

Thomas H. Sloan. INLAND STEAM NAVIGATION IN NORTH CAROLINA, 1818-1900. (Under the direction of Dr. Charles L. Price) Department of History, East Carolina University, August 1971.

This study is an examination of the contribution of the inland river and sound steamboat to the development of transportation in nineteenth century North Carolina. The extensive use of the steamboat in North Carolina was remarkable considering the marginal environment for steam navigation offered by the geography of the state. Rivers and sounds were shallow and hazardous, with only the Cape Fear River reaching well into the state.

The first steamboat to operate within North Carolina was the Norfolk, which was put into service at New Bern in 1818. Almost immediately the Norfolk was the victim of a business recession in 1819. A sensitivity to economic depressions remained a problem with the generally undercapitalized steamboats throughout their career in North Carolina.

More pioneer steamboats followed quickly, and a slow growth in numbers continued until 1837, when another business depression hampered development. The remaining years before the Civil War were relatively prosperous and allowed the greatest development of the steamboat in the state. Over forty different steamboats were noted on the Cape Fear alone in a twenty-one year period. Efforts of state leaders to rechannel the flow of native commerce from other states to North Carolina ports by the means of railroads and steamboats failed, removing a potential source of progress for the steamboat.

The Civil War seriously reduced the number of steamboats, and recovery was slow due to a lack of capital and poor business conditions. The war had demonstrated the effectiveness of the railroad as a faster, more efficient form of transportation. Public demands for speed in travel put the slower steamboat at a disadvantage. A postwar federal program of river improvement was of some benefit, but most North Carolina rivers were incapable of permanent improvement without expenditures far in excess of a reasonable economic return.

Besides the problems imposed by geographical factors, the common carrier steamboat lines suffered a marked reduction in available revenue when a sizeable proportion of water transport users began operation of their own steamboats after the war. The problems of steamboats were further complicated due to the doubling of railroad mileage in North Carolina during the last decade of the century, reducing the steamboat to the status of a "feeder" line to the rails and a cheap carrier of bulk cargoes.

The sailing vessels again began to compete with the steamboat for the remaining business, offering even cheaper transportation. The gasoline engine also made its appearance shortly before 1900 and began to replace steam power as a means of propelling the smaller boats.

By the end of the century, the steamboat was a minor carrier of goods and passengers, having been largely superseded by a superior form of transportation, the railroad. The steamboat, however, had left its mark as a participant in the development of the eastern part of the state and North Carolina as a whole.

INLAND STEAM NAVIGATION

IN NORTH CAROLINA

1818-1900

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Thomas H. Sloan

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IN NORTH CAROLINA
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by

Thomas H. Sloan

APPROVED BY:

Ellen

SUPERVISOR OF THESIS

Charles L. Price

Charles L. Price

CHAIRMAN OF THE DEPARTMENT OF HISTORY

Herbert R. Paschal

Herbert R. Paschal

DEAN OF THE GRADUATE SCHOOL

John M. Howell

John M. Howell

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CHAPTER I

NATIONAL BEGINNINGS AND STATE POTENTIALS

The state of North Carolina's long and extensive association with the steamboat in the nineteenth century has been largely neglected by observers and commentators on both the state and the steamboat. This omission may be traced to a lack of contemporary comment and the geographical distribution of water travel routes in the state. Travelers from the North usually went directly south, crossing North Carolina by land routes while the state's rivers generally run from west to east.

A number of factors created an early and lasting interest in steam navigation in North Carolina. Geographical factors, a dearth of other forms of transportation, an already lengthy association with water transport and other related matters lent impetus to experimentation with the steamboat in the state.

The steamboat was the result of extensive experimentation in both the United States and Europe by a number of individuals.¹ The accumulated knowledge resulted in a successful beginning in steam navigation in the United States in the late eighteenth century. In 1786,² John Fitch briefly placed a steamboat in operation at Philadelphia, the precursor of the first commercially successful steamboat. Fitch had received a state monopoly in New Jersey in 1786 and a similar

¹ Carl D. Lane, American Paddle Steamboats (1943), 4, hereinafter cited as Lane, American Paddle Steamboats.

² Seymour Dunbar, A History of Travel in America (1937), 241, hereinafter cited as Dunbar, Travel in America.

monopoly in 1787 in Delaware. He later obtained monopolies in other states including New York.³ Fitch operated steamboats in both New Jersey and Delaware in the same years that the monopolies were granted but actually began regular commercial operation on the Delaware River in 1790.⁴ Fitch attempted to get a national patent but failed⁵ and was soon relegated to obscurity by more politically and financially potent steamboat promoters.

Robert Fulton, who is known by schoolchildren as the "inventor" of the steamboat, was the proprietor of what was at least the seventeenth steamboat built and operated in the nation.⁶ Fulton had built two earlier and unsuccessful steamboats in Europe⁷ and secured the financial support of a prominent New York citizen, Robert R. Livingston.⁸

Livingston had obtained the former Fitch monopoly in New York in 1798 but had later lost the monopoly due to nonperformance of his contract. The monopoly was restored in 1803 to Fulton and Livingston,⁹ and an extension of time granted in 1807. Livingston was soon allied

³ Dunbar, Travel in America, 240-247.

⁴ Dunbar, Travel in America, 256.

⁵ Dunbar, Travel in America, 258.

⁶ Dunbar, Travel in America, 348.

⁷ Dunbar, Travel in America, 363.

⁸ William J. Petersen, Steamboating on the Upper Mississippi, The Water Way to Iowa (1937), 39, hereinafter cited as Petersen, Steamboating on the Upper Mississippi.

⁹ Dunbar, Travel in America, 375.

with his brother-in-law, John Stevens of New Jersey, who was later to figure in the development of the steamboat in North Carolina. He also formed an alliance with Nicholas Roosevelt¹⁰ a leader in the development of the steamboat on the Mississippi.¹¹

Fulton and Livingston obtained a national patent on the steamboat in 1809,¹² and both the patent and the monopolies proved troublesome to enforce. Violators of their monopoly on the Hudson River were halted by legislation in 1811, but many were left free to operate due to the nonretroactive nature of the legislation.¹³ A major factor in their failure at enforcement was the almost total lack of public enthusiasm for the monopolies or the steamboat patent.¹⁴

A search for greener pastures led Fulton and Livingston to the Mississippi where they obtained a steam navigation monopoly, later operating the steamboat New Orleans in 1812.¹⁵ Local opposition soon forced them to cease efforts to enforce their rights. Henry Shreve, the proprietor of a rival steamboat, won the approval of the federal courts¹⁶ in 1818 to operate his boat in defiance of the monopoly.

¹⁰ Dunbar, Travel in America, 359.

¹¹ Petersen, Steamboating on the Upper Mississippi, 53.

¹² Dunbar, Travel in America, 379.

¹³ Dunbar, Travel in America, 381.

¹⁴ Dunbar, Travel in America, 382.

¹⁵ Dunbar, Travel in America, 386-389.

¹⁶ Dunbar, Travel in America, 395.

A further setback was encountered when former collaborator Nicholas Roosevelt claimed a patent on vertically rotated paddlewheels on steamboats.¹⁷

As most of the steamboats then in existence used this type of paddlewheel, the Roosevelt patent posed a serious threat to the Fulton and Livingston interests. Fulton and Livingston, beset with public hostility, adverse state laws, and litigation by former business associates, were effectively blocked from enforcing a monopoly on the western rivers by 1819 and on eastern waters by 1824.¹⁸

The state granted monopoly, fraught with various troubles, had long been a widespread device to encourage private capital to undertake public improvements. The states offered monopolies of the improved facilities with their promise of profits in return for the improvements. Many of the monopoly charters contained performance clauses and also set rates for the use of the improvement.

North Carolina was no stranger to the use of the monopoly to stimulate desired improvements, having granted a monopoly to the Dismal Swamp Canal in 1790¹⁹ and another to the Cape Fear Company in 1792 for the improvement of the Cape Fear River from Fayetteville to the Deep and Haw rivers.²⁰ The latter firm was succeeded by the Deep and Haw River

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Dunbar, Travel in America, 399.

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Petersen, Steamboating on the Upper Mississippi, 72.

¹⁹

Revised Code of North Carolina 1819, I, c. 332, hereinafter cited as Revised Code, 1819.

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Revised Code, 1819, I, c. 370.

Navigation Company in 1796 when that company was belatedly granted the
²¹
 right to charge tolls.

Interest in steam as applied to ships had developed within North Carolina as news of successful steamboat operations elsewhere increased. Much of the enthusiasm was coupled with the then current campaign for internal improvements. State leader Archibald Murphey had urged such a program of internal improvements for North Carolina in 1812
²²
 but his efforts had brought little in the way of concrete results. A steamboat was operating on Chesapeake Bay in 1813 but a number of factors present in North Carolina were to delay briefly the advent of the steam-
²³
 boat in the state.

No factor was more important or created more difficulties and problems for the development of steam navigation and water transportation in general in North Carolina than did the geography of the state. Despite an unusual expanse of protected inland waters, the state possessed no good deep water ports. Beaufort, which was close to the ocean and had a reasonable depth of water at its inlet, lacked access to the interior of the state. Its only rival, the Cape Fear River area, had a shallower inlet and an inland port city of Wilmington that necessitated some twenty miles of travel against river currents. The Cape Fear River did offer the best access to the interior, extending (with limitations) almost to the center

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Revised Code, 1819, I, c. 463.

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Guion Griffis Johnson, Ante-Bellum North Carolina, A Social History (1937), 24, hereinafter cited as Johnson, Ante-Bellum North Carolina; William Henry Hoyt (ed.), The Papers of Archibald D. Murphey (1914), II, 103-196.

