News," *New York Herald*, September 13, 1884, 8; "Shipping News," *New York Herald*, October 24, 1885, 10; "Shipping News," *New York Herald*, February 2, 1886, 10; "Shipping News," *New York Herald*, June 23, 1886, 10; "Shipping News," *New York Herald*, December 21, 1886, 10; "Shipping News," *New York Herald*, July 7, 1887, 10; "Shipping News," *New York Herald*, October 19, 1887, 10; "Shipping News," *New York Herald*, February 7, 1888, 10; "Shipping News," *New York Herald*, March 1, 1889, 10; "Shipping News," *New York Herald*, May 11, 1889, 11; "Shipping News," *New York Herald*, July 21, 1889, 16; "Wrought by Sea and Tempest," *New York Herald*, September 13, 1889, 3; "Shipping News," *Boston Daily Advertiser*, July 12, 1886:6; "Shipping News," *The Philadelphia Inquirer*, July 15, 1886, 6; "Shipping News," *The Philadelphia Inquirer*, October 18, 1888, 6; "Shipping News," *The Philadelphia Inquirer*, November 17, 1888, 6; "On Vineyard Sound Rough Weather Reported," *The Philadelphia Inquirer*, September 13, 1889, 2; "Shipping News," *Boston Journal*, February 23, 1887, 3.
 23. "Electric Sparks," *Boston Journal*, October 4, 1884, 6; "Shipping News," *The Philadelphia Inquirer*, October 4, 1884, 2.
 24. U. S. Coast Guard, *Annual Report on the Operation of the U. S. Life Saving Service for fiscal year ending June 30, 1890* (Washington D.C.: Government Printing Office, 1892), 25.
 25. "Loss of Life on the Coast," *Worcester Daily Spy*, October 28, 1889, 1; "Many Seamen Drowned," *Trenton Evening News*, October 28, 1889, 1; "Crimes and Casualties: Wrecked on the Virginia Coast," *Times-Picayune*, October 28, 1889, 2; "Virginia Affairs, Further Disasters," *The Sun*, October 28, 1889, 2; "Mishaps at Sea, the Fate of Shipwrecked Crew," *Springfield Repub-*

- lican, October 28, 1889, 5; "Wrecked off a Wild Coast," *Plain Dealer*, October 28, 1889, 1; "Other Vessels Lost," *The Philadelphia Inquirer*, October 28, 1889, 2; "An Awful Tale of the Sea," *Patriot*, October 28, 1889, 1; "Many Lives Lost in the Storm," *New York Tribune*, October 28, 1889, 1; "Victims of Neptune," *New York Herald*, October 28, 1889, 10; "The Storm King," *Knoxville Journal*, October 28, 1889, 1; "Tales of the Ocean," *Boston Journal*, October 28, 1889, 2; Stick, *Graveyard of the Atlantic*, 122-123.
26. U. S. Coast Guard, *Annual Report on the Operation of the U. S. Life Saving Service for fiscal year ending June 30, 1890*, 189-190.
27. *Ibid.*, 190.
28. "Shipping News," *New York Herald*, May 23, 1874, 10; "Shipping News," *New York Herald*, June 9, 1874, 10.
29. "Shipping News," *New York Herald*, March 17, 1878, 10; "Shipping News," *New York Herald*, March 6, 1881, 14; "Shipping News," *The Sun*, May 3, 1884, 4.
30. "Home News," *New York Tribune*, March 17, 1877, 10; "Brief Jottings," *Portland Daily Press*, April 9, 1877, 3; "Prices," *New York Herald*, January 5, 1886, 11; "Shipping News: From Norfolk," *The Sun*, March 11, 1895, 10; "Prices," *Boston Journal*, March 26, 1896, 8; "Shipping News," *The Philadelphia Inquirer*, April 27, 1892, 7; "Shipping News," *The Philadelphia Inquirer*, April 1, 1898, 5.
31. "Early Dispatches," *San Antonio Express*, December 30, 1874, 2; "Ocean News," *Daily Inter Ocean*, December 31, 1874, 1; "Telegraph," *New Orleans Times*, December 31, 1874, 1; "A Perilous Voyage," *Daily Inter Ocean*, January 7, 1875, 2; "A Perilous Voyage," *Portland Daily Press*, January 15, 1875, 3; "Condensed News," *Pomeroy's Democrat*, January 16, 1875, 5.
32. "Home News," *New York Tribune*, March 17, 1877, 10; "Brief Jottings," *Portland Daily Press*, April 9, 1877, 3; "Shipping News," *New York Herald*, December 30, 1879, 10; "Crimes and Casualties," *New York Tribune*, December 30, 1879, 1; "Marine Disaster," *The Philadelphia Inquirer*, December 30, 1879, 1; "Shipping News," *The Philadelphia Inquirer*, July 21, 1896, 9; "Shipping News," *The Philadelphia Inquirer*, October 16, 1896, 10; "Shipping News," *Boston Daily Advertiser*, July 23, 1896, 7.
33. "No clue to Him," *Boston Journal*, September 9, 1897, 6.
34. "Shipping News," *The Philadelphia Inquirer*, April 1, 1898, 5.
35. U. S. Coast Guard, *Annual Report of the Operation of the U. S. Life Saving Service for the fiscal year ending June 30, 1898* (Washington D.C.: Government Printing Office, 1899), 36.
36. "Shipping News," *The Philadelphia Inquirer*, April 27, 1898, 13.
37. "Schooner and her crew go down," *New York Evening Journal*, April 30, 1898, 5; "Lives Lost in the Storm," *Omaha World Herald*, May 1, 1898, 6; Stick, *Graveyard of the Atlantic*, 158-160.
38. U. S. Coast Guard, *Annual Report of the Operation of the U. S. Life Saving Service for the fiscal year ending June 30, 1898*, 36-39.
39. *Ibid.*, 39.
40. Berman, *Encyclopedia of American Shipwrecks*; Farb, *Shipwrecks: Diving the Graveyard of the Atlantic*; Gentile, *Shipwrecks of North Carolina from Diamond Shoals North*; Freitag, *Shipwrecks Unforgotten from New Jersey to the Gulf of Florida*; Charles, *North Carolina Shipwreck Accounts*; Charlet, *Shipwrecks of the Outer Banks*.
41. Berman, *Encyclopedia of American Shipwrecks*; Farb, *Shipwrecks: Diving the Graveyard of the Atlantic*; Gentile, *Shipwrecks of North Carolina from Diamond Shoals North*; Freitag, *Shipwrecks Unforgotten from New Jersey to the Gulf of Florida*; Charles, *North Carolina Shipwreck Accounts*; Charlet, *Shipwrecks of the Outer Banks*.
42. Lawrence, "An Overview of North Carolina Shipwrecks," 5-6; National Weather Service, "What is a Nor'easter?," National Oceanic and Atmospheric Administration (Accessed 12 October 2020), <http://www.weather.gov/safety/winter-noreaster>; University of Rhode Island, "Primary Circulation," *Hurricanes: Science and Society* (Accessed 12 October 2020), [http://www.hurricanesociety.org/science/science/primary-circulation/#:~:text=Hurricanes%3A%20Science%20and%20Society%3A%20Primary%20Circulation&text=In%20the%20lower%20troposphere%20\(near,direction%20in%20the%20Southern%20Hemisphere](http://www.hurricanesociety.org/science/science/primary-circulation/#:~:text=Hurricanes%3A%20Science%20and%20Society%3A%20Primary%20Circulation&text=In%20the%20lower%20troposphere%20(near,direction%20in%20the%20Southern%20Hemisphere).



