

The Scuppernong River Project:

Volume I

Explorations of Tyrrell County Maritime History

Nathan Richards, Daniel Bera, Saxon Bisbee, John Bright,
Dan Brown, David Buttarro, Jeff O'Neill, and William Schilling



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Research Report No. 21

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VOLUME I
EXPLORATIONS OF TYRRELL COUNTY MARITIME HISTORY

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Cover: Portion of the James Wimble map of North Carolina (1738) showing location of the Scuppernong River (North Carolina State Archives).

Cover design concept: Nadine Kopp.

DEDICATION

This publication is dedicated to the people of Columbia, for their unwavering hospitality during the 2011 Scuppernong River Project.

ACKNOWLEDGEMENTS

This project and the products that have emerged from it would not have been possible without the assistance of a congregation of people from a host of institutions across eastern North Carolina. From the outset, this project was designed with collaboration at its core. In investigating the history and archaeology of Tyrrell County, we wanted this to be a project that left something for the people of the area to have once we packed up and returned from where we came. We hope that our work lives up to their expectations.

At the UNC-Coastal Studies Institute, John McCord and David Sybert were involved in every facet of the project; not only did they coordinate local outreach and education events (in conjunction with Lauren Heesemann, NOAA) and film activities for a short documentary, but they also “took the plunge” when instrumentation disappeared into the tea-stained Scuppernong. Though not co-authors, they were very much a part of the team, and were there with us every step of the way. Nancy White, whose discussions with the Program in Maritime Studies (Larry Babits) and Pocosin Arts Folk School (Feather Phillips) created the incentive to undertake this program, helped with funding and catering, and supported us at each step in the process. Robert McClendon was pivotal early in the project in helping guide community discussions that set the themes of historical investigation and formed our research framework. Additionally, the UNC-Coastal Studies Institute Foundation (in particular, Bill Massey) is owed our thanks for providing the funding to gather the community of Columbia for a half day symposium and post-event reception to celebrate the end of the data collection phase. Lauren Rotsted (ECU) also provided much appreciated research assistance.

As well as providing us with lodging for the twelve days of the project, the Pocosin Arts Folk School provided us with access to knowledge, people, and resources that meant we could work and teach efficiently. Feather Phillips was at the core of this project in every way – literally nothing could have happened without her knowledge and expertise. So too Karen Clough recurrently went out of her way to assist us with anything we needed. The hallmark of a great partnership is when a project goes off without a hitch. A new word should be invented for when project partners anticipate and enhance your labors. The good humor and laughter that was omnipresent at Pocosin was something that infected our effort.

The Town of Columbia was equally gracious in their support of our work. Without access to the town dock and a power supply to recharge our batteries, none of the archaeological work could have occurred. Mayor Michael Griffin and Town Manager Rhett White are owed our thanks. Additionally, a

number of other organizations were critical in assisting with our data collection. Their local knowledge was always offered without hesitation, and we hope this work does their expertise justice. This included individuals at the Tyrrell County Public Library (Debbie Davenport and Linda Markham) and the Tyrrell County Register of Deeds (Melanie Armstrong and Gene Reynolds).

One of the special components of this project was the significant investment of the local community. This came in so many ways – offers of lodging, donations of meals at local restaurants, and numerous home cooked meals – and, so important to research *overflowing local knowledge*. These generous community partners included Clay Causey, Pebble Causey, Ray Davenport, Walter Davenport, Mike Griffin, Sue Griffin, Charlie Ogletree, Midge Ogletree, Dot Redford, Bill Smyth, Frances Smyth, Debbye Utz, Dwight Utz, Doris Van Dorpe, Sonny VanDorpe and Lauren Heesemann. Willy Phillips and Feather Phillips, owners of the Full Circle Crab Company, need to be singled out for taking project meals to new decadent heights.

Last but not least, we must also acknowledge the assistance of the Partnership for the Sounds and the Pocosin Lakes National Wildlife Refuge, who provided us with access to the classrooms and lecture hall of the Walter B. Jones, Sr. Center for the Sounds for our periodic outreach and education programs over the semester. Here Howard Phillips and Tami Phillips in particular are due our heartfelt thanks.

It should be noted that this project was planned well before Hurricane Irene visited eastern North Carolina, and it happened in its wake. Despite Irene's ravages the residents of Tyrrell County still welcomed us with open arms and embraced the project and its participants. This is a testament to their character and resilience. It cannot be overstated – this support will never be forgotten.

Funding for this project was provided by ECU's division of Academic Affairs (for boat fees accrued during instruction) the Program in Maritime Studies at East Carolina University (equipment and car fuel), and the UNC-Coastal Studies Institute (boat fuel).

PREFACE

This project emerged from conversations between three individuals, Dr. Lawrence Babits (Program in Maritime Studies, ECU), Dr. Nancy White (UNC-Coastal Studies Institute), and Feather Phillips (Pocosin Arts Folk School) in the spring of 2011. This meeting was focused on a very simple question, “how can we work together?” Coincidentally, I had recently become the Interim Program Head at the Coastal Studies Institute (a joint appointment with the Program in Maritime Studies), and was scheduled to teach HIST6835: Advanced Research Methods for Maritime Archaeology (a class for MA students centered on utilizing technology in maritime archaeology and focused on instructing students in utilizing remote sensing instrumentation). It was obvious that with these three organizations in the lead, we could start the process of concurrently researching the largely unexamined Scuppernong River (and adjacent Bull Bay) while also teaching students how to conduct a remote sensing survey. Consequently, I was thrown into the fray. At first I felt some trepidation – after all, not all rivers are the same – not all rivers hold the potential to teach our students about the techniques and technologies at our disposal, and even fewer rivers guarantee us the promise of engaging our intellectual curiosities.

Although the Scuppernong River had not been studied much in the past, there had been some work undertaken by underwater archaeologists. Indeed, it was the material held at the North Carolina Underwater Archaeology Branch (NCUAB) coupled with the wealth of information in the maps and charts stretching back to the 1590s that served to convince us of not only the potential of the area, but also of the opportunities that awaited us in Tyrrell County. This gave us another opportunity – to integrate an historical research component which would inform and enhance our search for the maritime cultural resources of the area. It also gave us the opportunity to leave a tangible record of our efforts to the people of Tyrrell County – whose forebears were not only our subjects, but who themselves became our project partners. With this in mind, we set out from the beginning to leave at least a report of our activities – something that could augment or perhaps reexamine the work previously conducted in Tyrrell County.

Growing from our original intention, two companion volumes have been released in 2012. Volume I (this volume) is an exploration of Tyrrell County Maritime History. We do not pretend this to be a complete record of the maritime history of the region (indeed, we admit that the time frame for this project has not allowed for an in depth examination of primary sources) – but rather a communication of our background research. This allowed us to construct concepts of historical significance for the region, and also assign meaningful context to our potential underwater discoveries. Nothing in this report is more truthful than the statement that the Scuppernong River and the adjacent communities are overflowing with

potential of historical research. In so many ways, the history of Tyrrell County is the history of the Albemarle Sound, and therefore a pivotal piece in the maritime history of North Carolina.

Volume 2 (see Richards et al. 2013), on the other hand is a report of the results of 2011 remote sensing fieldwork focused on discovering the maritime cultural resources of the Scuppernong River. Even though we did not cover 100% of the submerged bottomlands with our instrumentation, it is eminently clear that some of our data hold promise for future maritime archaeological research – on the site-specific as well as landscape scale. While some may deride the lack of development in Tyrrell County, this only serves to indicate to archaeologists that there is great potential for finding the remnants of human activities in the area, and that this multi-layered maritime landscape may hold the undisturbed record of thousands of years of rich interaction between humans and their environment. Gaps in this second volume may be supplemented in time with the completion of a third report at a future date.

The research team was rewarded with the good weather to allow us full days to search the Scuppernong River and Bull Bay's hidden heritage. Previously known resources were re-located, information regarding ambiguous targets was made clearer, and there is evidence that new submerged sites have been found. You can't ask for much more on a project-on-a-shoestring where research and educational goals were merged. Additionally, I was rewarded with a talented group of students (my co-authors) who met each challenge with a smile, and who made hours cramped on our small research vessel enjoyable.

By the end of the project, one thing is for certain – we have only scraped the surface of this area. We know that there is at least another season of remote sensing on the Scuppernong River needed, and we also know that some of the dozens of acoustic and magnetic anomalies discovered in the area are crying out for ground-truthing. So now we wait for a similar “alignment of planets.” We have the people, it is only timing (and funding) that hold us back. In the meantime, there is enough to write about.

Nathan Richards, Ph.D.

Primary Investigator, Scuppernong River Project, 2011-2012

Greenville, North Carolina

20 November 2012

TABLE OF CONTENTS

DEDICATION	iii
ACKNOWLEDGEMENTS.....	iv
PREFACE.....	vi
TABLE OF CONTENTS.....	viii
LIST OF FIGURES.....	ix
INTRODUCTION.....	I
THE PEOPLING OF TYRRELL COUNTY	8
THE TRANSPORTATION NETWORKS OF TYRRELL COUNTY	27
THE DEVELOPMENT OF COLUMBIA.....	50
A HISTORY OF BOAT AND SHIP CONSTRUCTION IN TYRRELL COUNTY.....	63
THE FISHING INDUSTRY IN TYRRELL COUNTY AND THE ALBEMARLE SOUND.....	83
TYRRELL COUNTY'S LUMBER INDUSTRY.....	92
WARFARE IN TYRRELL COUNTY.....	108
REFERENCES.....	127

LIST OF FIGURES

Figure 1. Portion of Tyrrell County studied in 2011, including the location of study area within North Carolina. (Image: Nathan Richards).....	2
Figure 2. Image of planned survey lines for remote sensing. Lane spacing is at 20m intervals in areas south of Mill Point, and 50m intervals above Mill Point. (Image by Nathan Richards using NOAA digital chart I2205_6).....	3
Figure 3. Adaptation of image of historic waterfront, showing location of known wrecked and abandoned watercraft, 18 October 1989. (Image by Nathan Richards, after North Carolina Department of Cultural Resources).....	4
Figure 4. Geographic distribution of linguistic groups across North Carolina circa 1600. (Image by Nathan Richards after Wetmore 1975:27).....	13
Figure 5. Approximate locations of prominent Native American tribes circa the 17th century. (Image by Nathan Richards after Wetmore 1975:28).....	14
Figure 6. “The Tovvne of Secota” (1588) by Theodor de Bry engraving of John White’s original painting describing a Hatteras or Secotan village. (Courtesy of the University of North Carolina at Chapel Hill, originally published in Harriot 1588).....	15
Figure 7. "Americae pars, Nunc Virginia: The carte of all the coasts of Virginia” – a map of North Carolina c. 1585. Approximate area of Tyrrell County highlighted by authors (University of North Carolina at Chapel Hill).....	19
Figure 8. <i>Estelle Randall</i> before it burned at the Columbia town wharf in 1910. (Image: Mariners Museum, PB2876 CI76).....	30
Figure 9. The drawbridge at Columbia in the in early 20th century. (Image: Tyrrell County Public Library).....	33
Figure 10. The “old” and “new” bridges alongside each other (Image: Tyrrell County Public Library).....	34
Figure 11. Detail from the 1795 map <i>The State of North Carolina from the best Authorities &c</i> , by Samuel Lewis. (University of North Carolina at Chapel Hill).....	36
Figure 12. Photograph of the Bonarva Plantation and Canal, date unknown. (Image: Peggy Griffin Collection, Tyrrell County Public Library).....	38
Figure 13. Detail of <i>Map of the Upper Portion of the Scuppernong River, NC</i> (arrows added by authors). Arrow 1 denotes the location of the <i>Mary E. Roberts</i> warehouse, arrow 2, the location of the <i>I.D. Coleman</i>	

warehouse, and arrow 3, the location of the wreck of the schooner <i>Lawrence</i> . (US Army Corps of Engineers 1886:968).....	39
Figure 14. Portion of <i>Maps Showing the Norfolk, Albemarle & Atlantic Railroad and its Connections</i> , by G.W. & C.B. Colton & Company 1887 illustrating connection of NC steamboat routes to Norfolk-area rail lines. Note that “Mackey” should actually read “MacKay.” (Library of Congress).....	47
Figure 15. Railroad stations of Norfolk Southern in eastern North Carolina as shown in detail of a Norfolk Southern Timetable Map, 1934. (Norfolk Southern 1934).	48
Figure 16. Detail of the 1738 Wimble Map showing the location of an anchorage and a series of landings/settlements in the vicinity of present-day Columbia. (courtesy North Carolina Dept. of Archives and History).....	51
Figure 17. 1885 Scuppernong River Modification Map. (US Army Corps of Engineers 1886:968).....	54
Figure 18. Graph depicting comparative statement of traffic (tons) 1902-1921, 1927-1931. (US Army Corps of Engineers 1922:476, 1932).	59
Figure 19. Extract from US Army Corps vessel classification report showing shipping statistics for the year 1921. (US Army Corps of Engineers 1921:478).....	60
Figure 20. Construction details of <i>Bessie</i> , a 19 th century periauger from South Carolina. (Drawing by Dan Brown, 2010).....	64
Figure 21. Typical flat-bottom skiff construction. (By Nathan Richards after Alford 1990:3).....	65
Figure 22. A New Haven sharpie (center) on the Quinnipiac River, New Haven, Connecticut, c. 1900. (Chapelle n.d.:137).....	66
Figure 23. Carolina Sharpie under sail c.1885. (Photo by Wirth Munroe, from Chapelle n.d.:141).....	67
Figure 24. George Washington Creef, Sr. in front of his workshop with two shad boats ca. 1905-1915. (Durwood Barbour Collection of NC Postcards, UNC-Chapel Hill).....	69
Figure 25. Shad boat once belonging to Ray and Walter Davenport now located in Plymouth, NC. (Photo by Dan Brown, 2010).	69
Figure 26. Deadrise, V-bottom, or “round chine” shad boat now located at Plymouth, NC. (Photo by Dan Brown, 2010).....	70
Figure 27. Detail of the 1738 Wimble Map showing the approximate location of the “Bateman Shipyard.” (courtesy North Carolina Dept. of Archives and History).....	73
Figure 28. Graph depicting ships built per year in Tyrrell County over the period 1806 and 1855. (Data from Still and Stephenson 2009).	75

Figure 29. Graph depicting the maximum, average, and minimum lengths, breadths, and depths (respectively) of ships built in Tyrrell County, 1814-1855) (Data from Still and Stephenson 2009). 76

Figure 30. Graph maximum, average, and minimum tonnages of individual ships built in Tyrrell County (1814-1855). (Data from Still and Stephenson 2009)..... 76

Figure 31. Maximum, average, and minimum length to breadth ratios of ships built in Tyrrell County, 1814-1855. (Data from Still and Stephenson 2009). 77

Figure 32. Detail of the 1738 Wimble Map showing the approximate location of the Rogers Landing Boatyard. (Courtesy North Carolina Dept. of Archives and History)..... 80

Figure 33. "Their manner of fishynge in Virginia" by Theodor de Bry. (Harriot 1972[1590]:56-57). ... 85

Figure 34. "The brovvyllinge of their fishe ouer the flame" by Theodor de Bry, showing the preparation of fish. (Harriot 1972[1590]:59). 86

Figure 35. Hauling the Seine. (*Harpers Weekly*, 28 September, 1861, p.620). 87

Figure 36. Steam Seine Fishing on the Albemarle c. 1896. (NC State Board of Agriculture 1896:147)... 89

Figure 37. Landing a Shad Seine, Sutton Beach, Albemarle Sound, c.1887. (Photo by Hugh Smith, Freshwater and Marine Image Bank, University of Washington Library). 91

Figure 38. A small locomotive brings felled timber to a mill in 1913. (Sid Shearin Collection, Tyrrell County Public Library)..... 97

Figure 39. The Branning Manufacturing Lumber Yard. (Peggy Griffin Collection, Tyrrell County Public Library). 98

Figure 40. The West Virginia Pulp and Paper Company, visible lower left, was active in Tyrrell from 1953 to 1973. (Tyrrell County Public Library). 104

Figure 41. "Obstructions placed by the rebels in the Croatan Sound--sunken vessels and chevaux de frise." (Original printed source unknown. Neg. 80-419. NCC vault FFCC970.73 B96, North Carolina Civil War Image Portfolio, University of North Carolina at Chapel Hill)..... 116

Figure 42. Major Edmund C. Brabble, CSA, commander of the 32nd North Carolina Regiment. (North Carolina State Archives). 117

Figure 43. James Johnston Pettigrew c. 1855. (Source: Peele 1898: facing p. 413). 119

Figure 44. February 7, 1862--"The naval fight in Croatan Sound--landing of national troops--showing also the obstructions in the Sound, with the rebel fleet beyond." (Original printed source unknown. Neg. 80-384. Digitized from a 4 x 5 in. transparency. NCC vault FFCC970.73 B96, University of NC library at Chapel Hill)..... 120

Figure 45. "Burning of the rebel gunboat 'Curlew', off Fort Forrest, Feb. 7, 1862." (Original printed source unknown. Neg. 80-428. NCC vault FFCC970.73 B96, University of NC library at Chapel Hill).
..... I20

Figure 46. Portion of rough contemporary sketch showing USS *Whitehead*, a river and sound steamer converted for gunboat duties. (Image by Alfred Waud, c.1860-1865, Library of Congress)..... I22

Figure 47. Postwar photograph of Columbia men who served in the First World War. (Nancy Meekins Collection, Tyrrell County Public Library, Columbia, NC, 2011). I24

LIST OF TABLES

Table 1. Estimate of shipments by steamer to and from the Scuppernong River 1886-1894. (US Army Corps of Engineers 1895:1365).....	41
Table 2. Comparative statement of traffic (shipping statistics) 1902-1921, 1927-1931. Empty cells indicate no data. (US Army Corps of Engineers 1922:476, 1932).....	58
Table 3. List of vessels built in Columbia or Tyrrell County, 1737-1908. (Data from Still and Stephenson 2009).....	74
Table 4. Shipwrights in and near Tyrrell County, 1685-1855. (Data from Still and Stephenson 2009).	79

INTRODUCTION

In the fall of 2011, students and personnel affiliated with the Program in Maritime Studies (East Carolina University) and the UNC-Coastal Studies Institute commenced the process of collating a submerged cultural resources inventory of the Scuppernong River and adjacent Bull Bay (see Figure 1). This area was of interest because of its long history of settlement and the prominent role of maritime industries in Tyrrell County. Researchers hoped that this resource inventory would serve many purposes. First, as a record of the area, it could be used to ensure land use does not inadvertently have a negative impact upon archaeological sites in the area. Second, it could provide a reevaluation of known cultural resources that have not been inspected by archaeologists since the early 1990s. Third, we felt that these resources once properly understood represent education and tourism development opportunities of social, cultural, and economic benefit for the region. Last, but not least, we hoped to open the area up to other research initiatives and agendas.

The study area chosen for the project covered the entirety of the Scuppernong River (about 9 miles from Lake Phelps to Creswell, 12 miles from Creswell to Columbia, and about 4.5 miles to the mouth of Bull Bay), Bull Bay (about 3 miles by 7 miles in maximum extent, approximating to 13 square miles), including a number of tributaries (Bull Creek, Deep Creek, Bunton Creek, Mauls Creek, Riders Creek, and Second Creek) and canals (Moccasin Canal, Mountain Canal, Thirty Foot Canal, Transportation (or Collins, or Old) Canal, Bonarva Canal, Bee Tree Canal, and Somerset Plantation Canal) (Figure 2). This area encompasses a number of towns and settlements within Tyrrell County, such as Columbia (previously known as “Shallops Landing” and “Elizabeth Town”), River Neck, Colonial Beach, Norman Smith Legion Beach, Mill Point, and Travis, and to a smaller degree Washington County (the town of Creswell). The survey area also included shorelines which are a part of Pettigrew State Park (part of the 112,000 acre Pocosin Lakes National Wildlife Refuge). While outside of the study area, adjacent Lake Phelps is noteworthy due to the location of the Somerset Place Plantation along its shores (an important destination connected to the Scuppernong River in the 1700s) and also the location of almost thirty buried American canoes, five of which have been recovered, and are now located at the North Carolina Museum of History, Pettigrew State Park, the North Carolina Estuarium (Washington, NC), and the Port O’ Plymouth Maritime Museum (see Curci 2006). While Lake Phelps was not a part of the 2011 study area, the environmental conditions noted by Curci (2006:76) regarding Lake Phelps may

indicate that cultural resources lying in the Scuppernong River and Bull Bay may have environmental conditions conducive for the preservation of submerged maritime archaeological sites.



Figure I. Portion of Tyrrell County studied in 2011, including the location of study area within North Carolina. (Image: Nathan Richards).

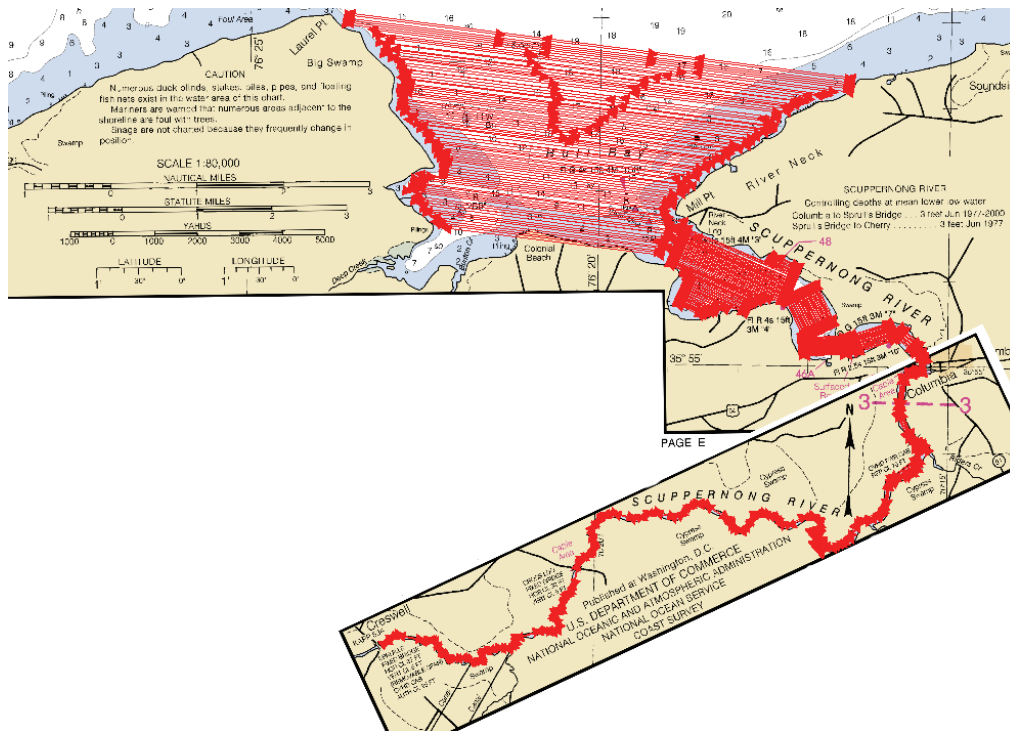


Figure 2. Image of planned survey lines for remote sensing. Lane spacing is at 20m intervals in areas south of Mill Point, and 50m intervals above Mill Point. (Image by Nathan Richards using NOAA digital chart I2205_6).

Maritime archaeological research in the study area had commenced in 1988 with a collaboration between Tyrrell County and the North Carolina Underwater Archaeology Branch (NCUAB) focused on impending impacts to cultural resources in Columbia – in particular potential alterations to historic shipwreck 0001SCR (*Estelle Randall*, 1898-1910), and other abandoned or wrecked watercraft (0002-0006SCR) along the historic waterfront (Figure 3). The inspection, recording, and in some cases recovery and conservation of artifacts, machinery, and ship’s timbers continued until 1992.

After the NCUAB’s investigations, there is no other record of additional maritime archaeological research occurring in the area, although there was preparation for such. In particular, East Carolina University used the Scuppernon River and Bull Bay in field training exercises (“desktop surveys”) emulating the planning process and execution of a comprehensive submerged cultural resources inventory of the area. In 2002, students enrolled in Dr. Lawrence E. Babits’ HIST6805: *History and Theory of Nautical Archaeology* class were tasked with researching the history and potential cultural resources of coastal North Carolina counties. One assignment by Matthew Brenkle commenced the task of assembling information on Tyrrell County, the area within which this present study resides (Brenkle 2002).

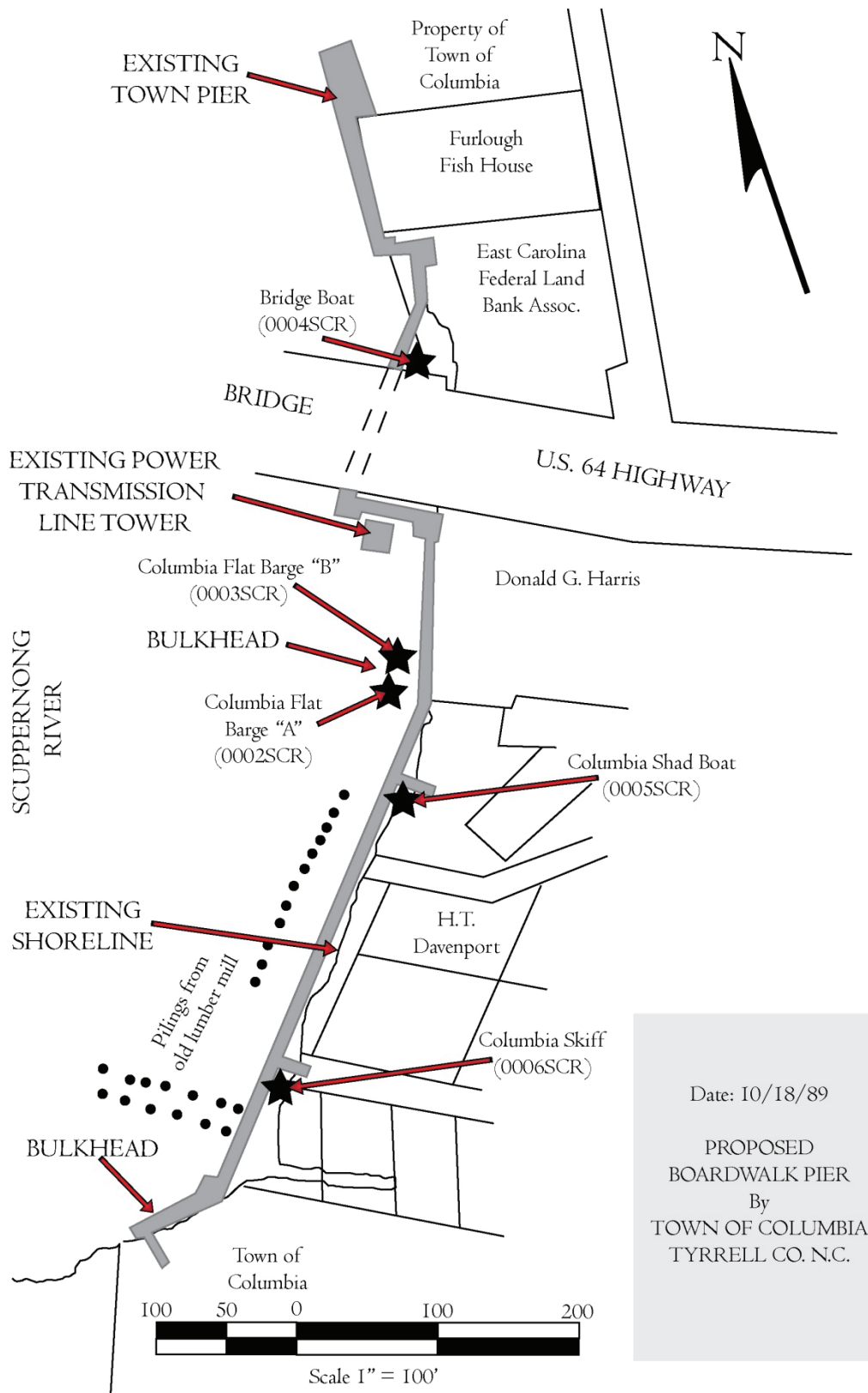


Figure 3. Adaptation of image of historic waterfront, showing location of known wrecked and abandoned watercraft, 18 October 1989. (Image by Nathan Richards, after North Carolina Department of Cultural Resources).

In 2004, students enrolled in Dr. Nathan Richards' HIST6820: *Research Methods in Nautical Archaeology* were similarly tasked with compiling a synopsis of the maritime history and archaeology of waterways and embayments within North Carolina. Two assignments by Erica Seltzer (Bull Bay) and Chris McCabe (Scuppernong River) outlined some of the potential cultural resources of the two main waterways within the study area (McCabe 2004; Seltzer 2004). These became useful starting points for planning additional maritime historical and archaeological research.

Other than these sources, the design of the remote sensing survey (side scan sonar and magnetometer survey) to occur in September of 2011 began in the archives of the North Carolina Underwater Archaeology Branch, and then extended into primary and secondary historical sources housed at East Carolina University's Joyner Library, Columbia's Pettigrew Library, and Manteo's Outer Banks History Center. This initial research informed us of five separate categories of cultural resource currently identified in the historical and archaeological records of the Scuppernong River and Bull Bay, and assisted researchers with the design of a remote sensing methodology where site types, wreck dimensions, and other details could be matched to sensor trawling depths and lane spacing, allowing for the maximum potential for site discovery and characterization. There were four main site types identified during this preliminary research (for further elaboration on specific site types and descriptions see Volume 2, Richards et al. 2013). A synopsis of each is below.

Discovered Watercraft

Research uncovered no evidence of named historic shipwrecks in the waters of Bull Bay, although six abandoned or wrecked watercraft were known to lie in the waters of the Scuppernong River. These include the well-known remains of the inland passenger steamer and mail carrier *Estelle Randall* (built 1898) burned adjacent to the Columbia waterfront wharf the night of 17 January 1910, as well as a series of unidentified watercraft (two barges, a shad boat, a skiff and a site known as "the bridge boat") examined by the NC Underwater Archaeology Branch in the early 1990s (American Shipmaster's Association 1899:464, 1900:453; *Nautical Gazette* 1898:217; *Raleigh News and Observer* 1910; USLSS 1911:219; Wilde-Ramsing 1990; Columbia/Tyrrell County 1992).

Undiscovered Watercraft Noted in Historical Sources

Archival research indicated two shipwrecks lost in the upper reaches of the Scuppernong River had not been relocated. These are the Columbia-built schooner *Lawrence* (built 1849), noted as lying adjacent to Spruill's Bridge (near Creswell) by the US Army Corps of Engineer in 1885-1886, and the 86-ton oil steamer *Marguerite* (built 1903), listed as having burnt at "Spruell's [sic] Bridge, N.C." on 5 April 1933 (US Army Corps of Engineers 1885:1044-1045, 1886:159, 970; Berman 1972:132).

Currently Unidentified Wrecks on Nautical Charts

The examination of available nautical charts indicated that two wreck symbols, pointing to two unidentified shipwrecks appear within Bull Bay in the years 1957 and 1996. No historical information regarding these potential shipwrecks was located before the commencement of fieldwork.

Other Potential Shipwrecks

Due to the absence of a comprehensive remote sensing record of Bull Bay and the Scuppernong River, there was some chance that unrecorded shipwrecks or abandoned watercraft were still waiting to be discovered. Additionally, there were a large number of shipwrecks listed in archival sources as "lost somewhere in Albemarle Sound." For example, as of 2011, NCUAB records list almost 60 vessels lost within Albemarle Sound. Of these 26 have generic "Albemarle Sound" locations of loss. Among these are the schooner *Collector* (lost at Scuppernong Point, Albemarle Sound on 24 August 1829), an unknown schooner (lost "between Pear Point and the mouth of the Scuppernong River") on 29 July 1846 and the screw steamer *Tourist* lost "In Albemarle Sound between Elizabeth City, NC and Columbia, NC" on 4 June 1907.

Terrestrial Maritime Cultural Resources

Initial cartographic and secondary source historical research indicated that there are a large number of maritime infrastructure sites either known or suspected to lie within the study area. These include the remains of lighthouses (Laurel Point Lighthouse 1880-c.1950), shipyards (the Bateman Shipyard c.1738), landings, pilings, bridges as well as extant industrial sites.

Report Outline

These notes regarding the existence of tangible heritage sites within the study area justified the choice of the Scuppernong River and Bull Bay as a location for a class that would allow for student instruction in side scan sonar and magnetometer instrumentation while also guaranteeing that there would be something to see (or discover).

However, while this research served as a good foundation upon which to commence the process of collating the submerged cultural resources inventory, it was found to be biased toward wrecked and abandoned watercraft (neglecting the tangible vestiges of many maritime industries), and in many cases was extremely fragmentary. Thus, the researchers embarking on the 2011 field work needed a better grounding in the maritime history of the region. In other words, the readily available information did not adequately provide enough context within which they might come to understand discovered archaeological sites. We needed more information in order to recognize their significance and research potential. An approach looking to combine historical research and archaeological survey was commenced in order to highlight the changing landscape and evolving conditions of the people of the area.

In order to do this, the research team divided the history of the area into six main themes. The first two, that of charting the settlement of Tyrrell County (the borders of which have expanded and contracted many times over three centuries) and recording the history of transitions in the transportation networks served as the “big picture” studies covering the largest spatial and temporal distance. This was followed by a series of more focused thematic studies, encompassing the development of the town of Columbia’s waterfront (the seat of Tyrrell County, and its only town and port), the history of watercraft construction, the fishing industry on Albemarle Sound (as Tyrrell County fisherpersons roamed far), the lumber industry, and finally warfare in Tyrrell County. Hence, the following sections represent the baseline of knowledge which informed our archaeological survey.

THE PEOPLING OF TYRRELL COUNTY

Introduction

The settlement and exploration in the area of present day Tyrrell County, North Carolina, began as Paleo-Indian hunter-gatherers fanned out across the North American continent, reaching eastern North Carolina nearly 13,000 years ago. These early inhabitants were nomadic hunter-gatherers who followed and hunted big game as their primary form of subsistence. Over the next 10,000 years, as big game populations dwindled, these groups of hunter-gatherers became local specialists and slowly became more settled in eastern North Carolina. By 1,000 BCE these groups adopted agriculture, built permanent settlements, and developed into complex, linguistically and culturally distinct tribes. Archaeological evidence illuminates a great deal about the migration and lifestyle of these original North American inhabitants. Throughout the continent, native groups followed a similar cultural development as those which settled in eastern North Carolina (Perdue and Oakley 2010:9).

Meanwhile, driven by the quest to find mineral and natural resources, European exploration reached a fever pitch following the Spanish discovery of the New World. Both Portugal and Spain enjoyed massive mercantile gains from exploration in the Atlantic and Indian oceans, which prompted other western European kingdoms to become involved. In short order the Dutch, French, and English were exploring and settling the New World. By the latter half of the 16th century, Queen Elizabeth of England was issuing patents for English explorers to find and claim lands in the New World. A failed attempt to establish a colony by Sir Humphrey Gilbert was followed by several failed attempts by Sir Walter Raleigh. These latter attempts, however, brought English explorers to coastal North Carolina and inland into the Albemarle region (Powell 1989:28-48).

Formed in 1606, the Virginia Company succeeded in establishing the first permanent English colony in the New World at Jamestown, Virginia, the following year. As more settlers arrived in newly formed Virginia, explorative efforts pushed southward into present day North Carolina. Following exploration of the Albemarle area, settlers slowly began occupying the lands in northeastern North Carolina. The first recorded permanent settler, Nathaniel Batts, moved to the Albemarle in 1655. Poor management of the Virginia Company and political turmoil in England during the late 17th and early 18th centuries, however, retarded growth within the Virginia and 'Carolana' colonies (Powell 1989:18-19, 49-52).

The royal struggle in England which resulted in King Charles I's death and the disputed rise of King Charles II reached the colonies when, in repayment for their loyalty, Charles II gave eight proprietors title to a newly formed 'Carolina' colony. Between 1663 and 1729, the proprietors managed the Carolina colony by dividing the land into small precincts. These tracts would later grow and divide into counties. When administration of the colony was returned to the Crown, a Tyrrell precinct was formed. Between 1729 and 1776, the boundaries of Tyrrell County were refined as increases in population and economic activity dictated higher orders of administrative control. During this time, the Albemarle counties, including Tyrrell County, were embroiled in bitter sectional disputes with the Cape Fear area for power and control in the North Carolina general assembly; these disputes nearly threw the colony into anarchy and ultimately stimulated colonial disdain for English rule, seeding the anti-English sentiments which came to fruition during the American Revolution (Powell 1989:53-130).

What follows is an historical account of this development: the peopling of the present day Tyrrell County area. This includes discussion of both Native American and European settlement. Much of the Native American history draws from archaeological evidence, save for historical accounts left by European explorers from the 16th century. Nevertheless, Native Americans occupied Tyrrell County much longer than its modern European inhabitants, since at least 13,000 years ago, and left a great deal of material remains. European exploration and settlement in the area was, on the other hand, recorded in great detail.

Native American Exploration and Settlement

Archaeologists believe that Native Americans arrived in the North American continent by way of a land bridge between present day Siberia and Alaska, across the Bering Strait. During the most recent Ice Ages, as sea levels fell due to increases in continental glacial coverage, land underneath shallow seas was exposed and, in the case of the Bering Strait, offered passage between the otherwise isolated Asian and North American continents. Human inhabitants in Siberia at this time were nomadic hunter-gatherers who tracked big game across the continent. As these animals were followed through the Bering Strait during the Ice Ages, the original humans arrived in North America. In subsequent centuries, and after the land bridge disappeared under the Bering Sea, these hunter-gatherers continued to track game across the North American continent. This original settlement resulted in the dispersal of human populations across the continent. Over the course of thousands of years, these original settlers developed into the sophisticated

indigenous societies encountered by European explorers (Wetmore 1975:3-6; Phelps 1983:17-19; Perdue 1985:1-4; West and Morris 2004:130).

The exact date of the original migration is debated. Geological information indicates Ice Ages between 10,000 and 28,000 and 40,000 and 50,000 years ago. Based upon artifact dating, archaeologists originally believed Native Americans migrated during the most recent Ice Age. The discovery of artifacts dating before the most recent Ice Age, however, indicates humans also migrated during the earlier Ice Age (Perdue and Oakley 2010:1). Regardless of the exact date of arrival, once humans arrived in North America they dispersed across the continent and, through the millennia, underwent a series of cultural shifts based upon lifestyle and ecological interactions. Referred to as cultural traditions, these are distinct phases of human settlement across North America as determined through archaeological examination. The first cultural tradition brought by the original human settlers in North America is known as the Paleo-Indian cultural tradition. The lifestyle of these original inhabitants was a continuation of their hunter-gatherer strategy used to track game across the Asian continent. Since hunting big game was the primary subsistence of these early humans, they travelled in small bands and left few material remains. They did not build large settlements and utilized simple stone and bone tools. Arriving in North Carolina as many as 13,000 years ago, these Indians left so little material remains that no more than 50 sites containing Paleo-Indian artifacts were identified by archaeologists during the 1980s in eastern North Carolina (Wetmore 1975:6-9; Phelps 1983:18-22; Perdue 1985:4-6; West and Morris 2004:130).

Writing for the Tyrrell County Genealogical and Historical society, William R. West and Betty West Morris (2004:128-132) described the types and locations of various Paleo-Indian, Archaic, and Woodland artifacts found throughout Tyrrell County. As told to West and Morris (2004:130), the oldest artifact found in the county was a Clovis-type point located near the present location of the Columbia High School:

My most prized Tyrrell projectile point was found by my classmate, J.S. Howett in a field near where Tyrrell Hall now stands, just east of Columbia High School ... It is a classic Clovis-type, Carolina fluted Paleo-Indian point that dates between 11,500 and 11,000 B.C.

To date, this artifact is the oldest found in Tyrrell County. Additionally, it is the only Paleo-Indian artifact found in the area. As in most places, though, the simple tools and nomadic nature of these Native

Americans resulted in little archaeological deposition of their material culture. It is likely these early inhabitants merely traveled through the area as they tracked game. Nevertheless, this point provides strong evidence that the first humans to explore the Tyrrell County area were Paleo-Indian Native Americans as long as 13,000 years ago (West and Morris 2004:130).

Population and environmental changes approximately 10,000 years ago necessitated the development of the next cultural tradition: the Archaic period. Climatic warming at the end of the most recent Ice Age, in addition to widespread hunting, placed pressure on big game populations across North America. The result was a gradual dwindling of the primary food source for Paleo-Indians. Simultaneously, Paleo-Indian populations were growing as they exploited the resources across the North American continent. Hunter-gatherer groups therefore adapted by becoming more locally specialized in small game and plant resources. As specialization in resource exploitation developed, so too did a specialization in tool construction. During this time, humans developed more sophisticated stone tools, stone-vessels, and the atlatl or spear thrower (Wetmore 1975:9-11; Perdue 1985:6-7; West and Morris 2004:128-129).