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Lane, American Paddle Steamboats, 27.

of the state, far surpassing the other rivers of the state.²⁴

Other inlets in North Carolina were shallow and hazardous, often unprotected and with treacherous shifting sandbars, and usable only by small vessels with due caution. As a result, much of the state's interior trade and particularly that of the northeastern portion went to other states. This situation concerned state leaders and was the cause of a continued effort to develop an internal east-west trade.²⁵

North Carolina also had the disadvantage of relatively short rivers reaching into the interior of the state. With few exceptions the rivers were of limited utility, being universally shallow with tortuous channels. The rivers were beset with sandbars, mud banks, much debris, and banks so heavily covered with vegetation and large trees that they constituted another hazard to boats, especially in the narrow upper reaches of the rivers.

In spite of these disadvantages, water transport in the coastal areas was dominant during the colonial and post colonial period and retained this dominance until railroads became common.²⁶ The streams and rivers served the residents of the state in the late eighteenth and early

²⁴ Samuel Huntington Hobbs, Jr., North Carolina, Economic and Social (1930), 223.

²⁵ Cecil Kenneth Brown, A State Movement in Railroad Development; The Story of North Carolina's First Effort to Establish an East and West Trunk Line Railroad, (1928), 173, hereinafter cited as Brown, A State Movement in Railroad Development.

²⁶ Charles Christopher Crittenden, "Inland Navigation in North Carolina, 1763-1789", North Carolina Historical Review, VIII (April, 1931), 145, hereinafter cited as Crittenden, "Inland Navigation".

nineteenth centuries as a sole means of transportation other than forest trails and a few very rudimentary roads. Water carried much of the traffic in both goods and passengers, moving mainly by manpower or natural currents in canoes, flatboats, rafts and small craft of varied descriptions.²⁷ Merchants were often involved in the river trade, finding ownership and operation of boats advantageous and often a necessity.

A hint at the traffic involved is provided by an advertisement in a Fayetteville newspaper in 1816. The advertiser sought to let a contract for four flatboats, two of them 48 feet long by ten feet wide, and two more 30 feet long by six feet wide. The boats were to be strongly built of heavy lumber and banded with iron along the sides,²⁸ a tribute to the vagaries of navigation on the upper Cape Fear. Such boats were capable of carrying large amounts of the bulky agricultural goods or forestry products usually transported and were often sold after unloading down river for their timber content rather than face the nearly impossible return trip against the river current. Tobacco and cotton constituted two-thirds of the \$1,331,398 in goods shipped down river from Fayetteville in 1816.²⁹

Such roads as existed were ineffectually maintained by the overseer system, a highly unpopular and almost universally avoided institution. The overseer laws required all able-bodied male residents of

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Crittenden, "Inland Navigation", 146-149.

²⁸

Fayetteville American, November 21, 1816.

²⁹

Brown, State Movement in Railroad Development, 10.

a particular district to maintain the public roads within the district. An appointed overseer was in charge with the legal power to require a specified number of days labor from each qualified resident, who usually had to provide his own tools for the work.³⁰

The overseer system when appropriate also included the clearing and maintenance of streams and rivers, entailing the removal of treetops, debris and other detriments to water travel. State laws requiring the clearing of navigable streams were passed in 1784 and 1788 and later but the net effect was no more successful than the efforts to maintain the roads.³¹

The chief advantage of land travel was relatively greater speed. Travel in North Carolina in the early 1800's was mainly on horseback or as in the case of the less wealthy traveller, on foot. There were a few freight wagons and carts and fewer stages, stages being confined to the most heavily travelled routes.³² Travel on foot for the industrious meant only twenty miles a day as the botanist Michaux averaged in North Carolina in 1802.³³ Hazards were plentiful, travelers being attacked

³⁰ Charles Christopher Crittenden, "Overland Travel and Transportation in North Carolina, 1763-1789", North Carolina Historical Review, VIII (July 1931), 241, hereinafter cited as Crittenden, "Overland Travel".

³¹ Crittenden, "Inland Navigation", 152-153.

³² Crittenden, "Overland Travel", 252-256.

³³ Dunbar, Travel in America, 308.

by wolves as late as 1778.³⁴ Three horses and a driver were drowned
when a bridge over the Neuse at Kinston collapsed in 1800.³⁵

The eastern part of the state was the location of numerous
bridges, the larger ones being chartered by the legislature to
private builders and operators as toll enterprises.³⁶ Ferries were
also common and invariably a toll business. Being an agricultural
area, towns were usually small trading centers offering little in
the way of inns or accommodations to the traveler.³⁷ The towns were
built along streams and were served by water transport for much of
their needs.³⁸ The numerous streams and the limited economic oppor-
tunities tended to make use of the streams and rivers preferable to
building roads.³⁹

Interest in water transport had already led to the development
of the Dismal Swamp Canal. The Clubfoot Creek Canal was chartered in 1814
to connect the Neuse River and New Bern to the ocean port of Beaufort.⁴⁰

³⁴ Crittenden, "Overland Travel", 248.

³⁵ Johnson, Ante-Bellum North Carolina, 27.

³⁶ Crittenden, "Overland Travel", 243-246.

³⁷ Crittenden, "Overland Travel", 249.

³⁸ F. W. Clonts, "Travel and Transportation in Colonial North
Carolina", North Carolina Historical Review, III (January, 1926), 16-17.

³⁹ Ben Franklin Lemert, "Geographical Influences on the History
of North Carolina", North Carolina Historical Review, XII (October, 1935),
304, 309.

⁴⁰ Private Laws of North Carolina 1826-1827, c. 27.

Another venture was the Cape Fear Navigation Company which was to improve the Cape Fear River between Fayetteville and Wilmington.⁴¹

The promoters of the improvements were to be allowed to charge reasonable tolls and were soon hiring engineers and advertising to hire slaves as laborers.⁴²

Leaders and shippers in the northeastern part of the state in 1817 requested the improvement of the Swash,⁴³ the entrance to the inlet at Ocracoke, a notoriously shallow and hazardous body of water. The Swash was the only feasible access to the sea for the area. The only alternate route was to ship goods overland to Norfolk in order to serve overseas or other deepwater customers. Another venture to link the Neuse and the port of Beaufort was proposed and chartered the same year, the North Creek and Adams Creek Canal.⁴⁴ Many schemes to construct

⁴¹ Revised Code, 1819, II. c. 891.

⁴² Fayetteville American, October 10, 1816.

⁴³ Fayetteville American, January 9, 1817. The subject of the improvement of the Swash was a recurring item of interest in North Carolina until the Civil War.

⁴⁴ The North Creek and Adams Creek Canal never materialized as such but the route that its promoters envisioned has been utilized as a part of the current Intercoastal Waterway and is at present an active canal facility. Its companion canal, the Clubfoot Canal, also exists at present and is passable by the lightest of boats and canoes. It is doubtful that a nineteenth century North Creek and Adams Creek Canal would have succeeded any better than the Clubfoot Canal. Both were projected as canals only four feet deep and 14 feet wide at this depth. As proved by the Clubfoot Canal, this was too shallow for economic operation. Both canals were approximately five miles long and utilized natural waterways for much of their approaches. See New Bern Federal Republican, January 18, 1817; New Bern Carolina Centinel, March 2, 1822.

canals and other internal improvements were chartered by the legislature prior to 1818. Plans and ideas for improvements were far in excess of the available capital or technology. Most of the ambitious schemes accomplished little more than a momentary excitement and the election of officers. Typical was the effort of John Devereux DeLacy who formed the Neuse River Navigation Company which soon met with a dubious press and a lack of funds.⁴⁵ The venture failed due to nonperformance in 1819.⁴⁶

John Stevens, one of the Fulton and Livingston group, had sought and had been awarded a monopoly of steam navigation on North Carolina waters by the General Assembly in 1812.⁴⁷ Stevens claimed rights to the use of the steamboat under the Fulton and Livingston patent from the Connecticut River to Savannah with the exception of New York, asserting that the rights were derived from a settlement with Fulton and Livingston. According to Stevens, Fulton and Livingston were to retain New York and the Midwest as their area of operation.⁴⁸

Stevens' acquisition of the monopoly from the state met with prompt protests to the legislature by Fulton, Oliver Evans and John Devereux DeLacy.⁴⁹ DeLacy had earlier joined forces with Nicholas Roosevelt

⁴⁵ New Bern Carolina Centinel, May 9, 1818.

⁴⁶ New Bern Carolina Centinel, May 9, 1818.

⁴⁷ "An Act for the encouragement of Steamboats on the Waters of this State", North Carolina Legislative Papers, 1812, Box 263. See Private Laws of North Carolina 1818, c. 54.

⁴⁸ "The Memorial of John Stevens", North Carolina Legislative Papers, 1812, Box 263. State Department of Archives and History, Raleigh, North Carolina.

⁴⁹ Sarah Woodall Turlington, "Steam Navigation in North Carolina Prior to 1860" (unpublished master's thesis, University of North Carolina, 1933), 4, hereinafter cited as Turlington, "Steam Navigation".

when the various members of the Fulton and Livingston group had rejected the leadership of Fulton and Livingston and had sought portions of the steam navigation "pie" for themselves.⁵⁰

DeLacy claimed the right to develop the steamboat in North Carolina on the basis that the Stevens, Fulton and Livingston agreement did not specifically mention North Carolina and that the Fulton patent was invalid.⁵¹ None of the protests over the Stevens monopoly met with success although DeLacy formed the Clarendon Steamboat Company in North Carolina, a nebulous firm that neither owned nor operated any vessels.⁵²

Under the terms of the Stevens monopoly, Stevens was required to have a vessel in operation within two years of the granting of the monopoly.⁵³ Stevens failed to do so, and his monopoly expired in 1814. John Devereux DeLacy petitioned the North Carolina legislature for a steam navigation monopoly on the Cape Fear upon the expiration of the Stevens monopoly,⁵⁴ but was refused, probably due to his intemperate

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John Stevens later assigned two thirds of his North Carolina monopoly to Fulton and Livingston, affirming his association with them. The agreement was dated May 28, 1813, and involved Stevens, Fulton and the heirs of Livingston. See Calendar of the Stevens Family Papers (1940), 67.