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If you have any additional questions about the submission process, please contact the editor: Jeremy Borrelli, borrellij16@ecu.edu.

Style Appendix: Resources for Bias-Free Writing

Please note that the conversations we are having now about bias-free writing will continue to change and develop over time. Our standards and best practices must continue to change and develop as well to ensure our language does not cause harm to others. Please refer back to these sources regularly to incorporate any new changes, and continue to develop sources of your own to inform your writing.

General

- National Park Service, Interpretive Development Program, Identifying and Removing Bias, <https://www.nps.gov/idp/interp/201/identbias.htm>

Ethnicity, Race, and Nationality

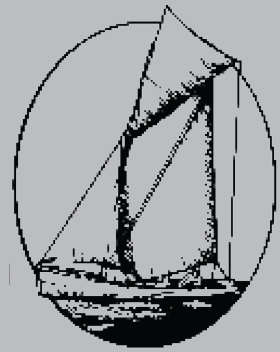
- Asian American Journalists Association, Guide to Covering Asian America, <https://www.aaja.org/aajahandbook>
- Australian Institute of Aboriginal and Torres Strait Islander Studies, Guidelines for Ethical Publishing, <https://aiatsis.gov.au/aboriginal-studies-press/getting-published/ethical-publishing-guidelines>
- P. Gabrielle Foreman, et al, “Writing about Slavery/Teaching About Slavery: This Might Help,” community-sourced document, <https://docs.google.com/document/d/1A4TEdDgYsIX-hlKezLodMIM71My3KTN0zxRv0IQTOQs/edit>
- National Association of Black Journalists, Style Guide, <https://www.nabj.org/page/styleguide>
- Native American Journalists Association, Guide on Terminology, https://najanewsroom.com/wp-content/uploads/2018/11/NAJA_Reporting_and_Indigenous_Terminology_Guide.pdf

Gender, Sex, and Sexuality

- American Philosophical Association, Guidelines for Non-Sexist Use of Language, <https://www.apaonline.org/page/nonsexist>
- NLGJA: The Association of LGBTQ Journalists, Stylebook Supplement on LGBTQ Terminology, <https://www.nlgja.org/stylebook/terminology/>
- Trans Journalists Association, Style Guide, <https://transjournalists.org/style-guide/>

More resources and discussion articles on Ability and Disability, Age, Religion, and more, may be found at the Conscious Style Guide: <https://consciousstyleguide.com>.

If there are resources you'd like to see included in this list, please contact the Tributaries editor, Jeremy Borrelli, at borrellij16@ecu.edu.



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