Discussing archaeological research of Archaic sites in eastern North Carolina, David Sutton Phelps (1983:22) remarked “In contrast to Paleo-Indian, Archaic period sites literally dot the Coastal Plain landscape ...” Phelps (1983:24) also noted that “The known range of site locations spans every microenvironment in the Coastal Plain, from saline estuary shores to margins of major trunk streams and their entire tributary systems as well as pocosins and floodplain swamps, each with its own potential foods and other resources.” Presumably, posits Phelps, this is due in large part to the increases in population recorded in later Paleo-Indian groups combined with the abundance of particular plant and animal species as global climate change affected ecological relationships and facilitated the proliferation of species useful to humans.

Archaic cultural specialization resulted in the development of more specialized and diverse stone and bone tools, which were subsequently deposited in the archaeological record. These, too, are evident in archaeological finds throughout Tyrrell County, much more so than the single Clovis-type point left from the Paleo-Indian period. The stone tools and vessels utilized by Archaic peoples were located in numerous areas around the county, including the Dewey Pier, Gum Neck, the Tatum House, along the Columbia waterfront, and Malachi Chapel. These artifacts include archaic axe-heads, stone vessels, and spear and knife points. These artifacts were located by local residents, usually along river banks or in farm fields after plowing (West and Morris 2004:128-132).

Sometime around 3,000 years ago, another distinct shift occurred. At various times across the North American continent Archaic cultures adopted agriculture as their primary means of subsistence, with hunting and gathering undertaken as a supplement. Quickly thereafter, groups were building permanent settlements, making specialist tools, and discovering ways to make ceramic vessels. During this time stone and bone tools again increased in diversity and complexity, and the bow and arrow was developed to replace the atlatl. After becoming sedentary, human populations grew, with social organization similarly increasing in complexity to meet the needs imposed by larger populations and the complex demands of agricultural practice. This marked the boundary between the Archaic and Woodland cultural traditions. The Woodland cultural tradition was the most recent development among indigenous populations in North America and was the cultural phase encountered by European explorers (Wetmore 1975:11-22; Perdue 1985:8-12; West and Morris 2004:129-130).

Perhaps the most conspicuous archaeological residue of this cultural tradition was the emergence of ceramics. To make pottery, clay was rolled into thin strands then coiled, often with the outer surface smoothed and decorated. Prior to the development of ceramics, native groups used carved stone bowls and cooked in skin-lined pits using heated rocks. The development of pottery during this period, however, provided a conspicuous transition when viewing the archaeological record. Not only was the presence of pottery in the archaeological record useful, but the presence of large depositions usually coincided with settlement sites. In addition to pottery, these depositions also contained the specialized blades and axe heads characteristic of the period. Many of these sites are present throughout Tyrrell County (Wetmore 1975:11; West and Morris 2004:128-132).

During the late archaic period a cultural homogenization was evident in the archaeological record across the North Carolina coastal plain. The early Woodland period, however, marked the first visible archaeological differentiation as evidenced by analysis of ceramic finds. This differentiation was generally distinguished between the northern and southern areas of the plain, based upon the prevalence of fiber tempered ceramics in the southern coastal plain and the absence thereof in the northern coastal plain. Over the course of the following centuries, cultural differentiation continued along the North Carolina coastal plain, ultimately developing into the cultural-linguistic divisions witnessed by early European explorers in the 16th century. By the later Woodland period, these divisions in the archaeological record coincided with habitation of the areas by distinct cultural groups: Algonquian, Iroquoian, and Sioux (Phelps 1983:25-39).

As noted by Phelps (1983:36), at the time of European arrival eastern North Carolina, including the area of present day Tyrrell County, was occupied by Algonquian groups described as, “the southernmost representatives of a linguistic family distributed from North Carolina to Canada...exclusively adapted to the Tidewater environment in the middle and southern ranges of that distribution.” A more general distribution of linguistic groups at the time of European arrival is given in Figure 4. Within each linguistic group, cultural differences, geographic location, and political division further defined individual tribes (as shown in Figure 5). By 1600, the area around present day Tyrrell County was occupied by the Algonquian-speaking Hatteras, Secotan, Machapunga, and Weapomeoc tribes. In fact, the Hatteras and Secotan tribes were the first groups encountered by English explorers during the Roanoke voyages in 1584 (Corbitt 1953:13-26; Wetmore 1975:27-28; Powell 1989:37-39; Watson 2010:x-xi).

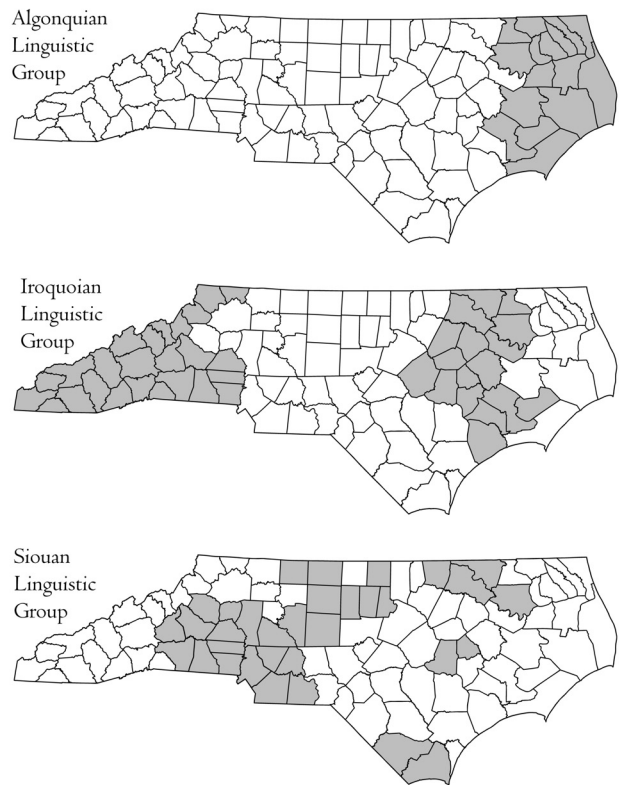


Figure 4. Geographic distribution of linguistic groups across North Carolina circa 1600. (Image by Nathan Richards after Wetmore 1975:27).

The first group, the Hatteras or Croatoan, occupied the mainland and Outer Banks in the vicinity of modern day Cape Hatteras and Roanoke Island. In 1701, the Hatteras occupied a single village with a population estimated at 80 individuals (Wetmore 1975:59-60). Near the Hatteras were the Machapunga. They occupied the area of present-day Hyde County in the vicinity of Lake Mattamuskeet and are thought to be very similar, if not related to either the Secotans to the north or the Pamlico to the south. In 1600, European explorers reported the tribe contained as many as 1,200 individuals; by 1700 they had only about 100 individuals. Just to the north, the Machapunga shared a ‘border’ with the Secotan tribe. This tribe occupied the coast along the Albemarle Sound, and had villages as far south as the Pamlico River.

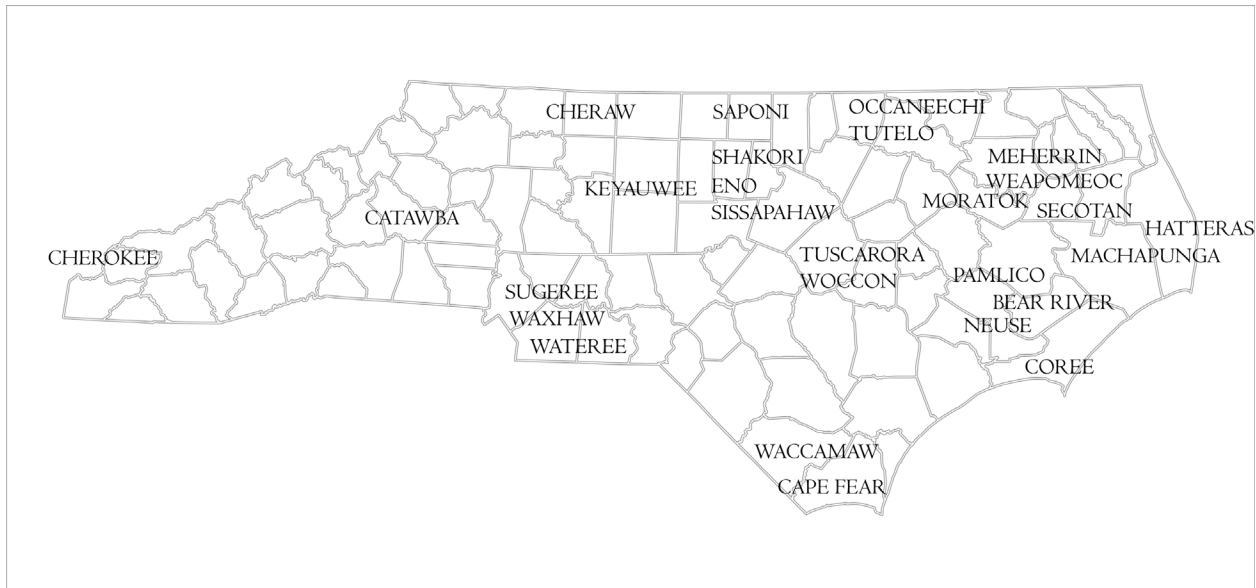


Figure 5. Approximate locations of prominent Native American tribes circa the 17th century. (Image by Nathan Richards after Wetmore 1975:28).

On the other side of the Albemarle were the Weapomeocs who were in fact a confederation of five groups (the Pasquotank, Perquiman, Poteskeet, and Yeopim tribes) by the mid-17th century. In 1600, there were reportedly 800 members of the confederation; by 1701 a mere 46 (Wetmore 1975:49-73).

As a result of the language barrier between the groups (noted by the Europeans in their early accounts), the exact nomenclature and distinctions between these tribes is difficult to ascertain. Furthermore, following European contact, disease and conflict quickly decimated Native American populations in eastern North Carolina, with many groups assimilating into each other throughout the 17th and 18th centuries. Nevertheless, at the time of initial contact with Europeans, Algonquian cultures spanned the area throughout the Albemarle and Outer Banks, exhibiting a great deal of organization and sophistication. This is evident in both the written accounts and artwork of the original European explorers. In particular, the paintings of John White became iconic images of the Hatteras and Secotan tribes (seen in Figure 6). Large dwelling structures, organized agriculture, hunting and gathering of local meat, vegetables, and fish, and ritualistic behavior were observed and recorded by early European explorers.

As disease and conflict took their toll on native populations during the 18th century, they nearly vanished from eastern North Carolina. The dawn of English exploration and settlement was ultimately the dusk of the indigenous North Carolina tribes; the original explorers and settlers of the coastal plain. In the course of 13,000 years these humans explored and inhabited eastern North Carolina, adapting to the unique tidewater ecosystem.

Clearly, from an abundance of historical and archaeological evidence, they occupied the area throughout Tyrrell County, exploiting the bounty of natural resources which still characterize the area to the present day. They hunted deer, turkeys, bear, and small animals. They fished the waters of the rivers and sounds with a variety of specialized tools. They grew corn, beans, squash, pumpkins and sunflowers, and gathered wild greens, nuts, and honey. Additionally, some groups managed the forest ecology through controlled burning (Perdue 1985:13-19).

Native Americans offered both assistance and resistance as English settlement claimed ever-increasing amounts of the land. Thus, in both positive and negative ways, they affected European settlement and are thus immortalized in the geography and culture of the Albemarle.

The first English settlers to North Carolina were highly dependent upon the local knowledge of indigenous people, learning about local geography and plant and animal resources. As English settlement intensified, however, inevitable cultural clashes resulted and many Native Americans perished in the intensity of European disease, aggression, and greed (Wetmore 1975:23-25; Perdue 1985:11-26).

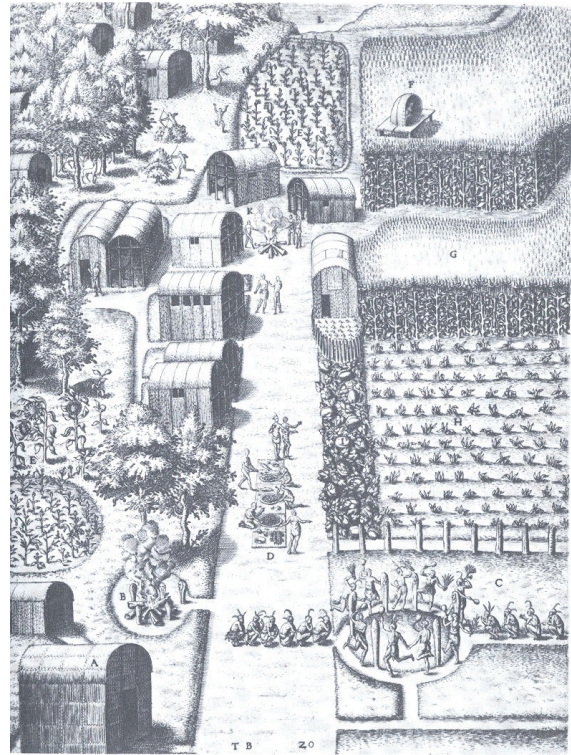


Figure 6. "The Tovvne of Secota" (1588) by Theodor de Bry engraving of John White's original painting describing a Hatteras or Secotan village. (Courtesy of the University of North Carolina at Chapel Hill, originally published in Harriot 1588).

European Exploration and Settlement

The Age of Discovery began as the ships of Portugal explored along the western coast of Africa in the early 15th century. During the course of the century, these explorers eventually rounded the Cape of Good Hope and entered the Indian Ocean, opening up an Eastern route to spice-laden Asia. Compelled by Portuguese gains, the Spanish also began exploratory voyages, sending Christopher Columbus eastward in 1492. The result was an event which forever altered human history: the introduction of Europeans to the

New World. During the first half of the 16th century both Spain and Portugal extracted immense quantities of raw materials, chief among them precious metals, from Asia and the New World. As a result, each enjoyed a surge in economic gains and political power among European kingdoms. This enticed the other Western European would-be thalassocracies to develop an interest in Atlantic exploration (Galvano and Hakluyt 1601:60-96; Dos Passos 1969:80-232; Phillips and Phillips 1992:1; Smith 1993:3-49).

During the latter half of the 16th century the Dutch, French, and English initiated their exploratory efforts which at first merely interloped upon, and in the following century superseded, Spanish and Portuguese holdings. The impetus for each kingdom was the same: the exploitation of natural resources, mainly precious metals, from Asia and the New World. English ships and “explorers” plied the waters in the New World raiding Spanish merchantmen during the concluding decades of the 16th century. Colonial efforts formally began, however, in 1583 with a land patent granted to Sir Humphrey Gilbert by Queen Elizabeth. Gilbert’s charge was to find lands in the New World not occupied by a Christian kingdom and claim them for England. His attempt to colonize what is present-day Newfoundland ended in failure, and Gilbert himself was killed in a storm on his return journey to England. This patent was quickly taken up by Gilbert’s half-brother, Sir Walter Raleigh. Raleigh organized an exploratory voyage to reconnoiter the area of present day North Carolina and Virginia, much to the south of Newfoundland, in preparation for establishing a permanent settlement. In the spring of 1584, the first of what was to become three expeditions to eastern North Carolina sailed. Each expedition followed a similar path of travel. Ships left England in April, usually stopping in the Canary Islands *en route* to English holdings in the Caribbean. Once landed, the ships could re-provision and sail along the Gulf Stream to the North Carolina coast, usually arriving in early July (Corbitt 1953:1; Shirley 1985:1-75; Powell 1989:28-37).

The first expedition came ashore on 4 July 1584, in the vicinity of Cape Hatteras. Under the direction of Philip Amadas and Arthur Barlowe (Sir Walter Raleigh never actually sailed to his colony) the purpose of this voyage was to scout along the coast and find a suitable site for the establishment of a colony. For a series of days, the Englishmen met and traded with the Hatteras Indians, after which they were guided inshore into the Pamlico Sound, then north to Roanoke Island. There they remained until August, after which time they returned to England. During this brief voyage, however, they mapped portions of the coast and entered the waters of the Albemarle (Powell 1989:15-17).

The initial Roanoke voyage was not the first time these natives interacted with European explorers. Nearly sixty years prior, Italian explorer Giovanni de Verrazano sailed for King Francis I of France in

1524. During his voyage, Verrazano travelled along the American east coast, stopping first in the Cape Fear region of North Carolina and then travelling northward along the Outer Banks, encountering Native Americans along the way. Verrazano's stay was brief as he continued north to explore present day New England. Nevertheless, he made initial observations of the natives and the coast, believing the inland sounds were likely the Pacific Ocean. During their voyage, Amadas and Barlowe discovered the continent beyond the inland sounds. Further, their interactions with the natives were considerably more protracted, and they even took two natives, Manteo and Wanchese, back to England with them (Corbitt 1953:13-26; Quinn and Quinn 1982:1-12; Shirley 1985:26-30; Powell 1989:29-30; Watson 2010:x).

Information gained during their first voyage set the stage for the second Roanoke expedition the following year, which would attempt colonization. During this voyage Sir Richard Grenville was to deliver Ralph Lane and a group of approximately 105 settlers, including Philip Amadas and Thomas Hariot, to Roanoke Island. There, they built a small settlement and began more extended explorations into the Albemarle region. During this time three groups of men were organized as military units to divide the task of exploration. The first was sent northward to explore the areas around the Chesapeake. A second group travelled northwest into the vicinity of the Chowan and Roanoke rivers, and a third explored the sounds and waters around the banks and Hatteras (Corbitt 1953:27-35; Shirley 1985:30-40; Humber 1986:17-23; Powell 1989:41-42). As recorded by Ralph Lane, himself in charge of the second group,

The 11th day [of July], the general, accompanied in his tilt boat with Master John Arundell, Master Stukeley, and divers [sic] other gentlemen, Master Lane, Master Candish, Master Hariot, and twenty others in the new pinnace, Captain Amadas, Captain Clarke with then others in a ship-boat; Francis Brook and John White in another ship-boat, passed over the water from Wocokon to the main land, victualed for eight days, in which voyage we first discovered the towns of Pomeiok, Aquascogoc, and Secotan, and also the great lake called by the savages Paquique, with divers other places, and so returned with that discovery to our fleet (Lane in Corbitt 1953:33).

A review of maps produced by Sir Walter Raleigh show the location of several of the areas mentioned by Lane. Pomeiok, Aquascogoc (labeled Aquscogoc), and the lake Paquique are all clearly visible on the map. Two small villages, labeled Secota and Sectuooc, are just west of Pomeiok and Aquascogoc on the map. Lane reports traveling east to west during their exploration on the following itinerary, "The 12th, we came

to the town of Pomeiok. The 13th, we passed by water to Aquascogoc. The 15th we came to Secotan, and were well entertained there of the savages” (Corbitt 1953:33). Travelling in this way, it is very likely they moved west from Aquascogoc and arrived two days later in Secota.

Certainly, during the course of their small expedition these Englishmen travelled through what is present-day Hyde and southern Tyrrell Counties, as shown in maps drawn afterwards (Figure 7). Their interactions with the natives were at first pleasant, yet quickly deteriorated. As described by historian Howard Zinn (1999:12),

In 1585, before there was any permanent English settlement in Virginia, Richard Grenville landed there with seven ships. The Indians he met were hospitable, but when one of them stole a small silver cup, Grenville sacked and burned the whole Indian village.

This occurred on 16 July, as the inland exploratory party was returning to Roanoke Island. As reported by Lane

The 16th we returned thence, and one of our boats with the admiral, was sent to Aquascogoc, to demand a silver cup which one of the savages had stolen from us, and not receiving it according to his promise, we burned and spoiled their corn and town, all the people being fled (Lane in Corbitt 1953:33).

This event in large part sealed the fate of the early colonies. Betraying the hospitality of the locals over a petty object cut off a source for food and assistance upon which the English settlers depended. Arriving too late in the year to establish crops, the settlers of the first colony were, from the outset, under-provisioned and dependent upon the natives to assist in the harvest and gathering of food. Thus, as the supplies dwindled among the settlers, the decision was made to take the next available ship to England. Relief came with the arrival of Sir Francis Drake, who visited the settlement in the spring of 1586 *en route* to England from the Caribbean. Seeing their condition, Drake agreed to ferry them back to England and the settlement was abandoned on 19 June. Arriving a short time later, relief ships from England arrived to find the colony empty and learned from the natives that Drake had taken them back to England. By the command of Sir Richard Grenville, a handful of men were left to maintain the colony. After Grenville departed, however, these men were killed by the natives in reprisal for English violence (Quinn and Quinn 1982:24-81; Shirley 1985:36-40; Humber 1986; 17-60; Powell 1989:41-42).

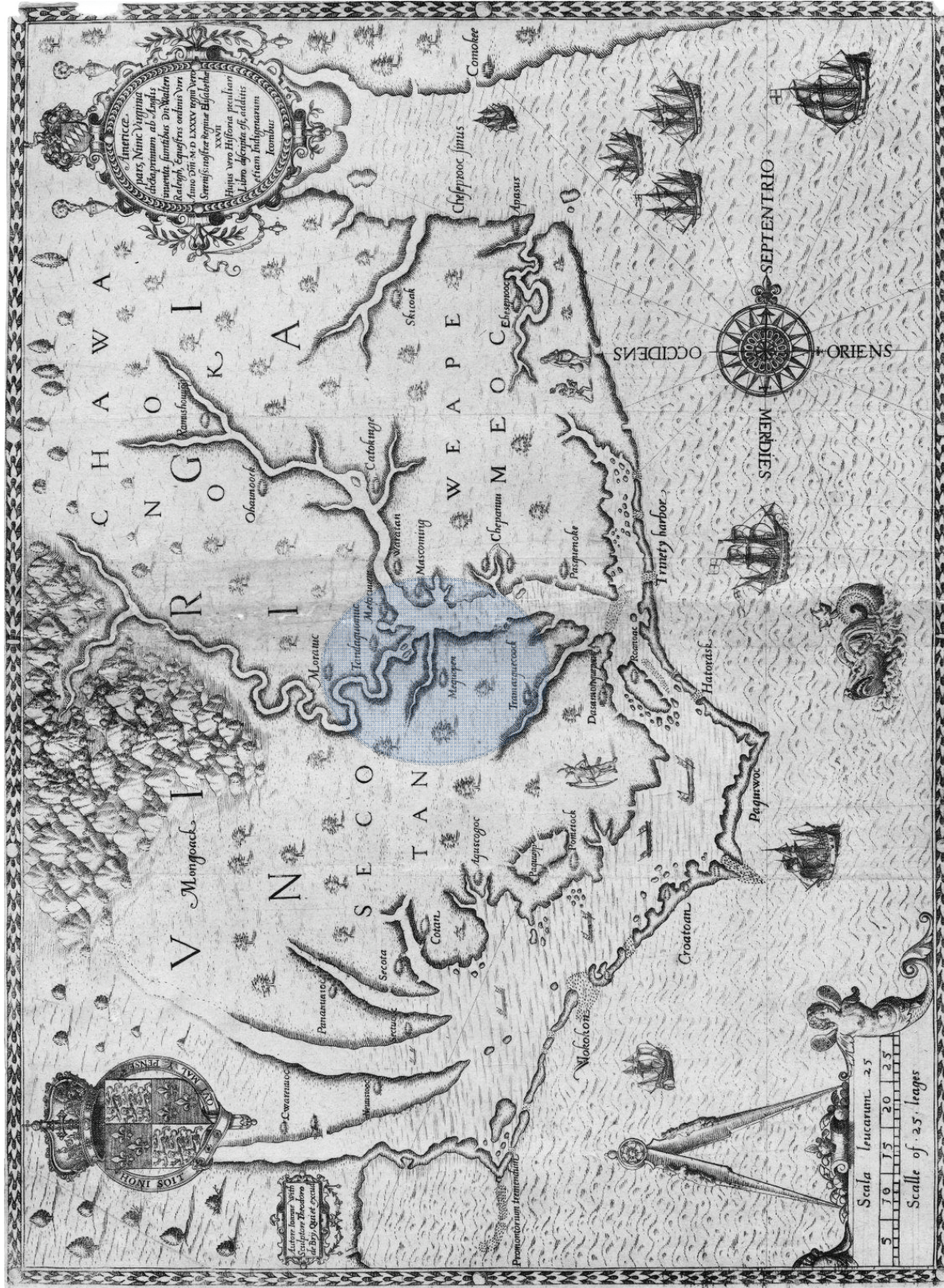


Figure 7. "Americae pars, Nunc Virginia: The carte of all the coasts of Virginia" – a map of North Carolina c. 1585. Approximate area of Tyrrell County highlighted by authors (University of North Carolina at Chapel Hill).

The fourth voyage to Roanoke Island (the third expedition thus far), was the most fateful. This voyage, however, benefitted from the detailed survey and maps developed by the prior expeditions. Unfortunately for the colonists, however, this final expedition also repeated many of the previous expedition's mistakes. This colony was sent under the charge of John White and was intended to land further north to take advantage of more suitable anchorages in the Chesapeake. A preoccupation with privateering, however, resulted in the ships returning to Roanoke Island and re-occupying the houses left by the previous settlers. Like the previous expedition, they arrived too late to plant crops and soon realized they would need to send for additional supplies. John White sailed for England on 27 August 1587, the last time any of the colonists would be seen (Quinn and Quinn 1982:93-106; Shirley 1985:51-56; Humber 1986:23-51; Powell 1989:43-44; Willard and Mook 2004).

Rising tensions between England and Spain during the latter half of the 16th century culminated in the Spanish Armada of 1588. Fearing Spanish invasion, Queen Elizabeth prevented any unnecessary departure of vessels. Thus, upon his return John White faced an ordeal but in early 1588 convinced the Queen to allow two vessels to send relief to the colonists. Shortly out from England, however, these vessels were attacked by French privateers and forced back to England. Additional relief was withheld until 1590 when Queen Elizabeth was more certain the threat of Spanish invasion had abated. Upon their return to Roanoke, however, the colonists were gone – only the word CROATOAN, carved into a tree was left behind. Whether they were killed by natives, assimilated into a local tribe, or died of starvation is unclear (Quinn and Quinn 1982:110-130; Shirley 1985:57-72). The passing of the Roanoke colony proved a significant setback for English efforts, all the more so with the 1603 trial and 1618 execution of Sir Walter Raleigh. With Raleigh's sentencing passed all of the claims given him in Virginia; the slate of English entitlements in North America was effectively wiped clean (Powell 1989:42-49).

Knowledge of natural resources in the Virginia area and the maps generated during explorative forays inland soon compelled the new English King, James I, to issue a charter to the newly formed Virginia Company in 1606, for the lands between present day Maine and Cape Fear, North Carolina. The following year, a permanent settlement was established in Virginia, called Jamestown. In eastern North Carolina, the exodus of the English from Roanoke Island resulted in an absence of European explorers and settlers for a period of decades. The next documented English explorers into the area were Marmaduke Rayner and John Pory in 1621 and 1622, respectively, sent at the request of the Virginia Company. English settlers slowly moved into the area, coming by way of Jamestown and first occupying the Northern Albemarle area. The first documented permanent English settler in the Albemarle area was Nathaniel Batts,

who in 1655 was hunting, trapping, and trading with the Native Americans (Powell 1989:49-52; Brickhouse 2004:134-135).

From the establishment of Jamestown in 1607 onward, and especially during the middle and later half of the 17th century, England took greater and greater interest in the settling and development of eastern North Carolina (see Hume 1994). Reports of the Roanoke settlers and the observation of vast stands of lumber suitable for timber and naval stores by John Pory piqued English interest in the resources of the Albemarle region, Tyrrell County included. Much of the settlement in the Carolinas during this time, however, was mired by mismanagement and political infighting amongst English nobility. This turmoil began in 1624 when, dissatisfied with the operation of the Virginia Company, King James revoked their charter. James died shortly thereafter, leaving his son Charles I title to the lands. Five years later, Charles granted a tract of land between 31 and 36 degrees latitude to his attorney general Sir Robert Heath. This tract was called Carolana, in honor of the king, and extended between northern Florida and the southern shores of the Albemarle, leaving a gap between the southern borders of Virginia (Powell 1989:50-52).

Both Heath and his successor to the patent, Henry Frederick Howard, failed to persuade settlers to enter the region. Heath was once reprimanded when he attempted to bring French settlers to the region, as they were not members of the Church of England. By the 1640s, political infighting in England, including a struggle for the throne following the death of Charles I in 1649, retarded Howard's efforts to bring settlers into the Carolana region. Most who arrived simply remained in Jamestown. Nevertheless, perhaps taking advantage of turmoil in England, Virginian proprietors were issuing land grants within the Albemarle region. By 1663, as many as five hundred people occupied the area, prompting the Virginia Council to appoint the region's first sheriff to ensure taxes were collected, and by 1688 nearly four thousand settlers were reported in the region (Powell 1989:52-53; Brickhouse 2004:134).

Between 1649 and 1660, English nobility was at war for control of the crown. The Prince of Wales, Charles II, came to power in 1660 and owed favors to those who assisted his ascent. In particular, eight supporters were appointed Lords and Proprietaries of the Carolana tract in 1663. Two years later, this tract was extended to include the northern Albemarle region already being settled under the direction of the Virginia Council. This new tract was renamed Carolina in honor of Charles II, with its new northern boundary on the line presently separating Virginia and North Carolina and its southern border well inside Spanish-controlled Florida (Powell 1989:53-55).

Between 1663 and 1729, Carolina remained under proprietary control. As early as 1662, officials in Virginia were requesting the creation of an Albemarle County encompassing the regions of present-day Currituck, Dare, Pasquotank, Perquimans, Tyrrell, Chowan, Hyde, and Beaufort Counties. Between 1662 and 1665, Carolina and Virginia officials vied for control over the ambiguously defined area between the two tracts. In 1664, William Drummond was appointed by the proprietors as the governor of the Albemarle County while simultaneously Virginian land-owner Sir William Berkeley was authorizing land grants in the northern Albemarle. Control over the region was solidified in 1665 with the official declaration of the area as part of Carolina. Soon thereafter, the proprietors established a governing body and were collecting taxes from land-owners. The proprietary government consisted of a Governor and appointed Council working together with an elected Assembly (Powell 1989:53-60).

At this same time, settlers began arriving and occupying the vicinity of the Cape Fear River and present-day Wilmington. Shortly thereafter, and much to the satisfaction of the proprietors, settlements also began along present day coastal South Carolina. This diversion of attention generated unrest in the Albemarle County. In the following twenty years, reports North Carolina historian William S. Powell (1989:60), the history of the Albemarle area was

... a story of unrest, confusion, slow growth, and armed rebellion. There were numerous reasons for this unhappy state of affairs. Many settlers had been there before the Proprietors...and they resented the interference. Albemarle was an isolated settlement, largely out of touch with the outside world....After the founding of Craven County in 1670 and the settlement of Charles Town on the Ashley and Cooper rivers, the Proprietors turned their attention to that newly settled southern part of Carolina.

Additionally, would-be settlers were further dismayed by the disparity between the Virginia and Albemarle tax system. Taxes in Carolina were nearly twice that in Virginia, and were to be delivered in coin whereas in Virginia they could be paid in-kind. As a result, the proprietors adopted a similar tax regime in the Albemarle in 1668. Nevertheless, the proprietors still experienced difficulty attracting new settlers (Powell 1989:61).

Moreover, Carolina's remoteness did nothing to assist the region in gathering effective leaders. Between 1672 and 1689, four proprietary administrators were either run-off, deposed, or formally banished for various crimes and corruptions. Periodic conflict with Native Americans and the inability of

the government to form an effective defense further fueled resentment toward proprietary rule. These factors, in combination with general resentment toward the British for the imposition of the Navigation Acts, erupted into open rebellion in 1677 when a faction of Albemarle administrators attempted to circumvent the enforcement of English trade laws. The result was the installation of a ruthlessly pro-proprietary governor who drove anti-English administrators from the government, compelling several prominent merchants to rebel against and, ultimately, depose him (Powell 1989:63-69).

Such occurrences were typical as a removed proprietary government attempted to establish effective leadership. Seth Sothel was appointed governor but kidnapped by pirates off Northern Africa, leaving Carolina in disarray during the time of his internment. He was again made governor in 1683 where he proceeded to illegally seize lands and falsely accuse and jail his political opponents. For five years Sothel conducted himself in this manner before being tried and removed from power by the Carolina Assembly. The next governor, Philip Ludwell, arrived in the Albemarle in 1689 to find John Gibbs proclaiming himself governor and threatening violence to any who opposed him. This persisted until they received official clarification from England in 1691, after which period Carolina, Albemarle included, enjoyed a period of relative peace and prosperity (Powell 1989:66-73).

Prosperity encouraged growth, and the horizon between the 17th and 18th centuries was marked by widespread settling of the Albemarle area, especially after Native American resistance was quelled following the four-year Tuscarora War (see Lee 1963). As settlers reached far enough south to establish themselves, a separate Bath County was created in 1706. In the course of the next few years, “most of the land from the Virginia border to the shores of the Albemarle Sound had been occupied...” (Powell 1989:70). People were now settling more of the rivers of northeastern North Carolina. Still, tensions existed on the borders with Carolina and Virginia as some Virginian officials refused to recognize the border established during the 1665 charter from King Charles II. This was exacerbated in 1719 when South Carolina became a Royal colony. Each exercised political sway to retard the resolution of border issues, among other challenges facing the proprietors, and in 1729 the North Carolina proprietors sold their shares to King George II (Powell 1989:77-86).

The Royal government realized many of the problems governing the Albemarle region were directly related to the isolation of the area and the difficulty its citizens had attending courts and public functions. Thus, one of the first tasks of the Royal government was to sub-divide the Albemarle into more manageable districts. The result was the formation of the Tyrrell precinct in 1729. A general synopsis of early Tyrrell County boundaries was provided by North Carolina historian Alan D. Watson (2010:1)

Tyrrell emerged in 1729 as an expansive precinct, bounded as it was on the north by sound, on the west by the Chowan River as far as Rainbow Banks (in present-day Martin County), on the east by the Atlantic Ocean (including Roanoke Island and the Outer Banks in present-day Dare County), and on the south by the southern border of Albemarle County (which, though indefinite, abutted Beaufort Precinct). The legislature authorized surveys in 1741 and 1748 to clarify boundaries between Tyrrell and Edgecombe and between Tyrrell and Beaufort respectively ... Just prior to the Revolution, in 1774, the General Assembly formed Martin County from Tyrrell and Halifax counties.

Thus, by the official establishment of Tyrrell County, European settlement in the Albemarle area had been underway for almost a century. Formal government was organized for the area of Tyrrell County under proprietary government since 1662. With the incorporation of North Carolina as a Royal colony "...the people saw no sudden or dramatic change in their government. The offices of governor, Council, Assembly, and courts, as well as other administrative agencies, remained as they had been" (Powell 1989:87).

Though established by law in 1729, the Tyrrell precinct was not officially incorporated into the North Carolina Assembly until 1735 (Watson 2010:2). During Royal control, "Tyrrell played a minor role in the politics of colonial North Carolina, for the county occupied a relatively isolated area of the province, and its representatives to the lower house rarely held positions of prominence in the government" (Watson 2010:3). Nevertheless, Tyrrell County officials were party to power struggles between the Albemarle and Cape Fear counties during the middle of the 18th century. Battling over representative control of the North Carolina assembly, the situation reached an impasse which ultimately required official adjudication from the Crown, and which ultimately fueled disdain for English control in general (Watson 2010:3-7).

Despite this, settlement in Tyrrell County continued. In 1690, a small trading post was established along the southern shores of the Albemarle. During the first decade of the 1700s, Edward Hassell, John Hassell, Cornelius Fitzpatrick, Thomas Holloway, Anthony Alexander, John Tarkington, and Godfrey Spruill purchased large tracts of land along the Scuppernong River. These, and other lands, continued to be sold and occupied (Brickhouse 2004:134-135). The boundaries of Tyrrell County were surveyed and

changed throughout the Colonial period, up until the late 19th century. These changes reflect further increases in population and administrative control across eastern North Carolina (Corbitt 2004:135-136).

By the late colonial period, the area of Tyrrell County was thoroughly explored and settled. In the ensuing centuries, American laborers and entrepreneurs came to Tyrrell County to reap the bounty of natural resources: timber, productive soils, and fishing (see Angley 1986). This course of human habitation remained the same to the present day. European occupation marked a definitive end to Native American occupation, yet also marked the beginning of a new era in the human history of eastern North Carolina. In both cases, humans were attracted to and remained in the Tyrrell County area for the myriad resources available to hardy and industrious people.

Conclusion

Some general conclusions regarding human exploration and settlement are possible following this historical review. The processes underlying Native American exploration and settlement are markedly distinct, though in some ways similar to those driving European exploration and settlement. Each, in its own way, was focused upon the natural resources in the area. For the Native Americans, these were a form of subsistence, as these groups lacked the global-scale economies of European kingdoms. English exploration and settlement was singularly motivated by the desire to command mineral and natural resources for the sake of English interests, both Royal and private. Thus, though Native Americans and Europeans established themselves across eastern North Carolina to exploit natural resources, the motivation and means of that exploitation were considerably dissimilar.

Further, the arrival of each group is quite dissimilar. The early Paleo-Indian occupants travelled through the area hunting large game, and thus moved throughout eastern North Carolina with the ebb and flow of seasonal and environmental change. During the Archaic period, these groups became local specialists and thus adapted themselves to the unique tidewater ecosystems of the Albemarle. This, over the centuries, developed into established agrarian and hunter-gatherer groups who were experts in the local resources. In this way, early Native American settlers happened upon the Tyrrell County area, and adapted themselves to exploit the local resources.

European settlement, on the other hand, was pre-planned and deliberate. Sir Walter Raleigh organized and directed multiple excursions to Roanoke Island. Similarly, the establishment of Jamestown and the systematic division and occupation of land thereafter were an organized and structured endeavor.

When English settlers arrived in North Carolina, they sought to form the land into productive farms, fisheries, and timber operations. Their utilization of resources was structured and conducted on a scale far beyond that of the original Native American inhabitants.

Thus, when discussing exploration and settlement of Tyrrell County, two distinct phases can classify human habitation. The first, and so far the longest, was the period of Native American occupation, between 11,000 BCE and roughly 1715, the conclusion of the Tuscarora War and the final removal of native tribes in the Albemarle region. This habitation phase was characterized by small, localized populations who exploited natural resources on a small, subsistence scale. Though this period lasted thousands of years, little written record exists, and most understanding of it is gained through archaeological investigation. The second phase was shorter, yet it also had a much more dramatic effect upon the land. European settlement at Roanoke and then Jamestown displaced Native American populations with European settlers intent on establishing productive mercantile economies. Thereafter, transportation, communication, and industrial networks marked the land as canals were dug, forests cleared, fields planted, and natural resources flowed forth from Tyrrell County. These changing networks of transportation are elaborated upon in the following chapter.

THE TRANSPORTATION NETWORKS OF TYRRELL COUNTY

Introduction

Cycles of population growth and economic health often influence (and are in turn influenced by) the various networks of transportation humans etch upon a landscape. So too the technological advances that culminate in new forms of transport play a critical role in defining a population's chances for economic prosperity. As a populace engages a new unmodified landscape they utilize it as best as they can in order to survive and thrive, until they accumulate the knowledge and capital to adapt the landscape itself. As technologies are born, intimate geographical knowledge grows, and the people necessary to enact landscape modification congregate, modes of transportation diversify, and the trades associated with each collaborate or compete; sometimes with foreseeable results, but many times with unknown consequences. External factors, in particular those seeking to connect regions across states and nations will set in motion developments that dictate the ultimate fate of places.

This chapter will examine the history of the initial development, growth, alteration, and in some cases decline of the transportation networks of the entirety of Tyrrell County, North Carolina. Commencing with the unmodified landscape, it will examine how settlers focused upon the Scuppernon River's connection to the world of the Albemarle Sound (and beyond), harnessed the potential of this waterway and its many tributaries, and transformed it into a corridor running through the center of their economic and social life. This decidedly maritime focus continued with the next phase of development, with the opening of regular trade routes, and the eventual digging of canals, placement of ferries, and construction of bridges. Following this, adaptations saw parallel development on land, with the increased utilization of trails, their eventual development into well-traveled roads, and the ultimate installation of paved roadways and railroads. Over time, the rivalry between water-borne and land-based methods of travel would also leave their impression upon the landscape and economic viability of numerous industries within Tyrrell County – a process which continues to the present-day.