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"The Petition of John Devereux DeLacy", North Carolina Legislative Papers, 1814, Box 278, State Archives.

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Turlington, "Steam Navigation". 21.

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"An Act for the encouragement of Steamboats on the Waters of this State", North Carolina Legislative Papers, 1812, Box 263, State Archives. See Private Laws of North Carolina 1818, c. 54.

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"The Petition of John Devereux DeLacy", North Carolina Legislative Papers, 1814, Box 278, State Archives.

allegations in his protest over the Stevens monopoly two years earlier.⁵⁵
 In 1818, the General Assembly did grant a monopoly of steam navigation on the Cape Fear to Joseph Seawell for the portion of the river between Fayetteville and Wilmington. Seawell had to operate a steamboat for seven years on the river in order to retain the monopoly. The legislative charter provisions also set the rates to be charged by Seawell's boat.⁵⁶

In the meantime the state's enthusiasm for the steamboat grew rapidly. A New Bern stage line and hotel in 1818 termed themselves the "Steamboat Stage Line" and the "Steamboat Hotel" although no steamboat yet served New Bern or had any connection with either enterprise.⁵⁷
 The use of "steamboat" in naming the businesses undoubtedly came from anticipation of steamboat service planned by the New Bern Steamboat Company, formed in 1817 by New Bern citizens.⁵⁸ A Pamlico Steamboat Company had been chartered in 1816⁵⁹ and an Edenton and Plymouth Steamboat Company

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"The Committee to Whom was Referred the Memorial of Robert Fulton and Oliver Evans and the Counter Memorial of John Stevens", North Carolina Legislative Papers, 1813, Box 273, State Archives.

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"A Bill Securing to James Seawell the right of Navigating the Waters of the Cape Fear with Steam Boats", North Carolina Legislative Papers, 1817, Box 300, State Archives.

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New Bern Carolina Centinel, May 9, 1818.

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The president of the New Bern Steamboat Company was John Devereux, which brings up the interesting possibility of a relationship to John Devereux DeLacy. See New Bern Federal Republican, January 17, 1818.

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John Devereux DeLacy was one of the principals in this firm. See "A Bill to Incorporate the Pamlico Steam Boat Company", North Carolina Legislative Papers, 1816, Box 299, State Archives.

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was organized in 1818. Although no steamboat yet operated in the state, each major river system had its own steamboat company.

By 1818 the steamboat was a proven success in northern waters and was in evidence on the borders of North Carolina. The steamboat itself, though a desired and popular item much in the public fancy, was an innovation of largely unknown qualities. Like most innovations, it was viewed as a panacea bringing prosperity and progress in its wake. It is doubtful that more than a few North Carolinians were in any way knowledgeable on the subject of steam transportation and the limitations of the pioneer steamboat went unheard or unknown in the enthusiasm of the promoters.

Much of the impetus for steamboats arose in the favorable sentiment for internal improvement. Steam navigation was the logical result of improved rivers and water transportation. The need for improvement was evident and obvious in the field of transportation. Sail was an erratic and slow method of water transport and all but useless in the narrow and twisting river channels. The concentration of population on the coast and along the waterways of the state and the reliance on water transportation was much in favor of the steamboat.

Promoters of the steamboat in North Carolina had little to fear from the declining fortunes of the Fulton and Livingston interests.

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The New Bern Steamboat Company and the Edenton and Plymouth Steamboat Company operated steamboats shortly after their conception. The Pamlico Steamboat Company apparently never functioned as such. See Private Laws of North Carolina, 1818, c. 52.

The Roosevelt patent claims and hostile state laws in New England all but confined Fulton's and Livingston's activities to New York. The suit of Gibbons vs. Odgen later effectively ended any pretensions to monopolies on navigable waters.

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By early 1818 the scene was set in North Carolina for the introduction of the first steamboat to be operated as a North Carolina enterprise. Several steamboat companies were active, and Joseph Seawell had his monopoly on the Cape Fear and was required to operate a steamboat on those waters to keep the monopoly in force. Public sentiment and approval was in favor of steamboats and internal improvements. The steamboat was not long in coming. Within the year several steamboats would be in operation with varying degrees of success.

⁶¹Dunbar, Travel in America, 412-414.

CHAPTER II

THE EARLY STEAMBOATS, 1818-1837

The advent of the steamboat in North Carolina was greeted with much enthusiasm, but the net results of the first few years of operation created a more restrained attitude as to the promise of the steamboat. North Carolina investors learned much about the economics of steam navigation, the operation and design of steamboats, and the effects of monopolies on development.

The New Bern Steamboat Company won the race to introduce the steamboat to North Carolina. In 1817 this firm purchased a steamboat at Norfolk, Virginia, and brought it to North Carolina, the first steamboat to operate within the state. The steamboat was the Norfolk, which had been purchased for \$53,000, an astronomical amount even for an innovation like the steamboat. The same sum would have provided a number of financial fortunes considering the period involved and the modest wealth usually found among the natives of the Southeast. The Norfolk arrived in New Bern on April 10, 1818, and advertised a fare of \$15 for one-way travel between New Bern and Elizabeth City, the route chosen for its operation. The fare of \$15 was probably set to meet stage competition, since the stage fare between the two cities was described as being "much the same."

¹ William M. Lytle, Merchant Steam Vessels of the United States 1807-1868, Forrest R. Holdcamper (ed.), (1953), 139, hereinafter cited as the Lytle List.

² New Bern Carolina Centinel, April 11, 1818.

³ New Bern Carolina Centinel, April 11, 1818.

The operation of the Norfolk was not a profitable one. Traffic was slow to develop. The total cargo of one trip amounted to only seven passengers and three horses. Because of the lack of business, the number of trips per week was reduced from two to one. In an attempt to attract greater traffic, the fare by May, 1818, was reduced to half for horses, servants and children.⁴ Even this reduction was not enough to make the operation of the Norfolk a success.

The competition was not slow to capitalize on the Norfolk's misfortune. The proprietor of a New Bern stage line advertised a proposed New Bern to Plymouth stage line for "those unwilling to await the departure of the steamboat." Passengers on the new stage line would ferry across from Plymouth to Edenton and take the stage to Norfolk.⁵

In July, 1818, the New Bern Steamboat Company suspended operations.⁶ Plans to resume operations at the end of the month resulted in failure, and the Norfolk was removed to the James River in Virginia. The Norfolk returned to New Bern in 1832 for a brief period.⁷

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New Bern Carolina Centinel, May 9, 1818.

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New Bern Carolina Centinel, May 23, 1818.

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New Bern Carolina Centinel, July 18, 1818.

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New Bern Spectator, June 8, 1832. During the period that no steamboat was present at New Bern, trade was carried on by small river craft such as the batteau Enterprize of Raleigh. The trip from Stone's Mills in Wake County, the limit of practical navigation on the Neuse, took 15 days. The cargo downstream was 29 bales of cotton and 19 barrels of flour. The return cargo was coffee, sugar, salt, iron, lead, plaster of paris, potatoes and a museum. The trip upstream was accomplished by muscle power supplied by boatmen. See New Bern Carolina Centinel, February 12, 1820.

The Norfolk was apparently underpowered, having had some difficulty with high winds during its earlier sojourn at New Bern and being finally removed in 1832 for "indifferent engines."

The second steamboat to ply the waters of North Carolina was the Henrietta, and the first steamboat built in the state. The construction of the Henrietta must have been remarkable since it set something of a record for longevity for a pioneer steamboat, remaining in use until 1858.⁸ This steamboat was built for Joseph Seawell,⁹ the holder of the monopoly for steam navigation on the Cape Fear River and was in operation in late July or early August, 1818,¹⁰ at Wilmington. The Henrietta was launched April 30, 1818, the first of many steamboats to be made in the Fayetteville area. After launching, the Henrietta experienced considerable difficulty in descending the upper Cape Fear to Wilmington.¹¹

The third steamboat to operate in North Carolina was another native product, the Prometheus. The Prometheus was built at either Swansboro or Beaufort by Otway Burns, a renowned privateer captain of the War of 1812 who had taken up the trade of shipbuilding. The Prometheus

⁸
Lytle List, 33.

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New Bern Carolina Centinel, May 9, 1818.

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New Bern Carolina Centinel, August 1, 1818.

¹¹
New Bern Carolina Centinel, August 8, 1818. The fact that the Henrietta took a month to descend the river countered some of the anti-internal improvement sentiment that had surfaced in the state, describing proponents of improvements as "visionaries" and "herring catching" individuals. See New Bern Federal Republican, June 14, 1817.

was launched on May 9, 1818, and was in use on the Cape Fear in late June
 12
 of the same year.

The ownership of the Prometheus is uncertain although possible owners were Joseph Seawell or the Cape Fear Navigation Company, the holder of the monopoly on use of the river for general traffic. The arrival of the Prometheus was marred by its near inability to best the current in the
 13
 Cape Fear. The Prometheus was used for a local tour by President Monroe on his visit to the state in April of 1819,¹⁴ as was another early North Carolina steamboat, the Albemarle.¹⁵

The Prometheus failed as a financial venture and claimants
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 against the boat were asked to present bills in September, 1818. The career of the Prometheus subsequent to 1819 is not known other than it
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 was abandoned in 1825, only seven years after its launching. There is

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Sources differ as to where the Prometheus was built. Both Swansboro and Beaufort, the site of Burns' shipyard are mentioned. Contemporary newspapers give Beaufort as the construction location. See Wilmington Cape Fear Recorder, May 9, 1818; New Bern Carolina Centinel, April 25, 1818; also James Sprunt, Chronicles of the Cape Fear River, 1660-1916 (1916), 138-139, hereinafter cited as Sprunt, Chronicles of the Cape Fear.

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Sprunt, Chronicles of the Cape Fear, 138-139.

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Sprunt, Chronicles of the Cape Fear, 209-210.

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Edenton Gazette, April 13, 1819.

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Wilmington Cape Fear Recorder, September 19, 1818.

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Lytle List, 292. The short life expectancy of steamboats may have helped prompt such public advertisements as one that requested the public to "abandon all prejudices against the use of steam vessels at sea". See New Bern Carolina Centinel, May 5, 1821.

a possibility that poor design or the previously mentioned lack of power was the cause of its early demise.

Only two other steamboats appeared during the initial period of steamboat activity, the Albemarle and the North Carolina. The Albemarle was placed into operation in 1819 by the Edenton and Plymouth Steamboat Company¹⁸ which purchased the Albemarle in its native New York City.¹⁹

The Albemarle began operations between Edenton and Plymouth,²⁰ later expanding the route to include Williamston and Elizabeth City. A sudden fracture of the massive crank linking the engines to the paddle-wheels²¹ caused the Albemarle to capsize in 1821 and the vessel was sold in 1822 for a fraction of its original value to a Norfolk resident.²² Misfortune struck again in 1825 when the Albemarle burned at Philadelphia.²³

The North Carolina was built at Fayetteville in 1819 for use in South Carolina but was in operation on the Cape Fear from 1823²⁴ until 1829, when it was abandoned.²⁵ The ownership of the North Carolina is not

¹⁸ Edenton Gazette and North Carolina General Advertiser,
January 29, 1819.

¹⁹ Lytle List, 4.

²⁰ Edenton Gazette, January 21, 1822.

²¹ Turlington, "Steam Navigation", 50.

²² Edenton Gazette, January 21, 1822.

²³ Lytle List, 211.

²⁴ Turlington, "Steam Navigation", 27.

²⁵ Lytle List, 140.

known but it is of interest since it, like the Prometheus, was in use on the Cape Fear during the tenure of the Seawell monopoly on steam navigation. Another vessel, the Cotton Plant, built at Fayetteville during this early period was used on the Cape Fear from 1828 to 1838.²⁶

New Bern transportation interests again attempted to place a steamboat at that port in 1829 after the opening of the Clubfoot Canal. A group of New Bern investors purchased the Codorus, which was the first iron hulled vessel built in the United States. The Codorus was built in 1825 at York, Pennsylvania, for use on the Susquehanna River.²⁷ The Codorus would float in only two feet of water, making it an ideal choice for the shallow Susquehanna and the equally shallow Clubfoot Canal.

The Codorus arrived in January, 1829, and began plying between New Bern and Beaufort via the canal.²⁸ Again the lack of traffic caused a suspension of service.²⁹ The Codorus was equipped with new engines in 1830³⁰ and a half of the Codorus was offered for sale the same year.³¹ No further mention of the Codorus is made in later contemporary sources but the vessel is listed as abandoned during the 1830's by the Lytle List, which gives no clue as to the source of its information.

²⁶
Lytle List, 41.

²⁷
Lytle List, 36.

²⁸
New Bern Carolina Centinel, January 24, 1829.

²⁹
New Bern Spectator, February 27, 1830.

³⁰
New Bern Carolina Centinel, May 1, 1830.

³¹
New Bern Spectator, March 28, 1830.

Another steamboat, the Petersburg, was present in New Bern during 1829, being originally used on the Roanoke River by the Dismal Swamp Canal Company and later sold to the Virginia and North Carolina Transportation Company. In July of 1829 the Petersburg was sent to New Bern because of low water on the Roanoke. After operating between New Bern and Elizabeth City for a few months the Petersburg was returned to the Roanoke, where it remained except for a short period of a few months at New Bern in 1830. The Petersburg was finally sold as unsuitable for use on the Roanoke. The cause for its unsuitability is not known, although a lack of power was noticed when it operated at New Bern.

Two other vessels were used in the general area of the Roanoke at this time, both of them the property of the Dismal Swamp Canal Company. The North Carolina (II) was used on the canal in 1830 and later on the Roanoke between Weldon and Edenton and through the canal to Norfolk. The Lady of the Lake replaced the North Carolina (II) as a towing vessel on the canal in 1830 and is the first steamboat in North Carolina known

32

New Bern Carolina Centinel, August 8, 1829.

33

New Bern Carolina Centinel, May 10, 1833.

34

New Bern Spectator, May 3, 1830.

35

Edenton Gazette, January 30, 1830. The use of (II) is intended to differentiate between the first and subsequent vessels of the same name.

36

Halifax Advertiser, March 11, 1830; Elizabeth City Star, September 18, 1830.

to have special design features. The Lady of the Lake had a recessed stern wheel designed specifically to avoid the washing of the canal banks, reducing the waves from the paddle wheel to a minimum.³⁷ The experiment may have been unsuccessful as the Lady of the Lake was sold³⁸ in 1833 and converted to a sailing vessel.

The major area of activity for the early steamboats in North Carolina was obviously the Cape Fear River, which offered the most potential for steam navigation in the terms of an existing river traffic. The Cape Fear was for the purpose of steam navigation the province of Joseph Seawell, the owner of the monopoly for steamboats on the river beginning in 1818. The terms of the monopoly allowed a ten year monopolization, and Seawell was required to operate a steamboat between Fayetteville and Wilmington for seven of the ten years.³⁹ The effect was to put a steamboat in operation at an early date, but to exclude other steamboat promoters for ten years. While the monopoly stimulated development, it was an inducement in one instance only and actually served to halt others in an area of high potential.

Of the steamboats placed on the Cape Fear during the years of the monopoly, one was the property of Seawell (the Henrietta) and one of unattributed ownership (the Prometheus). The Prometheus is thought to

³⁷ Halifax Advertiser, May 13, 1830.

³⁸ Lytle List, 109.

³⁹ Private Laws of North Carolina, 1818, c. 59.

have been the property of a stock company,⁴⁰ possibly the Cape Fear Navigation Company, which was a privately owned, state chartered firm improving the river in return for the privilege to charge tolls on river freight. The North Carolina was not known to have been the property of either of the above companies and may have been owned by the Cape Fear Steamboat Company, which was organized in 1822,⁴¹ the year before the North Carolina was in use on the river.

No connection is known between the three steamboats or their ownership, although some arrangement must have been made with Seawell in order to operate the boats legally on the river. That other investors were deterred by the monopoly is evident, as two new steamboat companies were organized at or near the end of the Seawell monopoly. The Henrietta Steamboat Company, which may have been a reorganization of the Seawell interests,⁴² was formed in 1827⁴³ as was the Cotton Plant Steamboat Company, a new arrival in the steamboat field.

Besides the monopoly, a number of other factors proved to have an influence on the development of steamboats within the state. The public enthusiasm for internal improvement was continued and enlarged to the point that the words "internal improvement" were catchwords. One of the many private lotteries then current was named the "Internal Improvement Lottery"

⁴⁰ Sprunt, Chronicles of the Cape Fear, 138-139.

⁴¹ Private Laws of North Carolina, 1822, c. 140.

⁴² Private Laws of North Carolina, 1827-1828, c. 52.

⁴³ Private Laws of North Carolina, 1827-1828, c. 50.

44

with no apparent connection to internal improvements.

The state of North Carolina began a program of internal improvement with the proceeds from the sale of the Cherokee lands in 1820.⁴⁵ Work began on the Cape Fear prior to 1820 by private companies and was continued under state supervision when the Cape Fear Navigation Company placed the supervision of its improvements under the North Carolina Board of Internal Improvements in 1823.⁴⁶ The state also carried out projects on the Cape Fear below Wilmington from 1822 until 1829 when improvement of the river became wholly a federal responsibility.

Under the Board of Internal Improvements' recommendation and supervision, the state subscribed to stock of improvement companies and granted loans in an effort to aid development.⁴⁷ A state dredge in 1825 turned out to be a failure.⁴⁸ Many of the hazards of river navigation stemmed from the heavy growth of trees along the river banks. Natural

⁴⁴
Edenton Gazette, November 20, 1820.

⁴⁵
Public Laws of North Carolina, 1819, c. 2.

⁴⁶
Public Laws of North Carolina, 1822, c. 16. Under the provisions of this act, the Cape Fear Navigation Company relinquished its control over the river below Wilmington and accepted state supervision of its physical assets in return for further state aid.

⁴⁷
Elizabeth City Star, February 17, 1827. The state's efforts were stimulated by reports such as one from shippers in Fayetteville, who were hampered by low water and sought steamboats drawing 18 inches of water as ideal. See Wilmington Peoples Press and Wilmington Advertiser, October 2, 1833. Improvement efforts were also complicated by many purely visionary schemes, such as one to make the New Hope Creek near Chapel Hill a navigable stream. See Wilmington Cape Fear Recorder, October 23, 1829.

⁴⁸
Elizabeth City Star, February 17, 1827.

causes and the logging of the lush riverbank growth had long deposited both whole trees and large branches in the rivers, further constricting narrow channels. Loggers and other seekers of wood considered the river the convenient place to dispose of unwanted treetops.

Efforts at using the overseer system to clear the rivers failed as did the numerous laws protecting streams from a sort of colossal littering by loggers.⁴⁹ The problem grew so serious that the Roanoke Navigation Company sought the right to enforce the public laws respecting streams.⁵⁰ The problem of timber and trees in streams was one of the early and most persistent of steamboat navigation problems. The Henrietta and the North Carolina (II) were both "snagged" by tree limbs imbedded in the river bottom in 1825 and 1826. The North Carolina stranded a theatrical company sans costumes, scenery and music.⁵¹

The few canals completed were among the meagre results of the drive for internal improvements. The Clubfoot Canal opened in 1827 after lengthy and spasmodic construction. Much of the delay in its construction was due to an involved and varied financial career that at one time included private ownership of the canal.⁵² Although the Clubfoot Canal

49

Private Laws of North Carolina, 1823, c. 59; Private Laws of North Carolina, 1825, c. 41.