The Unmodified Landscape

When we think of the time when the earliest European explorers and colonists began settling Tyrrell County it is easy to think that they lacked the personnel, technology, or geographical knowledge to plan or

make significant changes to the landscape. In reality, what they lacked first and foremost was the *need* to alter the landscape – the winding stretches of waterways provided the access to the resources they sought. Besides, the small populations of early settlers had to bring their supplies with them. The journey across the Atlantic Ocean represented considerable risk, and while the choice of a settlement location carried many unknowns and many other risks, the land and its connection to the water also provided innumerable opportunities.

In the late-16th and early-17th centuries, the European colonizers coming to the area that eventually became Tyrrell County would soon see their lack of familiarity with their new environment transform into an intimate knowledge of the potential held within the waters and soils of their new home. This geographical fluency, coupled with growing investment and constantly changing technologies, would soon allow them to shorten the distances between resources and markets. The exploitation of the rich natural bounty of Tyrrell County's numerous lakes, sounds, inlets, and creeks would inevitably leave their mark on the landscape.

At the heart of Tyrrell County, the Scuppernong River (Figure 1) in particular has a long history of utilization by people. This waterway has been the lifeblood of the region in so many ways – it provided not only an initial means of transporting the goods of the county, but also eventually provides the power and sustenance that allowed the county to grow. Transportation of people and goods was the most common use of the Scuppernong. The Native Americans of the area plied the waters of the Scuppernong, Bull Bay, and the Albemarle Sound in dugout canoes carrying people and trade goods to nearby Native American and European settlements. They also used their canoes to fish the rich and bountiful waters of the Scuppernong River and Bull Bay (see Harriot 1972[1590]:56).

Early European settlement in the area relied almost exclusively upon the water for the means by which they could transport people and goods. This was not lost on the colonial government which implemented an export system of warehouses and inspections for the means of applying a tax to exports of the area in 1739. Later, a 1755 statute established 13 inspection sites along the rivers and creeks of the county and appointed four inspectors to work the area from Kendricks Creek to Rainbow Banks and from the courthouse to Alligator River (Anglely 1986:3; Watson 2010:15-16).

After the American Revolution, the Scuppernong River was used for many of the same purposes, but with the development of more agricultural and industrial lands at various plantations up river and the construction of several sawmills, the volume of trade began to increase. Small sail craft, barges, periaugers,

and other small vernacular craft were very common on the Scuppernong during the 19th century. These vessels were used for transporting goods and people, and for the fishing industry.

During the 19th century, it was not uncommon to see a sailing vessel traveling up the Scuppernong River to retrieve cargo from a plantation or storehouse. In 1816 for example, the sloop *Expedition* sailed up the Scuppernong to receive 1,335 bushels of wheat from plantation owner Ebenezer Pettigrew. A similar amount of wheat was shipped from the same plantation in 1818 on the schooner *Sally Ann* (Lemmon 1971:729-730).

The fishing industry developed in earnest in the time before the American Civil War but was noted by a settler in 1730: “Fishing is Exceeding plenty [.] I have seen a Hundred Mulletts Catch’d att a Cast without weating one[']s foot & there[']s [an] abundance of Trout as big as Salmon with [a] Great Variety of Other Fish & Oysters very Good” (Watson 2010:19). The rivers also abounded with shad and herring which were heavily exported after being pickled and barreled. They were normally shipped to West Indian or northern markets if not kept for the consumption of the local populace, including the local slave population. In the late 1880s, crab fishing was viewed as a profitable enterprise and began in earnest up and down the Scuppernong, a practice which continues to this day (Watson 2010:83-84).

Tyrrell County residents continued to travel the Scuppernong River well into the 20th century. The loss of the passenger freighter *Estelle Randall* (Figure 8) to fire the night of 17 January 1910 while at the town dock is probably the most tangible reminder of the Scuppernong still being used for the transport of freight (*Raleigh News and Observer* 1910). The introduction of a railroad into Columbia in 1908 can be noted as a cause for the reduction of shipping on the Scuppernong River. Between 1912 and 1916, shipping on the Scuppernong was reduced by more than two-thirds, from 26,653 tons to 10,443 tons (US Army Corps of Engineers 1917:552). Use of the Scuppernong for shipping of goods and products from Tyrrell County did not end with the introduction of the railroad into the county. There was a need for shipping up until just past the end of the Second World War when the last of the lumber mills on the Scuppernong began to shut down for good (Watson 2010). Today the Scuppernong is a destination of fisherpersons and pleasure boaters.

Adapting to the Landscape

As European colonists gained a foothold within Tyrrell County, population increased, additional settlements formed, and a boost in exported trade goods followed. To sustain this growth, it soon became

necessary to create a means for efficiently moving people and goods across a landscape full of natural obstacles. Instead of making significant changes to the landscape directly, the citizens of Tyrrell adapted themselves to the Scuppernong River by utilizing a system of bridges and ferries. These bridges and ferries are a link between a Scuppernong River-focused unmodified landscape and a later more heavily modified, land-oriented landscape.

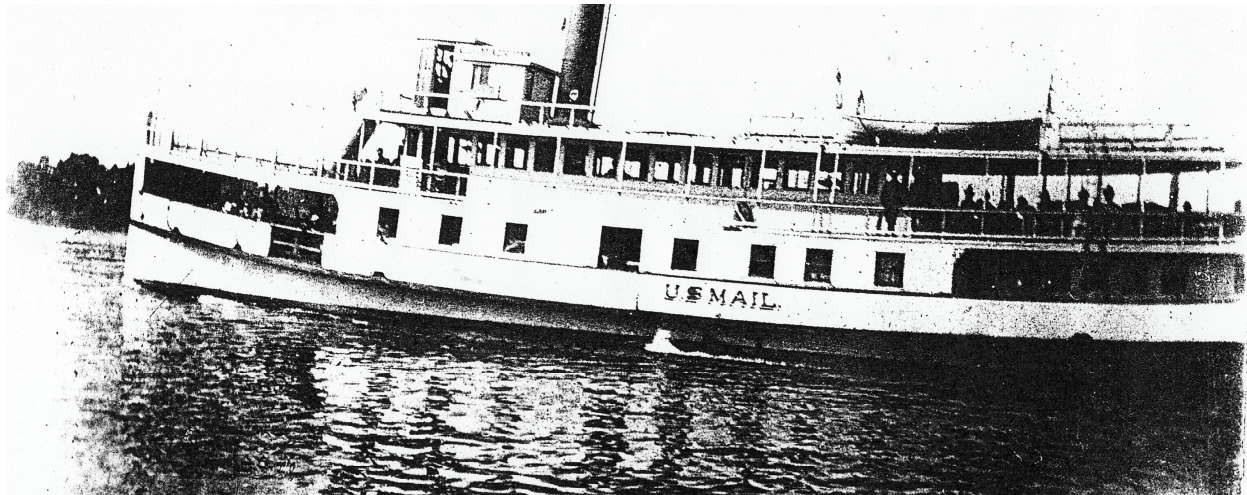


Figure 8. *Estelle Randall* before it burned at the Columbia town wharf in 1910. (Image: Mariners Museum, PB2876 C176).

Ferries of Tyrrell County

Although the earliest occupants of Tyrrell County invariably saw the waterways as *opportunities* for travel, the construction of ferries became a necessity to allow the land-bound trekker to move across the landscape. Initially, these travelers likely commissioned local people to use their small boats to cross the rivers and creeks of Tyrrell County, but eventually permanent ferries operated by private citizens (and later the government) were constructed where settlements or transportation routes met the water.

One of the earliest and best known ferries of the 18th century Albemarle Sound region was Mackeys Ferry in modern day Washington County (once part of Tyrrell County). Operated by William Mackey from his plantation to Edenton and other locations across the sound, the ferry operated from 1735 to 1938. On occasion, the job of ferry keeper fell to the wives and widows of ferry keepers. At least two women in the 1790s are identified as being ferry operators, Sarah Crooke and Anne Wynne (Watson 1974:247-261, 2010:95).

Each individual county court licensed ferries, appointed ferry keepers, established rates and often determined the specifications of the ferry. There were at least three ferries operating at various points along the Scuppernong by the late 1750s. In the late 1760s, the Tyrrell County court debated whether to cease operations of the Lower Ferry (Snell's Ferry) across the Scuppernong River. Over 100 citizens petitioned the court to keep the ferry open—an appeal that was ultimately successful (Anglely 1986:3; Watson 2010:26).

Towards the end of the 18th century, Tyrrell County began offering free ferry transportation across the Scuppernong River by using public funds. Legislated by the General Assembly, ferry service would be free during days of meetings of the county court, election for members of the General Assembly, and militia musters. Tyrrell County enacted this provision in 1769 and in subsequent years paid several different ferry keepers for transporting residents across the Scuppernong River (Watson 2010:95).

During the Civil War, the bridge at Columbia became an important supply route for Confederate forces. On 12 July 1864, an expedition of the Union gunboats *Ceres* and *Whitehead* under the command of Lieutenant Commander Earl English steamed up the Scuppernong with the intention of burning the bridge at Columbia to prevent supplies from being transported to Confederate forces at Plymouth. The expedition was a complete success as they were able to destroy not only the bridge but also a gristmill along the way (Macomb 1864:146). This bridge would not be rebuilt until the early 1870s. Owing to the destruction of the bridge, ferry usage after the war had to increase, and in January 1866, the county court appointed commissioners to make the ferry operational. By 1869, efforts to reconstruct the bridge had not been successful and the ferry to Columbia was still in service. With the exception of pack animals and cattle, all who rode the ferry did so free of charge. Within the next few years the bridge was replaced and ferry service eventually ceased operation. In 1887, the bridge had to be replaced again, so the ferry service was re-initiated on the site. This ferry did not provide service on Sunday and charged an extra fee if the crossing took place before sunrise or after 8pm (Watson 2010:122, 143-144). As Tyrrell County expanded, bridges were constructed at the location of many ferry landings as other transportation networks such as roads and landings for river transport converged there. Even with these bridges, ferries were still used throughout the 19th century and much of the 20th century.

Further east, on the Alligator River (today shared by Tyrrell and Dare counties), ferry service was also used far into the 20th century. In 1931, Captain Thomas Baum began a private toll-ferry service on the river which would last for over 60 years, and was subsidized by the state from 1933 to 1942 (after which it became a free service). After Baum's death, the state purchased the ferry service in 1947 and by

1962 had finished a 3.2 mile long bridge across the Alligator River effectively ending ferry service on the Alligator River (Barefoot 1995:137; Turner 2003:116).

Bridges over the Scuppernong

Ferry services come with inherent limitations. Ferries have capacity and load limitations, have schedules that are open to change (causing inconvenience), and like all water-borne transportation, can only operate according to the whim of atmospheric conditions. For these reasons, bridge-building often exemplifies the next step in the evolution of a transportation network.

In the historical record, some of the first evidence of the bridges of Tyrrell County appear in the form of bridge repair notices. In 1760, Tyrrell County justices ordered three road companies to rebuild Great Conehoe Bridge, assigning maintenance responsibilities to one of the companies. In 1765, the court justices also granted a petition for the construction of a bridge over Herring Run as long as the bridge was high enough to allow canoes to pass. Statutes also required that bridges over navigable waterways be at least 12 feet wide and made of sawed planks with firm and strong posts and rails (Watson 2010:25).

Several bridges were constructed in Tyrrell County in the early 19th century across the Scuppernong River, Riders Creek, and Little Alligator Creek. At the town of Columbia a toll bridge was constructed from 1806-1808 which led from the east bank of the Scuppernong River to the “Point of Marsh” on the opposite bank. This float drawbridge was sold in 1828 and replaced by a drawbridge that required almost constant repairs (Watson 2010:141).

A second drawbridge was constructed on the Scuppernong in 1812 at Cross Landing. In 1817 the county justices ordered the bridge moved up river. In its new location the bridge also needed constant repairs. In 1832 the county paid Ebenezer Pettigrew to build a new bridge at the site which lasted until 1859 when the county paid B.F. Swain to rebuild it (Watson 2010:94).

Tyrrell County and Martin County for a time also shared in the responsibility of building and maintaining a bridge over Welches Creek (Washington County absorbed Tyrrell’s responsibility upon its formation). Though finished in 1793, six years later it required extensive repairs and was likely replaced. Bridges constructed over Riders Creek and Little Alligator Creek in 1802 and 1809 respectively were marred by the need for repairs until they were both replaced in the 1930s (Watson 2010:92-93).

During the late 1870s, the county continued to maintain drawbridges at Columbia and Cross Landing and bridges at Little Alligator, Riders Creek, and Newfoundland River. By 1887 the Columbia

Bridge needed to be replaced at a sum of \$823.30. The drawbridge at Cross Landing was replaced in 1889 for \$713 and the Riders Creek Bridge was converted into a drawbridge in 1883. An increase in river traffic swelled the need for drawbridges throughout Tyrrell County (Figure 9) (Watson 2010:94).



Figure 9. The drawbridge at Columbia in the in early 20th century. (Image: Tyrrell County Public Library).

As automobiles became more common at the turn of the century, and heavier loads needed to move across waterways, steps were taken by Tyrrell County to keep their bridges in working order as long as possible. In 1901, county commissioners prohibited crossing the bridges with loaded vehicles heavier than the ordinary load of a two horse wagon. In 1921, speeds in excess of five miles per hour across any bridge in the county by car, horse, or truck, were prohibited (Tyrrell County 1901, 1921).

To improve the state highway system and include a route through Columbia to the Outer Banks, an adequate paved bridge over the Scuppernong was required. Constructed for a cost of \$90,000 and opened in 1927 to much fanfare, the drawbridge operated for at least two more decades (*News and Observer* 1927). In the mid-1950s, the State Highway Commission decided a bypass around Columbia was needed to alleviate congestion caused by the manual drawbridge and downtown Columbia. By 1957 a new modern bridge had been built which spanned the Scuppernong River as part of a re-oriented US Highway 64, though for a time the old and new bridges were both used (Figure 10). There are currently

four main bridge locations in Tyrrell County -- Spruills Bridge, Phelps Bridge, Columbia Bridge, and Cross Landing Bridge.



Figure 10. The “old” and “new” bridges alongside each other (Image: Tyrrell County Public Library).

Modifying the Landscape

While bridge-building can be seen as an adaptation to the landscape, it is also a form of landscape modification. Although the construction of individual bridges may not constitute massive disruptions to land, the consequences of their construction often set in motion the impetus for more significant changes to transportation networks. With a growing system of ferries and bridges to connect the trails that crossed Tyrrell County, soon more significant modifications to the landscape would occur. Trails would soon be paved, and maritime transportation would wane in the wake of railroads and automobiles.

The commencement of bridge-building in Tyrrell County, an important feature in the evolution of transportation networks in the region, was not the first form of wholesale land alteration in the area. Indeed, as soon as the settlers of Tyrrell County ventured into the wilderness around them, they discovered that it was not exactly hospitable. The forests were thick and full of dangerous wildlife, the swamplands difficult to traverse and the waterways frequently precarious. Where they found the landscape not in accordance with their vision, or imagined “improvement,” they attempted to modify it.

One of the earliest forms of landscape modification was the cutting of canals for drainage, irrigation, power, and transportation (waterway modification and extension). When river traffic necessitated it, people also found it necessary to improve the navigational qualities of the Scuppernong River. Also increasingly common was the construction of the country roads which soon spread throughout the county and eventually become a part of the landscape we see today. All of these modifications were the results of an increase in the economic exploitation of resources within Tyrrell County.

Canals of Tyrrell County

Constructed at the behest of wealthy landowners and built on the backs of African slaves owned by those same landowners, canals improved the economic fortunes of the area and significantly expanded transportation networks. Canals were one of the first and most extensive methods in which the citizens of Tyrrell County attempted to modify the landscape around them. The construction of canals throughout Tyrrell County made it possible for thousands of acres of swamp and wetlands to be accessible for agricultural, industrial, and transportation purposes (Watson 2010:81-82).

The idea to build the Somerset Canal (Tyrrell County’s largest canal) can be traced back to the late 18th century and the desire of three Edenton businessmen to farm at the bottom of a lake. In 1784, Edenton businessmen Josiah Collins, Nathaniel Allen, and Dr. Samuel Dickinson purchased roughly 100,000 acres of land adjacent to Lake Phelps for the original purpose of draining the lake and farming its fertile bottom (Figure 11). Instead, the Lake Company constructed a canal connecting Lake Phelps to the Scuppernong River that drained the swamplands between the two bodies of water and created fertile agricultural lands (Watson 2010:81-82).

In early 1786, the brig *Camden* arrived at Edenton, the port of entry for the Albemarle Sound region with a cargo of 80-100 African slaves intended to build the canal. The Lake Company sent *Camden* to West Africa to obtain slaves for digging the canal soon after the company purchased the immense tract

of land between Lake Phelps and the Scuppernong River. The owners of the Lake Company believed that new West African slaves would be suited for digging the canal as they were still physically strong and did not possess the language or geographical familiarity with the region to attempt to escape from the horrendous conditions associated with constructing a canal (Watson 2010:81-82).



Figure 11. Detail from the 1795 map *The State of North Carolina from the best Authorities &c.* by Samuel Lewis. (University of North Carolina at Chapel Hill).

Pulled from their homeland to labor in knee- to waist-high muck in sweltering heat and surrounded by disease-laden insects, these slaves achieved an amazing feat of landscape modification. Finished in 1788, the Somerset Canal (originally called the Collins Canal) created thousands of acres of arable farmland by draining the swampland surrounding Lake Phelps as well as irrigating nearby land. The canal became the core of a new phase of transportation network development which linked Lake Phelps-based plantations and the world at large. By connecting the lake with the Scuppernong River, plantations and smaller farms in the area could transport their goods on barges and small boats to larger vessels waiting at various landings for shipment to markets in Edenton, Charleston, Boston, or New York (Watson 2010:82-84).

The waters of the Somerset Canal also provided the necessary power to operate several sawmills and gristmills along the banks of the canal. By 1791, the Lake Company was advertising in the *Edenton Gazette* regarding the availability of their products for shipping at the mouth of the canal:

The subscribers take this method to inform the public that they have completed their sawmills at their canal on Scuppernong River, where they have for sale a quantity of excellent Cypress Plank and Scantling, which they will dispose of on reasonable terms, and where orders for house frame and all kinds of Saw Mill Timber will be executed at the shortest notice.

Those who wish to purchase may apply to Mr. Thomas Trotter, at the Mills, or either of the subscribers, in this town. The lumber will delivered at the mouth of the Canal, where any vessel with an easy draft of water may take in her full cargo (*Edenton Gazette* 1791).

Just before this (around 1790), Josiah Collins had entered into a *suit in equity* towards Dr. Dickinson and Nathaniel Allen after the latter two could not cover their share of investments in the enterprise. Collins was then forced to cover their cost and the pair became very indebted to him. When they could not (or would not) settle their debts with Collins, he was forced to take legal action against them in which he pressed for a settlement of the company's affairs. Unfortunately for Collins, Dickinson and Allen did not settle with him and he was forced to gain total control of the Lake Company's interests through a series of purchases (Anglely 1986:3-5; Watson 2010:81-82).

In 1794, Dr. Dickinson gave Francis Peyrinnaut (an Edenton merchant), a mortgage on one half of his entire Lake Company interest and in 1798 he transferred this half interest over to Peyrinnaut. Peyrinnaut held onto this half interest until 1801 when he sold it to Collins for nearly \$8,000. In 1810 after Dr. Dickinson's death, Collins' son, Josiah Collins, Jr., purchased from the Dickinson estate the remaining interest for \$5,000. During the same time period, Collins was also buying up the shares owned by Nathaniel Allen. In 1803, Allen almost lost his title to John and Joseph Skinner who gave him a mortgage on his entire share of the Lake Company. He also gave Collins a second mortgage on his share to secure a loan of \$8,625. In 1816, Collins was able to purchase all of Allen's interest at an executor's sale (Tyrrell County 1798:361-362, 1801:506-507, 1803:578-581, 1810:157-158, 1816:352-358).

With complete control of the Lake Company property, Collins continued building the area into a profitable plantation, naming it Somerset Plantation. The canal became the heart of the plantation. He made several industrial and personal improvements to the property, though it is uncertain what all of those improvements were (Tarlton 1954:15).

After his death in 1819, Josiah Collins left all the lake property to Josiah Collins, Jr., and left a provision in his will that after Collins, Jr.'s death the property would be divided between the seven grandchildren. His only condition was that the younger six children were to receive undeveloped land and the elder grandchild, Josiah Collins, III was to receive the developed Somerset Plantation. In the 1830s, Josiah Collins, III constructed Somerset Place which sits on the shores of Lake Phelps next to Somerset Canal (Anglely 1986:4; Watson 2010:82-83).

The Collins family was not the only wealthy and important family to construct canals and plantations on Lake Phelps. In 1787 Reverend Charles Pettigrew of Edenton moved to the shores of Lake Phelps to develop property adjacent to that of Josiah Collins, who was a parishioner of Pettigrew's. While not as extravagant as Somerset Plantation, Pettigrew completed Bonarva Plantation (Figure 12) in 1790, the first of three plantations constructed by Pettigrew between Lake Phelps and the Scuppernong River (Anglely 1986:4-5; Watson 2010:65,76-77).

For years, Pettigrew had complete access to Somerset Canal; however, his son Ebenezer Pettigrew eventually constructed a separate canal named Bonarva Canal. The Pettigrew family utilized this canal much in the same manner in which the Collins family utilized Somerset Canal. Bonarva Canal was used for the transportation of goods as well as for irrigation, drainage and to power extensive milling facilities. Throughout the 19th century, both the Pettigrew and Collins plantations constructed several other canals including Bee Tree Canal, Thirty Foot Canal, Mountain Canal, and Moccasin Canal.



Figure 12. Photograph of the Bonarva Plantation and Canal, date unknown. (Image: Peggy Griffin Collection, Tyrrell County Public Library).

Navigational Improvements

Shipping on the Scuppernong River was critical to the development of Tyrrell County during the latter half of the 19th century. The railroad had not yet reached into Tyrrell County and the road system was not suitable for handling the large amount of timber and agricultural products coming out of the county – nor was it cost-effective to haul large amounts of products by horse and cart. Still the most efficient and effective method of transportation was sending goods by the steam and sailboats that stopped at various landings up and down the Scuppernong River.

With the growing importance of agriculture and timber exports to the economy of Tyrrell County and the state of North Carolina, the General Assembly of North Carolina sent to the US Congress a resolution calling for the improvement of navigation on the Scuppernong River to be carried out by the federal government. Between 1878 and 1885, \$6,000 was spent by the United States in dredging a channel roughly 2,200 feet long, from 7 ½ to 9 feet deep and 60-70 feet wide through the bar at the mouth of the river (Angely 1986:7-8). The US Army Corps of Engineers also dredged a turning basin at Spruills Bridge and made four cut-offs, rounded off eight points at sharp bends and dredged a shoal at the mouth of Somerset Canal, labeled as Collins Canal on the map (US Army Corps of Engineers 1895:1360-1364).

In an 1886 US Army Corps Map, examples of the shipping industry can be seen as separate warehouses for the steamers *I.D. Coleman* (1862) and *Mary E. Roberts* (1873) are shown at Spruill's Bridge (Figure 13, arrows 1 and 2). The same 1886 US Army Corps of Engineers' map indicates the location of the wreck of the schooner *Lawrence* (Figure 13, arrow 3) that is initially listed as removed from the river for the cost of \$100 on 26 August 1885 as part of the work they were conducting to remove navigational hazards on the Scuppernong River. The Army Corps of Engineers full report indicates the ship was actually moved and re-deposited close by:

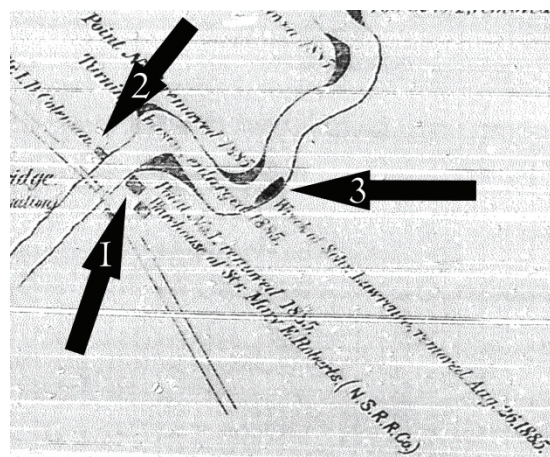


Figure 13. Detail of Map of the Upper Portion of the Scuppernong River, NC (arrows added by authors). Arrow 1 denotes the location of the *Mary E. Roberts* warehouse, arrow 2, the location of the *I.D. Coleman* warehouse, and arrow 3, the location of the wreck of the schooner *Lawrence*. (US Army Corps of Engineers 1886:968).

The schooner Lawrence. – This wreck (referred to in the last Annual Report) lay in the Scuppernong River near Spruill's Bridge, North Carolina (see accompanying map). Not being removed by the owner thereof after lawful notice, she was accordingly raised and floated on August 26 last, by the Government. Her dimensions were 60 feet by 16 feet. An attempt was made to keep her afloat in order to sell her according to the law, but it has been ascertained that the cost thereof would be greatly excess of her value, being old, rotten, and almost worthless, the schooner was accordingly moved a short distance and allowed to sink where she would be out of the way. This has finally disposed of her very effectually and cheaply, the cost thereof being \$100, which was the estimate (US Army Corps of Engineers 1886:970).

By 1894, the US Army Corps of Engineers conducted an evaluation of the Scuppernong River to assess the current navigation hazards and the suitability for further improvements throughout the river, and reported their findings to the Secretary of War who passed the findings to the US House of Representatives. The report submitted by Major W.S. Stanton and First Lieutenant E.W. Van C. Lucas indicated that while the improvements conducted in 1885 were very beneficial to river navigation, those improvements were not as effective as they had hoped:

Through the bar at the river mouth was dredged in 1880 a cut "about 2,200 feet long, from 7 ½ to 9 feet deep and 60 to 70 feet wide" ... This cut remained in good condition only a year or two, and although the bar is still in better condition than before the cut was made, it has at low-water stages a depth of only 5 to 5 ½ feet, and the practicable channel has decreased to 30 feet or less... This bar is decidedly the most formidable obstacle to navigation up to Spruills Bridge.

From the bar up 18 miles to Spruills Bridge the channel gradually decreases in width from about 1,800 to about 50 feet and the least channel depth is about 7 ½ feet, which is sufficient for all the needs of navigation... Work of improvement carried on by the United States from 1879 to 1885, inclusive, resulted in such a decided change for the better that steamers are now able to run 13 miles from Spruills Bridge to Columbia in two and one-half hours, and have trouble only at the sharp bend immediately below the running basin at Spruills Bridge (US Army Corps of Engineers 1895:1363).

The 1895 evaluation also shows that at this time the Scuppernong River was traversed routinely by:

Two steamers, from Edenton and Norfolk, respectively, make two trips per week apiece, discharging and shipping freight at Columbia, Simmons Landing and Spruills Bridge, respectively, 5, 11, and 18 miles from the river mouth (US Army Corps of Engineers 1895:1364).

The Army Corps of Engineers Report also included a table of the amount and type of goods shipped on steamers to and from Columbia, Spruills Bridge and Simmons Landing for 1886-1894 (reproduced in Table I). This information was obtained from the Norfolk and Southern Railroad company agent at Spruills Bridge. The report notes that the table does not include the freight carried by sailing vessels which mainly consisted of bulk lumber and shingle shipments. It also notes that the mills of Tyrrell County shipped 5,200,000 shingles, 1,500,000 feet of cut lumber and 5,000,000 feet of lumber in the form of logs which were often towed elsewhere to be cut. Total shipping on the river, both coming and going, was estimated at 23,000 tons annually (US Army Corps of Engineers 1895:1365).

Table I. Estimate of shipments by steamer to and from the Scuppernong River 1886-1894. (US Army Corps of Engineers 1895:1365).

BOUND NORTH			
		1886	1894
From Spruills Bridge:			
Cotton	bales	1,500	900
Corn	bushels	10,828	12,500
Shingles	-	100,000	45,000
Eggs	crates	600	700
Truck	packages	-	3,000
Rice	bushels	11,900	-
Miscellaneous freight	tons	100	150
From Simmons Landing:			
Cotton	bales	450	350
From Columbia:			
Cotton	do	600	300
Potatoes	barrels	1,200	2,500
Truck	packages	-	500
Miscellaneous freight	tons	50	60
TOTAL BOUND NORTH			
Cotton	bales	2,500	1,550
Corn	bushels	10,828	12,500
Shingles	-	100,000	45,000
Eggs	crates	600	700
Truck	packages	-	3,500
Potatoes	barrels	1,200	2,500
Rice	bushels	11,900	-
Miscellaneous freight	tons	150	210
BOUND SOUTH			
<i>Miscellaneous merchandise and fertilizers</i>			
To Spruills Bridge	tons	520	475
To Simmons Landing	do	30	27
To Columbia	do	250	290
Total South Bound	do	800	792

It was the recommendation of the US Army Corps of Engineers at this time that no more improvements to navigation be made to the Scuppernong River (US Army Corps of Engineers 1895:1362,

1363). Based on this recommendation no improvements were made to the Scuppernong and no waterway development appears to have occurred until 1900. Between 1894 and 1900, a considerable increase in the amount of shipping on the Scuppernong brought about a reexamination of conditions along the river. As a result of this investigation in 1900 the US Army Corps of Engineers undertook a project to dredge a channel at the river's mouth 1,200 feet long, nine feet deep and 150 feet wide (US Army Corps of Engineers 1902:1542).

Shipping on the Scuppernong took a hit after 1908 when the Norfolk and Southern Railroad extended its tracks to Creswell and Columbia from Mackey's Ferry. By the end of 1910, Tyrrell County was shipping over 10,000,000 feet of lumber a year with half being carried by rail and the other half being transported by lumber barge, steamer, or the sailing vessels still in operation on the river. According to a 1917 report by the US Army Corps of Engineers, shipping on the Scuppernong between 1912 and 1916 fell from 26,653 tons in 1912 to 10,443 tons in 1916. However, the total value of freight increased from \$320,991 in 1912 to \$433,036 in 1916 (US Army Corps of Engineers 1917:552).

Consequently, in 1917 a plan was recommended for the further development of the Scuppernong River. The plan called for multiple channels at various destinations along the river. The mouth of the river received a channel 150 feet wide and 10 feet deep across the bar. A 100 foot wide and 10 foot deep channel to Columbia was dredged, and a 40 foot wide and 8 foot deep channel near Spruills Bridge was created (US Army Corps of Engineers 1917:552).

Even with the introduction of the Norfolk Southern rail line into Columbia, the Scuppernong River was still a main artery in the economic expansion that was taking place in Tyrrell County. This is borne out by statistics for 1916 cited by the US Army Corps of Engineers:

Commercial statistics.- The commerce for 1916 amounted to 10,443 tons, valued at \$433,036.20. Commerce to the extent of 8,440 tons, valued at \$372,083, passed over the improved sections, composed as follows: General merchandise, farm products, etc., carried by gasoline and sail boats drawing 3 to 5 feet, tonnage 4,436, valued at \$376,743.70. Fertilizer, lime, coal, and salt, handled by schooners and barges drawing from 6 to 8 feet, tonnage 4,447, valued at \$51,145. Timber to the amount of 1,560 tons, valued at \$5,147.50, was towed by tugs drawing 7 feet (US Army Corps of Engineers 1917:552).

In the decades following the conclusion of improvements to navigation along the Scuppernong in 1917, only routine maintenance projects occurred along the river. Indeed, by 1948 the channel at the mouth of the Scuppernong was so filled in that only vessels with a draft of six feet or less could cross the bar. By 1975, the US Army Corps of Engineers found that shoaling was once again becoming a nuisance on the river. Instead of being dredged, the Scuppernong River was buoyed with channel markers as it became more and more common to haul goods out of the county by trucks over the improving road system (Tyrrell County 1948, 1975). The next phase of development would occur over land – something which would have a dramatic affect on maritime transportation in Tyrrell County.

Expanding Transportation Networks

As the economic and cultural expansion of the United States, North Carolina, and Tyrrell County continued, it became an imperative for people and governments to embrace the technological innovations that increased the efficiency of the transportation of people and goods. The development of the railroad system and eventual extension into Tyrrell County made it possible for the quick and timely transport of people and goods from Tyrrell County to a multitude of locations in a significantly reduced time. The enhancements made to previous roads throughout the county and construction of new and improved roads in the county, largely due to the introduction and popularity of the automobile, created an environment in which people eventually did not have to rely on the river or rail for travel or shipping purposes. This development would have substantial impact on the future of transportation networks and landscape modifications within the county which would echo similar trends throughout the country.

Roads of Tyrrell County

As settlers, explorers, and farmers began to move away from settlements immediately adjacent to the rivers and waterways of the region they required a land-based system of trails and roads to enable convenient travel. While trails and tracks naturally formed, they were often primitive. For the construction of more substantial roads the colonial legislature gave the power for the construction and maintenance of roads to each individual county. Before the Revolution, for a road to be constructed a need had to be demonstrated – usually in the form of a petition requesting a particular road be built. If the petition for the road was viewed favorably, the county court would appoint a jury of twelve men to mark the route of the road after

which they would assess any resulting damage to property. After the jury completed their inquiry, the county court justices would appoint a number of taxable males along the route to serve as a road company to construct the road. One of their number would serve in the role of group overseer. The entire group of men was responsible for construction and maintenance of the road and any alterations they wanted to make (such as discontinuing roads or revitalizing former roads) had to be approved by the justices of the court. As Tyrrell County expanded, it was necessary to continue building roads to support the needs of the county's populace. To construct these roads, overseers were needed in increasing numbers. At least six men served as an overseer for the year 1735. By 1760 that number had more than doubled to 15. Overseers were appointed for yearlong terms, but could volunteer to continue with the position (Watson 2010:22-23).

The roads being constructed were needed to link landings and settlements with chapels, ferries, and other main roads. Between 1752 and 1775, Tyrrell County ordered the construction of at least 46 roads (at this time Tyrrell County consisted of modern day Tyrrell, Dare, Washington and part of Martin counties). A 1764 law required these roads to be 20 feet wide and clear of overhanging brush. Bridle roads (narrow paths) were also allowed after approval by the county (Watson 2010:23). This system of road construction did not change very much through the 19th century. By the late 19th century after a successful petition for a road, the county commissioners would order the sheriff and a jury of five landowners to mark the route of the proposed road. Often the communities petitioning for the proposed road would be the ones taxed to pay for the cost of its construction. At this time, it was still legal to appoint able-bodied males to work on the construction of the roads. Given the physical labor and time that was expected from most citizens over the course of the year, it was not uncommon for the county to sue citizens to compel them to fulfill their duty (Tyrrell County 1735-1741).

In 1881, the General Assembly partially alleviated Tyrrell County's labor shortage. They passed legislation permitting the county to call upon the state prisons for up to 100 convicts to build and repair the county highways. As soon as it was passed, the commissioners of Tyrrell County contacted the prison to obtain as many convicts as possible for road work. On at least two more occasions Tyrrell County sought out the services of convict labor for road construction and maintenance (Watson 2010:141).

The 20th century brought about many improvements both technological and organizational with regard to the road system of North Carolina. As already noted, historically, the roads of each county were the responsibility of that county and its commissioners. In 1901 the North Carolina General Assembly created the North Carolina State Highway Commission, which was projected to serve as an advisory agency

to the counties who still possessed most of the authority. The commission was disbanded in 1903 after two ineffectual years. During this period of the early 20th century, some things had changed for the Tyrrell County commissioners with regard to their management of the county roads. The county commissioners still maintained control over the local construction of roads but legislation passed in 1901 provided them with expanded powers to buy material and machinery for highway construction, to contract with individuals to maintain sections of roads, and to enact taxes needed for the construction of roads and highways. The commission also still had the power to enlist able-bodied men in the county to help in the construction of county roads. In 1905, the state legislature passed a motion to exempt those under the age of 21 from being called to work on road construction. Exemptions could also be obtained for medical reasons from a doctor as well as by paying a \$3-5 annual exemption fee (Watson 2010:189-190).

In 1915, over a decade after its disbanding, the state legislature again created the North Carolina State Highway Commission as a body to assist and advise the construction of new roads and highways within North Carolina. This new commission originally did not possess much funding or authority over the county commissioners but after the passing of the Federal-Aid Road Act of 1916 gained significant power. With the federal legislation in place, the commission became the agency by which federal and state funds meant for road construction and maintenance were dispersed to the requesting counties (Watson 2010:189).

In 1917, the North Carolina State Highway Commission requested that local county roads become part of the state highway system. The Tyrrell County commissioners submitted that the road from Columbia to Plymouth be included in any such transaction. Two years later, the State Highway Commission and the county entered into a contract where the highway commission agreed to pay for half the cost of maintaining three roads in Tyrrell County. As with most government agencies, the highway commission lacked funding for all their endeavors and frequently neglected Tyrrell County roads or borrowed the funds they needed from the county itself. A major problem with the county road commissioners of Tyrrell County was the constant turnover in members. To alleviate this disruption in 1923, the state legislature appointed a five-man highway commission for the county with each member of the commission representing the communities of Columbia, Gum Neck, Scuppernong, Alligator, and South Fork respectively (Watson 2010:191-192).

As the North Carolina State Highway Commission slowly took control of highway construction and maintenance, they agreed to pave the road between Columbia and the Washington County line

towards Plymouth in 1926. Once again, the commission lacked the funds to do so and borrowed \$156,000 from Tyrrell County to complete the paving process (Watson 2010:194).

Paving the roads of Columbia became increasingly important as automobiles grew common in the county. The first cars of the county were Studebakers and Buicks introduced to Tyrrell County between 1911 and 1912. These first cars were owned by prominent locals Arthur Walker, Charlie Roughton, Wallace Tatem, Tome Davenport, Dr. Joseph Spruill and Dr. Clarence Flowers. Prior to the completed paving of Columbia in 1927, the roads within the city were often so muddy that cars could not always safely pass through them (White 2004).

Between 1929 and 1931, in accordance with legislation passed by the state General Assembly, the county commissioners handed over responsibility of 38 miles of Tyrrell County primary roads to the North Carolina State Highway Commission. This included handling all funds for construction and maintenance, construction of all new roads, and maintenance of existing roads. By 1937 only 10 miles of paved roads existed within county borders and the State Highway Commission had still not acted to fulfill the promise of the North Carolina Highway Act which had been passed in 1921. This particular piece of legislation mandated that roads were to be constructed that would link the various county seats. To promote their needs, the counties of Tyrrell, Washington, Dare and Hyde counties formed the Southern Albemarle Association which attempted to promote the construction and improvement of roads within the region. The paving of US Highway 64 and NC Highway 94 finally occurred after the end of the Second World War but even then the Tyrrell County Commission feared that US 64 would be rerouted leading to severely reduced traffic through the Columbia area. Paving the rest of the county was a lengthy and time-consuming process but the majority of the county was paved by the time of the completion of the US 64 Columbia Bridge in 1957 (Watson 2010:193).

The Railroad

When the Norfolk and Southern Railroad constructed its new line from Norfolk through Elizabeth City and Hertford to Edenton in 1881, a new era of transportation began in eastern North Carolina. The availability of a rail line made it possible for those communities on the route to quickly get their goods to markets at a reasonable time and enabled people to travel longer distances in a shorter period of time.

When used in conjunction with the steamboats which visited areas such as Tyrrell County that had no rail line (some vessels, such as the 120-ton screw steamer *Mary E. Roberts* (1873) and the 162-ton mail boat

Martha E. Dickerman (1883) were owned by the Norfolk and Southern Railroad) the whole of North Carolina became more accessible. For the residents of Tyrrell County the closest rail stations connected to steamboat routes were found at Plymouth, NC to the west, or the Knotts Island station (MacKay Island), located on Knotts Island in Currituck County, a significant distance north (and not far from the Virginia border) (Figure I4). Even at the end of the 19th-century, steamboats were the only efficient way to connect to rail lines (US Treasury Department 1898:266, 1912:240; Watson 2010:144).