50

A. Joyner to J. Hamlin Wood, June 15, 1822, J. Hamlin Wood Papers, State Department of Archives and History, Raleigh.

51

Wilmington Cape Fear Recorder, December 20, 1826; Halifax Free Press, January 28, 1825.

52

Private Laws of North Carolina, 1818, c. 50. The stock of the Clubfoot Canal had at one time become part of the estate of General William McClure, and was the legacy of his daughter. The daughter was the second wife of William Gaston, a prominent figure in North Carolina politics and jurisprudence.

and the Dismal Swamp Canal were the receivers of sizeable state aid, both were noted for their shallowness, allowing the passage of only small light draft vessels. The overall results were the subject of considerable complaint by shippers. There had been little improvement in the rivers as compared to their original state, and the largely futile efforts of the private companies at improvement and development were little comfort to those needing transportation by water.⁵³

The very newness of the steamboat was one source of trouble to the owners and operators of steam vessels. The technology of steam and steamboats was still in its infancy and much of the design and building of engines and boats was on a trial and error method.

Steamboats were often not adapted to conditions and were of poor durability and inadequate power. Boats were often poorly designed for steamboat service. The short average life of the pioneer steamboat in North Carolina was undoubtedly due to design problems. Engines were apparently expected to accomplish any task set to them, as boats were often grossly underpowered for any sort of service. The lack of a conception of the limits of the power available from a given engine was sufficiently widespread to attract the notice of a European observer, who commented that Americans often utilized engines of obviously inadequate power in relation to the boat's size.⁵⁴

53

Wilmington Peoples Press and Wilmington Advertiser, November 20, 1833. Goods were described as coming down river on men's backs and in canoes on the Cape Fear between Fayetteville and Wilmington. The time required for the trip under these circumstances was six weeks.

54

Jean Baptiste Morestier, Memoir on the Steamboats of the United States of America (1957), 12.

The steamboat was also very expensive by the standard of the era. The cheapest vessel noted was the Petersburg, which sold for an estimated \$8,000,⁵⁵ a sizeable amount in the early 19th century. While high costs are the price of innovation, the capital outlay for a steamboat demanded commensurate return, keeping rates for steamboats from being competitive.

Competition for the early steamboat was largely in the form of sailing vessels. The era of the railroad as an economic contender was still in the future. Competition between stages and steamboats existed in scattered instances, such as New Bern and the area around the Dismal Swamp Canal but the steamboat and stage largely coexisted as complementary forms of travel. The steamboat and stage were cooperators in a network of transportation rather than rivals. The steamboat at this time was still too rare to be a threat to the stage lines.⁵⁶

Sailing vessels were established competitors and offered a directly comparable service to the public. Sail was an effective and active contender in the lower rivers and sounds where sail was prevalent.

55

New Bern Carolina Centinel, August 1, 1829.

56

Susanne H. Freund and Alice B. Keith, "Prince Bernhard's Travels in the Carolinas, December, 1825", North Carolina Historical Review, XXVI, (October, 1949), 446-459. Travel at this time in North Carolina was described as a choice between horseback and stage travel, the steamboat not being mentioned as a possible alternative. Since only the Cape Fear had steamboats during this year, this is logical. One rather minor antagonist of the steamboat was the owner of toll bridges, one of whom refused to alter his bridge to allow passage of a steamboat in the late 1830's, prompting legislative action. See New Bern Spectator, January 4, 1839.

57

Packet boat service for passengers and large numbers of sailing vessels handling freight connected the state to markets and areas both north and south.

The conditions of travel in general were poor, and sail offered no exceptions. Travel through the sounds was described as tedious and hazardous in the small open boats usually available. Steamboats also earned a reputation for hazardous travel, especially over large bodies of water. Boiler explosions were not unknown and steam's reputation for power enhanced the suspicions of the traveling public. New York steamers had resorted to the safety barge to dispel apprehensions about boilers. The safety barge was towed behind the steamboat, effectively removing the passenger from the vicinity of the boilers. Although barges were in common use in the state, the safety barge was not used, and its presence elsewhere did little to allay the fears of the traveling public in North Carolina.

General economic conditions had a great deal to do with the steamboat, since the steamboat as a method of transportation was directly dependent on the movement of goods and passengers. The first period of activity by steamboats within the state had its economic casualties. A business depression was a major cause in ending New Bern's first attempts

57

New Bern Spectator, September 4, 1835.

58

Edenton Gazette, July 2, 1821.

59

New Bern Carolina Centinel, May 5, 1821.

60

Lane, American Paddle Steamboats, 10.

at steamer service, complicated by the redundancy of two steamboats com-
 61
 peting with each other for the inadequate traffic available. Early
 steam navigation survived economic ups and downs only around major
 centers of business and concentrated shipping activity. The Cape Fear
 and the area near the Dismal Swamp Canal retained steamboat service
 from its beginning despite periods of economic decline.

The North Carolina economy had continued its rather sluggish
 62
 course during the 1820's, varying little from the previous decades.
 With the 1830's, a more vital and lively economic picture was evident
 for the state. Trade and business increased and was soon noted in the
 increased traffic on the state's chief artery of trade, the Cape Fear.
 The increase in business is illustrated by the sizeable increase in ex-
 ports. The total exports for the state in 1832 was \$338,246. By 1837,
 exports had increased to \$1,302,490.66 with the bulk of the exports
 63
 being handled by the port of Wilmington.

61

This situation did not deter the advertisement on a steam-
 boat for sale in a New Bern newspaper. The Eagle, of Baltimore, was
 offered in the New Bern Carolina Centinel, May 15, 1819.

62

One remarkable instance of transportation was the sale of
 North Carolina watermelons on the Grand Canal near Utica, New York.
 It is likely that the melons, which were described as sold in quantity,
 were brought to this location largely by sailing vessels and barge boats.
 Even after the railroad had captured most of the shipment of produce,
 sail was preferred by shippers of melons for its cheapness and ability
 to carry melons with a minimum of breakage. See Halifax Free Press,
 September 3, 1824.

63

Wilmington Peoples Press and Wilmington Advertiser, June 26,
 1833; Wilmington Advertiser, March 23, 1838.

The new prosperity created more river traffic and business for steamboats. The Cape Fear Navigation Company declared a dividend to its stockholders as did the Roanoke Navigation Company.⁶⁴ The Cape Fear Navigation Company was the subject of many complaints and was generally unpopular with shippers and others concerned with the river trade. Users of the river complained of tolls being levied with no corresponding improvement in the river. Refusals to pay tolls were not unknown and many of the rafts and small craft practiced evasion of the tolls by any means available.⁶⁵

More traffic was also noted on the Dismal Swamp Canal⁶⁶ and an effort to reopen the Roanoke Inlet and dredge other ocean inlets was made but failed.⁶⁷ Wilmington, the center of exports for the state, soon had ocean steamer connections, both north and south, aiding passenger traffic.⁶⁸ Increased activity among sailing vessels to outside points was also in progress.

The good times for the state and the steamboat ended abruptly

⁶⁴ Wilmington Peoples Press, March 20, 1833; Halifax Advocate, January 5, 1832.

⁶⁵ Wilmington Peoples Press, February 27, 1833; Wilmington Peoples Press and Wilmington Advertiser, November 20, 1833.

⁶⁶ Wilmington Advertiser, December 29, 1837.

⁶⁷ Edenton Gazette, April 10, 1830.

⁶⁸ Wilmington Advertiser, May 5, 1837. Passenger fares had decreased as steamboats became more numerous and less expensive to buy. The fare from New Bern to Elizabeth City was \$15.00 in 1818, and had fallen to \$8 in 1830. See New Bern Carolina Centinel, May 1, 1830.

in the panic of 1837 which hit hard at both business and transportation.

A comparison of traffic figures for the Cape Fear Navigation Company shows

the extent of the impact of the panic on goods coming into and out of

69

Wilmington.

<u>Downriver</u>	<u>1833-1834</u>	<u>1837-1838</u>
Bales cotton	13,195	8,838
Barrels spirits	118	35
Casks Flaxseed	1,858	967
Bushels grain	147	4,981
General freight	\$498.36	\$552.00

Upriver

Bushels salt	80,399	41,737
Tons iron	318	349
Barrels	3,495	2,747
Tierces	373	374
Hogsheads, pipes	2,284	2,116
Casks lime	1,539	569
General freight	\$15,736.74	\$8,254.45

The effect of the panic on the number of steamboats on the Cape Fear was striking. In 1837 five steamers can be identified on the river and two more in ocean traffic. In 1839 only two steamers were on the river and two in outside ocean service. The panic's effects were to last into the middle of the next decade when a revival in steamer traffic took place.

The initial period of steamboat activity in North Carolina had seen many changes and a sizeable development of the steamboat industry.

69

Wilmington Peoples Press and Wilmington Adviser, June 11, 1834; Wilmington Advertiser, June 22, 1838. The barrels, tierces, hogheads and pipes mentioned are all types of staved barrels used as containers for storage and shipping. Pipes usually contained wine but any of the above could be used for a variety of liquid or solid merchandise.

The state was beginning to have some instances of industrial development, with the steamboat as one of the beneficiaries of the new manufacturing concerns.⁷⁰

Steamboats had become more or less standardized in size for river use at about 100 tons and the power of engines was steadily rising. The earliest steamers often had as low as 20 horsepower and by the 1830's horsepower shot upwards, the John Morris had 40 hp. in 1832, the Clarendon⁷¹ had 45 hp. in 1833, and the DeRosset had 60 hp. in 1839.

Several steamboats built in the state were sold southward as the steamboat progressed down the Atlantic coast. The Duncan MacRae was built in 1835 by Wilmington shipbuilder Doyle O'Hanlon for South Carolina⁷² and the Walter Raleigh and the Clarendon were sold in or to the more southern states.⁷³

Design was improving, benefiting from such costly errors as the burning of the North Carolina enroute from Elizabeth City to Weldon in 1831. The cause of the fire was said by her captain to be the closeness of wooden parts of the hull to the boiler housing.⁷⁴

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Wilmington Advertiser, July 27, 1838.