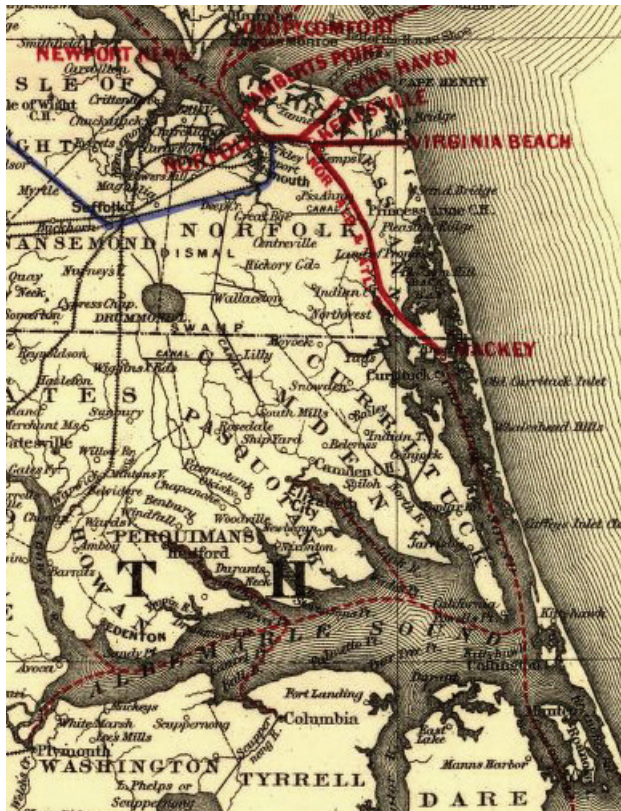


Figure I4. Portion of *Maps Showing the Norfolk, Albemarle & Atlantic Railroad and its Connections*, by G.W. & C.B. Colton & Company 1887 illustrating connection of NC steamboat routes to Norfolk-area rail lines. Note that “Mackey” should actually read “MacKay.” (Library of Congress).

From 1908 onwards, the Norfolk and Southern Railroad Company gradually reduced the need to take the steamers to these rail hubs when it finished extending its track to Mackeys Ferry and then on through to Columbia. This section of track left Mackeys Ferry and rumbled through to Columbia via the settlements of Beasley, Scuppernong, Creswell, Woodley, and eventually the Cooper rail stations. Rail service was greatly enhanced in 1910 when a trestle bridge across the Albemarle Sound was completed that erased the need to ferry rail cars across the sound (Spruill 2009:7). Also in 1910, the Norfolk and Southern Railroad Company was reorganized as the Norfolk Southern Railroad Company (Watson 2010:198).

The extension of rail services into Columbia and the rest of Tyrrell County (Figure I5) caused a shift in transportation of goods and people from the steamboats of the Scuppernong to the railroad company. By 1910, Tyrrell County was shipping out over 10,000,000 feet of cut lumber to help fuel national expansion, with roughly half of that lumber being transported by the Norfolk Southern Railroad Company (Angley 1986:10-12; Watson 2010:198-199). The train out of Columbia could also ship produce to northern markets much quicker than steamers could.



Figure 15. Railroad stations of Norfolk Southern in eastern North Carolina as shown in detail of a Norfolk Southern Timetable Map, 1934. (Norfolk Southern 1934).

The existence of a sole railroad company with no competition led to complaints about altered schedules and arbitrarily high rates. By 1933, the Norfolk Southern company threatened to quit running its twice daily run from Mackeys Ferry to Columbia as the economic woes of the Great Depression combined with their fluctuating rates were not lucrative enough for the company. Intense opposition by the Tyrrell County commissioners and rulings by the Interstate Commerce Commission and the North Carolina Utilities Commission kept the track open (Tyrrell County 1935). In 1948, however, the Norfolk Southern Railroad Company finally abandoned the Columbia station and withdrew to Creswell in Washington County (Tyrrell County Minutes 1948). By this time an improved highway system and larger dependence on automobiles, buses, and trucking eased the loss of the railroad (Watson 2010:199).

Conclusion

As time has progressed, and as populations and economic trends have undulated, the transportation networks that fueled the development of Tyrrell County have changed drastically. As early colonists faced an unmodified landscape, boats and ships formed the core of the use of arable land and resource cultivation and exploitation. While much diminished in number from their heyday, watercraft are still employed in the commercial and recreational use of the Scuppernong River--a continuation of hundreds of years of tradition.

With increasing population and the growth of commerce, the residents of Tyrrell County engaged in ferry and bridge construction. These structures allowed the populace to cross natural boundaries in a cost-effective and safe manner and connected them to other transportation networks such as roads.

Before significant investment was made in roads, the canals of Tyrrell County were the largest scale works commenced in order to expand trade. These drastically altered the drainage of swampland and created new waterways—forever altering the nature of human interactions in the area. Canals also markedly increased the agricultural and industrial strength of the region—and soon steamboats met sailing vessels at landings and wharves. As the rates of visitation became more common, and as ships grew bigger, additional artificial improvements to the river in the form of dredged channels and the installation of aids to navigation made journeys further up river with more substantial cargoes possible.

This increase in shipping led to an increase in production that convinced the Norfolk Southern Railroad Company to extend its line to Columbia from Mackeys Ferry. The presence of a rail line facilitated the transportation of goods and people into an ever-expanding national transportation network. This undermined the efficiency of water transportation, and served as the death knell of maritime transport's regional dominance. Rail too would soon face a threat – as truck and automobile use pushed the growth of a reliable road system into the county, and toward the commercial hub of Tyrrell County's wheel – the town of Columbia.

THE DEVELOPMENT OF COLUMBIA

Introduction

The people of Tyrrell County have been transporting goods via waterways for centuries. When the earliest settlers came to North Carolina they recognized the value of the Albemarle Sound and connecting rivers and waterways, and settlements sprang up along shorelines and banks. The importance of these waterways for the towns steadily grew until just a few decades ago when larger coastal ports as well as air and ground traffic became much more prevalent. For Tyrrell County's transportation networks, all roads, inevitably, led to the town of Columbia. As the veins of a body move blood to its heart, the health of the trade carried along the rivers, the trails, the railroads, and the highways of Tyrrell County invariably dictated the nature of development there. In many ways, the evolution of a town's waterfront, and the work conducted to keep access leading to it clear, are intrinsically linked; hence changing waterfronts may be seen as a microcosm of the economic development of a surrounding region. This chapter outlines the development of the Town of Columbia and the symbiotic relationship between the development of the town and the alteration of the Scuppernong River. Throughout history, we see how waterway modification changed the nature of trade to Columbia, but also how economic transformations there may also be seen to have precipitated such activities. Of particular importance was the role of the US Army Corps of Engineers and their activities along the Scuppernong River in the 19th and 20th centuries.

The town of Columbia, North Carolina is located on the east bank of the Scuppernong River about three miles from the mouth of the river, which enters into Bull Bay on the Albemarle Sound. From the mouth to the head of navigation is a little over 23 miles. The Scuppernong River is not subject to extensive tidal changes and is instead regulated by winds that have been known to create fluctuations of water depth up to five feet. The navigable waters of the Scuppernong run from Bull Bay up to Creswell and Spruill's Bridge. The river itself is dark and murky from the tannins leached into the waters from the juniper trees that line the banks and the swamps adjacent to the river. These conditions make locating and avoiding submerged hazards such as trees, stumps, wrecks, and sandbars very difficult. Obstructions such as these were a major detriment to shipping (and therefore the development of the waterfront) unless actions were taken to correct them.

The present-day town of Columbia is in the approximate location of the Indian village of Mequopen, reflecting the suitability of the region for habitation due to easy access to food and other natural resources, and the importance of the Scuppernong River as a connection to the rest of Albemarle Sound (Angley 1986:1). With the arrival of European people and their settlement of the area, it is no surprise that these same advantageous factors led to eventual development of the area as the location of a major settlement then known as Shallop's Landing – which would eventually become Columbia.

The first landowners established plantations along the Scuppernong as early as 1697. Immediately afterwards there are records of shipping along the Scuppernong, as the eighty-three ton ship *Albemarle* was said to have been, “lying in the River Coscoopernung” (an early version of the name Scuppernong) (Angley 1986:2). The 1738 Wimble Map shows us the location of a major anchorage and a series of settlements and landings along the Scuppernong River at this time (Figure 16).

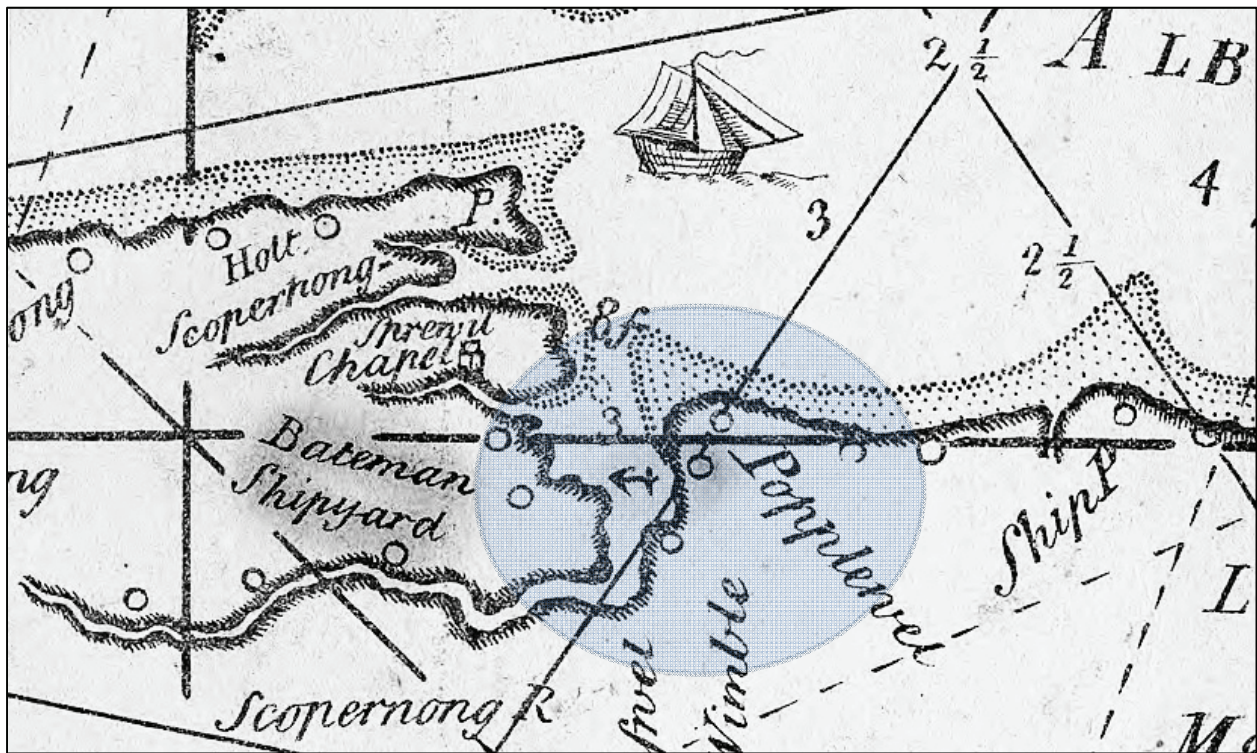


Figure 16. Detail of the 1738 Wimble Map showing the location of an anchorage and a series of landings/settlements in the vicinity of present-day Columbia. (courtesy North Carolina Dept. of Archives and History).

As noted in the previous chapter, in the mid 1700s there were a number of ferries that operated along the length of the river, and no records of any bridges joining the east and west banks of the Scuppernong River are found until the 1760s. During this period the main exports were lumber, rice, and wheat, which were

shipped down from the upper reaches of the Scuppernong to where sailing vessels then exported the goods to other ports and out of the region. At this time, most vessels in operation on the Scuppernong were shallow drafted since the bar at the mouth of the river was approximately 5 feet deep (Angley 1986:3).

In 1789, Shallop's Landing became Elizabeth Town and quickly grew into the deepest harbor on the Scuppernong. In 1799, Elizabeth Town (with a total of six households) became the seat of a then much larger Tyrrell County. Finally in 1810, the town was renamed Columbia both in honor of Christopher Columbus and to avoid confusion with nearby Elizabeth City to the north (in then Bladen County). By 1815, Columbia was a maritime center and was shipping wheat and other goods as far away as New York City (Angley 1986:6; McNaughton 2008:18).

By the time of the renaming, there is evidence of a drawbridge spanning the Scuppernong at Columbia. The bridge landed in Columbia at what is now Bridge Street with a draw span of 24 feet. This distance would have been sufficient for the size of the ships that were working on the Scuppernong at the time when the mouth was still only at a depth of 6 feet. By the beginning of the American Civil War, both sail and steamer traffic had increased to a point that there were regular steamer runs from Columbia to Elizabeth City; however the majority of traffic was still smaller sailing ships, canoes, periaugers, and rafts (Angley 1986:6).

Similar to the rest of the southern states, during the Reconstruction Period, Columbia experienced economic decline after the war. As early as 1868 the county magistrates began lobbying for a new bridge but the funds were not available even as late as 1870. The location of the bridge was moved from Bridge Street to Main Street as the center of commerce in Columbia had shifted. The exact date of the reconstruction of the bridge is unknown, but it was at least before 1875 because by that time the county was already paying for bridge repairs. By 1875 the bridge crossing was limited to a slow walk with non-pedestrian traffic directed to adjacent ferries. As of 1881 there were still only 11 buildings on the banks of the Scuppernong and these were mostly businesses near the deepwater port at the foot of Main Street (McNaughton 2008:56). In 1887, there was yet another project to repair the bridge by replacing the existing frame with heart of cypress covered in heart of pine and finally using galvanized spikes as fasteners for a total cost of \$823.30 (a sum which would be over 2 million dollars in today's economy). General maintenance during the period was from \$28.50 to \$200 (or in today's economy \$700 to \$5,000), all of which the county paid for (Watson 2010:142-143).

There is no evidence that a replacement drawbridge was built until 1927 despite the first automobile arriving in Columbia in 1911. The 1927 bridge was opened to huge fanfare and set about a

renewed age for the town. Prior to the 1927 bridge, a number of ferries were in operation, most notably the ferry operated by Captain Bob Knight, which landed at 206 North Water Street and ran from 1903 until he retired shortly after the new bridge was built at the foot of Main Street (McNaughton 2008:57). A footbridge was operational for at least 50 years prior to the new bridge being built. Then with the arrival of the Norfolk and Southern Railroad in 1908, a railroad bridge was constructed a few hundred yards south of the footbridge. The footbridge, however, appeared to be hastily built and required constant upkeep which was under contract from the county (Watson 2010:197-198).

The first half of the 20th century proved to be a most prosperous period for Columbia. The railroad and shipping industries saw the greatest volume of goods being exported from Columbia at this time, spurred on due to the First and Second World Wars and the war efforts needed to support them. This is also the time during which the Army Corps of Engineers conducted the majority of its dredging operations aside from the initial river modifications made in the last 25 years of the 19th century. In 1948, the railroad left Columbia and 10 years later a new highway style bridge was built in the same location that skirted Columbia and directed traffic around Columbia instead of over the drawbridge and down Main Street. In 1992, the old drawbridge was removed and the land at the base of Main Street and along Water Street began a redevelopment process. Then in 2004, the current US Highway 64 Bridge was repaired and modified to its current state (Watson 2010:197-200).

The US Army Corps of Engineers and River Modification

Prior to 1874, the residents petitioned the United States Government for help in improving the navigability of the Scuppernong River. Congress passed the Navigability Action in 1874 which called for a channel 60 to 70 feet wide at the mouth of the river across the bar. The plan also rounded out eight sharp bends in the upper portion of the river close to Spruill's Bridge. A shoal was also removed three miles south of the bridge and a turning basin was dredged out at the bridge so that larger vessels could have a faster turnaround and less poling would be required (US Army Corps of Engineers 1902:263). The upper portion of the river was also obstructed by snags, logs, overhanging growth, and fallen trees, all of which were removed prior to beginning the work. This part of the project began in 1879 and 206 logs and stumps were removed along with 4,800 cubic yards of spoil from the mouth. The following two years saw spoil removed from the Devil's Elbow and Rattlesnake Bend areas of the river. The project ran from 1879 to 1885 with the exception of 1883, due to the lack of funds. The rest of the changes were made in the

1885-1886 dredge season (Schermerhorn 1889:490). A map from 1878, by Captain C.B. Phillips, was modified by F.A Hinman, Captain of the Engineers in 1885, to show the changes made by the Army Corps of Engineers along the Scuppernong River (see Figure 17).

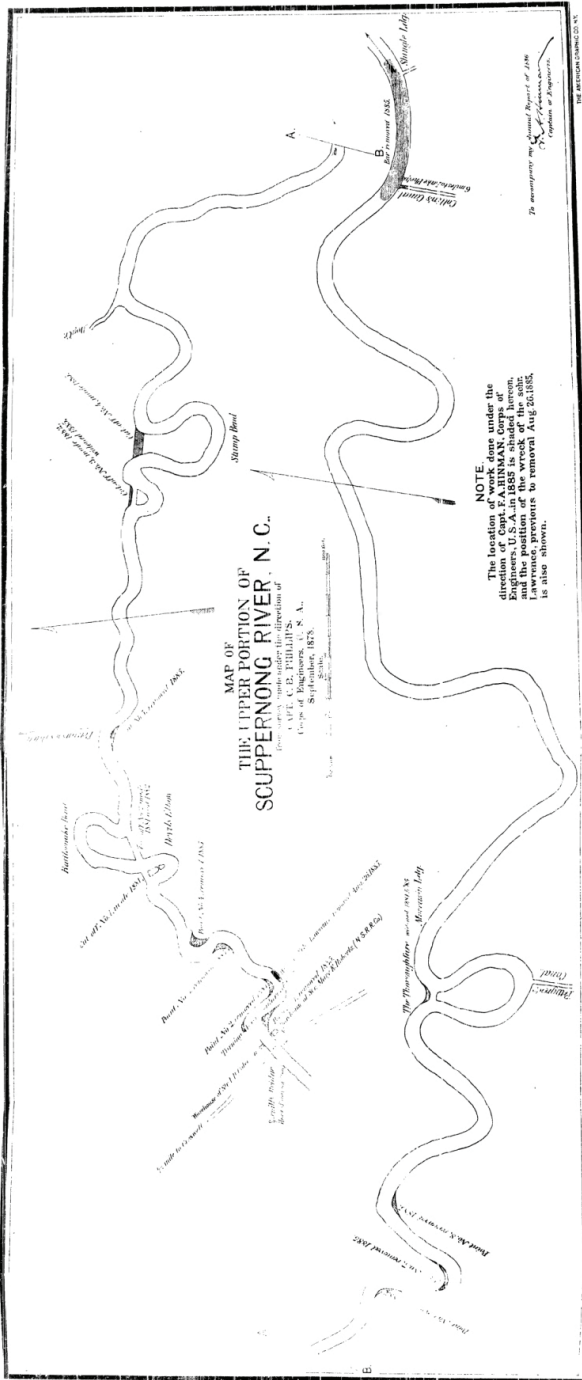


Figure 17. 1885 Scuppernong River Modification Map. (US Army Corps of Engineers 1886:968).

The map also mentions the removal of the wreck of the schooner *Lawrence*, a navigational hazard, in August of 1885. The aforementioned wrecks of *Marguerite* and *Estelle Randall* are also wrecks that at one time or another could have impeded navigation on the Scuppernong. The location of *Marguerite* is unknown but the burning of *Estelle Randall* in 1910 just off the wharf would have caused any number of problems for ships coming into port.

During the four years of the dredging project \$8,000 (\$200,000 in the 2011 economy adjusted for inflation) was expended. By the late 19th century the bar had already shoaled over again. The project was reopened in 1900 with the goals of a 150 foot wide channel at 9 feet deep, 1200 feet through the bar. The project was amended in 1902 to increase the length of the channel to 3,400 feet. By 1907, the 1902 project was at about 70% completed with a depth of 9 feet at the mouth and at least 7 feet from Columbia up to Spruill's Bridge. By this point the current project had cost \$14,969.97 or in today's currency, close to \$344,287 (US Army Corps of Engineers 1907:263).

In 1912, a new plan was devised to widen the channel to 150 feet across and 10 feet deep at the mouth of the river across the bar. From there to Columbia, the depth was to remain 10 feet deep with a channel of at least 100 feet across. Beyond Columbia, the river was to be at least 40 feet wide and 8 feet deep up to Spruill's Bridge. However, the 1913 evaluation of the Scuppernong River for dredge maintenance found that the mouth of the river had once again silted to a depth of less than 7 feet and general maintenance dredging was conducted in 1915 and 1918 (US Army Corps of Engineers 1918:583). Between these years the annual allowance for work on the Scuppernong was around \$2,500 or about \$43,000 given inflation.

The project was evaluated again in 1921 and the cost of maintaining the waterway was adjusted to \$46,000 or \$589,720 in 2011 (US Army Corps of Engineers 1921:612). However, only \$15,000 was allotted for the work in 1921 so the remainder of the project would have to be completed in the forthcoming years. During the year, operations by the US hoister (snag remover) *Contentnea* removed 12 trees, 39 snags, 5 stumps, 8 logs, 14 sawn logs, and 2 cords of sunken brush from the channel. From the banks, 299 trees, 17 stumps, and 188 cords of brush were removed. Also the US hydraulic dredge *Croatan* removed 65,297 cubic yards of spoil from the channel cuts. Only minor maintenance operations were conducted during the second half of the 1920s. The work order was revised in 1925 to \$59,000, topping out at over \$760,000 adjusting for today's inflation. Only \$2,500 was allotted for general upkeep in 1928, just one year before the Great Depression. When the depression hit the country, government upkeep of rivers appears to have taken a back seat to more important issues as there was no work or expenditures during 1929. The years 1930-1932 saw amounts of \$9,000, \$4,000, and then only \$114.76 expended on a survey of the river, respectively (US Army Corps of Engineers 1932:521). The report also acknowledges that there were no available funds for scheduled projects in the following year but that \$5,000 could be spent on upkeep during the 1934 fiscal year (amounting to \$84,000 today), which was a drastic decline from the adjusted spending on previous projects.

In the lead up to the Second World War, the increasing demand for lumber and food helped Columbia climb out of the Great Depression. During the years of the conflict, demand for these goods to supply the country and troops persisted and grew. Arguably, these exports were readily available thanks to the numerous dredging projects which kept the Scuppernong open for trade from the 1870s onwards. However, US Army Corps projects appear to have transitioned to waterway maintenance, with the Scuppernong attracting less funds due to a decrease in water traffic immediately before the USA's entry

into war (from 1937 to 1940 the Scuppernong River saw only \$500 worth of work). During this same time the amount of wharf space had decreased from over 1,300 feet to only 300 feet.

After the Second World War, US Army Corps efforts for the Scuppernong River remained at the same level as before. The dredging operation scheduled for 1949 would cost \$15,000 (\$141,000 in 2011) (US Army Corps of Engineers 1949:705). However, when the hydraulic dredge *Marion* conducted the dredge operations the following year the cost amounted to \$21,980.92 (nearly \$7,000 over budget). In 1950, \$10,000 was allotted to help cover any overages. However, this is still only a fraction of the amounts spent in previous years. It would also prove to be the final major project for improving (and not just maintaining) the Scuppernong River.

Beyond 1950, funds began to be diverted to flood control projects and away from the navigability of the Scuppernong River. The 1959 Army Corps Report lists no commerce taking place on the Scuppernong for the entire decade (US Army Corps of Engineers 1959:377). By 1975 the Army Corps of Engineers had suspended nearly all operations on the Scuppernong and opted for marking the slow moving channel instead of dredging. Between 1967 and 1987 the Army Corps of Engineers were analyzing the possibility of dredging between Spruill's Bridge and Maul's Creek, a total distance of only 3.8 miles. The project, however, never seems to have left the planning stage even after yearly reanalysis costing upwards of \$100,000 (\$200,000 in 2011) over the course of the planning stages. In 1987, the Army Corps suspended the plan to dredge the Scuppernong River and on 20 April 1988 the project was de-authorized pursuant to the continuing authority provided the Chief of Engineers under Section 205 of the 1948 Flood Control Act, as amended with a running total of expenditures listed at \$234,032 (US Army Corps of Engineers 1992:6-30).

When the Scuppernong River project was finally decommissioned in 1988, the commercial traffic along the Scuppernong was nearly nonexistent and no longer required annual upkeep as most of the traffic was recreational and the slow waters kept the channel rather stable. The river today from Columbia to Bull Bay has a depth of around 10 to 12 feet, a depth more than adequate for the sail and gas-powered craft that cruise the Scuppernong River. However, in the early industrial years of Columbia (approximately from 1874 to 1948), the larger vessels that were carrying goods from Spruill's Bridge to Columbia then on to other parts of the country had a much deeper draft (especially when laden). It is therefore necessary to look at the impact that the United States Army Corps of Engineers dredging operations had on the economy and growth of Columbia. While there are certainly other outside factors, the main factors that influence

this association are the arrival and departure of the railroad, the Great Depression, and the three major American wars, including the American Civil War, and the First and Second World Wars.

Scuppernong River Trade

Shipping records for the earliest years are scarce, and many of the earliest records are not a part of the statistics used by the US Army Corps of Engineers prior to about 1900. An 1894 study of the Scuppernong by US Army Corps of Engineers (1895:1360-1365), however, notes the lasting improvements that dredging activities from 1879 to 1885 had on river commerce:

Work of improvement carried on by the United States from 1879 to 1885, inclusive, resulted in such a decided change for the better that steamers are now able to run 13 miles from Spruill's Bridge to Columbia in two and one-half hours, and have trouble only at the sharp bend immediately below the turning basin at Spruill's Bridge (US Army Corps of Engineers 1895:1363).

However, the study also found that the Scuppernong had quickly deteriorated at the bar and was once again limiting traffic on the river; therefore the economy of Tyrrell County. At the time, at least two steamers were making bi-weekly trips, unloading and loading goods from Columbia to Spruill's Bridge (US Army Corps of Engineers 1895:1364). From 1894 to 1899, the traffic on the Scuppernong had more than doubled in terms of tonnage. In fact the US Army Corps stated in 1900 that:

It is estimated that the present commerce is more than double that of 1894, the part handled by steamer alone having increased from 2,000 tons to 38,000 tons in 1899-1900. The increase is general and covers farm products, miscellaneous freight, and lumber.

The development of this country depends mainly on the successful navigation of this river, and two regular steamers are now making tri-weekly trips, while barges carry upward of 15,000 feet of manufactured lumber and 5,000,000 shingles annually, in addition to perhaps \$50,000 worth of juniper logs. Two new lumber mills have recently been built and the juniper log industry is rapidly growing, so that a successful increase of the present commerce may be expected in the near future.

This business is all handicapped by lack of water on the bar at the mouth, the present depth of which is not more than 6 feet in a very narrow channel, which is liable to decrease 2 feet or more during the prevalence of westerly winds . . . Ample relief can be obtained at comparatively small cost by dredging the desired channel, and such work will place this river on an equal footing with other streams in the vicinity (US Army Corps of Engineers 1901:1541-1542).

The action of dredging the Scuppernong can be seen relative to the shipping records from 1902 to 1931 in terms of general tonnage and value (Table 2 and Figure I8). It is especially necessary to look at the time period before the Norfolk and Southern Railroad arrived in 1908. In the six years following a major dredging operation, statistics show a rise in the tonnage shipped from Columbia (with the exception of a short drop in 1906). Reports do not mention the effect that dredging had on the freight costs but do typically mention whether or not an increase in traffic resulted from the dredging operation. However, the industry responded well in 1907 with an increase of close to 24,000 tons. This can most likely be explained by the railroad shipping materials for construction, or lumber companies shipping timber. The timber industry at this time was experiencing a significant boom and that was one of the reasons that the railroad was stopping in Columbia in the first place.

Year	Tons	Value	Passengers
1902	34,306		
1903	46,213		
1904	51,473	\$ 2,539,250.00	
1905	55,137	\$ 1,857,477.00	
1906	44,909	\$ 1,585,175.00	
1907	68,630	\$ 1,660,814.00	
1908	12,515	\$ 215,200.00	
1909	20,588	\$ 556,401.00	
1910	29,194	\$ 308,767.00	
1911	37,658	\$ 349,092.00	
1912	26,653	\$ 320,991.00	
1913	30,073	\$ 382,622.00	
1914	27,224	\$ 355,370.00	
1915	9,448	\$ 389,478.00	
1916	10,443	\$ 433,036.00	
1917	9,065	\$ 679,829.00	
1918	20,734	\$ 1,001,477.00	
1919	38,860	\$ 1,348,781.00	
1920	7,102	\$ 678,276.00	500
1921	11,969	\$ 384,130.00	500
1922			
1923			
1924			
1925			
1926			
1927	4,566	\$ 134,572.00	137
1928	5,295	\$ 162,068.00	75
1929	7,532	\$ 112,999.00	150
1930	15,731	\$ 318,713.00	200
1931	7,840	\$ 172,952.00	

Table 2. Comparative statement of traffic (shipping statistics) 1902-1921, 1927-1931. Empty cells indicate no data. (US Army Corps of Engineers 1922:476, 1932).

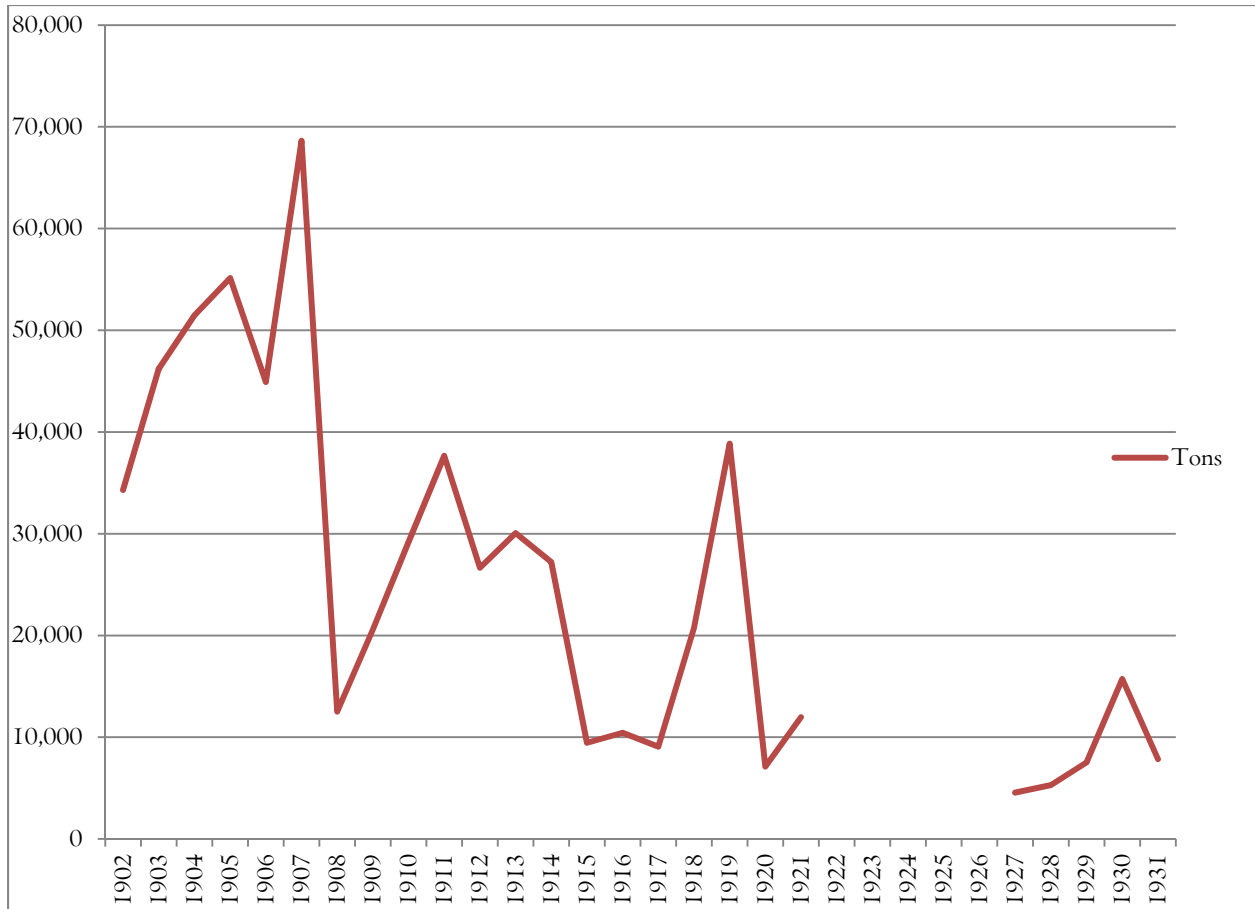


Figure 18. Graph depicting comparative statement of traffic (tons) 1902-1921, 1927-1931. (US Army Corps of Engineers 1922:476, 1932).

The arrival of the Norfolk and Southern railroad, in addition to a small financial crisis in 1908 severely decreased river traffic that year but the following year the industry rebounded largely due to the amount of lumber coming out of the area. By 1910 over 10,000,000 feet of lumber was going through Columbia, half of which was leaving by rail and the other half by the standard lumber barges widely used in the shallow waters of the Albemarle Sound and Scuppernong River. While the shipping industry never reached pre-railroad levels again, there was a marked high in traffic during the First World War where 20,734 tons and 38,880 tons were shipped out in 1918 and 1919 respectively. Traffic also typically increased following the dredging operations of the time, specifically in 1902 and 1912.

The first twenty years of the 20th century may have been the most active for the Columbia waterfront but it was also the time where economic decline commences. For example, by 1921 the US Army Corps reported there were 18 Columbia-registered vessels operating on the Scuppernong (Figure 19) (US Army Corps of Engineers 1921:478). As of this year the majority of watercraft were still sailing vessels, but small shallow-draft steamers had become the main source of goods transport because they were

not at the mercy of favorable winds in order to arrive at their destination. Despite a trend of trade decline, this period would still be the most active for the shipping industry on the Scuppernong until the early 1930s.

Classes.	American.	Net registered tonnage.
Registered:		
Steamers.....	5	199
Gasoline.....	6	68
Sail.....	7	143
Total.....	18	410

Number of passengers transported during the year, about 600.

Six to eight flats or lighters, towed by small motor boats, and five large scows, towed by steamboats, operated on the river during the year.

Figure 19. Extract from US Army Corps vessel classification report showing shipping statistics for the year 1921. (US Army Corps of Engineers I921:478).

Army Corps of Engineers Reports also state that the wharf space during this time was around 1,500 feet until at the latest 1932. By 1938, the wharf space had declined to 300 feet (US Army Corps of Engineers 1938:491). This rapid deterioration in the span of eight years is due to a number of lumber mill closures and the resulting loss of jobs. This is also the beginning of the shift in Columbia from the industrial era to the commercial era. Around the same time, the tonnage being shipped from Columbia fell sharply as well, which would be expected with the loss of a major industry.

These trends also coincide with population statistics. In 1870 the population of Columbia was just under 100 people; by 1890 the population had reached 209. By 1896 that had risen to 250. Only four years later, in 1900, Columbia had reached 382 inhabitants. Then by 1930 the population had more than doubled to 864 (mirroring the lumber boom). Growth had slowed by 1960 as the industry dwindled and nearly crested 1100 people. However, by 1990 with the loss of the remainder of the lumber industry the population sunk to 615 inhabitants, and finally rebounded to 819 by 2000. Also, during the 1940s and 1950s the majority of the businesses shifted from the waterfront to Main Street.

With the lost wharf space in the 1930s, this was a logical shift. With the exception of a few smaller lumber mills that would be in operation until after the boom that came with the Second World War, Columbia's industrial development essentially halted. The evolution from waterways to rail and finally to roads had begun in Columbia, and the loss of the waterfront industries freed up the real estate for

other commercial enterprises and the public and governmental buildings that are now located along the waterfront. It is also notable in these statistics that tonnage and wharf space declined before the railroad left Columbia in 1948. It is around this time that large corporate farms in the Midwest became more prevalent and the shipment of lumber from North Carolina began to be taken by road instead of by a water route.

The total tonnage of shipping visiting Columbia, population, and wharf space revolved around the economic vitality of its lumber mills, which were themselves linked closely to the railroad. The departure of these mills and then the railroad in 1948 left much of the waterfront in disarray—it would be years until it recovered. 1948 also marked the largest shift in the identity of the Columbia waterfront. The loss of the working waterfront became a major driving force in altering the nature of business with commercial enterprises moving from the lumber industry to a more diverse small-business economy along Main Street. Prior to this time many of the buildings on the waterfront were warehouses for the storage of goods to be shipped or fish houses. From that point forward, the businesses along the waterfront either folded or shifted toward the service industry. The locations where these industrial businesses once stood became restaurants, cafes, grocery stores, a shoe shop, a general store, gas stations, and even a bowling alley, pool hall, and dance hall. As a last ditch effort the Army Corps of Engineers dredged the bar at the mouth of the river which had silted to 6 feet in 1948. This could have been a response to the railroad leaving and a theory that waterborne travel would make a return to Columbia but by this time the road transportation system was too well established and proved better for moving goods to inland and coastal markets.

Conclusion

Throughout the 114 years of Army Corps of Engineer modification to the Scuppernong River a significant amount of money was spent. Records show that \$234,000 was spent during the full length of the project but this did not account for inflation. Utilizing inflation records and statistics the actual cost if all of the work were to be completed in 2011 would be over \$2,011,007. This total is for the major dredging and maintenance operations and does not include many of the small surveys that were ongoing over the course of the project.

This evidence shows that the dredging operations, especially prior to 1930, had a great impact on maintaining the shipping industry in Columbia. However, inevitably all government actions are monetarily driven and after the loss of the majority of the wharf space at Columbia it was no longer advantageous for

the Army Corps of Engineers to consistently keep the Scuppernong River in a fully dredged state. When the tonnage rates dropped below 5,000 tons it was no longer feasible to keep paying for a river that was no longer shipping the volume of goods that it once did. By 1950 the volume of goods was negligible, and the only traffic on the Scuppernong appears to have been smaller recreational vessels or small working/fishing boats, neither of which have a draft of more than a few feet and can easily cross the bar at the mouth of the river. After 1950 the dredging operations were few and far between and by 1975 they were suspended altogether in favor of merely marking the deepest channel. Finally in 1988, when the project was fully suspended and would only be modified if there were a danger of flooding, the Scuppernong had ceased to be an avenue of commerce for eastern North Carolina. However, the waterfront in Columbia has evolved to utilize the river in different ways (US Army Corps of Engineers 1950-1992).

From 1950 to the 1970s the waterfront of Columbia continued to deteriorate. Many of the older buildings rusted and fell into disrepair. In the late 1970s a revival of sorts took place and the lot next to present-day Riverview was excavated and a new marina was built for the residents of Columbia. With this action the waterfront began its transformation to where it is today. Many of the industrial buildings were torn down and replaced with community buildings. The lot where Branning Lumber once stood is now the location of the wildlife and visitor's center of Columbia. The old gas station at the end of Main Street was converted into a municipal office. Riverview was restored and turned into a residential building along with the building of Pigeon House just a few hundred feet down Water Street to the north. The last remaining industrial building, an old warehouse and oil storage business, stands next to Pigeon House and is currently sitting unused. The area west of Columbia, across the Scuppernong, still has a single warehouse standing but the rest of the area has been turned into a park (MacNaughton 2008:85-86, 163, 168, 169, 177, 183, 197-203).

The waterfront of Columbia, North Carolina is forever bonded to the Scuppernong River, not just in proximity but also economically. Today, while Columbia is not as dependant on the river as it once was, it does celebrate the Scuppernong River in many ways. The most obvious is of course the Scuppernong River Festival that has been held each year since 1992 and brings people from all over the region. In 1995, the river walk boardwalk was finished, bringing more people closer to the water than ever before. The mile long dock functions as a way to educate visitors about the river and its past, as well as exemplify the beauty of the Scuppernong River.

A HISTORY OF BOAT AND SHIP CONSTRUCTION IN TYRRELL COUNTY

Introduction

The ubiquitous mix of land and water in the coastal plain of eastern North Carolina resulted in the natural and practical utilization of sounds, estuaries, and rivers for transportation since prehistory. As discussed in previous chapters, and reinforced by historian Michael Alford, the diversity of conditions and uses for boats led to an equal diversity of boat types. For most rural counties in the eastern plains, boats were the most convenient and sometimes only means of travel until the construction of modern roads and bridges; in some areas this came as late as the 1930s (Alford 1990:xiii).

The advent of railroad construction in the late 1800s did not replace the reliance on boats; boats were in fact used to connect railroads with most of the coast. Tyrrell County was no exception to this rule. Never achieving a population greater than 5,500 people (Weeden 1990:10-12), even those who did not depend on the water to make their living utilized this abundant resource for travel. The “dialects” (Alford 1990:xiii) of boatbuilding traditions that exist throughout eastern North Carolina can still be found in a few places today. Tyrrell County boats reflected the regional style influenced by the most prominent body of water to its coast, the Albemarle Sound.