⁷¹

The DeRosset was unusual, having been built of iron in sections in Great Britain, shipped to this country and assembled in Baltimore. See Lytle List, 47.

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Wilmington Peoples Press and Wilmington Advertiser, November 13, 1835.

⁷³

Wilmington Peoples Press, August 13, 1834; Wilmington Advertiser, January 25, 1839.

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Halifax Advocate, December 8, 1831.

The increase in trade and business within North Carolina in the decade of the 1830's had provided the means for the steamboat becoming firmly implanted within the state's transportation system. The bulk of the goods moved within the eastern part of the state was moved by water⁷⁵ and the steamboat's utility was unquestioned within that sphere. The economic distress in 1837 slowed the development of the steam navigation industry, but was only a temporary setback to both the state's economy and the steamboat. The subsequent revival of business would provide the steamboat with its period of greatest growth.

⁷⁵Halifax Advocate, May 24, 1832.

CHAPTER III

STEAM NAVIGATION IN THE ASCENDENCY, 1837-1865

The panic of 1837 created an economic doldrums within North Carolina that would last into the first few years of the next decade. Business and commerce would remain at a reduced level due to low prices and reduced demand for the state's agricultural and forestry products.

The steamboats in North Carolina found a corresponding reduction in the demand for their services in the lessened commerce during this period. The post-1837 depression failed to eliminate the existing steamboats as the earlier business slump in 1819 had done in some instances. As before, the steamboat survived on the Cape Fear and in the Roanoke area where the reduced trade remained sufficient to support a minimal steam navigation activity.

The panic halted further development of the steamboat for several years until the effects of the panic and its ensuing depression gradually dissipated. The period that followed the end of these economic troubles was one of considerable growth and prosperity. Until the Civil War interrupted further progress, the steamboat would share in this development and be a contributor to its success.

The two decades from 1840 to 1860 were intervals of great growth in steam navigation in the state. A Chicago newspaper described North Carolina as having roughly 45 percent of the South's steamboat tonnage in 1853, a total of 30,366 tons out of 67,743 for the entire region. Within

¹ Raleigh Weekly North Carolina Standard, March 2, 1853.

its operational area in the eastern part of the state, the steamboat was easily the dominant form of transportation, rivalled only by the large numbers of sailing vessels.

The commerce carried on in increasing quantities on the water and by steamboat led to the establishment of a marine insurance firm in North Carolina in 1859, the first of its kind in the state.² Most of the increase in the number of steamboats was on the Cape Fear River. Contemporary sources mention over 40 steamboats operating on the Cape Fear in the period 1840 to 1861. An additional twenty to twenty-five were noted on other rivers and a half dozen more engaged on the Dismal Swamp Canal.

Ownership of steamboats was enlarged to include mercantile interests. The Dibble Brothers of New Bern operated and owned several steamers in their combined transportation and mercantile activities,³ and two Wilmington commission merchants owned a steamboat in 1860.⁴

² Williamston Mercury, April 5, 1859. Marine insurance was definitely indicated for the Dibble Brothers firm of New Bern, who operated the unluckiest steamboats in the state. One Dibble steamer burned and two other suffered boiler explosions within the same year. One of the Dibble steamboats which had managed to survive the boiler explosions was destroyed in the Civil War. Another Dibble steamer under construction was never finished due to the war. It was a Dibble steamboat that was blocked by the refusal of a toll bridge owner to open the bridge to allow the boat to ascend the river. See New Bern Republican and Patriot, June 14, 1853.

³ The Dibble firm was a pioneer in developing local markets and the area in general. The firm operated steamboats, engaged in retail and wholesale trade, and acted as commission merchants along the Neuse and Trent rivers for a number of years. Much of their business was in naval stores, and the firm deserves much of the credit for New Bern's commercial success prior to the arrival of rail service.

⁴ Fayetteville Weekly Courier, September 22, 1860.

The wide adaptability of water transport led to more diverse ownership and use of steamboats. Early steamboats were often used as towing vessels, carrying the usual freight and passengers and added freight on barges or "flats" towed behind the steamboat. The Wayne, used on the Neuse in 1844, was said capable of towing six barges.

The use of towing steamboats soon led to the building of large lighters or barges for bulk cargo. The Corfu, used on the Dismal Swamp Canal, had a capacity of 3,000 bushels of grain and was rated as of 55 tons burden, small in comparison to a 12,000 bushel barge noted on the Albemarle and Chesapeake Canal.

The Cape Fear had several steamboats used for freight only, and Wilmington had a steam tug company devoted exclusively to towing. Sailing vessels were normally towed up the Cape Fear rather than lose time battling river currents.

Dredging boats powered by steam were used widely in North Carolina by private firms, the state and the federal government. The

⁵ This practice was directly counter to the usual arrangement in the North, where the passengers traveled in the towed barge as in New York. Barge passengers were a safe distance from the boilers and possible explosions. North Carolina travelers probably preferred proximity to boilers rather than ending up on a sand bar or mud bank while navigating one of the tortuous bends common to North Carolina rivers. Towled barges were not noted for ease of handling and generally required considerable room.

⁶ New Bern Newbernian, February 20, 1844.

⁷ Elizabeth City Old North State, November 17, 1849.

⁸ New Bern New Era, January 18, 1858.

⁹ Elizabeth City Democratic Pioneer, November 20, 1855; Tarboro Southerner, May 17, 1856.

10

Cassidy shipyard in Wilmington built one dredge in 1852. Steamers were also used in the hazardous but profitable and thriving marine salvage business. The Sam Berry of Wilmington was lost in Masonboro Sound while returning from one such mission. The Beery was two years old and valued at \$20,000, and had been near Beaufort in a salvage attempt on a stricken schooner.

11

A more pleasurable use of the steamboat was the popular steamboat excursion, a widely practiced and welcome source of additional revenue to the steamboat. Promoters of such tours soon added something more than the attraction of seeing "someplace different". An excursion to Nags Head featured, "Kayton's Brass Band" and later trips included not only bands but singers and moonlight.

12

Another type of excursion was a trip to favorite fishing areas.

13

A talk by Henry Clay and a real estate promotion were also noted as the impetus for excursions.

14

The growing popularity of resort areas in the state was an important factor in the steamboat business. A Beaufort hotel had a steamboat to take summer guests from the railroad in Morehead City to the hotel and for excursions daily.

15

A rival hotel added the same

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Wilmington Weekly Commercial, September 24, 1852.

11

New Bern Journal, January 23, 1856.

12

Elizabeth City Democratic Pioneer, June 23, 1857; July 21, 1857.

13

Wilmington Commercial, June 14, 1850.

14

New Bern Newbernian, March 26, 1844; Elizabeth City Old North State, October 15, 1853.

15

Fayetteville Daily Courier, June 7, 1860.

services the next year.¹⁶ Regular service by steamboat between north-eastern North Carolina towns and the popular resort of Nags Head was offered in the 1850's.¹⁷ The resort steamers operated on a seasonal basis, returning to more prosaic chores during the rest of the year.

The ultimate in specialization in steamboats was a floating shingle mill used on the Cape Fear. The boat was a square bowed stern wheel vessel that entered cypress swamps, cutting trees, hauling them on board and processing them into the finished product.¹⁸

The increased numbers of steamboats led to specialization in crew members. The positions of captain, first mate and engineer were well defined and steamers carried laborers and deck hands as well as firemen to handle fuel and stoke boilers. Crewmen were very likely used on deck or in firerooms as the boat's activity demanded.

At the bottom of the steamboat hierarchy were numerous Negro crew members, who often made up a majority of the boat's crew. While steamboat companies and owners owned slaves and used them as crew members, many of the Negroes in crews were free Negroes. The rough labor involved in being a deckhand and roustabout was considered hazardous, and many slave owners refused to hire slaves to operators of boats as well as loggers, canal construction companies and other types of accident prone labor. A slave represented a fairly sizeable investment, and an accident

¹⁶ Plymouth Roanoke Cresset, February 9, 1861.

¹⁷ Edenton American Banner, August 7, 1856.

¹⁸ Wilmington Daily Herald, June 12, 1860.

or illness could convert a valued asset into an expensive liability, as crippled slaves had little market value and their lifelong support was the responsibility of the owner.

Examination of the racial characteristics of the steamer crew is best supplied by the accounts of steamboat disasters. The New Wayne, which sank from a boiler explosion in 1853, had two whites and nine Negroes on board, of which four Negroes, including a Negro woman cook, died.¹⁹ The Kate McLaurin, which had a similar explosion in 1860, had four casualties, the white captain and three Negroes. Three of the crew were free Negroes, of which two were among the dead. The third Negro killed was the property of the owners of the McLaurin and another slave who had been hired from his owner was badly injured by the blast.²⁰

The Magnolia, whose boilers blew up in 1858, suffered ten dead, evenly divided between whites and Negroes. Among the Negroes killed were the cook and the pilot.²¹ The responsible position of pilot was filled by Negroes in more than one instance. As Negroes made up a considerable portion of the boatmen and other workmen along the river, the intimate knowledge of the river gained in such jobs enabled them to get such a position of trust.

Many Negroes were also employed in the state's thriving ship and boat building industry, which built many of the steamboats that

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New Bern Weekly News, June 25, 1853.

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Fayetteville Weekly Courier, June 2, 1860.

²¹

New Bern Weekly Union, February 22, 1858.

were now in use on the rivers and the sounds. North Carolina had been involved in the building of ships and boats from its settlement and had an extensive record of building sailing vessels, some as large as 400 tons burden.²² All port towns of any consequence in the state had some sort of marine facilities, and shipyards were widely found in both town and rural areas.

Washington, North Carolina, had a marine railway of 400 tons capacity in 1860 and utilized this facility in building vessels including steamboats as well as making repairs.²³ A marine railway is best described as a sturdily constructed section of railway track extending from the shore into and under water. The track is equipped with short wheeled cradles designed to support vessels placed in them and the vessel is then drawn out of the water for renovation and repair. The marine railway avoided the calculated risk of beaching a vessel for inspection and repair of areas below the waterline.