Little historical evidence exists regarding any major shipyards or boatbuilding operations in Tyrrell County, yet a local knowledge and tradition of building existed among individuals to whom boats played an integral part of their economic wellbeing. The few undocumented examples of surviving Albemarle Sound vessels combined with oral histories of local builders, fishermen, and descendants of builders may illuminate the past of these once ubiquitous vessels and their use in Tyrrell County. Who built the boats and ships used in Tyrrell County? What types of vessels prowled the waters of the Scuppernong, Little Alligator, Alligator Rivers and the Albemarle Sound? Who used these vessels and to what ends? A broader survey of regional boatbuilding practices in eastern North Carolina with specific focus on the types of vessels used in Tyrrell County will answer questions about a vanished practice that is now relegated to hobby builders and a minority of specialized builders.

The Boats of the Region

A review of the many boat types and their descriptions and date of use in Tyrrell County, the Albemarle Sound, and the Scuppernong, Little Alligator, and Alligator Rivers follows. Unfortunately, little evidence

of ship-building and boat-building practices survived in the historical record, though ample scholarship on vessel types is available. Through researchers such as Howard Chapelle (n.d., 1951), Michael Alford (1990, 1992, 1997), and William Fleetwood (1995) make it possible to glean information about vessels that operated on the Albemarle Sound, many of which would have also plied the waters of the Scuppernong, Little Alligator, and Alligator Rivers.

Kunners and Periaugers

Possibly inspired by Native American dugout log canoes, or a combination of Huguenot and other Old World log boat traditions, early Carolina settlers began building single-log dugout canoes in the 1600s. Usually a single log was burned and the wood shaped to form. Sometimes, where rot set in, a single log could be split, or two smaller logs shaped, and formed together to fashion a canoe. After the Civil War, the use of log boat canoes, called “kunners” by locals, fell out of use as sharpies and shad boats became popular. Some kunners and periaugers persisted due to their rugged nature, long use life and the sheer number constructed over two centuries (Alford 1990:29-30, 1991:191).

The elusive periauger (see Figure 20), supposedly of South Carolinian origin, was as prominent and ubiquitous along the estuaries of the Albemarle Sound as kunners and skiffs, and usually of 4 or 5 tons. Periaugers were a vernacular craft similar to European expanded log boats. These likewise fell out of use in the late 19th-century, both from the deforestation of giant cypress trees used for constructing the hull of kunners and periaugers and due to the popularization of sharpies and shad boats. For trade requiring more than 5 tons cargo, merchants and plantations used sloops and schooners (Alford 1990:31, 1992:191; Fleetwood 1995:31).

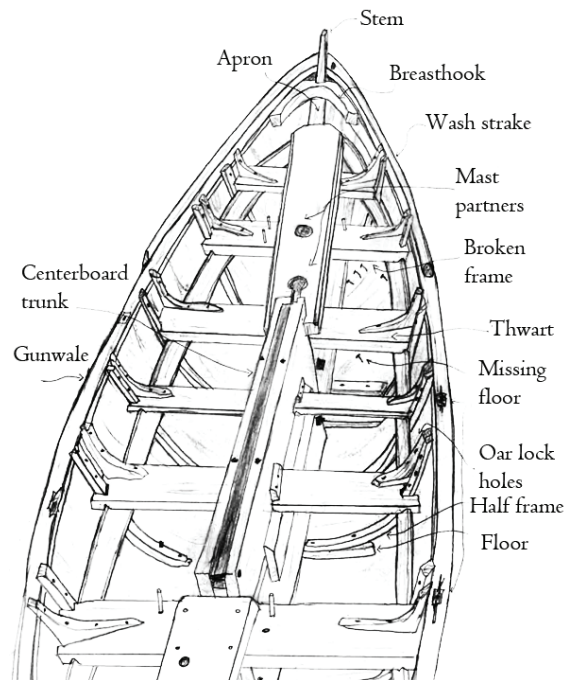


Figure 20. Construction details of *Bessie*, a 19th century periauger from South Carolina. (Drawing by Dan Brown, 2010).

Flat-Bottom Boats and Skiffs

Other very common vessel types include flat-bottom boats and skiffs; these remain popular for the shoal waters of the sounds. Flat-bottom boats with hard chines (a term referring to a sharp angle in a boat hull where there is little rounding) were cheap and easy to build and navigated the unpredictable shoals of eastern North Carolina rivers and sounds with ease. Typically the sides of the vessel were joined at the stem and transom, then transverse planked along the bottom, providing a stiff hard chine (see Figure 21) (Alford 1990:2-4). Skiffs remain popular with fishermen and boaters today, albeit they are usually constructed of aluminum or fiberglass, and petrol powered.

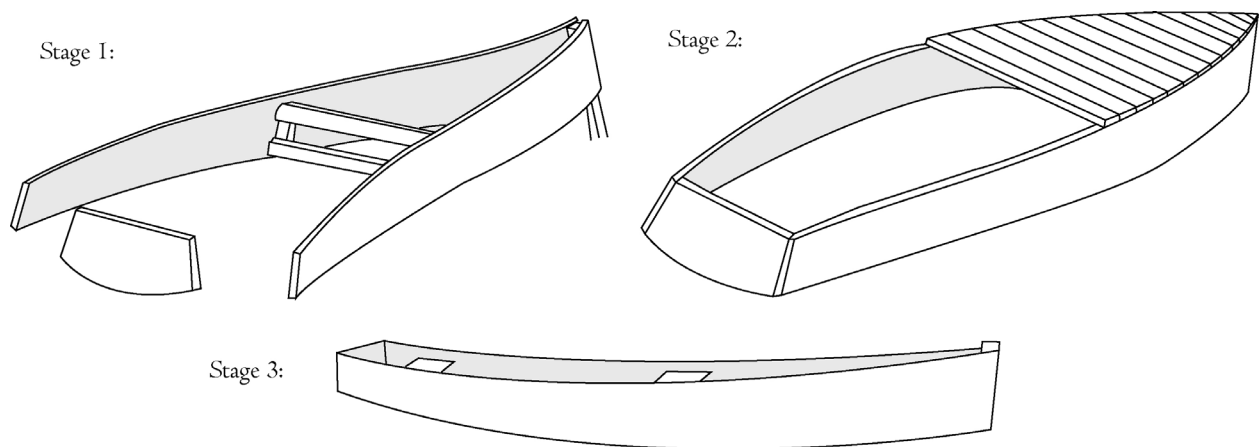


Figure 21. Typical flat-bottom skiff construction. (By Nathan Richards after Alford 1990:3).

Following the Civil War, shad boats and sharpies began to replace periaugers and kunnors as the work horses of the Albemarle region. Both have distinct geographic origins, one being of New England derivation, the other a truly local creation. Flat-bottom boats continue to populate the waters of North Carolina to this day.

North Carolina Sharpies

Sharpies were flat-bottomed skiffs over 20 feet in length, some reaching up to 65 feet. Possibly originating from New York in the mid 18th-century, they gained popularity in Connecticut during the 1870s. Commonly known as New Haven sharpies (see Figure 22), they first appear in the New England fishery. They employed multiple one- and two-masted rig types, including leg-of-mutton and gaff rigs (Chapelle 1951:104).

Sharpies made their first appearance in the waters of North Carolina in the mid-1870s. They were introduced by George Ives, a Connecticut man who relocated to Morehead City in 1874. Ives sought to convince Beaufort fishermen of the sailing qualities of the New Haven sharpie (Alford 1997:63-64).



Figure 22. A New Haven sharpie (center) on the Quinnipiac River, New Haven, Connecticut, c. 1900. (Chapelle n.d.:137).

In 1876, Ives defeated the renowned Morehead City boat *Sunny Side*, a “keel boat...deep, sharp, and 28ft. long overall” (Alford 1997:64), with his New England built sharpie *Lucia* of 34 feet in a popularized race on the Outer Banks. As Alford notes, in 1876 the magazine *Boat and Stream* publicized Ives’s victory:

An interesting and exciting race for a purse of \$50 was sailed on Thursday, July 6th, in Core Sound, between the *Lucia* a Fair Haven sharpie belonging to Mr. Ives, of Beaufort, and the *Sunny Side*, a clinker built, open boat, sloop rigged, owned and sailed by Dank Bell, of Morehead City... The *Sunny Side* has never been beaten before by an open boat, but *Lucia* beat her handsomely. The race was from Harker’s Point, in Core Sound, to the point of Shackleford, opposite Fort Macon, Beaufort Harbor, and was a dead beat to windward, in rough water, strong wind, and against ebb-tide; wind southwest (Alford 1997:64).

By 1879 there were more than 500 sharpies in North Carolina (Alford 1997:64).

New England fishermen primarily used sharpies in the oyster industry; North Carolinian fishermen also used sharpies in the oyster fishery and as run-boats in the seine fishery. Thus, while fair-curved shad boats were the primary workhorse of the Albemarle Sound, flat-hulled sharpies were a common vessel used

as run-boats or for general transportation. Part of the sharpie's popularity was its low build cost, making it accessible to fishermen. Their economical appeal lay in their simple construction (Alford 1997:65-66).

Due to their significant amount of sail (see Figure 23), sharpies required greater longitudinal strength, provided by a built-up keelson structure typically made of three planks (Chapelle 1951:112; Alford 1997:65). A centerboard (another feature useful in shoal waters) prevented these timbers from running the length of the center of the vessel, but this was compensated for with the fortification of chine logs and the strong timbers making up the sharpie's sides. Bulkheads and thwarts served as compression members and the foremast tie rod made up the tension member (Chapelle

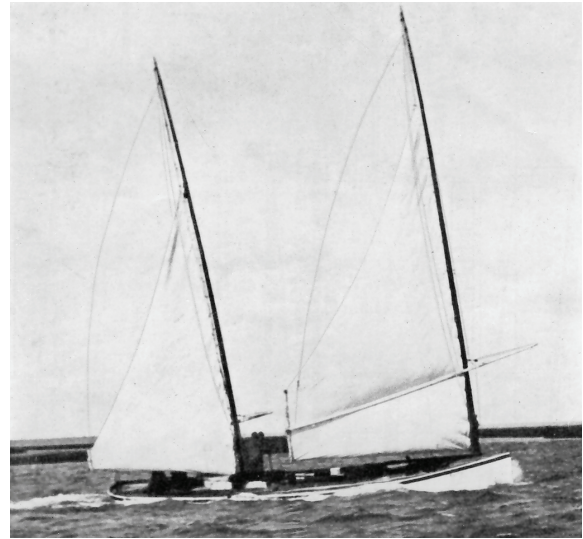


Figure 23. Carolina Sharpie under sail c.1885. (Photo by Wirth Munroe, from Chapelle n.d.:141).

1951:112). With gasoline engines appearing in the early 20th century, most fishermen had converted their sharpies into motor trawlers or small freighters. A major hurricane in 1933 devastated many of the remaining sailing sharpies, and gasoline engines became the standard of the day. Their low cost and easy construction made them accessible to a significant number of the population of the "modest agrarian-maritime society in eastern North Carolina" (Alford 1997:71).

Photographs and plans of Carolina sharpies from the 1890s through the 1930s exist (Alford 1997:70), unfortunately, a lack of surviving sharpie hulls leaves critical analysis of their construction challenging. While construction plans give an approximate idea of how these vessels were built, field experience has shown that vessels are rarely built exactly according to plan and undergo many modifications throughout their life use.

Albemarle Sound Boats

Once as common on the water as Carolina sharpies, the shad boat is of a distinctly native East Carolinian design. So much a symbol of North Carolina's past that in 1987 the General Assembly declared the Albemarle Sound boat the official State Historical Boat of North Carolina. According to small boat expert

Michael Alford (1990:18), “round bottom boats are the most expensive and complicated kinds of boats to build.” The curvature of the frames makes timber selection more critical and their construction allows the builder to craft a specific shape suitable for a variety of different environments. Of the dozens of small American work boats that employ a round-bottom hull, none is as distinctly unique to North Carolina as the Albemarle Sound Boat, also called a shad boat or seine boat, due to its use in the shad fisheries of the Albemarle and Pamlico Sounds (Chapelle 1951:257; Alford 1990:18). Chapelle (1951:257) compares Albemarle Sound boats to the New Jersey beach skiffs of Atlantic City, but carvel-planked instead of lapstrake.

Alford (1990:18) attributes the development of the Albemarle Sound boats to a combination of an increased work load faced by fishermen and the eventual thinning out of cypress trees large enough for sizable dugouts and periaugers. It is possible the high cost of hardwoods during Reconstruction also influenced the design of the shad boat. George Washington Creef, Sr. (Figure 24), a Roanoke Island builder, is credited with designing and building the first shad boats in the 1870s. Utilizing the compass timber from the roots of white cedar trees, Creef formed “gracefully curving frames” giving the vessel the shape suited to the needs of Albemarle Sound fishermen. Creef’s boat was rapidly adopted by other builders from Currituck to Ocracoke, and Nags Head to Engelhard (Figure 25). The construction devised by Creef married some dugout building techniques with conventional plank-on-frame methods (Alford 1990:18-19). Shad boats had a great reputation for speed and seaworthiness, the latter an important factor in the unpredictable weather encountered by fishermen in the large sounds (Chapelle 1951:261).

Aside from being an original design born on the Outer Banks of North Carolina, the Albemarle Sound boat was known for its distinguished rig. Shad boats employed a sprit-sail-and-jib rig with a topsail. This additional sail, not found on any other American work boats, is likely what provided the additional speed that shad boats were known for. Differing from the usually flat sterns of deadrise boats, shad boats had graceful heart-shaped sterns. The quarters were deep for carrying heavy weights for the seine nets and the hull was un-decked (Chapelle 1951:257-258). Chapelle gives great detail on their construction. About their framing he writes,

The frames, spaced about 12 inches on centers, were about 1 ½ inches in siding and molding and were single futtocks cut off on the plank keel and not overlapping there. Floors were cut of plank and were fastened between frames and clear of them with independent fastenings. The washboards were supported by small knees fastened to the frame heads and to the topside planking (Chapelle 1951:258).



Figure 24. George Washington Creef, Sr. in front of his workshop with two shad boats ca. 1905-1915. (Durwood Barbour Collection of NC Postcards, UNC-Chapel Hill).



Figure 25. Shad boat once belonging to Ray and Walter Davenport now located in Plymouth, NC. (Photo by Dan Brown, 2010).

There was usually no rabbet on the keel, the outboard edges beveled to take the garboards. The stem was usually comprised of an apron and stem with a cutwater added after the hull was planked. The process of construction suggests shad boats were built over molds, frames placed after the planking was secured to a mold or master frames. Usually four to six thwarts provided transverse support, with the mast thwart kneed to the gunwale (Chapelle 1951:258).

Deadrise Boats, V-Shaped, and Round Chine Shad Boats

Before the end of the 19th-century, the round hull had been combined with the economical V-shaped construction to form “round chine” shad boats (Alford 1990:21). This colloquial term distinguishes the V-shaped bow of shad boats from typical flat-bottom hard chine boats, hence “round chine;” neither fully round nor hard chine, somewhere in between (see Figure 26). Another variation was *deadrise*, or *V-bottom* boats, popular for use in the sounds. These vessels were always planked longitudinally with a narrow V-shaped bow and a flat or shallow V-shaped stern. These were cheaper alternatives to round bottom boats built for gasoline engines, but after 1908 most remaining shad boats were converted to engine power. By the 1920s they were becoming too expensive to build due to their round hull and diminishing construction materials (mainly white cedar) (Alford 1990:11, 20-21).



Figure 26. Deadrise, V-bottom, or “round chine” shad boat now located at Plymouth, NC. (Photo by Dan Brown, 2010).

Unlike its counterpart, the sharpie, a few shad boats are still around. Scattered among museums in Plymouth, Manteo, and Beaufort, a handful of Albemarle Sound boats remain; some are tucked away in private sheds, sitting in yards, or even used as flower beds.

Mail Boats

A short-lived variation of the shad boat was the “mail boat,” which were in essence, Carolina rumrunners. In response to the restrictions of prohibition in the 1930s, and later in reaction to the collapse of the timber industry in Tyrrell and Hyde Counties, former lumber workers often turned to making illegal alcohol in the form of corn whiskey. Shad boat builders made a lucrative business supplying boats to bootleggers. “Mail boats” were typical of shad boat construction but usually longer, sleeker, furnished with more powerful engines and often decked, or furnished with a cabin (Alford 1990:22). Men who used to run shipments of cedar shingles ran boat loads of moonshine instead. The term mail boat was used by the builders and owners of these boats in a loose attempt at evading detection by federal authorities who prowled the rivers for these vessels (Alford 1990:21-22; Tate 2000:20,27-28).

A common technique used by bootleggers to evade capture was to string a line through corked whiskey jugs and throw them overboard to be later retrieved by hook. In a similar instance, a moonshiner by the name of Pinner managed to evade the confiscation of a 100 gallon order of corn whiskey on route to Maryland by sailboat. With no time to run a line through so many jugs, Pinner and crew crammed the bottles in canvas bags and threw them overboard. After being searched by federal officers, they retrieved the majority of their shipment (Tate 2000:20,27-28). Such resourcefulness reflects the flexible economic practices of Albemarle Sound culture.

Sloops and Schooners

There is little literature devoted to the history of larger sailing craft on the Scuppernong River. While Wilson Angley (1986:2-3) refers to a shipyard being located on the Scuppernong River, he makes little reference to the vessel types built there. Angley (1986:6) suggests that small sailing vessels, “flats, canoes, periaugers, and rafts” comprised the majority of traffic on the Scuppernong River from the early 18th up through the mid-19th century with the arrival of steamboats. Angley (1986) refers to sloops, schooners, and ships on a number of occasions, though these are all types of rigs, not distinguishing the presence of a

specific ship- or boat-building tradition. Very little else exists regarding the production of larger vessels in Tyrrell County or along its waters. Research by expert state historians, discussed below, may yield more clues to this activity.

Steamboats

By the 1830s, steamboats operated on the estuaries of the Albemarle Sound, including the Scuppernong River (Anglely 1986:6). No known steamboats were built in Tyrrell County, though they remained popular in most trades other than the fisheries. Small flat-bottom steamboats plied the shallower backwaters of rivers, while larger steam vessels (such as the aforementioned *Estelle Randall*, Figure 8) carried cargo, mail, and functioned as passenger ferries within the sounds.

The Shipyards and Shipwrights of Tyrrell County

The above discussion regarding the ship types operating in Albemarle Sound invariably covers the vessel types that dominated trade within Tyrrell County, but it does not adequately address the subject of the construction of watercraft on the banks of the Scuppernong River and on the coastlines of adjacent Bull Bay. In order to ascertain this, a more detailed examination of local and genealogical publications (such as White and Hare 2004:5-6), as well as oral histories, augment the work of noted boat historians Howard Irving Chapelle, Michael B. Alford, and W. Fleetwood, Jr.

Tyrrell County Shipbuilders

Few available sources refer to ships specifically built in Tyrrell County. Wimble's 1738 map shows the "Bateman Shipyard" on the north bank of the Scuppernong River, just west of Columbia (Figure 27). Similarly, a 1730 land patent makes reference to a shipyard on the river owned by "Batemon" (Hofmann 1979:237). While nothing else is currently known about this shipyard, historical research indicates that small vessels used for fishing, shipping cedar shingles, transportation and trade are known to have operated on the Scuppernong, Bull Bay, and the Albemarle Sound (Anglely 1986:2).



Figure 27. Detail of the 1738 Wimble Map showing the approximate location of the “Bateman Shipyard.” (courtesy North Carolina Dept. of Archives and History).

A database collated by William N. Still and Richard Stephenson (2009) indicates that at least 50 ships were built in Columbia or Tyrrell County between the years 1737 and 1908 (undoubtedly, there are others which escaped the historical record). Other than the observation that the vast majority of them were schooner-rigged, little is known about their construction. Table 3 displays the general statistics of Tyrrell County built vessels in Still and Stephenson’s *North Carolina Shipbuilding Database* (2009). The largest recorded vessel, *Josiah Collins* of 259 tons, does not reveal any other dimensions. Working on an assumption regarding shipbuilding practices and a basic formula worked out by 16th century English shipwrights that length times beam times draft divided by 100 ($L \times B \times D / 100$) will determine the tonnage of a vessel suggests *Collins* had a probable length of 96 feet, a beam of 32 feet, and a draft of around eight to nine feet. This would have been a fairly large vessel at its time of construction.

Of these vessels, 39 (78%) were built in the 19th century, averaging 50 tons; the largest listed at 114 tons, the smallest just over 20 tons (Still and Stephenson 2009). The average rate of vessels per year for the 49 year period is 0.82 per year, or one vessel every 13-14 months (see Figure 28). The total tonnage of these vessels is 2,034.56 (Still and Stephenson 2009).

Table 3. List of vessels built in Columbia or Tyrrell County, 1737-1908. (Data from Still and Stephenson 2009).

Ship name	Location	Year built	Tons	Length	Breadth	Draft	Rig
<i>St. Andrew</i>	Tyrrell County	1737	25.00	-	-	-	Schooner
<i>Betsy</i>	Tyrrell County	1793	49.00	-	-	-	Sloop
<i>Earl</i>	Tyrrell County	1793	66.00	-	-	-	Schooner
<i>Josiah Collins</i>	Tyrrell County	1795	259.00	-	-	-	Ship
<i>Mary</i>	Tyrrell County	1795	107.00	-	-	-	Brig
<i>Caleb</i>	Tyrrell County	1797	42.00	-	-	-	Schooner
<i>Hero</i>	Tyrrell County	1806	23.67	38.00	13.83	4.75	Schooner
Unknown	Tyrrell County	1806	23.17	38.00	13.83	4.75	Schooner
<i>Mohawk</i>	Tyrrell County	1810	45.58	50.75	17.66	6.10	Schooner
<i>Olive Branch</i>	Tyrrell County	1812	32.20	45.00	15.00	5.66	Schooner
<i>John Little</i>	Tyrrell County	1814	20.31	42.08	13.33	4.25	Schooner
<i>Resolution</i>	Tyrrell County	1814	20.00	41.66	17.58	4.08	Schooner
<i>Esther</i>	Tyrrell County	1815	54.78	54.00	18.75	6.50	Sloop
<i>Fort Landing</i>	Tyrrell County	1815	36.63	49.17	16.00	5.50	Schooner
<i>George Washington</i>	Tyrrell County	1815	54.79	54.00	18.75	6.00	Sloop
<i>Antelope</i>	Tyrrell County	1816	23.19	45.00	15.00	4.00	Schooner
<i>Coaster</i>	Tyrrell County	1816	20.72	42.66	14.08	4.08	Schooner
<i>Polly And Nancy</i>	Tyrrell County	1816	22.00	44.66	15.42	4.00	Schooner
<i>Union</i>	Tyrrell County	1816	28.55	48.75	16.00	4.33	Schooner
<i>Younger Son</i>	Tyrrell County	1816	25.58	42.66	15.82	4.25	Schooner
<i>Sally Ann</i>	Tyrrell County	1817	33.39	49.12	16.42	4.92	Schooner
<i>Agenora</i>	Columbia	1826	105.00				Schooner
<i>Angenora</i>	Columbia	1826	105.00	59.00	22.00	7.00	Schooner
<i>Polly And Nancy</i>	Tyrrell County	1831	25.00	45.00	15.00	4.25	Schooner
<i>George W. Rodgers</i>	Tyrrell County	1834	47.00	66.00	16.00	5.00	Schooner
<i>Mary</i>	Tyrrell County	1834	47.00	66.00	16.00	5.00	Schooner
<i>Mary Caroline</i>	Tyrrell County	1834	47.00	66.00	16.00	5.00	Schooner
<i>Virginia Hoges</i>	Tyrrell County	1835	55.00	62.00	19.00	5.30	Schooner
<i>Eliza Ann Walker</i>	Tyrrell County	1841	39.00	44.00	17.00	5.00	Schooner
<i>General Harrison</i>	Tyrrell County	1841	26.00	45.00	14.00	4.00	Schooner
<i>S.S. Simmons</i>	Tyrrell County	1844	31.00	48.00	17.00	4.00	Sloop
<i>Ann Halsey</i>	Tyrrell County	1847	46.00	59.00	17.00	5.00	Schooner
<i>Lawrence</i>	Columbia	1849	47.00	66.00	20.00	4.00	Schooner
<i>H.E. Lewis</i>	Tyrrell County	1850	46.00	62.00	17.00	4.92	Schooner
<i>Mary Louisa</i>	Tyrrell County	1850	34.00	55.00	16.00	4.00	Schooner
<i>John L. Jones</i>	Columbia	1850	41.00	-	-	-	Schooner
<i>L. Jones</i>	Columbia	1850	41.00	60.00	17.00	4.00	Schooner
<i>Ann C. Davenport</i>	Tyrrell County	1851	48.00	64.00	17.00	4.00	Schooner
<i>James F. Davenport</i>	Columbia	1851	91.00	67.00	21.00	7.00	Schooner
<i>Hugh Chisholm</i>	Columbia	1852	65.00	78.00	17.00	5.00	Schooner
<i>Caroline V. Casey</i>	Tyrrell County	1853	122.00	-	-	-	Schooner
<i>Mary C. Cramner</i>	Columbia	1853	60.00	72.00	17.00	4.42	Schooner
<i>Charles M. Mcleese</i>	Tyrrell County	1854	112.00	81.00	24.00	6.00	Schooner
<i>Chas. Mcleese</i>	Tyrrell County	1854	113.00	82.00	24.00	7.00	Schooner
<i>Susan Jane</i>	Columbia	1854	114.00	-	-	-	Schooner
<i>Joseph Ramsey</i>	Tyrrell County	1855	63.00	80.00	17.00	4.92	Schooner
<i>Annie Lois</i>	Columbia	1908	9.00	31.00	7.80	7.00	Gas Screw
<i>Columbia</i>	Columbia	1908	6.00	26.00	8.00	6.60	Gas Screw
<i>Hatton</i>	Columbia	Unknown	15.00	-	-	-	Schooner
<i>Joe Ann</i>	Columbia	Unknown	7.00		-	-	Sloop

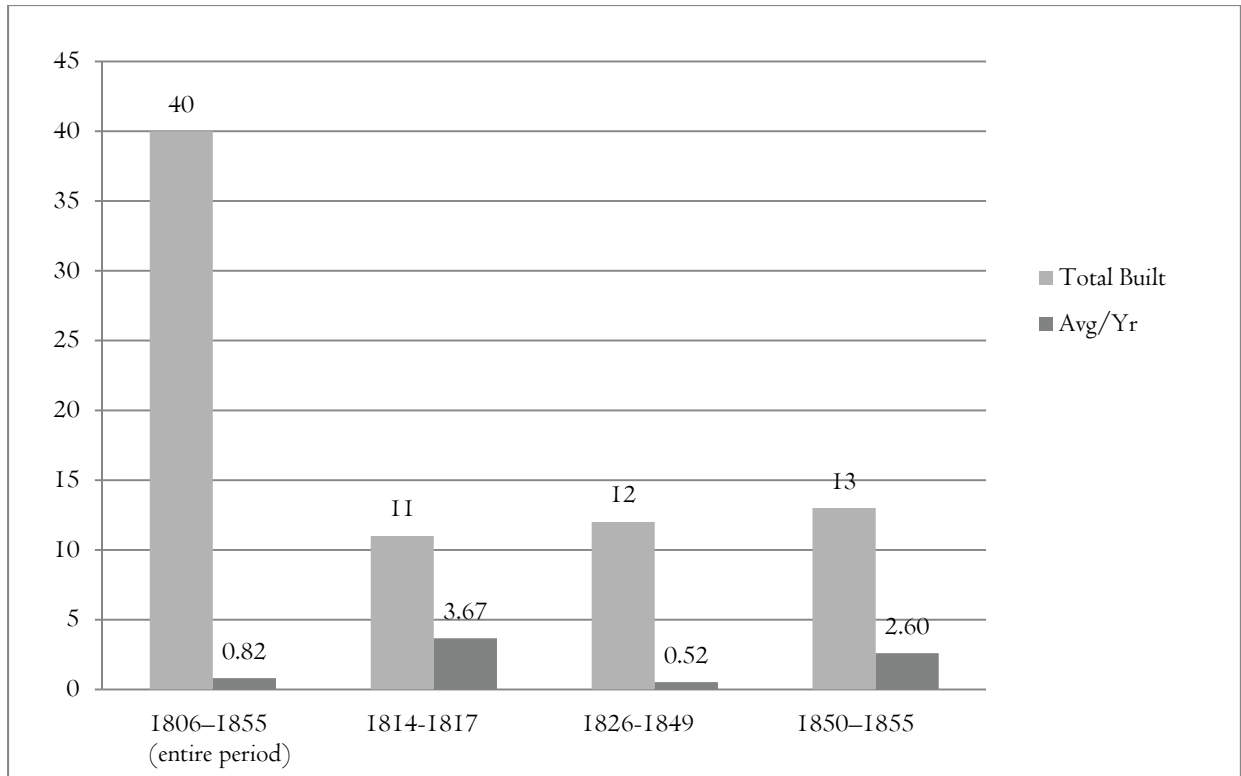


Figure 28. Graph depicting ships built per year in Tyrrell County over the period 1806 and 1855. (Data from Still and Stephenson 2009).

Examining building output (Figure 28), dimensions (Figure 29), tonnages (Figure 30), and length-to-breadth ratios over the period 1814-1855, three distinct trends are noticeable. The first concerns a peak in building between 1814 and 1817. These vessels averaged 30 tons and 46 feet in length with a draft of four to five feet. With 11 vessels built in just three years, the rate per annum is 3.67. The largest of these is close to the overall average at 54 tons and 54 feet in length. The boom in building likely reflects the national surge in exports after the lifting of the trade embargo with Britain following the end of the War of 1812.

The second trend reflects a slowdown in the 23 years between 1826 and 1849. During this period only 12 vessels are built, averaging 0.52 or one vessel every two years. These vessels are larger than those constructed during the three year peak, averaging 51 tons, a length of 57 feet, a beam of 17 feet and a draught near five feet deep. This rate of production suggests a slow but steady demand for larger vessels reflecting Tyrrell County's small population and corresponding economic role in eastern North Carolina maritime trade.

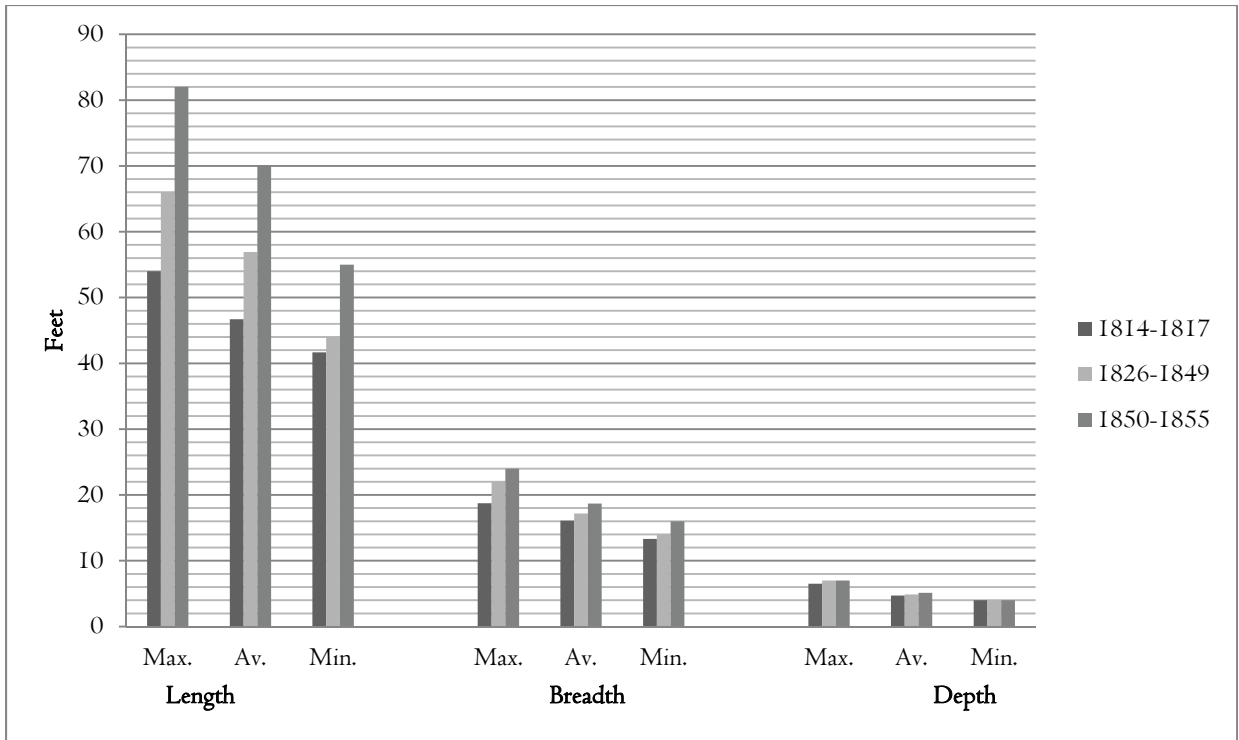


Figure 29. Graph depicting the maximum, average, and minimum lengths, breadths, and depths (respectively) of ships built in Tyrrell County, 1814-1855) (Data from Still and Stephenson 2009).

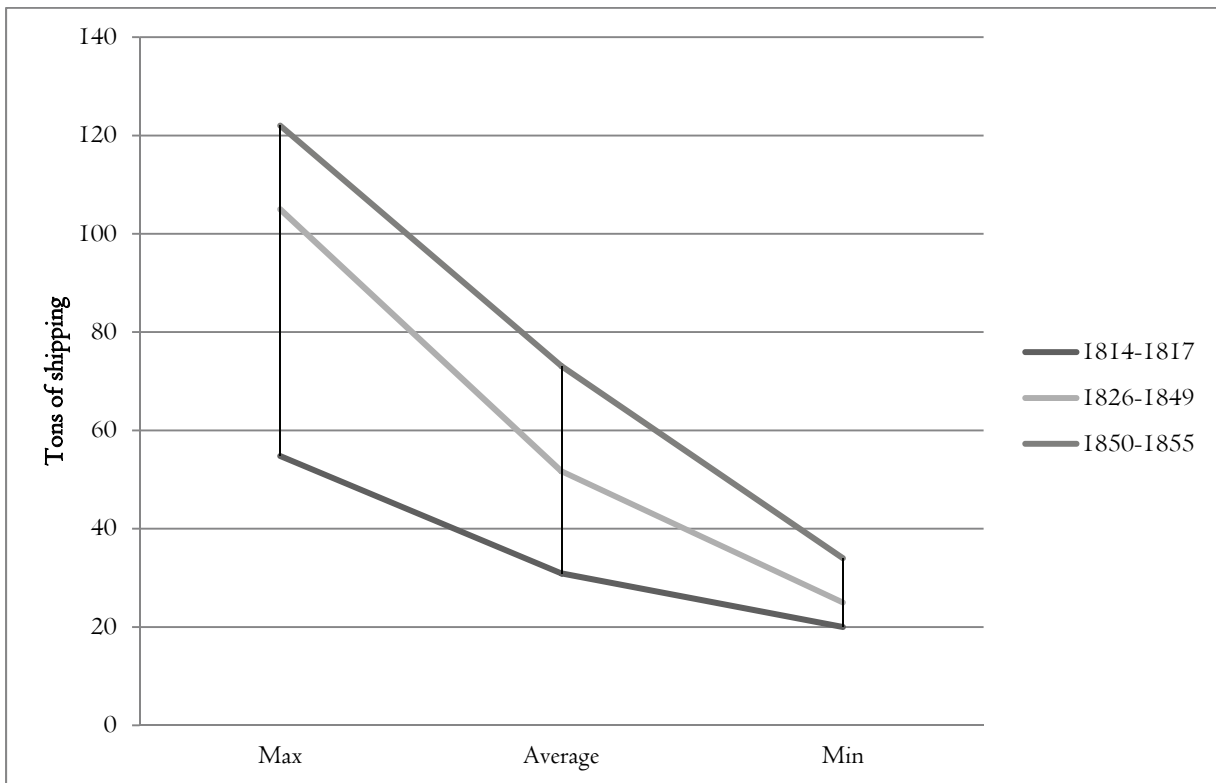


Figure 30. Graph maximum, average, and minimum tonnages of individual ships built in Tyrrell County (1814-1855). (Data from Still and Stephenson 2009).

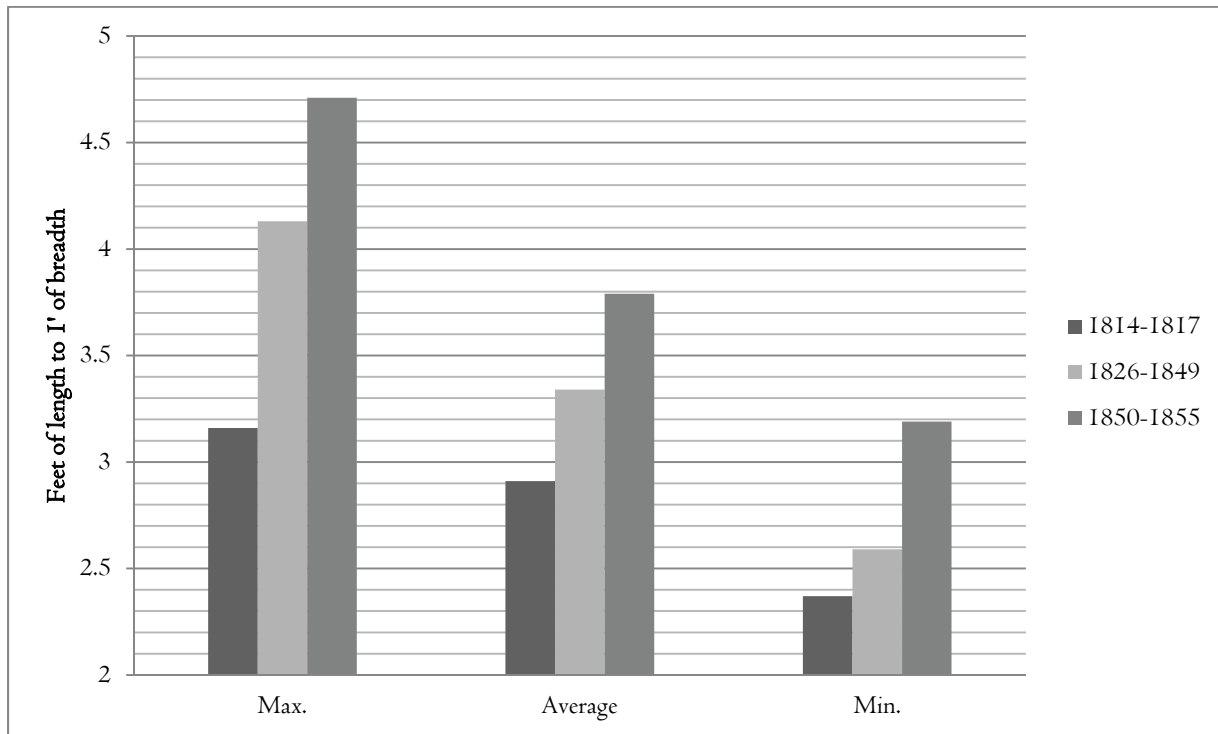


Figure 3I. Maximum, average, and minimum length to breadth ratios of ships built in Tyrrell County, 1814-1855. (Data from Still and Stephenson 2009).

The last trend coincides with a second boom beginning in 1850. In five years 13 vessels were built, averaging 2.6 per year. These ships were much larger, averaging 73 tons, a length of 70 feet, a beam of 18 feet and a consistent draught of five feet. This constant draught reflects the shallow channels of the Scuppernong and the Albemarle Sound, whereas the increased size suggests the steady creep of inflation and devaluation of exports from the region required greater production of commodities and larger vessels by which to ship them. There is a terminus to the activity in 1855 with no further vessels built in the area until 1908; this likely reflects the severely depressed status of the southern states as a whole after the American Civil War, Tyrrell County and eastern North Carolina (not a very wealthy region prior to the war) being no exception.

Historical research reveals little evidence of professional shipyards and shipwrights, though obviously some building in Tyrrell County did occur. The earliest currently recorded ship was the 25-ton schooner *St. Andrew*, build in the county in 1737, only eight years after the county was formed (Still and Stephenson 2009). This is not surprising given the gradual settlement along the Scuppernong and Alligator Rivers. The fledgling shipbuilding industry in the region reflects North Carolina's very slow economic

growth in the 18th century. Much scholarship is dedicated to New England and Chesapeake builders (see for example Brewington 1937); Fleetwood (1995) wrote an exhaustive study of South Carolina, Georgia and Florida, but little has been written about the early days of North Carolina's shipyards and shipwrights. This is perhaps because there is little mention in colonial records.

As early as the 1680s, North Carolina vessels engaged in trade with Virginia, South Carolina, Boston and other colonies. Much of this was dominated by Virginia and New York merchants, though 13 local residents were dominant in local Carolina trading. Most seagoing vessels operating out of North Carolina between 1690 and 1730 were of 20 tons. Of these, 23 were North Carolina built, with 12 engaged in trade with Virginia, three operating in the Pasquotank River, one in Currituck, one in Bath, one in Edenton, the others unknown. The earliest mention of any North Carolina shipbuilding is in a 1713 record of two shipbuilder apprentices in Beaufort. The next reference is a 1732 record of William Borden, a Rhode Islander, establishing himself as a shipwright. There are two court records referring to shipwrights and carpenters dealing with debt, and one in reference to a charge of assault. The five remaining records up through 1729 are court documents with accusations of piracy, wrecking, debt, and a case of salvage (Saunders 1886a:241,290, 1886b:xv-xvi, 1886c:xliv-xlv).

There is no evidence the patent of 423 acres conveyed to Jonathan Batemond (Hofmann 1979:237) and the mention of a shipyard suggests he was actually a shipwright or owned the shipyard on Wimble's 1738 map. Statistical analysis confirms Watson's (2010:87) reference to shipbuilding in Tyrrell County on a "limited scale." After the suspicious Batemond, there is a note of one Richard Downing apprenticed to Benjamin Cook in 1787 to learn shipbuilding (Watson 2010:87). Neither Downing nor Cook is mentioned again in regards to shipbuilding. Ebenezer Pettigrew is thought to have "built or purchased ships," ordering the construction of a 63-ton vessel under the command of a Captain Dunbar. As of 1829 this ship was still active in the inter-coastal trade with New York and Boston (Sharpe and Zarr 1964:87-88). A further search of the letters of Ebenezer Pettigrew and James Cathcart Johnson may reveal whether or not Pettigrew dabbled in shipbuilding or ship-buying.

Scant historical evidence exists regarding construction practices, traditions, or techniques in the Scuppernon River region beyond a few well-known boat types, such as sharpies or shad boats. There were, however, shipwrights producing vessels of significant size in Tyrrell County and the town of Columbia over a span of almost two centuries. Table 4 lists the names of 21 known shipwrights, their county of residence, and the year they are found in the historical record (Still and Stephenson 2009; Michael Alford 2011, elec. comm.).

Table 4. Shipwrights in and near Tyrrell County, 1685-1855. (Data from Still and Stephenson 2009).

Year on Record	Name	County
1685	Richard Davenport	Albemarle Area
1758	Robert Russell	Tyrrell
1760	John Lewelling	Tyrrell
1766	Thomas Grimes	Tyrrell
1787	Cook & Downing	Tyrrell
1797	William Bell	Hyde
1801	Richard Bell	Hyde
1801	John Hatfield	Tyrrell
1806	Benjamin Davis	Hyde
1807	Samuel Bradley	Hyde
1814	Michael Walker	Tyrrell
1815	Thomas Huggins	Tyrrell
1816	John Bryant	Tyrrell
1817	Spencer Midget	Hyde
1847	C. L. Walker	Tyrrell
1850	Cary & Bavis	Tyrrell
1850	J. Taylor	Tyrrell
1851	Hackburn	Tyrrell
1855	J. Walker	Tyrrell

With known vessels and builders operating in and near Tyrrell County over centuries it may be possible to detect archaeological evidence of their activities. Yet with the knowledge of 50 ships, 21 shipwrights, and one elusive shipyard, no trace has been identified.

As small boat builders rarely committed their designs to paper, very few historical records regarding the plethora of fishing boats and small cargo craft that once populated the littoral waters of Tyrrell County exist. Local histories written and published in Columbia, North Carolina, are the best source for this information. By scouring genealogical histories, one finds a few references to boat builders. The earliest is a late 19th-century reference to James Henry Basnight, a boat builder who “helped Man H. Basnight build shad fishing boats on Soundside Road near Roger’s Landing on Albemarle Sound” (see Figure 32) (White and Haire 2004:5). Born in 1842, he is documented as still employed in that trade at the time of his marriage in 1872 (White and Haire 2004:5). The only other example of a professional builder is an early 20th-century record of Iona Basnight Padgett’s father, who “was a mechanic and boatbuilder” (Tate 2000:19). The small scale nature of boat building explains the lack of historical evidence. Boat building as a trade would have been taught generationally, with hands-on experience in the

boatyard, each builder passing down knowledge, technique, and style by word of mouth. Oral histories are a possible solution to this gap in the historical record.

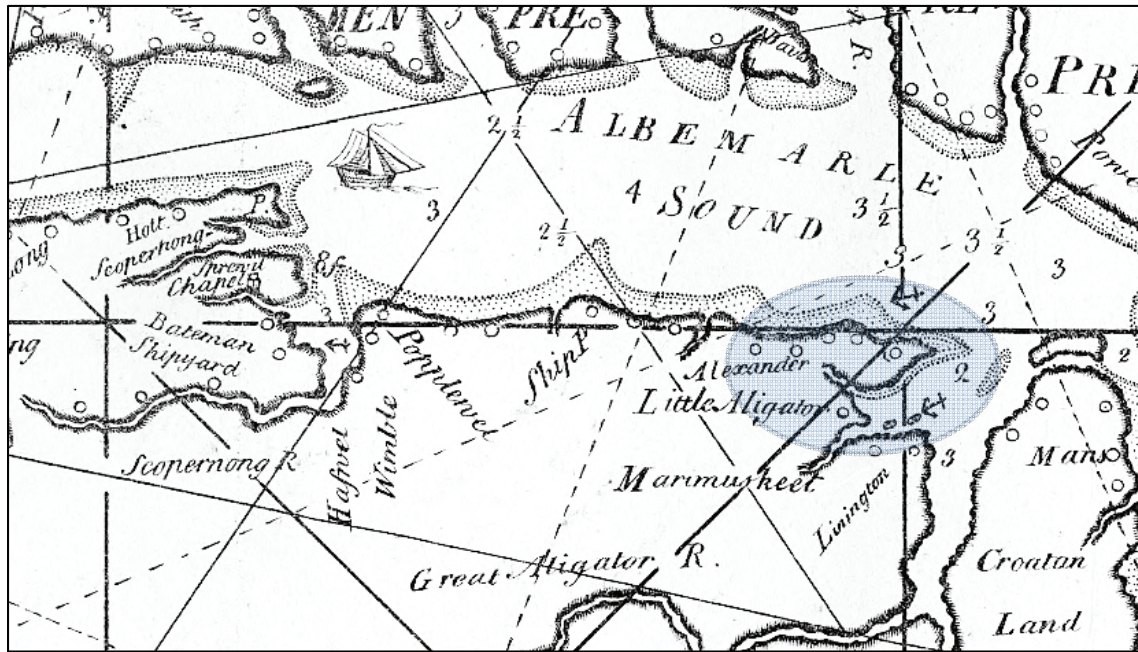


Figure 32. Detail of the 1738 Wimble Map showing the approximate location of the Rogers Landing Boatyard. (Courtesy North Carolina Dept. of Archives and History).

Interviews conducted with semi-retired fishermen Walter and Ray Davenport and Tyrrell County business owner Willy Phillips revealed insight into recent local boatbuilding practices. The last known builder was a man named Willy Spencer, who according to the Davenport brothers is deceased (Ray and Walter Davenport 2011, personal comm.). They may be referring to William Pelege Spencer, Jr. of Lake Landing, in Hyde County (see Hyde County 2010). According to the brothers Davenport, he was the last known builder of wooden work boats. While the Davenport brothers acknowledged they too had built a few boats in their time, they insisted that the most common practice was to trade someone for a boat, then repair or modify it as necessary for its intended use. This re-use of older boats is further exemplified by the unidentified shad boat outside of the Port O' Plymouth Museum (Figure 25). According to the brothers, they found the boat just off of Broad Street in a creek that runs into the Scuppernon. After identifying the owner, who said they could keep the abandoned vessel, they repaired it, painted it, put an engine in it and got several good years out of it before donating it to the museum in Plymouth (Ray Davenport 2011, pers. comm.; Walter Davenport 2011, pers. comm.). Though capable of constructing a workboat, the Davenport brothers do not consider themselves boatbuilders, but merely fishermen with knowledge useful to their craft. While they were unaware of the location of any shipyards or boat yards in the area, Ray

Davenport did disclose he knew the approximate location of the elusive Roger's Landing, mentioned in 1872 records. A visual survey of the area may reveal further evidence of boat construction practices.

Willy Phillips is another fisherman who has constructed his own boats, but does not build work boats for his business. Phillips is a trained boatbuilder who learned his craft in Denmark and was later employed at boatbuilding yards in eastern North Carolina. Phillips corroborated the Davenport brothers account of Willy Spencer as the last known boat carpenter and the common practice of trading for vessels then repairing and refitting as necessary. To Phillips's knowledge, like the Davenport brothers, there were no major boat building operations in Tyrrell County. While the evidence of large vessels is convincing, most work vessels were supposed to have been constructed on Roanoke Island, either in Manteo or Wanchese (Ray Davenport 2011, pers. comm.; Willy Phillips 2011, pers. comm.). Further investigation is warranted.

Conclusion

There exists a gap between the scholarly knowledge of boat and shipbuilding practices, the archaeological record, extant vessels and the memories of a population that retain cultural knowledge regarding shipbuilding in Tyrrell County. Small watercraft experts such as Howard Chapelle have revealed the vivacious role small craft played in the daily economy and function of American's eastern seaboard (see Chapelle n.d., 1951). Much is known about New England shipbuilders thanks to that region's rich genealogical activity and historical consciousness that dates back to the 17th century. Even more obscure traditions such as those on Lake Champlain and the Great Lakes have been the subject of rigorous study. William Fleetwood's comprehensive work *Tidecraft* (1995) covers the East Coast from South Carolina to Florida. However, eastern North Carolina in particular remains underexplored, especially the areas known locally as the Inner Banks, made up of littoral waters of the great sounds and their estuaries. Despite Alford's monumental efforts, most of the historical record merely identifies boat types and their uses.

It is known that vessels were steadily produced in the Albemarle Sound region and in Tyrrell County. Table 4 even identifies the names of 21 builders, but where they operated remains to be discovered. The tantalizing reference to Bateman's Shipyard on the 1738 Wimble Map and the reference to a land patent adjoining property with a shipyard owned by "Batemon" (Hofmann 1979:237) furnish historians and archaeologists with an excellent place to start. What about the other builders? Table 4 contains three builders by the surname of Walker listed in 1814, 1847, and 1855, perhaps indicating

shipwrihty in Tyrrell County was passed down patriarchal lines. Beyond kin connections, the rates of production in Tyrrell County fit with national trends and the regional economy of the American South. The surge in trade following the War of 1812 and the end of trade embargos with Britain can be seen in Figure 28. The steady but plodding economic pace of the following decades reflects the small but integral role Tyrrell County's modest population played in North Carolina's economy. The boom beginning in 1850 is more of a mystery but may reflect the injection of liquid assets into the American economy in the form of California gold. The end of the boom in 1855 follows with the terminus of the famous gold rush. The gap of production following the American Civil War likewise reflects the destructive economic impact of the war on local and regional trade as well as ship production.

The same economic forces, however, can be credited with the adoption of sharpies and shad boats replacing kunnors and periaugers as the work force of the Albemarle Sound. The cheaper construction cost of sharpies and the cheaper materials of shad boats (readily available local cedar, cypress, and pine) lent the construction methods and materials to the budgets of local fishermen. Rates of production of these vessels are nearly impossible to glean from the current historical record given their local production methods. The skills required to fashion such a boat were often passed on by word-of-mouth with empirical knowledge and hands-on techniques being passed on generation by generation. The records of deeds and wills may provide further insight into these less documented vessels. Most were too small to be included in American Lloyd's beginning in the 1840s. The latter, however, is a good place to continue investigation of the vessels found in Still and Stephenson's database (2009).

Research has led to the realization that the largest influence on small craft was the seine or shad fisheries and the availability of timber resources. Once large lumber operators began moving into Tyrrell, Hyde, and Dare Counties in the late 19th century, those formerly cheap Atlantic white cedar, cypress, and long-leaf pine trees began to disappear. The depletion of this natural resource led to the abandonment of shad boat construction on a large scale in the early 20th century, though many boats persisted throughout the century, refitted in many cases for gasoline powered engines. The seine fishery, however, provided a resource for fishermen to exploit up until very recently, despite the decline of large fishery operations due to the competition with Asia and Latin America (Walter Davenport 2011, pers. comm.; Ray Davenport 2011, pers. comm.; Willy Phillips 2011, pers. comm.). With the embargo on herring in North Carolina, the rising costs of fuel, even once lucrative shell fish (shrimp and crab) are losing out to foreign competition. Further exploration of the link between the region's natural resources and boat and shipbuilding trends may reveal interesting finds.

THE FISHING INDUSTRY IN TYRRELL COUNTY AND THE ALBEMARLE SOUND

Introduction

Looking at Tyrrell County today, one may posit that it has a long history of land-based resource exploitation. While this is true in a sense, in the total scheme of its history of human habitation, it is a relatively recent development. Albemarle Sound and the tributaries that flow to it made the settlements of the region focus on the water. This is seen in the development of the county's transportation networks, the location and length of occupation of its main settlements, and the industries (like boat-building) which dominated its trade. Besides proving to be the most easily accessed transportation routes and allowing a tradition of ship- and boat-building to grow in the area, this water-focus also formed the core of a tradition of fishing in the region that stretches back thousands of years.

The techniques and technologies of the fishing industry on the Albemarle Sound have directly resulted from its natural characteristics. With few inlets directly connecting Albemarle Sound with the Outer Banks, the Albemarle maintains a much lower salinity than neighboring Pamlico Sound to the south. The salinity fluctuates with rainfall and spring runoff. During drought, saltwater flows from the Pamlico into the Albemarle while during the spring, inland snow melt flows from the rivers into the Sound decreasing salinity. In fact, the Albemarle Sound is one of the largest bodies of coastal freshwater in the world. This unique characteristic provides an ideal environment for several species of anadromous fish (fish which ascend rivers from the sea for breeding), and these fish have historically been the most successful fisheries on the Albemarle Sound (Heath 1997:22-23).

The four predominant species of anadromous fish which spawn in the freshwater tributaries of the Albemarle Sound are alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), American shad (*Alosa sapidissima*), and hickory shad (*Alosa mediocris*). Together these species are known as river shad because of their upriver spawning. In North Carolina, river shad migrate with water temperatures into the sounds and tributaries. This migration occurs at temperatures between 50 and 55 degrees Fahrenheit. Once temperatures ascend beyond this, river shad begin to spawn (Heath 1997:26).

Seasonally, this occurs during early spring and varies for each of these species. During February, hickory shad are the first of the river shad to spawn. March and April sees the alewife followed soon after by the blueback herring and American shad in April and May. Spawning generally occurs in still and slow moving freshwater upriver and in canals and swamps. Historically, it is this springtime spawning and subsequent movement of river shad back into the sounds which has fueled the Albemarle Sound fisheries.

In addition, other species such as striped bass, bluefish, trout, white perch, flounder and shellfish have provided year round resources for fishery exploitation (Heath 1997:26-27). The exploitation of fish is amongst the best documented of resource exploitation practices, and is borne out by historical and archaeological evidence in some cases stretching back thousands of years.

Native American Fishing Activities

It is difficult to say when river shad were first exploited on the Albemarle Sound. Archaeological evidence is scant as the bones of river shad are small and easily destroyed. This results in a low likelihood that these bones would be identified on an archaeological site, even if present. Environmentally, the estuaries in the region have been stable since before 2500 BC and evidence such as the log boats from Phelps Lake have produced radiocarbon dates as early as 2400 BC and of a scale (dozens have been found in the lake to date) that suggests people were well settled in the area of Tyrrell County by this time and utilizing waterways for transport and perhaps for fishing and shellfishing (Curci 2006; Pierce 2010:17). Artifact assemblages containing stone net-sinkers suggest anadromous fish exploitation.

The first historically documented evidence for native fishing techniques comes from Thomas Harriot's observations in his *Brief and True Report of the New Found Land of Virginia*, originally published in 1588. In the report he describes the Algonquian fishing techniques:

The inhabitants use to take the two manner of ways, the one is by a kind of weir made of reeds which in that country are very strong. The other way which is more strange, is with poles made sharp at one end, by shooting them into the fish after the manner as Irishmen cast darts; either as they are rowing in their boats or else as they are wading in the shallows for the purpose (Harriot 1972[1590]:20).

This description of fishing on the Albemarle Sound is illustrated by John White's paintings (see Figure 33 and Figure 34). The first of these watercolors contains many techniques that were likely not used at the same time. To the left runs a long weir, highly stylized (a simple square section would not have worked). In the background, there are fisherman standing in shallow water and spearing fish. The foreground details a "cannow" (canoe) filled with fish and a fire in the center (used to attract fish at night) while men at the bow and stern catch fish in nets (which are not included in Harriot's description). The second watercolor

is a detail of the cooking arrangement for fish. While Harriot reports that the Virginia Algonquians did not smoke fish for preservation as the Indians of Florida did, it is likely that they actually did and it was simply not observed by Harriot. A map of the Albemarle Sound was created at this time by John White and a more detailed copy which was compiled from later editions of the original, taking into account Ralph Lane's journey into the Albemarle, details several villages along the sound and its tributaries (see Figure 7). In addition, many of these places would become settlement locations and are still today the larger population centers. The villages of Dasamonquepen, Tramasquecook, Mequopen, Mascoming, Chepanuu, and Pasquenoke correspond to a greater or lesser degree with the modern towns of Manns Harbor, Gum Neck, Columbia, Edenton, Bethel, and Elizabeth City, respectively. The villages were Algonquian, those on the south shores of the Albemarle being associated with the Secotan tribe (Angley 1986:1). These villages at the mouths of tributaries would have been (and continued to be) excellent locations for exploitation of river shad. Historic evidence for this exists in the account of Ralph Lane's exploration of the sound where he and his men raided a fishing weir at Chepanock (Chepanuu) during Easter of 1586 (Albertson 1914:2).



Figure 33. "Their manner of fishyng in Virginia" by Theodor de Bry. (Harriot 1972[1590]:56-57).

Fishing in the Colonial Period

The colonial period saw the transition from subsistence fishing into commercial fisheries. The low population in the Albemarle Sound region during the 17th century has left little historic information about fishing during the early colonial period and it is not until the beginning of the 18th century that the record begins. In 1701, the explorer John Lawson saw that colonists were employing Indians in the construction of weirs; adding that the fish species in the area were well preserved with salt, and some had even been exported (Lawson 1709:127,210; Taylor 1990:6; Heath 1997:84). The evidence for colonial curing of fish is further

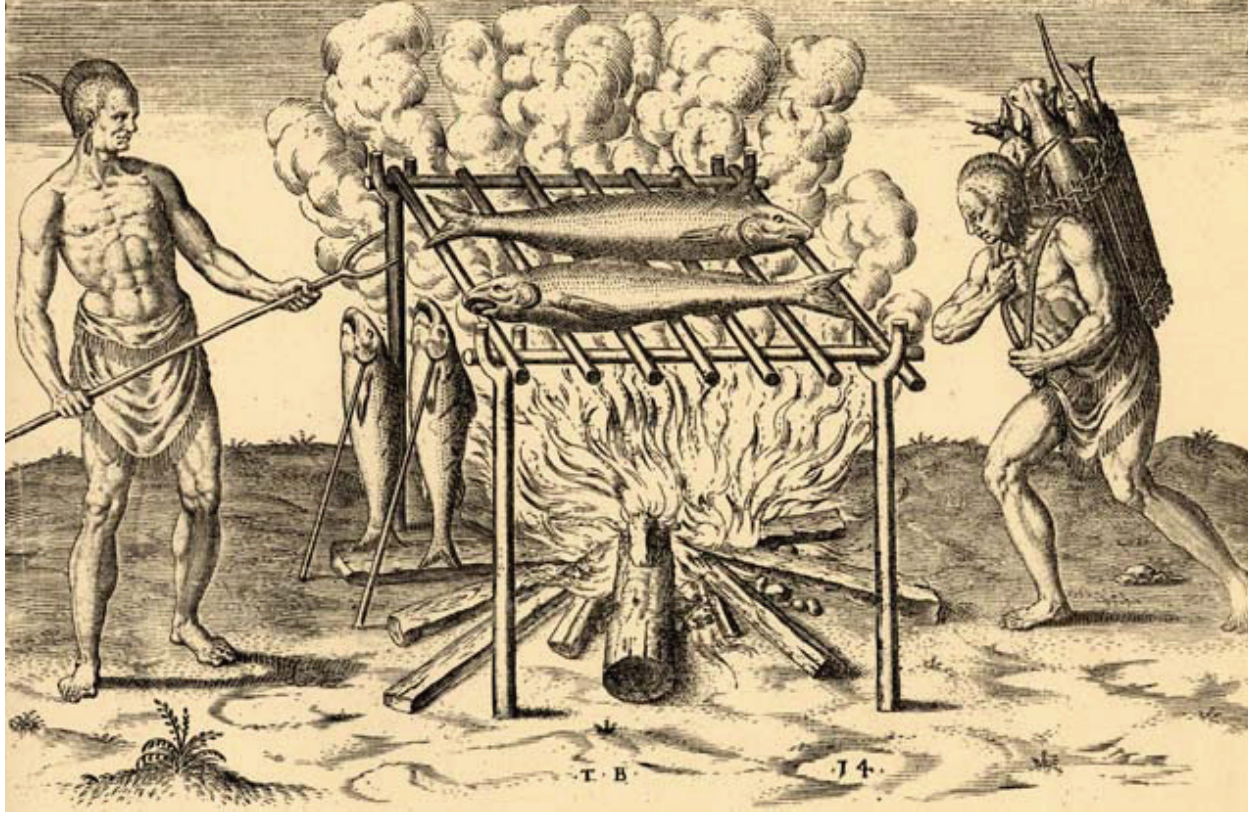


Figure 34. “The brovyllinge of their fishe ouer the flame” by Theodor de Bry, showing the preparation of fish. (Harriot 1972[1590]:59).

supported by a 1713 description of a year survival on “Lent fish” (Heath 1997:85). Lent fish was likely referring to the harvest of fish collected during the season of Lent from late February until mid-April. John Brickell in 1737 described the locals as having gathered as many fish as they had salt to cure (Taylor 1990:7). By the 1760s commercial fisheries were well established in Edenton, with planters exporting fish to supplement their income.

The first large commercial fishery in North Carolina is attributed to Alexander Brownrigg, who established his seine net operation on the Chowan River in 1762. The period of 1771-1776 saw over 24,000 barrels of salted fish exported from Edenton on 851 vessels. In 1772 alone, 5,000 barrels and 8,000 pounds of dried fish left Edenton for British colonies in the West Indies. Larger fisheries undoubtedly began using hand-hauled seine nets in order to retrieve the large catches. The nets would be “shot” (parlance for cast or thrown) with a small boat using a crew of about five men and then retrieved by hauling the line to shore with a hand windlass (Taylor 1990:9-10).

Post-Colonial Fishing

The post-colonial period saw an incredible rise in the scale of fisheries across the coast spurred on by cheap labor and subsequently a drop in exports of cured fish. The driving force in the development of the Albemarle Sound fisheries during the period 1780-1865 was slavery. In this time period the number of slaves in the state more than tripled; rising from 100,000 in 1790 to 330,000 by 1860. In addition, the number of free slaves increased six fold to 30,000 (Taylor 1990:14). This meant that throughout the period a growing demand for cheap food in the southern states diverted the market share that had previously been exported to plantations in the Caribbean. The development of horse- or mule-driven windlasses on shore meant a significant increase in the size of seine nets which could be handled and subsequently an increase in hauls; requiring ever more laborers to process the catch (Heath 1997:89,91)(Figure 35).



Figure 35. Hauling the Seine. (*Harpers Weekly*, 28 September, 1861, p.620).

The vast majority of this development occurred on the Albemarle Sound. In 1840, for example, the Albemarle region provided 86% of the 73,350 barrels produced in North Carolina. The numbers of seine hauling fisheries on the Albemarle boomed, reaching 70 by 1852 (Heath 1997:92-93). Hauls themselves were massive. One fishery on the Chowan averaged between one and three million fish per year from 1835-1874 (Taylor 1990:22).

The labor required to bring in such hauls was staggering. In 1850, 5,000 laborers were employed in just 28 fisheries. Seine nets over a mile in length would be drawn out on two boats, each with a crew of 11. Once cast, the hauling ropes would be run to shore and hauled in on horse-driven windlasses. Smaller windlasses were used to control the shape of the nets as they were hauled. The catch was hauled onto a

landing area where crowds of cutters (mostly women) would pull other species then begin splitting and gutting the herring for salting. These women would on average process 5,000 herring each in a day. The fish were then cleaned, salted, and barreled. In order to acquire this workforce, the counties held a fisherman's court where fishery operators and labor were brought together before the spring season commenced. Workers from all over the area gathered to gain employment there. Most of the laborers were freed slaves or slaves, though many were poor white farmers. Men, women and children could all hope to find employment (Taylor 1990:19-20, 93-95; Heath 1997:95).

Fish from the Albemarle Sound entered the market in several ways. Some fresh or cured herring (whole or split) was sold locally or it was consumed immediately. The majority of the fish was salted, barreled, and shipped to Virginia or Baltimore. From Virginia, the fish was either shipped to southern plantations or exported to the Caribbean. Fresh shad, however, demanded high prices in urban centers (it did not sell as well when cured). Most fish went to Virginia as Baltimore acquired most of its fish from the Chesapeake (Taylor 1990:23,25).

It is also at this time that an increase in litigation over fishing rights occurred. Damming of rivers and other obstructions on the rivers began to take a toll on fish populations and consequently acts were put forward to preserve populations and ensure common access to fishing grounds. The Civil War also greatly impacted the productivity of the industry. Union raids stifled large operations and escaped slaves decreased the available labor. Fears over Union benefits from raiding and the sale of fish caused the state to prohibit seine fishing in 1863 for the duration of the war, though some fisheries continued (Taylor 1990:27; Heath 1997:98-99).

The post-war period saw a great number of technological innovations that would have a dramatic effect on the fishing industry in the Albemarle Sound. At the end of the 1860s, ice cars on railroads created the ability to transport fresh fish long distances. This of course meant that other species of fish which had long been of little commercial value became prized commodities for major cities in the northeast. These included shad, striped bass, sea trout, mullet, bluefish, white perch, flounder and oysters (Taylor 1990:30; Heath 1997:100). The herring industry would still remain of primary importance for the local market in the Albemarle Sound and, though fewer, large seine hauling fisheries still brought in record hauls utilizing even larger nets. In the 1870s and 1880s, steam powered windlasses and net setting boats replaced horse drawn windlasses in the largest fisheries (Figure 36). On average, 1,750,000 herring were caught in a single haul by steam seines (Taylor 1990:38).

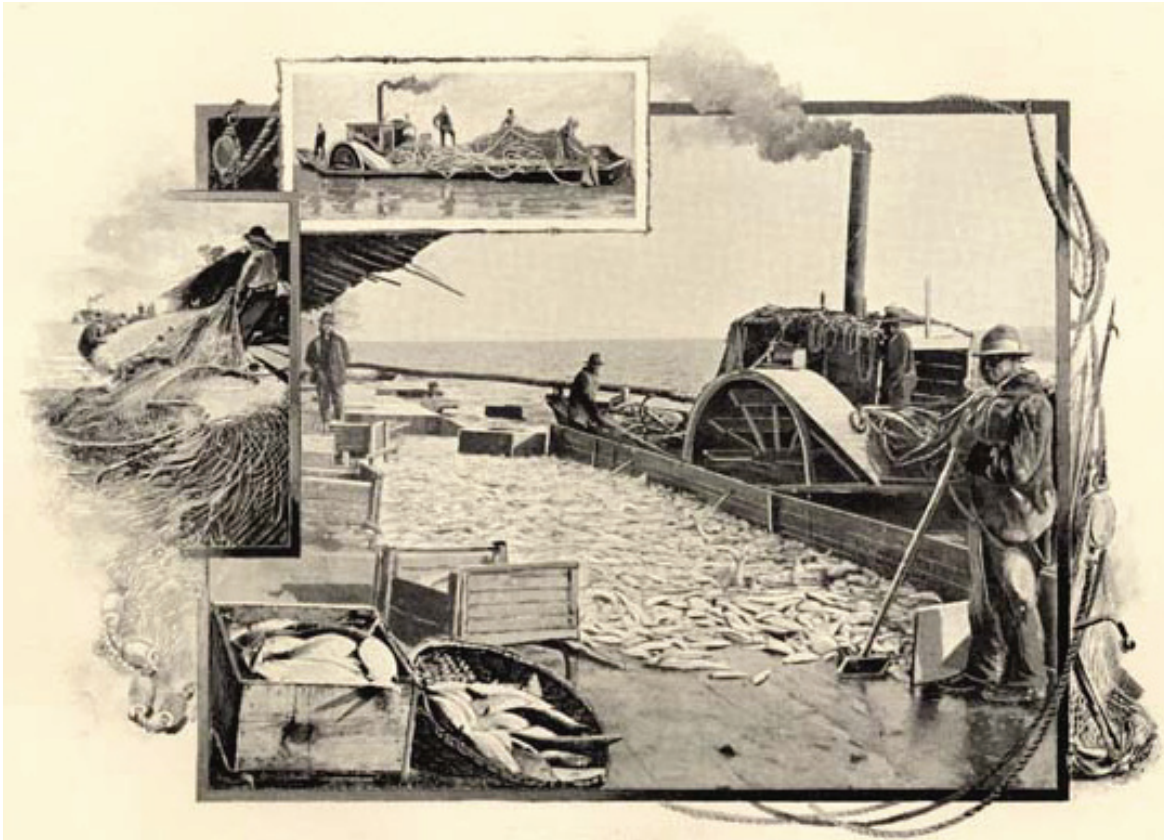


Figure 36. Steam Seine Fishing on the Albemarle c. 1896. (NC State Board of Agriculture 1896:147).

In contrast to these large operations, a new technology brought in from the North revolutionized commercial fishing on the Albemarle Sound. In 1869, John Penrose Hetterick (who would be joined by brother William H. Hetterick) introduced the pound net into the sound. The Hetterick brothers were originally Pennsylvania Dutch who had been using pound nets in the Ohio area and one of them (John Hetterick) had been a Union soldier and saw an opportunity on the Albemarle. These “Dutch nets” as pound nets were also called, operate on the same natural schooling tendencies of fish that a weir does; funneling them into a trap. Whereas a weir is a more or less permanent structure, a pound net can be set up and removed anywhere and can be hauled by a small crew with catches of 10,000 lbs. Their low cost also meant that the enormous investment needed for seine hauling fisheries could be avoided and many pound nets could be hauled in a single day by only two or three people. All of these advantages meant the numbers of pound nets in North Carolina waters grew quickly. There were just 117 pound nets registered in the state in 1880, though by 1897 there were 1,100 on the Albemarle Sound alone (Heath 1997:103,105).

In response to this new technology a specific boat type was designed by George Washington Creef in the 1880s (Figure 24). As noted in the previous chapter, Creef was a boatbuilder on Roanoke Island and his design was built to have maximum capacity for its size while remaining seaworthy in order to cope with the often rough sound waters. This boat would become a symbol of the Albemarle Sound and is today known as the Albemarle Sound boat or simply the shad boat. So symbolic of the North Carolina fisheries did this boat become that in 1987 it was named the official state historic boat of North Carolina (Alford 1990:19).

By the turn of the 20th century the large scale of the fishing industry on the Albemarle was taking its toll. Damming of the rivers and the numerous pound nets in place on the rivers limited access of river herring and shad to spawning grounds. Yearly shad hauls fell from six and a half million pounds to less than four million in just six years from 1902-1908 (Figure 37). Under the Board of Agriculture, shad and striped bass hatcheries were established on the Roanoke in the early 1880s and a large hatchery in Edenton by the US Fish Commission in 1889 (Taylor 1990:69,71). A statewide Fisheries Commission was created in 1915. Early on, this commission attempted to control fish populations by regulating equipment and ending the use of commercial herring and shad for fertilizer. However, the focus of the fisheries commission at its start was to spur growth in the oyster fisheries which have never been of major importance in the Albemarle Sound (Thorson 1982).

Conclusion

Despite efforts to curb population decline and habitat destruction, it was the low value and decreased catches that meant an end to large scale river herring fishing operations on the Albemarle Sound. Overfishing and river pollution has taken their toll. By the middle of the 20th century, the Albemarle Sound was far from being the most productive region in the state. At the time, Tyrrell County itself had very few fishermen indeed. Between 1936 and 1940, Tyrrell County had 97 fishermen out of the 6,909 fisherman in coastal counties (2,605 were in Carteret County alone). Tyrrell County was also ranked 15th in both economic welfare and value of fish (Taylor et al. 1951:296,299). By this time, the majority of people on the Albemarle Sound were farmers, not fishermen (first cotton, corn, and peanuts followed by tobacco in the 1930s). In some respects this was a return to subsistence fishing as these farmers would catch fish in the spring using personal gear in order to supplement their diet through the year (Heath 1997:164,167).

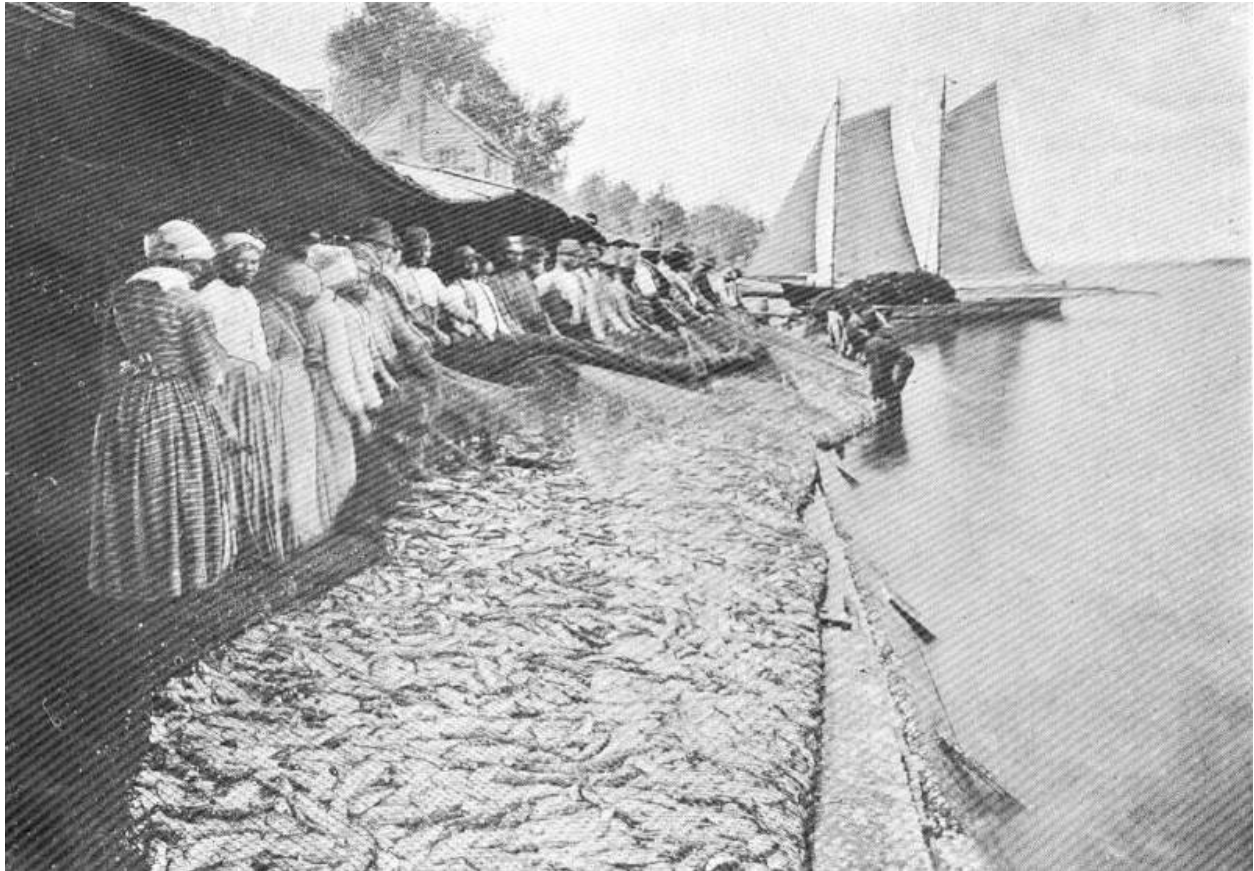


Figure 37. Landing a Shad Seine, Sutton Beach, Albemarle Sound, c.1887. (Photo by Hugh Smith, Freshwater and Marine Image Bank, University of Washington Library).

The few commercial fishermen left on the sound mostly abandoned pound nets for gill nets in order to catch the live fish demanded by the fresh fish market (Heath 1997:111). By the 1950s, even the Fisherman's Court became a largely festive occasion instead of a means of employment. Rising values for shellfish coincided with the introduction of crab pots in the 1960s (Willie Phillips 2011, pers. comm.). This market boomed in the 1990s with hard crabs accounting for over 60% of all commercial fishing in Tyrrell County. Even so, in 1997 Tyrrell County only contributed 2% of the total commercial fishing in the state (Diaby 1999:3).

The Albemarle Sound has provided subsistence level fishing for thousands of years for the many different groups who have occupied its shores. While the river herring industry that thrived in the 18th and 19th centuries has largely faded away, the culture associated with it still lingers, as there are still fish fries and local seafood festivals. It is hoped that through education and public awareness that the culture, if not the industry, of the Albemarle Sound fisheries can be preserved for future generations.

TYRRELL COUNTY'S LUMBER INDUSTRY

Introduction

Another prominent industry in Tyrrell County is the procurement of lumber. Driving east on Route 64 to Columbia, logging trucks crowd the road. The trucks belong to Weyerhaeuser Company, a maker of lumber and paper products. Their main manufacturing center is located in Plymouth, just west of Tyrrell County. Forest products are big business in eastern North Carolina. Almost 20,000 acres of Tyrrell County was still owned by timber companies in the early 2000s (Brown 2004:23). While the image of lumber trucks traveling down highways does not exactly paint a picture of a “maritime industry,” history tells us that for most of the period following the arrival of European people to North Carolina, timber harvesting meant that lumber had to be floated down waterways such as the Scuppernong River for milling or further shipment from towns like Columbia. This chapter tells that story.

The current industry is a shadow of its former self. In their heyday, the lumber barons of Richmond Cedar Works, John L. Roper Company, Branning Manufacturing, and others owned more than 80% of the land in the county (Tyrrell County Registry of Deeds [TCRD] 1921). For almost a century, from 1880 to 1970, business was booming, and timber cut in Tyrrell County found its way as far north as Boston (Cruikshank 1940:33; Bell 2001). Nearly 60 companies cut timber in Tyrrell at one time or another (TCRD 1885-1994). Statewide lumber production declined after peaking in the 1950s (Knight and McClure 1966:7). In the 1970s, West VaCo, the last timber company with truly vast holdings in Tyrrell County, sold their Tyrrell interests to the now defunct First Colony Farms (Bell 2001). Today, residents of Tyrrell once again own and farm most of the land.

Colonial Times and Traditional Methods

The swamps of the Albemarle Sound, including Tyrrell County, seemed vast and forbidding to visitors and early inhabitants of the region. Few organized attempts to cut timber from the swamp were made before the 19th century. The main users of the swamps were residents of the region and shingle cutters. Residents used the swamp hardwoods for their homes, fences, barrels, duck decoys, and boats. Atlantic white cedar, known locally as juniper, was especially popular for boat building because of its waterproof properties. A boat made from seasoned juniper might last for more than 50 years (Sapone 2001; Twiddy 2001). Long leaf pine was cut for lumber to be used in homes and formed the basis of a

small turpentine industry (Watson 2010:19-20). The farmers and fishermen who made the Albemarle Sound their home could readily harvest what they needed from the edges of the swamp. Local demand was low enough that the timberlands could easily replenish the timber consumed by residents. Some farmers exported a small quantity of forest goods.

Many farmers cut timber from their own property. Seventy percent of land-owning residents owned over 100 acres of land (Watson 2010:27). Some plantations, like Bonarva, owned by the Pettigrew family, maintained small mills on their property. Sometimes they were able to cut enough to make a small profit. In 1807, the Pettigrews sold 32,500 shingles, 2,030 barrel staves, and 1,330 red oak hoghead staves (The State 1964b). If a resident was not inclined to cut his own lumber, or did not own land, then they could acquire some from the small local operations in Columbia, or Lee's Mill in Washington County, or another of the local operations.