Wilmington, as can be expected of the state's major shipping area, had two shipyards and many smaller associated facilities. Steamboats were also constructed on the Cape Fear and especially in and around Fayetteville. Non-native steamboats were usually built in Wilmington, Delaware, or in the New England area. Iron hulled vessels were invariably built out of the state.

A 545 ton steamboat was built in Murfreesboro in 1858 for use in Virginia, but was sold to the federal government shortly after

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New Bern Republican, July 4, 1849.

²³Washington North Carolina Times, January 25, 1860; Tarboro Southerner, February 23, 1856.

completion.²⁴ Steamboats intended for North Carolina waters were much smaller. In the years 1840 to 1860, steamers intended for the upper reaches of the rivers were seldom over 50 to 60 tons in size except for freight boats, which were about twice as big. Steamboats used on the lower rivers and sounds were roughly 100 to 125 tons in size and occasionally larger.

Several steamboats used in North Carolina were of iron hull construction. Iron hulls were expensive compared to the native wooden construction, but were more durable in the rugged conditions found in river navigation. Iron also had the economic advantage of longer life in comparison to wood.

The upper works and superstructures were usually wooden and easily rebuilt or replaced. Frequently steamers were salvaged after boiler explosions or fires had reduced the hull to the waterline, restored with new upper works and placed back into service. The wooden superstructure also allowed cheap and easy renovation with local labor and materials, a popular feature with owners. Weather damage, rotting and hard usage combined to make repair and replacement a periodic item of expense. Steamboats were subject to rotting in wooden hulls under boilers, where heat, dampness and inaccessibility encouraged deterioration. The few propeller steamboats also noted vibration damage to wood²⁵ around propeller shafts and stuffing boxes.

²⁴ Lytle List, 177.

²⁵ Wilmington Daily Herald, May 19, 1860.

The average steamer for river use was of shallow draft, capable of operation in about two feet of water, a necessity for year-round navigation. By 1860, the "steam flat", a shallow draft steamboat of bargelike construction was developed to ply the upper rivers.²⁶ A raked, square and wedgelike bow was useful in getting over sandbars and underwater obstructions, and one steamer was made with a movable prow that could be raised to present such a bow to the water when needed.²⁷ Another experiment that was not repeated was placing propellers at the bow of canal boats.²⁸

The general design of the steamboats used in North Carolina prior to the Civil War was that of the side-wheel steamer. The "side wheeler" had the disadvantage of being rather wide amidships where the sidewheels bulked far out from the hull. Wheels were generally fragile and subject to damage and sidewheels especially so due to their exposed position. The wheels were largely of wood construction and could usually be repaired by the boat's crew, but propellers usually required the use of shipyards and marine railways to effect repairs.

Separate engines or separately controlled sidewheels allowed very short and quick turns to be made in a small area, a very real advantage on rivers where space to maneuver was usually at a minimum and channels often carried such names as the "devil's elbow."²⁹ The

²⁶ Tarboro Southerner, September 22, 1860.

²⁷ New Bern Newbernian, February 20, 1844.

²⁸ Halifax Roanoke Republican, January 23, 1844.

²⁹ Wilmington Daily Herald, December 2, 1859.

sternwheel offered somewhat better protection with the same easy repair and access and almost the same maneuverability.³⁰ The sternwheel and the propeller were used on about one third of the steamboats in North Carolina prior to the Civil War. Each type was roughly equal in numbers and both grew in popularity during the period.

The steamboats built for the western rivers also answered the needs of river navigation in North Carolina. A steamer built in 1847 for use on the Neuse and Tar rivers was constructed in the western style, i.e., shallow draft, dual engines and having a very strongly built hull. The steamer, the Governor Graham, had 60 horsepower and had sides of wood two and a half inches thick, with the interior ribs of the hull placed only a foot apart. The Graham was 125 feet long and 37 feet wide, and was a little wider in relation to her length than the usual North Carolina steamboat.³¹

With the average steamer being constructed of wood, fire was a serious problem. Steamboats often burned, and sparks from smoke-stacks also set fires on docks and wharves.³² The combustible nature of cargoes in the South increased the dangers.³³

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Charles Lavelle Parnell, "Gunboats in the Desert", United States Naval Institute Proceedings, XCIV (November 1968), 79.

31

New Bern Republican, November 29, 1847.

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Fires blamed on sparks from steamboats occurred in both New Bern and Wilmington. One of the fires in Wilmington came very close to burning the entire waterfront area, sparing only a few of the docks and warehouses.

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Agricultural products and naval stores of various sorts were

Cotton bales and especially naval stores were troublesome due to their flammable nature. The burning of the steamboat Wayne resulted from a chain of events that involved such cargo. The Wayne, attempting a night landing at New Bern, struck another vessel, breaching a barrel of turpentine. Later when the Wayne's fireman put out his boiler fire by dropping the live coals overboard, the turpentine that had been spilled on the surface of the river ignited. The resulting flames set the Wayne afire, burning the steamboat's upper works and an additional 23 barrels of the volatile turpentine.³⁴

The Rowan, which burned on the Cape Fear, was alleged to be another victim of spirits of turpentine accidentally ignited.³⁵ Turpentine made a hot, easily spread fire that was hard to extinguish.

The heavy traffic that accompanied the growing number of steamers soon led to an increase in the frequency of collisions. Traffic congestion created a constant hazard near docks and the narrow upper reaches of rivers. The Fanny Lutterloh was sunk in a collision with the Governor Graham in 1854, killing one person.³⁶ Three steamers,

³³(Cont'd.) almost universally combustible and many made hot, difficult to extinguish fires. A great portion of the waterfront buildings in North Carolina and other southern states were of wooden construction and were almost all equipped with wooden shingle roofs. Devices to catch sparks from boiler fires were available to steamboat users, but were apparently seldom used. Spark arrestors represented an added cost and probably interfered with firebox drafts. Draft for boiler fires was not an infrequent problem, some steamers having to have smokestacks lengthened in order to get enough draft to use fuel economically.

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New Bern Republican, March 7, 1848.

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Wilmington Daily Herald, September 5, 1859.

³⁶

Turlington, "Steam Navigation", 39. The Graham's heavy construction was undoubtedly a factor in its survival and the sinking of the Fanny Lutterloh.

the Black River, the Sun and the Hattie Hart were in a three-way collision in 1860.³⁷ The Black River also had the unique distinction of being damaged by a tornado the same day as the collision.³⁸

The increasing numbers of steamboats was an indication of a growing and profitable economy. The state produced quantities of cotton and naval stores and forestry products that found a ready market elsewhere.³⁹ Fisheries within the state produced large quantities of fish, using considerable quantities of salt, another important item of commerce.⁴⁰ Steamboats were a vital part of the extensive trade developed in this period, moving native products out of the state and bringing in necessary imports, such as the salt for the fisheries.

The state imported large amounts of food as well as manufactured goods.⁴¹ Small manufacturing firms within the state were plentiful, processing food, textiles, wood products and other goods from local resources.⁴² These firms, however, failed to meet more than local needs in most instances.

Communication and transportation for commercial purposes reached the state where a New Bern merchant could write a New York wholesaler on the fourth of a month and get the goods delivered in New

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Wilmington Daily Herald, June 5, 1860.

38

Fayetteville Weekly Courier, June 9, 1860.

39

New Bern Republican, June 27, 1849.

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Wilmington Journal, August 13, 1847.

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New Bern Newbernian and North Carolina Advocate, November 19, 1850.

42

Elizabeth City Old North State, September 4, 1852.

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Bern on the 17th of the same month. Most of the traffic in goods was carried by water, since the railroad in North Carolina at that time was still in the early stages of development.

The state's first railroad began operation in 1837 when the Wilmington and Raleigh Railroad began operation on the completed portions of the line near Wilmington and Weldon. The railroad was completed in 1840.⁴⁴ State leaders soon evolved a plan for the development of a system of rails and steamboats in an east-west pattern to channel the state's commerce through its own ports. The system would benefit the state by allowing residents to handle the business then going to out of state ports and shippers.⁴⁵

Most of the railroads built before the Civil War were built during the 1850's. In North Carolina, the Atlantic and North Carolina connecting Goldsboro and Morehead City and the North Carolina Railroad connecting Goldsboro and Charlotte were built, following the desired east-west pattern. The business of the state continued to flow to other states. The existing pattern of commerce was too well established and had been reinforced by the route of the Wilmington and Raleigh.⁴⁶

Another factor aiding the existing custom of goods going out of the state was the Albemarle and Chesapeake Canal, a bigger and better

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New Bern Newbernian, March 28, 1848.

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Brown, A State Movement in Railroad Development, 36.

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New Bern Journal, September 25, 1855.

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Brown, A State Movement in Railroad Development, 173. The name of the Wilmington and Raleigh Railroad was changed to Wilmington and Weldon Railroad in 1851.

canal connecting the North Carolina sounds with Norfolk. The canal was in operation in 1849⁴⁷ and took a sizeable portion of the trade of the Dismal Swamp Canal. One of the barges used on the Albemarle and Chesapeake Canal was the iron-hulled Enterprise, owned by a Scotland Neck, North Carolina, firm and capable of carrying 12,000 bushels of grain or 800 bales of cotton.⁴⁸

While the new railroads failed to aid the steamboat in developing an east-west commerce, little or no competition resulted from their presence. The number of railroads and their routes were too small in size to constitute a threat to the steamboat in the years prior to the Civil War. The rails and steamboats were cooperators, much in the way that steamboats and stage lines had cooperated to provide a network of transportation.