The shingle cutting process, known locally as "shingle getting," was primarily an individual business in the 1700s. Residents would venture into the swamps and locate a promising stand of cypress or juniper. There were two methods employed to process the trees. A laborer might cut the tree down and then float it to a central location if he was close to the water, or he might cut the tree into shingles on the spot so they could be easily transported to the water's edge and rafted out. Wooden shingles were cut approximately 24 inches by 12 inches, packed into bundles, and carried out over the sounds and canals by lumber flats, rafts, and small ships as far as Edenton, Norfolk, or Wilmington for shipment to their final destination. Some shingles would be damaged in shipment and they were highly flammable when dry, ensuring a constant demand. It is difficult to estimate exactly how many shingles were cut in a given period, but the trade peaked during the 1850s when more than 50 million crossed through the Dismal Swamp Canal annually, drawn from North Carolina and Southern Virginia. Shingles were used locally or shipped north as far as New York (Stewart 1981; Cohoon and Brickhouse 2001; Twiddy 2001).

The most common tree species in Tyrrell County were cypress, Atlantic white cedar (juniper), loblolly pine, long leaf pine, pond pine, and gum. Atlantic white cedar is actually a type of cypress, but the name white cedar has persisted in local usage. Juniper and cypress grow in the wet portions of the swamp and have good weather resistant properties. Regular cypress can even grow in places where its roots are completely submerged in water (Bell 2001). This made juniper and cypress desirable for siding, shingles, and boat building. Long leaf pine was desirable for its workability and quality, but was slow growing and less common in Tyrrell (Ashe 1894:53-55). Loblolly pine grows in the drier areas of the county in large numbers. Loblolly and short leaf pine are also sometimes referred to collectively as yellow pine. Much of

the loblolly was cut by the lumber companies because it is easy to work with and grows quickly. A loblolly can be ready for harvesting in 25 years. The other species take much longer to mature, up to 60 years (Cruikshank 1940:12-13; Bell 2001). This has caused relatively pure stands of loblolly to replace many slower growing trees in large parts of Tyrrell, especially long leaf pine. For most of Tyrrell's history, gum could not be dried and worked easily, so it was infrequently used commercially, though it still saw use for temporary structures like the swamp railroads (Ashe 1894:20,123; Cohoon and Brickhouse 2001). Pond pine mixed with other species covers most of Tyrrell's surface that is not populated by loblolly. It lives largely in damp parts of the swamp that are difficult to access. Although it can grow into reasonably good saw timber in poor conditions where other trees will not grow, pond pine was still not considered very desirable by lumbermen (Cruikshank 1943:28).

Waterways were the primary means of transporting heavy loads such as timber products until the introduction of rail lines. Stands of good timber near rivers or creeks were easily accessible and cut logs could be floated to sawmills. To access deeper stands was much more difficult. Residents solved this problem by digging small canals, little more than ditches, to stands of good timber. Some of these ditches could run for half a mile (Twiddy 2001). Logs could be floated, poled, or towed out to the main river, whereas shingles were usually loaded onto small boats. This method was sufficient for keeping up a small trade in shingles and cut lumber but was labor-intensive. Machines for digging canals would not appear until the widespread adoption of steam power. All the canal digging had to be done by slaves and work-animals. Workers had to face heat, snakes, insects, and constant soakings. The dense roots and fallen logs meant that work went slowly; yard by yard while overseers ruthlessly pushed the slave labor onward (Cecelski 2001:109-111). The intense labor required for this form of lumber harvesting meant that only stands close to water were cut. The work was slow and the swamp could easily replace what men could use. The local needs could be met, but exports remained relatively small.

Swamp Canals and Railroads, Opening New Markets

In addition to shingles, small amounts of cut lumber were also exported during the 18th century, but Tyrrell's location deep in the Albemarle Sound handicapped trading ventures. Once cut, lumber would need to be shipped all the way down the sounds to Wilmington before it could reach the Atlantic. The timber opportunity was attractive though, and lumbermen built many of the transportation networks in eastern North Carolina. Among the earliest efforts was the formation of the "Adventurers for Draining the

Dismal Swamp” in 1763, operating out of Virginia. They made little headway, but planted the ideas that drove the construction of the Dismal Swamp Canal and later the Albemarle and Chesapeake Canal (Brown 1981:11).

The Dismal Swamp Canal was planned to connect Elizabeth City and the nearby areas to the timber-hungry Norfolk shipyards and ports farther afield. First planned in 1772, it met with numerous delays because adequate funding and a sizeable labor force could not be secured. The canal would have meant increased trade and greater access to the outside world for Tyrrell, but languished for years as just an idea. The Dismal Swamp Canal finally materialized in 1805, at which point work had progressed far enough to allow the passage of log rafts and shingle flats. The canal was not made navigable by shallow draft ships until the 1820s. Because of the canal’s narrowness and shallow depth, only small vessels and shingle rafts could complete the journey north. Despite this, it saw heavy use by small craft. The Albemarle and Chesapeake Canal was completed in 1859, allowing much larger vessels to pass north to Norfolk (Brown 1981:1-3, 20). Today the Albemarle and Chesapeake is part of the Intracoastal Waterway.

The Intracoastal Waterway, completed in the early 20th century, solved many of these transportation problems. By then, however, rail lines had been built that carried most of the lumber trade. John Roper, later president of the John L. Roper Lumber Company, was one of the main financiers of the Elizabeth City and Norfolk Line (Prince 1972:15). Branning Lumber also paid to build the Wilmington and Powersville Line (The Washington Post 1898:11). The Norfolk and Southern Line owned Roper Lumber for a time and the two existed in a symbiotic relationship (Stewart 1981). The Norfolk and Southern reached Columbia in 1908 where two trains a day left carrying passengers and lumber (Davis 1963:62). The railroad brought easy access to the rest of the state and prosperity to Columbia. In addition, the lumber companies built extensive private tracks into the swamps. A temporary line would be run out to a good stand of timber and used much the same way as the old ditches had been (Ashe 1915:148-149). The tracks connecting Columbia to Mackeys Ferry were torn up in 1948, hurting the county economically (The State 1964a). The construction of Route 64 failed to replace the lost railroad.

New Technologies Tame the Swamp

These traditional harvesting conditions persisted well into the 19th century. During this period Tyrrell went through an economic boom as the lumbermen and their new steam-powered machines were finally

able to capitalize on the resources of the swamps. Steam power made it possible to reach the deep stands of the swamp with previously unthinkable ease.

Steam powered tugs could be used to pull the log rafts down the rivers and up to the saw mills. Tugs meant that mule-drawn barges and poled lumber rafts could be replaced. Steam powered saws were able to operate more quickly and smoothly than their water-powered predecessors. They were not hampered by weather or the need for mill ponds. Some were small enough to be made into mobile mills that could be taken close to a job site for basic processing. Some of the small mills in Tyrrell may have been of this type (the records do not specify), but the indicated locations of small capacity mills in the county change regularly between surveys. Steam powered saws allowed mills to be built that could process millions of board feet of lumber per year. Band saws were also introduced at the largest mills that could operate at extremely high capacities. Although there were few such large mills in Tyrrell, there were several in Washington County and Elizabeth City. Eventually both would be home to some of the largest mills in the state. They drew much of their lumber from outside their borders, including Tyrrell County (Phillips 1929:274; Cruikshank 1940:31-32, 1944:41; Knight and McClure 1966:12; Brown 1993:20). Steam power made mass production of lumber possible.

Railroads allowed the new lumber companies easy access to markets beyond Norfolk, Wilmington, and Elizabeth City. Trains could move vast amounts of lumber efficiently on a regular schedule. Additionally, temporary rails could be run out to good stands of timber much as the old ditches had been. Logs could be pulled up the train car with a cable skidder and then lifted aboard. A railcar could be rolled up to the timber stand and simply reversed back out (Bell 2001) (Figure 38).

The practice of digging ditches out to well stocked portions of the swamp did not fall by the wayside. Two new inventions kept this technique of paramount importance, steam dredges and steam skidders. A steam dredge was a large, powerful digging tool attached to a barge. It could cut canals much more quickly than men with picks and shovels. A dredge could also remove submerged stumps with ease, which posed a formidable obstacle for boats. Previously this work had to been done by skilled divers (Cecelski 2001:113). Also powered by the new steam engines were powerful skidders. While the previous inventions eased the labor required to cut timber in the swamp and allowed operations at a large scale, the cable skidder was the tool that finally allowed access to the most remote portions of the swamp.

A steam cable skidder was a powerful winch that could be mounted to a train car or barge. A long cable would be run out to a felled tree. Then the log would be reeled in, pulled easily across any intervening terrain. This caused a great deal of damage to intervening terrain, but lumber companies were already

practicing clear-cutting in the 19th and early 20th centuries (Ashe 1915:148-149; Bell 2001). The skidder allowed easy access to stands of trees much further from the ditches than previously possible. The deep stands of trees that had previously been inaccessible were now within reach. With these tools, the swamps of Tyrrell were finally the valuable resource prior generations had envisioned.



Figure 38. A small locomotive brings felled timber to a mill in 1913. (Sid Shearin Collection, Tyrrell County Public Library).

1860-1970, When Lumbermen Conquered the Swamps

The earliest mill in Tyrrell County was built at Lee's Mill on Kendrick's Creek in present day Roper, Washington County, North Carolina (a part of Tyrrell County until 1799). It was built by Thomas Blount in 1712 and operated until 1920. Washington County was split from Tyrrell in 1799. The 1840 census lists a steam powered mill in Columbia. It was unusual for the time because water power was still dominant in the region. In 1860, six lumber companies and four shingle companies employed 67 people in Tyrrell County and accounted for 86 percent of the county's industrial output. Continuous lumber operations in neighboring Washington County had already almost entirely depleted the long leaf pine in the region between 1830 and 1860 (Ashe 1894:102-107; Davis 1963:21-22; Watson 2010:87).

The major players in the Tyrrell County lumber business in the 19th and 20th centuries were Branning Manufacturing (Figure 39), the John L. Roper Lumber Company, Richmond Cedar Works,

Magnolia Land and Lumber Company, West Virginia Pulp and Paper Company (West VaCo), and Weyerhaeuser Company. Branning operated a large mill in downtown Columbia from the turn of the century until the 1920s (Haire et al. 1996:94). Their main facility sat where the Walter B. Jones Sr. Center for the Sounds is now on the Columbia Waterfront (Smith 2001). The John L. Roper Company was a Virginia-based firm. Extremely powerful, they were deeply connected to the Norfolk and Southern Railroad (Prince 1972:15–43; Stewart 1981). During the 1920s, Richmond Cedar Works held most of the land in Tyrrell County and clear-cut much of the accessible timber. In the 1950s they sold their properties, which were by then second-growth forest lands growing loblolly pine, to West VaCo. West VaCo conducted extensive cutting and replanting operations in Tyrrell and Dare Counties. In one plot of land they cleared 10,000 acres in 10 years (Bell 2001). Magnolia owned a large plot on the shore of Lake Phelps during the 1930s and 1940s, selling off the land as they cleared it. They sold their last lot in Tyrrell in the 1960s (TCRD 1885-1994). The North Carolina Pulp Company opened a mill in 1938 in Plymouth, North Carolina and later became part of Weyerhaeuser, an international company founded in Washington State. The pulp mill has been in continuous operation ever since (Cruikshank 1940:34).



Figure 39. The Branning Manufacturing Lumber Yard. (Peggy Griffin Collection, Tyrrell County Public Library).

By the 1880s and 1890s the big lumber companies had a major stake in Tyrrell County. Their powerful steam tools allowed them to access the trees denied to their predecessors. The trees of choice in Tyrrell were cypress, juniper, and where it still grew, long leaf pine. The standard modus operandi of the lumber companies in the early days was to clear-cut areas of forest. A plot would be chosen, ditches and rails run out to the site and skidders used to haul out all of the valuable wood. Logs would then be hauled or floated to central sites and cut into timber. Less desirable wood and the unused parts of trees would be discarded, creating large amounts of waste (Phillips 1929:18). Using the less desirable wood, dead and damaged trees, unwanted species, and the crowns of trees to make pulp was occasionally encouraged to little avail (Cruikshank 1944:60). From Tyrrell much of the cut timber went north as planks, shingles, staves, and fence rails. Good quality pieces, free of knots, would also be cut for interior paneling (Bell 2001). There were three mills in the area in 1893. They produced 4.5 million board feet of lumber and 7 million shingles. Because 1893 was a depression year they were operating at less than full capacity. Their full capacity would have been 6 million board feet of lumber and 9 million shingles (Ashe 1894:110). Shingle production continued to decline; in 1900 only 5 million shingles were shipped from Tyrrell. The outlook for lumber was improving though, in 1900 Tyrrell shipped 15 million board feet of lumber (Watson 2010:146).

In 1907 the John L. Roper Lumber Company held a small slice of Tyrrell County from just north of the Frying Pan almost to the shore of the Albemarle Sound. The Roper Lumber Company was a Virginia company found by John L. Roper in 1865 originally focused on cypress and juniper. They operated several mills in North Carolina cutting loblolly pine, juniper, and cypress. In the 1870s the company switched from seasoning the pine outdoors to using dry kilns which yielded boards equal in quality to the then more popular longleaf pine. Roper advanced shingle production as well by mechanizing the process. With their machines the North Carolina plants were producing 100,000 shingles a day. Some of the cedar shingles cut from the North Carolina swamps were used to construct stations for the Life Saving Service along the coast where their weather resistant qualities were greatly appreciated (American Lumberman 1907:54-58,60,65,72,110).

By 1921, giant lumber companies dominated the landscape of Tyrrell. In 1921, Roper's rival Richmond Cedar Works owned approximately 80% of the land in the county. Roper Lumber Company, Magnolia Land and Lumber, and several smaller companies owned most of the rest (TCRD 1921). Some residents resisted Richmond Cedar Works attempts to acquire their land in Tyrrell County. Richmond Cedar Works sometimes responded by pressuring the town to change property lines so that they could

acquire the land anyway. They knew that many of the residents could not afford a long legal battle. Tyrrell residents continued to cut small amounts of timber on land acquired by the company. Rather than adopt burdensome preventive measures, Richmond Cedar Works tacitly allowed their activities (Cohoon and Brickhouse 2001). They cleared much of the land that they owned. By the time Richmond Cedar Works sold to West VaCo, most of the land was second-growth timber (Bell 2001). Cypress and juniper comprised only 10% of Tyrrell's trees by 1927. Long leaf pine had been replaced by loblolly as Ashe had predicted (Phillips 1927:264). The state of North Carolina began conducting formal lumber inventories in 1938; by that time cypress made up less than a quarter of cut lumber (Cruikshank 1940:31) and would never exceed that amount in any of the latter surveys, each conducted about twenty years apart.

From 1900 to 1940 there were many companies operating in Tyrrell on some scale. They employed clear-cutting to harvest the swamp trees; no effort was made to replant depleted stocks. The land was left to naturally replant itself. This created to a major change in the tree makeup of Tyrrell County; loblolly pine replaced many species in the drier areas, especially the long leaf pine. This occurred because loblolly seeds easily and grows far faster than other species (Ashe 1894:20). Some species, particularly cypress, can take up to 60 years to reach a mature size. Loblolly can be ready for harvesting in 25 to 30 years (Bell 2001). Long leaf pine was largely eliminated because it seeds very slowly. The earliest recorded survey, in 1882, reported that at least 75% of Tyrrell was wooded, 50% juniper and cypress, 25% pine and oak (Hale 1883:245). The 1894 survey provides more detail, and notes the decline of the long leaf pine in eastern North Carolina (Ashe 1894:106-107). In addition to heavy use in the timber industry, the long leaf pine's recovery was slowed by its reproduction cycle. They produce seeds only every few years in large groupings called masts. This reduced opportunities for the tree to seed compared to other species and bad weather could easily destroy entire masts. The long leaf pine requires from 35 - 50 years before reaching useable size (Ashe 1894:52-57). Starting in 1830, Washington County conducted an extensive trade in long leaf pine with the West Indies. The pure stands of long leaf were depleted by 1860, forcing lumber companies to switch to the more readily available loblolly pine (Ashe 1894:106-107). Cypress was also threatened because the tree takes a long time to grow, and is found on rich soil desirable for farming. By 1894 many cypress swamps had been drained. Cypress also reproduces slowly and Ashe predicted that there would never be a large second-growth of cypress (Ashe 1894:40). Production statistics from later years support that prediction (Cruikshank 1940:31, 1944; Brown 2004:43). The cypress stocks regenerated better than predicted, especially in Tyrrell County where mixed stands of oak, gum, and cypress comprised 50% of the timberland by 2002 (Brown 2004:25), but never reached their pre-

lumbering levels. Loblolly is a hardy species, quick to reproduce itself and replace many other species, especially long leaf pine, in moderate environs. Not including new growth, the supply was predicted to be sufficient for 15 years at the current rate of use in 1894. With careful management it was believed they would last much longer. The supply of long leaf pine was estimated at 20 years; because long leaf stands regenerate themselves poorly that estimate was given with confidence (Ashe 1984:41-42). Later surveys revealed that nearly the entire pine harvest consisted of loblolly and yellow pine (Cruikshank 1944:43; Brown 2004:63). Despite the dearth of long leaf pine, loblolly would still not have been used except for a new technique, kiln drying. The pine timbers rotted and discolored badly because of their high sap content. Kiln drying was adopted to drive the sap from the pine boards. Loblolly must still be painted for protection from the weather if used externally (Ashe 1894:107).

A second survey of North Carolina's resources was completed in 1927. As predicted in 1893, long leaf pine in commercial quantities had become scarce (Phillips 1927:264). Loblolly pine replaced long leaf in the coastal plain as the softwood of choice for pulp and lumber. The swamps still contained a great deal of black gum, and some cypress with scattered stands of juniper. Railroad logging was in decline as good roads were expanding enough to make truck transportation viable. Second-growth trees were beginning to reach maturity. The survey speculated that with careful management there would be enough second-growth wood constantly maturing to keep lumber businesses operating indefinitely. Saw timber and pulp wood were largely cut from pine, shingles from cypress and juniper (Phillips 1927:18). The shingle trade by this time was in marked decline (Stewart 1981:102-103). Approximately 75% of Tyrrell's forests were owned by lumber companies at this time. The tree species in the country were 75% loblolly, 15% gum, 10% cypress and white cedar. Pure stands of white cedar, while once abundant, were nearly extinct. At this time Tyrrell was estimated to have 95 million available board feet of timber sized for cutting (over 8 inches wide 12 inches from the ground). However, that amount was considered only partly accessible. Two saw mills produced 500,000 board feet annually, with 3,500,000 board feet of logs exported by water each year (Phillips 1927:264).

In the 1930s lumber companies began to notice that their current methods were depleting the available stock of trees. Wishing to ensure a continuing supply of timber, in 1937 several companies sent representatives to two meetings of the American Pulpwood Association held in New Orleans, Louisiana and Jacksonville, Florida. There they codified a set of rules designed to encourage sustainable forestry. Loblolly and short leaf pine were to be subject to partial cutting where possible. Only trees eight inches in diameter at the stump (12 inches above ground) were to be cut except for stand improvement purposes

(removal of dead trees and thinning to encourage growth). Where partial cutting was not practiced, at least four healthy seed trees per acre of eight inches or more in diameter were to be left. Two companies which would later have operations in Tyrrell participated: the North Carolina Pulp Company (now a part of Weyerhaeuser Company), and West Virginia Pulp and Paper Company (Maugham 1939:247-249, 254-257). Initially, lands under management according to these provisions would be allowed to reseed naturally, but both companies eventually practiced replanting. Weyerhaeuser's current replanting operations are extensive across all their properties (Weyerhaeuser 2012b).

Because of their extractive business model, the lumber companies of the early 1900s were an inherently transitory phenomenon. Once the readily available lumber was cut they were forced to adopt more sustainable practices or move on. Requiring 25 to 60 years for a stand to replenish, growing timber is a slow process that requires extremely long term planning. When the companies moved on they took their jobs and money with them. Columbia experienced a sort of boomtown period while the companies were at their peak. The population of Tyrrell never grew much above 5,000 and the companies could add 130 permanent jobs and plenty of temporary work (Cruikshank 1940:3; Watson 2010:188). When the big lumber companies went into decline and eventually departed it hurt Tyrrell economically. Columbia and other Tyrrell townships nevertheless fared much better than their neighbor Buffalo City in Dare County.

Buffalo City was a company town operated by Dare Lumber Company. Workers lived in company housing and were paid in company coin, referred to as "pluck." Columbia was a farming town booming from the timber trade's presence. Buffalo City existed only for the timber trade. When the Dare Lumber Company departed the town collapsed entirely. Today the site of Buffalo City is just a flooded ruin (Twiddy 2001).

In 1928, the US Congress passed the McSweeney-McNary Act which called for periodic surveys of the country's forestry resources. The first North Carolina survey in this series was completed in 1938. Loblolly pine was still the prevalent species. It comprised half the surveyed trees, and three quarters of the lumber harvested. The best cypress and white cedar stands were found along the Roanoke River and also in Tyrrell County (Cruikshank 1940:7). Tyrrell also had vast stands of pond pine, a tree unfit for lumber use and difficult to cut. Only 4% of the forest land in the northern coastal plain was classified as clear-cut, mainly as a result of repeated fires in Dare, Hyde, and Tyrrell Counties. One fifth of the available saw timber was old growth trees in the northern coastal plain; the rest was primarily second-growth pine. At this time seven saw mills capable of cutting between one and nine thousand board feet each per day were recorded in Tyrrell. All mills of this size used circular saws; large mills such as those at Elizabeth City used

band saws which cut cleaner. 347 million board feet of lumber was produced in the coastal plain in 1937. Eighty percent was pine, 15% mixed hardwoods, and 5% white cedar and cypress. The pulp mill in Plymouth achieved full operation in 1938. Timber products from the coastal plain supplied building materials in the major cities of the east coast including Washington, Philadelphia, and New York. They also supplied mine reinforcing timbers, railroad ties, and hogshead staves (Cruikshank 1940:1,7,34).

An unusually quick follow-up survey was conducted in 1943 as part of the war effort. J.W. Cruikshank, compiler of the previous report, was the senior forester. Statewide production of lumber dipped in 1939, but rose again to meet war demand in 1940. Much remained the same in Tyrrell – it was still the best source of cypress and Atlantic white cedar. Cruikshank reported that about 10% of logging operations in the coastal plain had started using tractors for skidding. Many smaller operations still used animals. Steam cable skidders, described earlier, were used by large operations to log the swamps. Small companies sometimes used a cable skidder powered by a truck engine. Half of the mills on the plain used water access to move logs, and a quarter still used rail. Two shingle mills were reported in Tyrrell. An average shingle mill produced 10,000 shingles a day. Tyrrell continued to be split nearly 50/50 between loblolly and pond pine with a smattering of other types (Cruikshank 1944:38, 40-42,44-47,77). No new production figures at the county level after 1938 were recorded in this survey.

After the First World War there was a proliferation of lumber companies in Tyrrell. Most operated for a few years and then went under or ceased operations. The Second World War was a period of consolidation for the lumber industry. Only the large companies such as Roper, Richmond Cedar Works, and Magnolia Land and Lumber Company were able to continue operations. Production capabilities remained the same with seven small mills still in the county, but the number of active companies was vastly reduced (TCRD 1885-1994).

In 1953 Richmond Cedar Works sold their land in Tyrrell County to West Virginia Pulp and Paper Co. also known as West VaCo (Bell 2001). Most of the land was second-growth yellow pine. West VaCo owned over 300,000 acres in Tyrrell and Dare counties where 129 people were employed full time in the lumber industry (Watson 2010:188). Some farmers also freelanced for the companies from time to time. Local estimates put the available work force at several hundred (Sharpe and Zarr 1964). The local center of West VaCo operations was a lumber yard across the Scuppernong from the Columbia Waterfront (Davis 1963:86) (Figure 40). West VaCo used roads and tractors instead of rafts and skidders to cut the timber. They built 150 miles of swamp road in the two counties which allowed them to access most of the swamp efficiently. Using a variety of tractors with broad wheels to negotiate the soft earth,

West VaCo was able to reach most of the swamp. Quentin Bell remembered that at one time during his tenure as a forester for the company they cut 10,000 acres in 10 years on one plot (Bell 2001). The new technology was slightly more limited than its predecessors though. The tractors could not negotiate the wettest, softest places and could become mired in the soft ground, whereas a skidder cable dragged by a man could reach nearly any place in the swamp if a boat could be moved close enough (Bell 2001). Statewide the lumber production peaked at 2 billion board feet annually in the 1950s (Knight and McClure 1966:7).

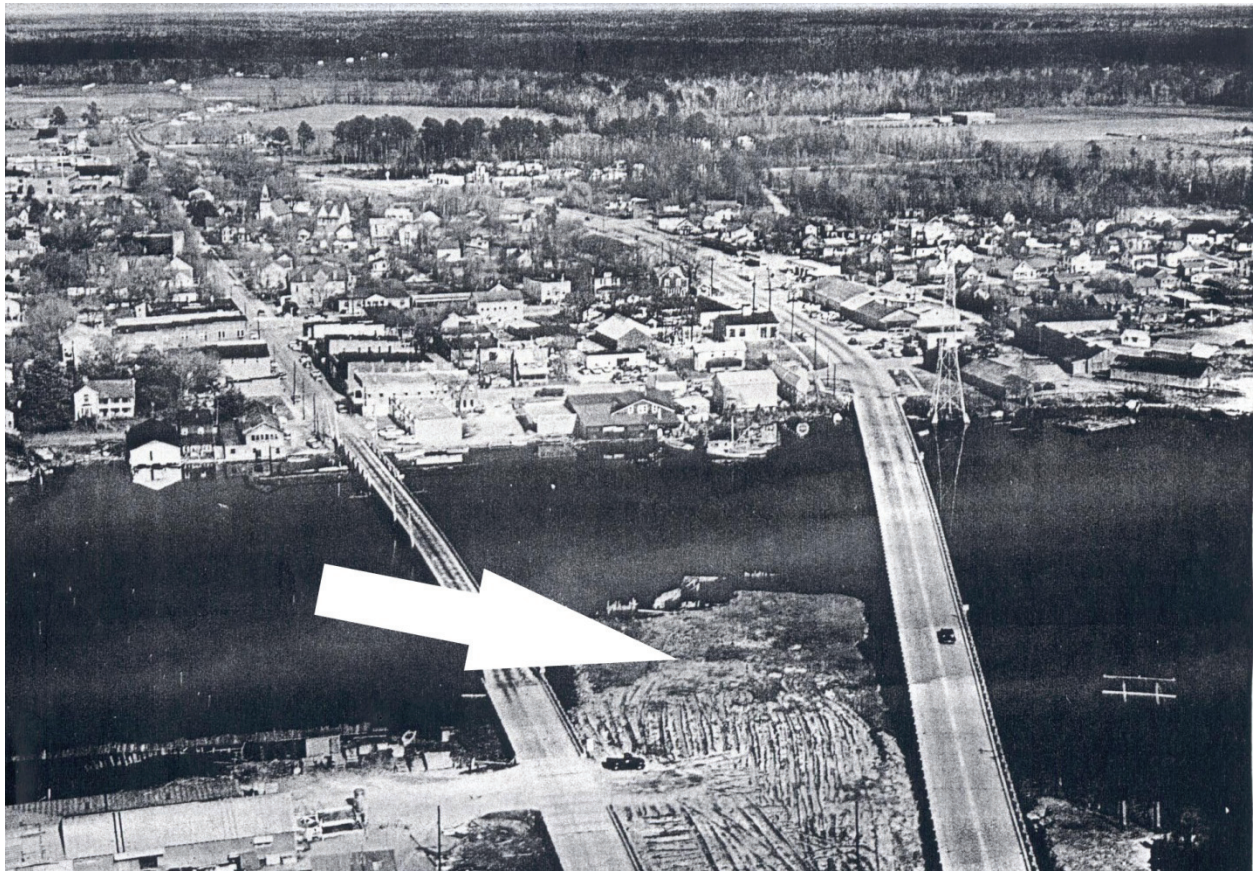


Figure 40. The West Virginia Pulp and Paper Company, visible lower left, was active in Tyrrell from 1953 to 1973. (Tyrrell County Public Library).

In 1964, North Carolina completed its fourth survey of lumber resources in accordance with the McSweeney-McNary Act of 1928. The survey found that 85% of Tyrrell County (212,000 acres) was commercial forest. There were three mills in the county capable of cutting over 2 million board feet annually. There were five more in Washington County, along with numerous other plants devoted to lumber products including veneers and pulp. In 1963, 15.4 million board feet of lumber was cut from

Tyrrell County. Nearly all of this (15.3 million board feet) was softwood. West VaCo was the primary lumber producing company in Tyrrell at that time. Lumber production was down from a peak of 2 billion board feet in 1950 to 1.5 billion board feet in 1964 (Knight and McClure 1966:7,12,46).

From 1970 Onwards, West VaCo and Weyerhaeuser

In 1973 the lands that had belonged to West VaCo were sold to a venture called First Colony Farms for drainage into farm land (Bell 2001). First Colony became the largest owner of commercial forest lands in the county as a result. First Colony found draining the swamp land difficult and struggled with the project for a few years. In the mid-1980s First Colony quit and conceded that they would be unable to make the land into profitable farms. In part this was due to new legislation that would cause them to forfeit certain federal program benefits, and in part because the best farm land had been drained long ago (Tyrrell County 1991:31). The land they acquired from West VaCo, now containing third-growth trees, became a wildlife refuge.

The next survey of North Carolina's forest resources was carried out by Herbert Knight and Richard Welch in 1974 just after First Colony Farms acquired West VaCo's holdings. Between 1963 and 1973, 173,000 acres of commercial forest lands were converted to other land uses, reducing the area of the coastal plain's lumber resources by 3%. One of the reasons for this extremely high cut was the transfer of West VaCo lands to First Colony Farms who attempted drainage projects to turn the land into farms. Tyrrell had 213,000 acres classified as commercial forest land in 1973; only 40,000 acres were owned by the forest industry. Most of the rest was owned by First Colony Farms who cleared much of the land. The commercial forest land of Tyrrell was dominated by yellow pines (loblolly and short leaf pine) and a mix of oak, gum, and cypress which covered 170,000 acres. Eleven million board feet of saw timber was cut in 1973, evenly mixed between pine and soft hardwoods. Three million cubic feet of growing stock was also cut (Welch and Knight 1974:I,14-15,20; Bell 2001).

In the 1980s and 1990s Tyrrell was generous to the few remaining lumber companies. They chose to encourage their continuing presence with lax regulation. A recurring encouragement to replant harvested areas was the only measure passed (Tyrrell County 1991:76). In 1980 the county considered raising taxes on the forestry industry but declined to do so as such action might discourage the existing industry which was considered a valuable source of tax income despite reduced size (Tyrrell County 1980:55-56). In 1983, Tyrrell County possessed 160,000 acres of commercial forest land, of which the forest industry

owned 46,000 acres. Sixty-five thousand acres was loblolly and other yellow pines, 20,000 mixed pine and oak stands, and 73,000 of oak, gum, and cypress. Thirty-six million board feet of saw timber was cut in 1983, 26 million of which was pine. Ten million cubic feet of growing stock was cut including 6.5 million cubic feet of pine (Bechtold 1984:19-21,33).

The sixth survey of North Carolina's forests under the 1928 act was completed in 1990. At that time the forest industry controlled 2.4 million acres of forest land statewide, 85% of which was in the coastal plain. Pond pine, prominent in Tyrrell, had declined to just 600,000 acres statewide. Intense forest management in the coastal plain resulted in a 6% increase in softwood growing stock. For the first time hardwood growth exceeded removals in the northern coastal plain. By 1990 no sawmills remained in the county, though three remained in Washington County. Pulp wood production rose to 347 million cubic feet for the state, surpassing cut lumber as the number one use for timber. Tyrrell County retained 150,000 acres of forest in 1990, around 59% of its land size. Thirty-six thousand acres of this was owned by the timber industry (Brown 1993:3-6,18,20,23,85-86).

In 1996 Weyerhaeuser Company owned 18,000 acres in Tyrrell and employed 28 people from the county at their Plymouth pulp plant. Additional residents were employed as cutters, railroad operators, and truck drivers serving the main plant in Plymouth. The Plymouth plant produced 150 million square feet of plywood, 105 million board feet of lumber, and 50 million board feet of treated lumber each year (Haire et al. 1996:95). From 1990 to 2001, 31.7 million board feet of lumber was harvested from Tyrrell annually. Almost twenty-nine million board feet was yellow pine, the remaining 2.9 million being various hardwoods. By 2002 the combined lumber interests of Weyerhaeuser and smaller companies in Tyrrell owned 20,000 acres of land (Brown 2004:23,67).

Weyerhaeuser Company is the last remaining major lumber company with interests in Tyrrell County. Branning Manufacturing sold their last land in Tyrrell in 1927. Magnolia finished operations in the county in 1964. Richmond Cedar Works sold their interests to West VaCo in 1953. West VaCo operated successfully until they sold their interest to First Colony Farms in 1973 (Bell 2001). The John L. Roper Company sold their last parcel of land in Tyrrell in 1977 (TCRD 1885-1994) and closed their books for good in 2009, another victim of the current economic recession (Gilligan and Dooley 2009). Many smaller companies continued to operate through the 1990s, however most had a lifespan of only a few years. Despite the current economic downturn which claimed the Roper Lumber Company, Weyerhaeuser has managed to keep up operations and showed a small growth in the first quarter of 2012 (Weyerhaeuser 2012a).

Conclusion

For Tyrrell County the lumber companies were a boom town industry. While they lasted, the timber companies brought jobs, money, and better infrastructure to the county. Despite Weyerhaeuser's continued large operation, the timber industry of Tyrrell County has been steeply in decline since the departure of West VaCo. Weyerhaeuser continues to cut large amounts of timber annually, but owns little land compared to previous companies and employs few people presently. The industry is a shadow of its former self. Most of the land they once cut timber on is now wildlife refuge or back in the hands of Tyrrell's citizens. However, the lumber industry's legacy in Tyrrell is more than a passing economic bubble. It wrought sweeping changes to the local ecosystem. In places where long leaf pine and cypress once grew densely, loblolly and black gum have replaced them. Life goes on quietly in Tyrrell County much as it always has in the wake of the lumber giant's departure, but the primordial swamp of generations past is just as ghostly a memory as the departed lumber industry that shaped it.

WARFARE IN TYRRELL COUNTY

Introduction

Warfare has always been an integral part of history. Nations have risen and fallen on the backs of campaigns designed to capture new resources and influence regional power balances. Many of these so-called war efforts have been unofficial, begun by no king or president. Until the advent of modern history as a study, the majority of these conflicts had been forgotten, but new wars of conquest arrived with the colonization of the Americas by Europeans beginning in the 16th century. These colonization wars ultimately resulted in the nearly complete destruction of Native American cultures in both North and South America. In North America particularly, what became the Thirteen Colonies of Great Britain and later the United States virtually wiped out Indian populations in the East. This paved the way for even more devastating conflicts among the white newcomers in the future.

As one of the very first areas in North America to be colonized, beginning in the first decades of the 1600s, eastern North Carolina (though it was not yet called this) soon witnessed its share of war. English settlers were soon moving south from the Virginia colony into the Albemarle Sound area and displacing the local tribes. The land south of the Albemarle which eventually became Tyrrell County in 1729 was part of this unfortunate process. Eventually, a war against the Native Americans began there that would pave the way for several future conflicts in this otherwise quiet and sparsely populated region of North Carolina. This legacy, although by no means pleasant in itself, has become part of Tyrrell County's long and proud heritage despite the adversities its people have faced. The wars fought in Tyrrell County or ones that some of its inhabitants went away to fight have not been discussed in detail. Tyrrell County inhabitants participated in several important conflicts beginning with the Tuscarora War; the Revolutionary and Civil Wars saw some events on Tyrrell soil, while the First and Second World Wars saw approximately 100 men from the county serve in each.

This chapter will therefore offer an overview of warfare in Tyrrell County utilizing historical sources. There will be a brief discussion of each conflict in order to give context to the time in which it was fought and how it affected Tyrrell County in general. The boundaries of the county at the time of each conflict will also be taken into account—several occurred outside the borders of the present day county lines due to the partitioning of parts of Tyrrell into Martin, Washington, and Dare counties beginning in 1774 and continuing until 1870.

The Tuscarora War, 1711-1715

Although minor conflicts regarding land, hunting rights, and fishing grounds between the colonists and the Native Americans date back to almost the first days of American settlement, relations between the English and local tribes in the Albemarle area were generally pleasant. For nearly 100 years after the first settlers moved south from Virginia, the abundance of coastal North Carolina's rivers, sounds, and forests sustained both groups. Contact was fairly limited during this time, as there were still relatively few English in the area. By the 1690s and early 1700s this situation was changing, and ever increasing numbers of colonists encroached on Native American lands. The tribes began grow restless as they were forced to compete for space and resources on their ancestral lands (Powell 1989:22-24; Perdue and Oakley 2010:27-31).

The first tribe reported by European explorers to live in the area that became Tyrrell County was the Secotan people. The Secotans, who had numerous peaceful interactions with European people, disappear from historical records by the beginning of the 18th century -- likely displaced by the more powerful Tuscarora tribes which moved into the area around that time. Interestingly, the large Secotan villages of Mecopen and Tramaskecoc were situated in the approximate area of modern day Columbia (Davis 1963:1) (see Figure 7). In any case, the interactions between the Secotans and English settlers were not typical of many other tribes in the region. In particular, the Coree and Machapunga tribes, which may have absorbed some of the former Secotans, were keen to harass the settlers for taking their land. These groups were therefore declared public enemies in 1703 by the Carolina government, and it seems a campaign was carried out against them. Unfortunately, all records relating to it appear to be gone. By 1711, they remained only in small groups in the interior, in thrall of the Tuscaroras (Paschal 1955:29-32; Powell 1989:77-83; Perdue and Oakley 2010:31-34).

The Tuscarora tribe at the beginning of the 18th century was the most powerful Native American group in eastern North Carolina, ruling from the Roanoke to the Neuse Rivers (Davis 1963:13). After the campaign carried out against the more aggressive of their neighbors in 1703, the Tuscaroras were in an even more advantageous position to retake land from the white settlers. All of the tribes at this time shared the idea that the colonists were preparing to make war on them, and rumors began to circulate that the Indians in turn intended to strike first. Harsh treatment on both sides continued, and when a 1710 petition by the Tuscarora leaders to move to Pennsylvania was denied pending a certificate of "good behavior," the natives felt they had no alternative but to make war (Enoch 1963:20).

At dawn on 22 September 1711, the Indians launched a sudden massive surprise attack. The time they had chosen to begin the war could not have been more suitable, for the new governor, Edward Hyde, and his supporters were facing the previous governor, Thomas Cary, in a battle for the office (Enoch 1963:21). The conflict known as Cary's Rebellion had embroiled North Carolina, and the colonists were quite distracted. In the wake of this rebellion, which was put down by Hyde, the Tuscarora War began. For three days the Indians attacked any white settlement they could reach and killed anyone they found. These attacks were largely carried out in the southern areas near the Neuse River, which was the territory of King Hancock, one of the more powerful Tuscarora chiefs. In the north, King Tom Blount and his followers had maintained friendly relations with the settlers, and refused to take part in the conflict, thus sparing many lives in what later became parts of upper Tyrrell County (Davis 1963:14).

Although the refusal of Blount's people to participate in the war limited the number of warriors, Hancock's Tuscaroras were aided by members of the Coree, Machapunga, Bear River, Neusioc, and Pamlico tribes. Settlers continued to be tortured and killed, and their homesteads plundered. The remaining colonists retreated to a few of the larger plantations and fortified themselves, but it seemed the Indians were far better prepared than they. The Lords Proprietors, chief landlords of the colony, did nothing, and the killing continued. North Carolina was forced to turn to Virginia and South Carolina for help (Enoch 1963:23,26).

Governor Alexander Spotswood of Virginia immediately shut down all trade with the Indians and sent out militia to prevent the Virginia natives from joining the war further south. In turn, South Carolina appropriated funds to raise an army of friendly Indians led by white officers. This force, under the command of Colonel John Barnwell, reached the Neuse in January 1712. Although promised reinforcements failed to arrive, the South Carolina force was well supported with about 30 white men and 500 Indians. Barnwell proceeded to immediately attack any Indian town he came across, destroying six villages and numerous forts within the first month. Although he encountered a major setback in March at Hancock's Fort, where he was forced to sign a truce to prevent the massacre of prisoners, Barnwell continued to aggressively wage war on behalf of the North Carolinians (Enoch 1963:27).

By April 1712, despite sickness, desertion, and vicious counterattacks by the Indians, Barnwell's force had all but finished the first stage of the war. On 7 April, under cover of darkness, the South Carolina force again attacked Hancock's Fort, the last major center of resistance. After a ten day siege, the fort surrendered. Barnwell set the conditions: all captives must be given up within ten days, King Hancock and the other main leaders must be surrendered, and the Indians must pay tribute to the governor once a

year while otherwise confining themselves to the immediate vicinity of the fort (Enoch 1963:30-31). Unfortunately, Barnwell set these terms without the knowledge of Governor Hyde, and they were generally not met with approval by the North Carolina government or its citizens. North Carolina's white settlers and their leaders wanted the Native Americans either exterminated or driven entirely from the colony, and Barnwell had failed to do this. In turn, the Indians continued to chafe under ill-treatment and the limiting terms of the peace. Barnwell's forces, denied the rewards they had expected, raided the country for property and slaves. As a result, the Tuscarora War soon flared up again, not long after it should have ended. (Paschcal 1955:18-19,28-31)

After a brief interlude, the Indians resumed their attacks, and Governor Hyde himself gathered militia for a march into Bath County, but he was stricken with yellow fever and died on 9 September 1712 along with many other colonists. Thomas Pollock replaced him as Deputy Governor and continued to raise troops, and again a call for help went out to South Carolina. A force under Colonel James Moore was sent with a force of nearly 1,000 men, but did not arrive until December. In that time, Indian attacks had again driven the North Carolinians into a few starving garrisons. Resources for the armed companies were nonexistent in the Neuse and Pamlico areas, but were more plentiful farther north. Therefore, Moore's force marched directly to the Albemarle region (Paschal 1955:18-19,30-31; Powell 1989:79-80).

The Tuscarora of the Albemarle still had not taken part in the war, but the colonists did not trust them. Only King Blount maintained occasional relations, but the arrival of Moore expedited cooperation. The colonial forces promised Blount that trade could resume if he delivered King Hancock for execution. This was soon done. Blount had also promised to partake in the war on the side of the whites, but as January 1713 arrived he had done nothing. Moore's Indians in the meantime were growing restless, and began to raid the homesteads of the settlers, generating ill will toward Moore's forces. The South Carolinian realized that he would soon have to act or risk alienating the people of North Carolina as Barnwell had done. He therefore began preparations for a new campaign, and marched south on 17 January (Enoch 1963:35).

The hostile Indians, hearing of Moore's approach, had fled to Fort Neoheroka, near the old site of Hancock's Fort. The new fortification was much stronger, and when Moore arrived on 1 March he began careful preparations to reduce it (Enoch 1963:36). Batteries were placed, trenches were dug, and an excavation to place explosives under the fort was begun. A final attack was launched on 20 March; three days later, Neoheroka was wrecked and the power of the Tuscarora nation was ended (Paschal 1955:29-32). Nearly 500 Indians were killed and approximately 400 captured, making the victory complete.

After this striking victory, Moore attempted to crush the remaining pockets of resistance involving the Coree and Machapungas around the Pungo River. He was only partially successful, but things quieted down for awhile, and Moore returned to South Carolina in September 1713. Throughout the next two years, a few small bands of hostiles continued to operate in eastern North Carolina, terrorizing the colonists before disappearing into the swamps. Finally in 1715, the government decided to open negotiations rather than continue its campaign of extermination. On 11 February 1715, a peace treaty was signed giving the remaining hostile Indians a reservation on Lake Mattamuskeet. The treaty was successful, and "...was the final act of the Tuscarora War" (Enoch 1963:38).

The area that became Tyrrell County was relatively untouched during the war, although attacks did occur. The relative peace in the area was largely due to the neutral stance of King Blount's people. Nevertheless, the settlers there were forced to take up arms to protect themselves, as well as fortify their places of residence. One of the largest and best defended of these was Fort Landing on the Alligator River, established as the first community there in about 1700 (Davis 1963:7). It was protected from attack by log walls, and survived the war to become the largest settlement in the Tyrrell area until the establishment of Columbia.

In the end, the Tuscarora War resulted in annihilation of many native eastern North Carolina peoples. The Coree, Machapunga, and Neusioc were nearly wiped out, while the Tuscarora retained only a vestige of their former strength. They were now united under that friend of the colonists, King Blount. For the whites, there had been vast amounts of property lost, and progress in North Carolina had been set back for decades. Ultimately, the settlers were able to rebuild and resume normal life, something the coastal plain Indians could never do. They gradually dwindled away or fled north or west.

The Revolutionary War, 1775-1783

The American Revolution swept like a storm through New England, Pennsylvania, New Jersey, and South Carolina, but eastern North Carolina did not see much fighting on its soil. By the 1770s, the area remained quiet and sparsely populated, even after the incorporation of new communities and the formation of counties. One of these new counties was Tyrrell, formed on 27 November 1729, from land taken from Bertie, Chowan, Currituck, and Pasquotank precincts (Davis 1963:17-18). Tyrrell at the time of the Revolution was still a quiet place, but it molded one of North Carolina's greatest Revolutionary War leaders, Edward Buncombe (born in St. Kitts 1742, emigrated 1768, died 1779).

Like the other colonies, by the 1770s, North Carolina was becoming restless under the burden of harsh taxes and unequal representation. The large expanse of country and many outlying small settlements meant that effective governance was difficult. This was true in the counties as well, and Tyrrell was not immune to the spirit of rebellion sweeping the eastern seaboard in those days. Indeed, as early as 1770 there were rumors of rebellion in the area due to the large size and relatively ineffective government of the county. Although the problems were partially remedied in 1774 by the formation of Martin County, the colonists had begun by this time to openly detest the British colonial government (Davis 1963:33).

Tyrrell County was well represented at the August 1774 conference in New Bern on whether resistance to colonial rule was warranted. Joseph Spruill, Jeremiah Frazier, Peter Wynne, Stephen Lee, and Thomas Hoskins were all natives of the Tyrrell area who participated. Ultimately, nothing was decided until war broke out in April 1775 at Lexington and Concord in Massachusetts. Immediately the colonies rushed to muster their militia forces. Their governments were quickly taken over by those who would have independence, calling themselves “Whigs.” Colonists remaining loyal to the British, soon termed “Tories,” took up arms to defend themselves or hurried to the aid of British forces. Eastern North Carolina in particular was a hotbed of Tory activity. For much of the war they harassed the Whig forces in the area, although little large scale fighting occurred. Tyrrell County itself did not see any major actions on its soil, but at least 100 of its men fought in the war, on both sides (Davis 1963:36).

A prominent local citizen and planter, Edward Buncombe, was a prime example of the Whig leaders of North Carolina. The Whig governor, Richard Caswell, appointed Buncombe head of militia forces in his native Tyrrell County on 9 September 1775. Buncombe immediately began to prepare, appointing Benjamin Blount as Lieutenant Colonel, James Long as First Major, and Joseph Spruill as Second Major. It was said that Colonel Buncombe, being wealthy, drilled and equipped his force at Buncombe Hall at his own expense (Davis 1963:38-39). At any rate, the war did not immediately come to eastern North Carolina.

After a year of fighting in the northern states, an assembly was called in Halifax, North Carolina in April 1776. The only representative of Tyrrell County in attendance was one Archibald Corrie. Colonel Buncombe was at this time appointed commander of the new Fifth North Carolina Battalion of the Continental Army. The battalion was composed of men from Tyrrell and neighboring counties—it was stated that Tyrrell and Perquimans counties sent the first volunteers to the Continental Army from the Albemarle region (Davis 1963:38,40).

In the summer of 1776, drilling and organization were complete, and Colonel Buncombe led his men from Buncombe Hall to Wilmington, where they embarked on transports for the northern campaigns. The Fifth North Carolina ultimately participated in many of the early engagements of the Revolution, but Colonel Buncombe was captured in the Whig defeat at the Battle of Germantown on 4 October 1777 in Pennsylvania. He later died of his wounds in 1779 while still a British prisoner. The Fifth North Carolina was further reduced in size at Valley Forge and sent to the Southern Department, where it served until capture at the disastrous fall of Charleston, South Carolina in May 1780 (Davis 1963:40).

At the same time that Edward Buncombe was training his Whigs, the abundant Tories in the region began to grow more active, especially around Lee's Mill. They began by secretly trying to persuade Whigs to leave Buncombe's force, under the promise that British General Howe would arrive in the area as soon as the Whig forces departed, seizing all their property. When this ploy did not work, the Tories began making plans to assassinate the local Whig leaders, including Colonel Buncombe. The Tyrrell County Tories involved in these plots were led by John Llewellyn and Daniel Legget, who called himself "Senior Warden." Before any of the assassinations could be carried out, Legget's and Llewellyn's plans were discovered, and the latter was imprisoned in Edenton along with several other Tories from the Lee's Mill area (Davis 1963:39). While this ended the Tory plot in Tyrrell County, Llewellyn was sentenced to hang, and his wife pleaded with a prominent politician from Scuppernon Township for her husband's life. Even though Governor Caswell became involved in the matter, Llewellyn was not pardoned. Hearing of his former compatriot's execution, Legget surrendered and begged for pardon. As Davis (1963:40) writes, "He appears to have escaped with his neck."

An interesting but little-known aspect of the Revolution in North Carolina that may have briefly visited Tyrrell County was the state navy. As William Still (1976:1) writes, "With the exception of New Jersey and Delaware each of the thirteen states commissioned one or more armed vessels." North Carolina was lucky enough to build or obtain five warships. Three were converted merchantmen: the brigs *General Washington*, *King Tammany*, and *Pennsylvania Farmer* (Still 1976:6). They were based out of Brunswick, Edenton, and New Bern, respectively. Very little is known of their design or wartime activities. It seems likely that *King Tammany*, being based at Edenton, visited either the Scuppernon area or Alligator River during its patrols of Albemarle Sound. The two galleys built by North Carolina, *Washington* and *Caswell*, were a joint project with Virginia. It appears that they did not see service in the Albemarle Sound area, being used instead to guard the approaches to Ocracoke (Still 1976:7). Unfortunately, the specific movements of all of these vessels cannot be stated with any certainty.

With the end of the Tory plots and the disposal of their leaders, the Revolutionary War once again left Tyrrell County in relative peace. The brunt of the fighting in the South was absorbed by South Carolina. Although major battles were fought in North Carolina, particularly at Guilford Court House, and British forces occasionally marched through the state, the inhabitants of the communities along the Scuppernong and Alligator rivers did not experience fighting firsthand. All around them, communities such as New Bern and Halifax felt the wrath of the British. It was fortunate for Tyrrell County that at this time there were no points of major strategic value. This would not hold true in the next war.

The Civil War, 1861-1865

In the nearly 80 years between the end of the Revolution and the Civil War, life continued as usual in Tyrrell County. However, there were two significant events during this period. Washington County was formed in 1799 from the western part of Tyrrell (Davis 1963:43). Most importantly, a new settlement named Elizabethtown was established in 1793 on the east bank of the Scuppernong River. The chosen site was near the old Indian villages of Mecopen and Tramaskecoc. Elizabethtown was soon renamed Columbia to avoid confusion with another North Carolina settlement, and by the Civil War was the largest population center in the area and also Tyrrell County seat. Many of the men who served in the Civil War called Columbia home.

With the 12 April 1861 firing on Fort Sumter in Charleston Harbor, the Civil War officially began. Much like the Revolution, stirrings of rebellion had been sweeping the country for several years prior, and by 1860 anti-Northern feelings were strong in the South. Eastern North Carolina was not immune to this widespread sentiment, but the state's reaction to the secession of South Carolina in December 1860 was lukewarm. Prior to Fort Sumter, public opinion seemed to favor remaining in the Union, but by May 1861 it had come full circle and North Carolina seceded from the United States (Barrett 1960:6-7).

Preparations for war began almost immediately. A number of fortifications were either commandeered or hastily constructed, especially on Roanoke Island and the Outer Banks to the east of Tyrrell County. No forts are known to have been built in Tyrrell itself, but in order to augment the defenses of Croatan Sound, between Roanoke and the mainland, an old canal boat was sunk in shallow water near the Tyrrell shore (now in Dare County) and eight guns mounted on the deck. This makeshift

battery was called Fort Forrest (Barrett 1960:29). In addition, a line of obstructions was placed across shallow Croatan Sound (Figure 4I).



Figure 4I. "Obstructions placed by the rebels in the Croatan Sound--sunken vessels and chevaux de frise." (Original printed source unknown. Neg. 80-419. NCC vault FFCC970.73 B96, North Carolina Civil War Image Portfolio, University of North Carolina at Chapel Hill).

It is not known if any artillery pieces were provided for the defense of Columbia, but it seems probable that the county seat would have had at least a few large cannon. In addition to these permanent defenses, the fledgling North Carolina State Navy, pieced together from several small acquired vessels and jokingly called the "mosquito fleet," guarded the Pamlico and Albemarle sounds. This ragtag force primarily patrolled off Roanoke, providing a second line of defense to the forts there.

Tyrrell County responded quickly to the wartime need for raising soldiers. Ultimately, 336 Tyrrell men ended up fighting in the war, although they represented both sides. Most fought for the Confederacy, and the first steps were taken in Columbia in May 1861 with the formation of the Scuppernong Grays. This group of men went to Raleigh and was incorporated into the new 12th North Carolina Regiment as "Company L". Later in 1861, the 12th was stationed at Portsmouth, Virginia and became part of the 1st North Carolina Battalion. This unit saw action on 19 February 1862 against a force of Union gunboats on the Chowan River, near Winton, North Carolina, but was forced to withdraw (McClees 2002:30). The 1st NC later became part of the new 32nd North Carolina Regiment.

In May 1862, Company A of the 32nd North Carolina Regiment was formed under the command of Tyrrell native Major Edmund C. Brabble (Figure 42), who was promoted to colonel. The unit consisted of 17 officers and 84 enlisted men, and was soon ordered to duty at Murfreesboro, North Carolina. Interestingly, it seems that all the officers of the 32nd were from the same church. Their acquaintance with

each other, and many of the men, served to bond the regiment into a tightly knit group. Brabble was reportedly a strict disciplinarian but in all respects a good commander; he was sorely missed after his death in May 1864 (Davis 1963:54).

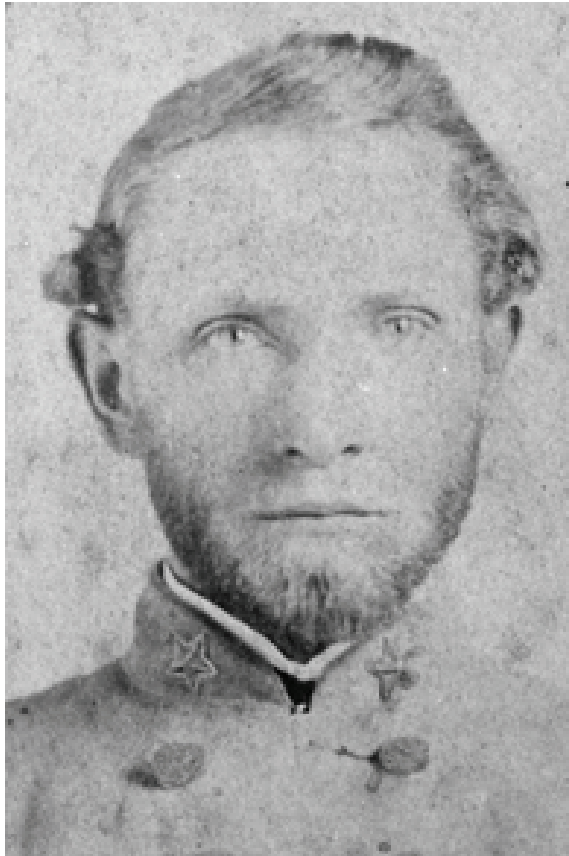


Figure 42. Major Edmund C. Brabble, CSA, commander of the 32nd North Carolina Regiment. (North Carolina State Archives).

Lieutenant Colonel David Coward of Bertie County succeeded Brabble in command of the 32nd NC. By war's end the regiment had fought at South Mills and Deep Gully, North Carolina, Gettysburg, the Wilderness, Spotsylvania, Cold Harbor, Petersburg, and Appomattox (David 1963:53-54). It was also given the privilege of flying the first official Confederate battleflag, the "stainless banner," in 1863. Unfortunately, despite its gallant service, the 32nd NC suffered greatly during the war. By April 1865 only 117 men were left in the regiment.

Other men from Tyrrell County volunteered for other units prior to the formation of the 32nd NC. One of the most famous of these was Lieutenant Colonel William F. Beasley, who enlisted in the 71st NC. He was only 18 years old and the youngest man of his

rank in the Confederate Army (Davis 1963:54). Other men enlisted in Company F, the Hertford Grays, and Company G, the Washington Volunteers, both part of the 1st NC Regiment. This unit saw action in the Seven Days Battles, Antietam, Fredericksburg, Chancellorsville, the Wilderness, Spotsylvania, Cold Harbor, Fisher's Hill, Petersburg, and Appomattox. Like the majority of Confederate units, the 1st NC suffered heavy losses and was just a shadow of its former self by war's end (McClees 2002:34).

Other Confederate units with Tyrrell men were the 17th NC Regiment and the 2nd NC Cavalry Regiment. The former included the Roanoke Guards of Martin County and the Morris Guards of Washington County, renamed Companies F and H, respectively. Like the 32nd NC, the 17th was organized at Raleigh in May 1862, a previous version of the regiment having been captured and disbanded

at Roanoke Island in August 1861. The new 17th NC saw action at Washington, Plymouth, New Bern, Kinston, Goldsboro, and Fort Fisher, North Carolina; Cold Harbor, and Petersburg, being disbanded in May 1865. At least a few Tyrrell men served in the 2nd NC Cavalry as well. This unit was formed in July 1861 from companies raised in Gates, Hertford, and Beaufort counties. It participated in the battles at Fredericksburg, Chancellorsville, Brandy Station, Upperville, the Wilderness, Spotsylvania, Petersburg, and Appomattox (McClees 2002:41,43).

A famous Confederate unit from North Carolina was the Albemarle Artillery Battery, more commonly known as the Edenton Bell Battery because its guns were forged from Edenton town bells. Over 30 Tyrrell men served in this unit, designated Company B of the 3rd NC Artillery Battalion, which was organized in February 1862. The Bell Battery was under the command of Captain William Badham, and it served well despite never having the chance to defend the Albemarle. After the August 1861 fall of Roanoke Island, Union forces occupied Elizabeth City and Edenton; the 3rd NC was moved to the defense of Richmond. It did not see action until December 1862 at White Hall on the Neuse River and later at Wilmington during the Federal bombardment of Fort Fisher. It is known that the battery participated in the closing battles of the Civil War in North Carolina, but which of these it was in is uncertain. It surrendered in May 1865 at Greensboro with the remaining Confederate forces. Two of the guns are preserved in Edenton's waterfront park (McClees 2002:47,49-50).

The 2nd North Carolina Junior Reserve Regiment, officially the 71st NC Regiment, was the final Confederate force known to have included Tyrrell County men. It was this unit that 18-year-old Lieutenant Colonel Beasley commanded. The 71st was formed in April 1864 when the need for Confederate soldiers was becoming desperate. The Junior Reserves were initially part of the 5th NC Battalion and saw action at Bellfield, Virginia before reorganization into the 71st. This new unit, still under Beasley's command, fought at Kinston and Bentonville, but achieved little in the war's closing stages. It surrendered at Greensboro in May 1865 along with the remaining Confederate forces under General Johnston (McClees 2002:51).

Perhaps Tyrrell County's greatest contribution to the Confederate cause was Brigadier General James Johnston Pettigrew (Figure 43), born at the Bonarva plantation on Lake Phelps in 1828 (Davis 1963:55). He attended the University of North Carolina at Chapel Hill and graduated first in his class of 1847. Pettigrew was considered one of the most brilliant students ever to attend that institution, and he spent the 1850s studying mathematics, science, and the military at various locations in Europe and the United States. By the time of the secession crisis in 1860, Pettigrew was in South Carolina as a

commissioned colonel and military advisor to the governor. He actually took part in the initial negotiations with the Federals in Fort Sumter prior to the April bombardment that opened the Civil War. He later returned to North Carolina and was made commander of the 22nd NC Infantry in August 1861. Pettigrew drilled his force relentlessly, but did not see action until Seven Pines in May 1862. In the aftermath of that action he was promoted to general and assumed command of a new force: Pettigrew's Brigade (Wilson 1998:32).



Figure 43. James Johnston Pettigrew c. 1855. (Source: Peele 1898: facing p. 413).

The young general's new force fought several small battles in North Carolina at Goldsboro, New Bern, Washington, and Blount's Creek lasting into March 1863, and eventually joined the Army of Northern Virginia in time for the Gettysburg campaign (Wilson 1998:48). On the third day of that great battle, Pettigrew led his men as part of Pickett's charge—it has been said that the North Carolinians got the farthest north of any Confederate force. Although he survived the disastrous defeat, Pettigrew was wounded during the retreat through Maryland and died of his injuries on 17 July 1863. His body was returned to the family cemetery at Bonarva Plantation. Pettigrew's Brigade went on to serve with the Army of

Northern Virginia until the end. General Pettigrew of Tyrrell County and his men thus left an indelible impression upon the course of the Civil War (Davis 1963:55).

While the Confederates of eastern North Carolina were fighting the war in Virginia and elsewhere, Roanoke Island and several towns had fallen to the Union as early as February 1862 (Figure 44). The Battle of Roanoke Island and the capture of the Outer Banks in August 1861 gave the Federals an important foothold on the rivers and sounds, and their naval forces quickly moved in. North Carolina's naval force had been scattered and all but destroyed in those early days of the war, and although some of the fighting took place near the small Tyrrell fishing hamlet of Manns Harbor, the war would not come directly into the county for another few years (Figure 45) (Pullen 2002).

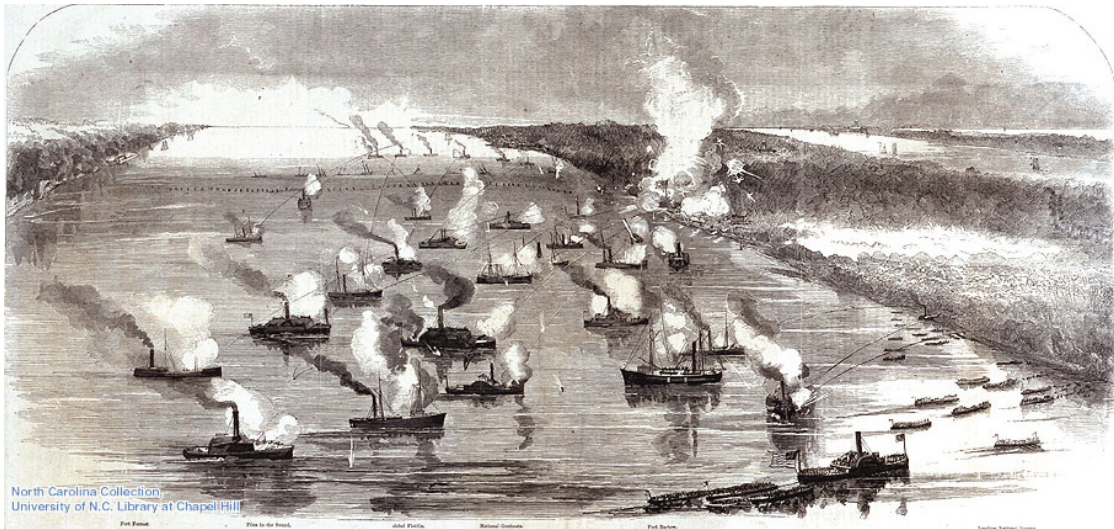


Figure 44. February 7, 1862--"The naval fight in Croatan Sound--landing of national troops--showing also the obstructions in the Sound, with the rebel fleet beyond." (Original printed source unknown. Neg. 80-384. Digitized from a 4 x 5 in. transparency. NCC vault FFCC970.73 B96, University of NC library at Chapel Hill).

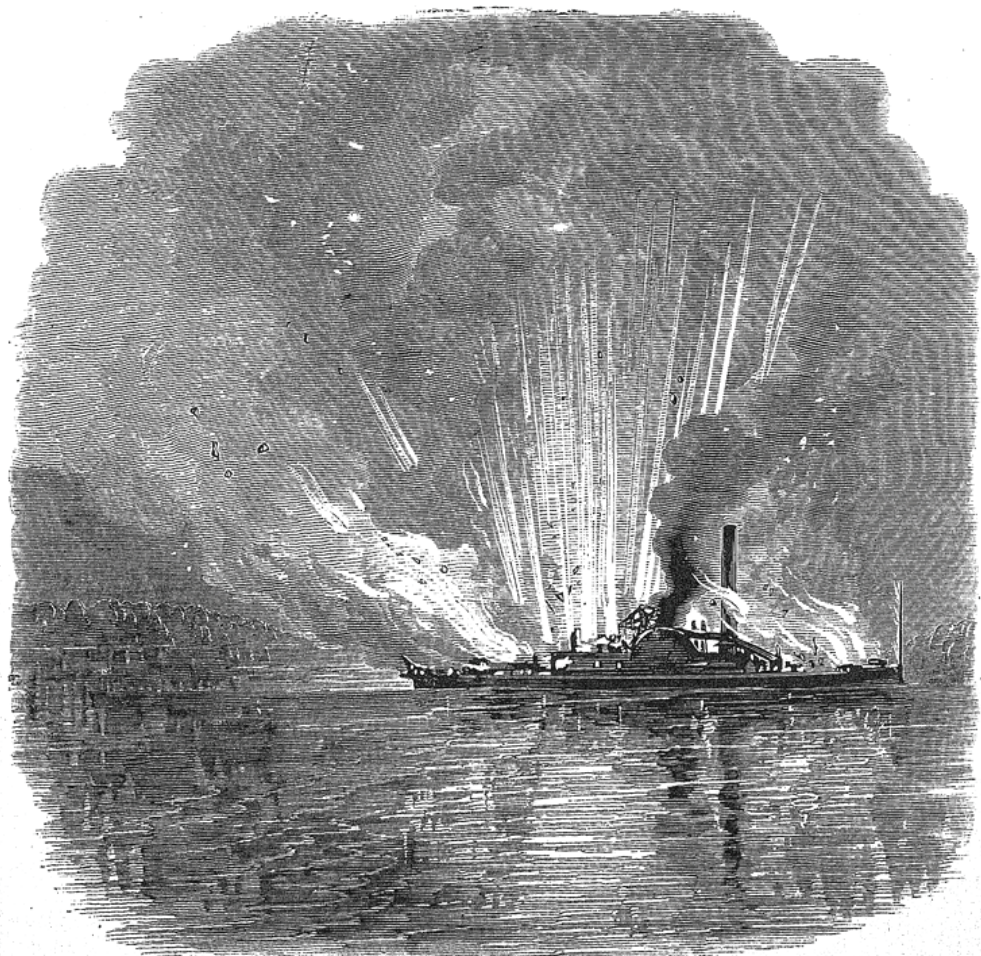


Figure 45. "Burning of the rebel gunboat 'Curlew', off Fort Forrest, Feb. 7, 1862." (Original printed source unknown. Neg. 80-428. NCC vault FFCC970.73 B96, University of NC library at Chapel Hill).

The greatest dangers to the citizens of Tyrrell County were Union-sympathetic “Buffaloes” who harassed the locals, stole or destroyed property, and generally created chaos. They infested the swamps, and emerged at night to “visit” their old neighbors looking for plunder (Barrett 1960:60). Buffaloes were despised by both sides as thieves and murderers, but a number of men from Tyrrell County actually served in Union units formed after the capture of towns such as Edenton, New Bern, Plymouth, and Washington. These communities became “. . .havens for men not wanting to serve the Confederacy” (McClees 2002:53).

By June 1862, enough men wishing to fight for the Union had gathered in the occupied towns of North Carolina that volunteer regiments could be established. Two were ultimately formed: the 1st and 2nd NC Union Volunteer Regiments. They were organized in New Bern, although their companies were scattered over the Union controlled parts of the state. The 1st was formed in June 1862, the 2nd in November 1863. Both of these units contained at least a few men from Tyrrell County. The 1st and 2nd NC Volunteers defended New Bern, Kinston, Plymouth, and Washington until the end of the war (McClees 2002:53-55).

In addition to the regular Union volunteer regiments, three regiments of colored troops were assembled in North Carolina, also involving men from Tyrrell County. These were designated the 1st, 2nd, and 3rd North Carolina Colored Regiments, officially the 35th, 36th, and 37th United States Colored Troops (USCT), respectively. All were raised in the coastal areas of the South under Union control, with men coming from North Carolina, South Carolina, and Virginia. The 35th, 36th, and 37th USCT were organized from spring 1863 to early 1864, and saw action at Fort Wagner and Honey Hill, South Carolina; Olustee, Florida; Petersburg and Fair Oaks, Virginia; the defense of Plymouth, North Carolina; and Fort Fisher (McClees 2002:56-58).

There were a few prominent Tyrrell County citizens who served the Confederacy in a non-military capacity during the Civil War. Among these were two women, Mary A. Beasley, mother of Lieutenant Colonel William Beasley, and Mary Pettigrew, sister of General Pettigrew. The former acted as a nurse and the latter became matron of a Petersburg hospital. Two physicians from the Tyrrell area, Drs. Edward Warren and Abner Alexander, also served the Confederacy during the war. The former became Surgeon General of North Carolina and later Chief Surgeon of Egypt, while Alexander served ably in the Confederate Army, becoming a member of the North Carolina General Assembly after the war (Davis 1963:56-57). These citizens gave all they had to the war effort, but in the end neither they nor Tyrrell’s fighting men could prevent the war’s destruction from entering their home county.

After the battles on Roanoke Island and the Outer Banks, along with the seizure of North Carolina's coastal towns, there had been relative quiet in the lands around Tyrrell County. There were frequent Union cavalry raids through the outlying areas and adjacent counties which caused significant damage and property loss, but the war did not come to Tyrrell until 1864. Beginning in that year, at least three minor operations were carried out by Union forces on the Scuppernong River "...to prevent Confederate troop movements and to interdict the flow of supplies" (Rush 1914:264; Anglely 1986:7). These missions ultimately became the only source of direct conflict in the Columbia area during the war.

In July 1864, a Union naval force under Lieutenant Commander Earl English with the gunboats USS *Ceres*, USS *Whitehead* (Figure 46), and USS *Ella May* ascended the Scuppernong River. English had orders to burn the bridge at Columbia in order to prevent the transport of supplies. The force met little or no resistance and carried out its primary objective as well as destroying a large gristmill and a quantity of grain. Later that year, in September, USS *Valley City* and the tugboat *Martin* were sent to the Scuppernong in order to cut off Confederate troops retreating from a Union expedition up the Alligator River. This latest deployment ended in failure when *Valley City* ran aground near the mouth of the Scuppernong. Despite exchanging fire with a small Confederate shore battery, the gunboat was uninjured and successfully refloated (Anglely 1986:7).

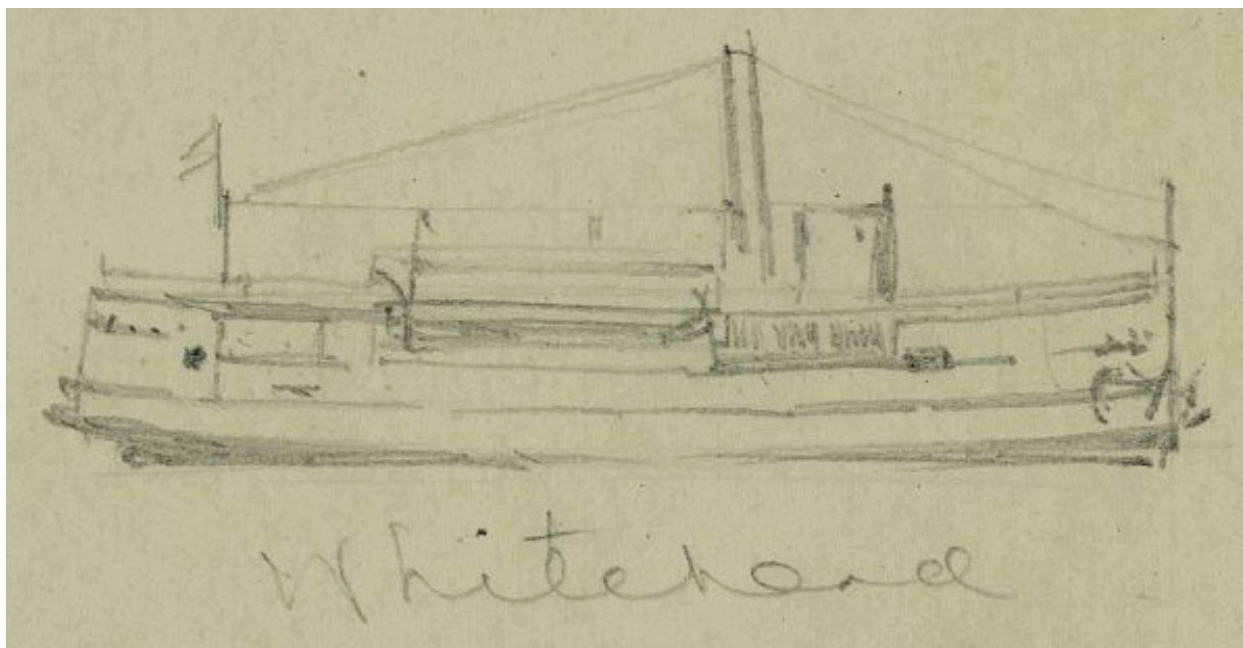


Figure 46. Portion of rough contemporary sketch showing USS *Whitehead*, a river and sound steamer converted for gunboat duties. (Image by Alfred Waud, c.1860-1865, Library of Congress).

The final Union expedition on the Scuppernong River came just a month before the end of the war. By that time eastern North Carolina had largely been in Federal hands for almost four years, and any remaining Confederates had been scattered or remained at most a minor nuisance. Many of Tyrrell County's citizens now supported the Union, if only in the hope of speeding the war's conclusion. In the midst of this end-of-war turmoil, Lieutenant Commander English again returned in USS *Ceres*, capturing a Confederate schooner and a large number of fishing nets (Anglely 1986:7). All of this was done at Cross Landing ten miles above Columbia. With the departure of English and his prizes, the war in Tyrrell County at last came to an end.

In April 1865, when Lee's Army of Northern Virginia surrendered at Appomattox, the South was devastated. Eastern North Carolina was largely spared the wrath of the Union armies under Sherman and the bitter partisan fighting in the western half of the state, due to its occupation by Union troops since the first year of war. Even this relative lack of damage was a steep price to pay for Tyrrell and its neighboring counties. Many local men had died, plantations were stripped bare, local industries were wrecked, and Federal troops ruled under martial law. The recovery process would take decades. Not until 1877 was the last Union soldier withdrawn. Afterwards, North Carolinians began working feverishly to recover the technological and economical ground they had lost over the course of 16 hard years (Davis 1963:57).

The First World War, 1917-1918

No conflict ever afflicted Tyrrell County, and North Carolina in general, as greatly as the Civil War, but by the first decade of the 20th century the destruction of 1861-1865 would soon be emulated on European battlefields. Many changes had come in the intervening years, such as electricity, a railroad line into Columbia, and the automobile, although the latter remained relatively rare until the 1920s. Tyrrell County itself had been split yet again, with the eastern part beginning at the Alligator River being consolidated into the new Dare County in 1870 (Davis 1963:57).

After 1910 the storm clouds of war began to brew again, and by 1914 Europe was engulfed in "the Great War" (the First World War). The United States at that time was following an isolationist policy, and did not actively support either side for the first few years. War industry was scaled up and arms and other products were supplied to both British and Germans, but as the war progressed American attitudes increasingly favored the British and their allies. This was due in no small part to the relentless U-boat war carried out by Germany against Allied shipping. A few American ships were attacked despite

proclaimed neutrality, leading to a public outcry culminating in the famous sinking of RMS *Lusitania* in May 1915, when 128 Americans died when that great liner was torpedoed. Eventually, President Woodrow Wilson declared war on Germany and its allies in the face of increasing public and international pressure. Thus the United States entered the war in April 1917 (Powell 1989:459-460).

Tyrrell County would not feel the direct impact of war on its own soil again, but ultimately over 100 of its men went overseas from 1917 to 1918 (Figure 47). Most of them served in Europe. Six were killed in action: James M. Brickhouse, Columbus Morris, and Lloyd H. Dillon of Columbia, David L. Cahoon and Clyde B. Armstrong of Gum Neck, and Oscar Dodge of Kilkenny (Davis 1963:63). Aside from these casualties, Tyrrell County remained relatively unaffected by the First World War. The greatest impact was felt in the aftermath of the war in 1918 and 1919 with the arrival of the Spanish influenza pandemic. This horrible disease, which had been spread by troops returning home from the filthy conditions of the trenches, killed more people than the war itself. It is unknown to what extent Tyrrell County was affected by the flu (see Crosby 2003).



Figure 47. Postwar photograph of Columbia men who served in the First World War. (Nancy Meekins Collection, Tyrrell County Public Library, Columbia, NC, 2011).

The Second World War, 1941-1945

Just over twenty years after the Great War, residents of Tyrrell found themselves confronting another far-off conflict. The Second World War had begun in Europe in 1939, and as before the United States remained neutral for a time. German submarines occasionally attacked US vessels, but there were no disasters affecting public opinion as the *Lusitania* sinking had in 1915. Instead, the deciding factor of American involvement came from the Japanese in the Pacific, with their infamous 7 December 1941 attack on the US naval base at Pearl Harbor. After President Roosevelt declared war the next day, men from communities across America volunteered for active duty.

As in the previous war, over 100 men from Tyrrell County eventually served overseas from 1942 to 1945, with many of these serving “with distinction and . . . a credit to their families and community” (Davis 1963:76). Killed in action were Private Mary Lee Kemp, Private Pete Taylor, Private E. Colon Cooper, Seaman Doss Weatherly, Private Norman E. Smith, Private Charlie Sykes, Sergeant William Nelson McClees, Private Gaither Lassiter, Corporal Lindsey Jarvis, Sergeant Huron Voliva, Private Richard Wynne, Jr., Major Raymond Wilkins, and Captain J.D. Holloway. The last two gained particularly high honors.

Major Raymond Wilkins was a member of the Columbia High School Class of 1934, joining the Air Force in 1936. He served in the Philippines with General Douglas MacArthur’s forces for two years, flying 186 missions. Wilkins was shot down over the Japanese base at Rabaul in New Britain (part of Papua New Guinea) in November 1943; he was posthumously awarded the Congressional Medal of Honor for his bravery in combat (Davis 1963:76-77). Like Wilkins, Captain J.D. Holloway was a pilot during the war, but he served with the US Army Air Corps. Holloway was also from Columbia. He piloted a Lockheed P-38 “Lightning” twin-engine fighter, first for seven months in Italy, then in the Far East beginning in May 1945 (Davis 1963:77). In this latter assignment Holloway was killed in action near Kuki, China in June. He was considered to be an ace pilot by that time.

During the Second World War, Tyrrell County was primarily affected by the development of wartime industry, namely increased agricultural production. This was when the potato began to be grown in the county, and soon virtually every farm was producing the crop. Besides this development, after the war life in Columbia and the outlying communities returned to normal. The relatively quiet pace of life in Tyrrell County continued, despite the intermittent wars in Vietnam, Iraq, and Afghanistan.

Conclusions

The Second World War was the last major conflict that created wholesale disruptions to the landscape and economy of Tyrrell County. Since then there have been other wars, but the way of life in the county has not appreciably changed, and large numbers of Tyrrell men did not participate in foreign conflicts. In the decades since the 1940s, the county has remained a quiet place with a population of around 5,000. It is a stretch of the imagination to visualize the devastation wrought by the Tuscarora, Revolutionary, and Civil Wars so many years ago.

Tyrrell County has honored the legacy of its wartime heroes, especially those of the Civil War, with a monument next to the courthouse in Columbia. To many it serves as a fitting reminder of the sacrifices made by the men of eastern North Carolina in the United States' most devastating war, but it also represents those who served abroad in both World Wars as well. Tyrrell County certainly played its part in all the conflicts its people were called upon to serve in. These conflicts all impacted the development of Tyrrell County, but failed to significantly change life there in the long run. The men and women who served in various capacities during every war performed their duties with valor. They only allowed the gradual march of technological progress to change Tyrrell County for the better, never the wars they fought in.

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