The rail lines and the steamboats combined to provide through passage for passengers and freight by numerous connections between the two services.⁵⁰ The right of way agreement between the town of New Bern

⁴⁷ Tarboro Mercury, November 9, 1859. Other projects of the period did not fare as well. A stock subscription in the Neuse River Navigation Company by the town of New Bern was repudiated after the election of a majority of "Know-Nothings" to the town council. The loss of the subscription eventually caused the collapse of the company. See New Bern Union, July 30, 1856.

⁴⁸ Elizabeth City Democratic Pioneer, October 18, 1859.

⁴⁹ New Bern New Era, January 18, 1858.

⁵⁰ New Bern Republican and Patriot, June 14, 1853; Halifax Roanoke Republican, March 1, 1848. The cooperative spirit was lacking when the Governor Graham began activity on the Tar River. The steamboat for a time was refused passage up river by the owner of a toll bridge at Washington, J. Bryan Grimes. Grimes was later a Confederate general and a leader in various activities in his area.

and the Atlantic and North Carolina Railroad provided for a wharf on the Trent River at New Bern to connect the rail line with New Bern's active steamboat companies.⁵¹ The Wilmington and Raleigh Railroad owned and operated steamboats between Wilmington and Fayetteville on the Cape Fear and also in ocean service between Wilmington and Charleston.⁵² The steamboats thus used provided a valuable connection for the rail line's customers to a major market.

This system of transportation ended abruptly with the outbreak of the Civil War. Both forms of transportation were important to the South in the war effort, but the railroad carried the bulk of the traffic generated by the war. The South was isolated by the blockade while Union occupation of large areas along the coast forced the Confederacy to rely on interior lines of transportation and communication.

This isolation had a very direct effect on the steamboat. A high percentage of the South's agricultural products had found a market overseas. Much of the cotton produced in North Carolina had found its way across the ocean, as had its turpentine and other forestry products. Manufactured products from foreign nations were imported in quantity into the state, especially salt and iron.

Imported articles and export goods within North Carolina were carried by steamboat in most cases. Most of these goods entered or left

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New Bern Journal, May 7, 1856. One scheme suggested was far ahead of its time. The plan called for shipping goods in flatboats on rivers and later placing the flatboats on rail flatcars, preceding current "piggyback" rail and truck combinations by many years. See New Bern Newbernian and North Carolina Advocate, October 22, 1850.

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Wilmington Advertiser, May 5, 1837; Wilmington Journal, November 20, 1846.

by the Dismal Swamp Canal or the Cape Fear River. The war halted much of this traffic, and reduced steamboat travel to military or other essential uses. Shortages of machinery parts soon became apparent.

Many of the steamers in use had been built in northern yards, and all but the smallest items of machinery and much of the iron work used by steamboats came from northern sources. About the only material that the South had in abundance was wood for construction and fuel, and that item was soon in short supply because of wartime manpower shortages.

The delivery of steamboats from northern yards was sustained up to the outbreak of hostilities. Another in the series of ships with a similar name, the North Carolina (III) was a large (618 tons) steamer delivered to Wilmington from New York on January 30, 1861. It was soon put into service as a blockade-runner and was captured and used as a Union navy vessel until after the war when it was sold.⁵³

The I. Wells arrived in Wilmington in March of 1861 for use on the lengthy trip up the Cape Fear to the mining area on the Deep River. A relatively small boat, the Wells was built to specifications for the difficult trip, which involved passage through the twenty lift locks necessary to ascend the river.⁵⁴ The Wells had two engines of 40 horsepower each,⁵⁵ also considered necessary for the passage upstream. The total horsepower of the Wells was far above the average for steamboats in general use in the state.

⁵³
John Harrison Morrison, Iron and Steel Hull Steam Vessels of the United States, 1825-1905 (1945), II.

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Wilmington Daily Herald, June 5, 1860.

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Wilmington Daily Herald, March 23, 1861.

In May of 1861, steamboat operation was curtailed when the state forbade the exportation of food and grain beyond its borders, and another blow was felt when all marine insurance was cancelled.⁵⁶

The war with its shortages soon caused major changes in steamboat activity. The blockade soon reduced the export of cotton and forestry products, cutting two of the major items carried aboard North Carolina steamboats. While military needs created new business in the way of passenger and freight revenue, the military was prone to take steamers for their needs exclusively. The call for manpower for the army and wartime labor elsewhere soon removed all but the most necessary steamboat personnel.

The wartime operation of steamboats was beset with problems as the extreme shortage of almost every commodity needed in the South increased. In 1862 Charles B. Mallett and James Brown, operators of a coal mine in the Deep River mining field, met with difficulties in obtaining the necessary supplies to operate their steamboat, the Reindeer. This boat was used to haul coal down river from Fayetteville to Wilmington, where the coal was sold under contract to the Confederate government. Mallett and Brown found it necessary to use nails and other supplies intended for the mines for the repair of the steamer. The owners of the Reindeer found more labor and material problems awaiting them and their steamboat in 1863 and 1864.⁵⁷

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Plymouth Roanoke Cresset, May 27, 1861.

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J. T. Watts, Wilmington, to Charles B. Mallett, Fayetteville; April 29, 1864, June 19, 1864, July 10, 1864. Charles B. Mallett Papers, Southern Historical Collection, University of North Carolina Library, Chapel Hill.

As demands for transportation grew, more steamboats passed into military control. One such boat was the J. R. Grist, used by the state of North Carolina to haul workers and supplies between Wilmington and a state salt works on the sound near Wilmington. Salt was in such demand that the state operated its own works to supply its needs and those of its citizens. The South had used 60 million bushels a year before the war, largely imported due to the lower price of the imported salt. Necessary and scarce as salt was, the Grist was commandeered and the salt workers were drafted
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by the Confederate army in 1863.

Steamboats were valued as means of military transport and as such were considered strategic targets by the Union army, which had made profitable use of steamers as gunboats in several battles. As the war progressed, a number of North Carolina steamboats were destroyed or captured. A foray by Federal gunboats on the Roanoke captured two
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steamboats, and two more were captured when Union forces captured the Dismal Swamp Canal. Confederate forces retreating along the canal after the battle of Roanoke Island attempted to damage the canal to render it useless to the federal forces and destroyed three tugs and a dispatch boat belonging to the canal company. Another steamboat was captured
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before it could be scuttled.

The canal was soon put to use by the Union army, which retained

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Ella Lonn, Salt as a Factor in the Confederacy (1965), 13-15, hereinafter cited as Lonn, Salt as a Factor in the Confederacy.

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Tarboro Southerner, August 23, 1862.

60

Samuel Ward Stanton, Steam Navigation on the Carolina Sounds and the Chesapeake in 1892 (1947), 16, hereinafter cited as Stanton, Steam Navigation on the Carolina Sounds.

61

control of it until the end of the war. This was the usual fate of the captured southern steamboat, which was usually renamed and used by the federal forces as auxiliaries or even occasionally as a warship. One incident in North Carolina involved a former civilian steamer in a naval battle. The Cotton Plant, used as a transport and for towing barges, ventured out to meet the invading federal forces in the battle of Plymouth in 1864. The captain of the Confederate ram Albemarle soon sent the vulnerable Cotton Plant back up river out of harm's way.

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As the war progressed and more of the state's coastal area was occupied by Union forces, fewer and fewer of the state's steamboats, either civilian or military, remained in operation. The upper Cape Fear held the last uncaptured and undestroyed steamers. These steamers were bottled up when Wilmington fell and were captured by Union troops when Fayetteville was occupied.

The net effect of the war was a serious reduction of the numbers of locally owned and operated steamboats in North Carolina. Besides the normal attrition due to navigational hazards, accidents and decay, the war presented new dangers. Steamboats large enough for use as blockade-runners were utilized for that service and, as such, were often lost or captured.

Smaller steamers were also frequently captured by the Union forces or commandeered by the Confederates for their machinery or

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Clifford Reginald Hinshaw, Jr., "North Carolina Canals Before 1860", North Carolina Historical Review, XXV (January, 1948), 55; Elizabeth City Fisherman and Farmer, February 26, 1897.

62

General Clement A. Evans (ed.), Confederate Military History, (1899), IV, 224.

military value. Wartime shortages, especially of boilers and engines, tended to render steamboats inactive.

Steamboats used by Confederate forces in pursuit of the war effort against the United States were subject to confiscation as spoils of war and the owners were not reimbursed when they were seized by the Union forces.

The overall result of these wartime losses was a severe economic setback to the state's transportation industry. Persons of suitable loyalty in occupied areas were allowed to engage in small scale economic activity, but they were not allowed to operate steam-
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boats. The war ended in North Carolina with steam navigation in the hands of the occupying federal forces and the majority of steamboats wartime casualties of one sort or another.

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Washington New Era, July 3, 1862.

CHAPTER IV

COMPETITION AND DECLINE

The end of the Civil War marked the beginning of a series of profound changes for the steamboat in North Carolina. The war had made important alterations in the economy of the South and the rest of the nation. The most significant of these economic changes for the steamboat would be the ascendancy of the railroad as a means of transportation. It would, however, be many years before this ascendancy would be clearly and definitely apparent.

The two most immediate factors having an influence upon post-war North Carolina water transportation were the heavy losses of steamboats during the war and the relaxation of bans on shipping by Federal Army authorities in the occupied areas of the South.¹

Many of the state's steamboats had been sunk or otherwise destroyed by wartime emergencies. Boats were scuttled and sunk by both armies in efforts to deny the enemy the use of a proven means of military transportation. Many steamboats were captured, and others made useless by shortages of parts and the removal of machinery to power more necessary vessels. Steamboat personnel and the skilled tradesmen necessary to maintain steamboats were scattered by the demands of war. Few steamboats without a direct connection to the war effort escaped destructive neglect. The Federal edicts forbidding export and even coastal trade

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The War of the Rebellion, A Compilation of the Official Records of the Union and Confederate Armies (1880-1901), Series I, XLVIII, Part III, 602, hereinafter referred to as Official Records (Army).

from occupied areas made exceptions only in the case of a few "loyal" civilians of impeccable Unionist sentiments. The embargo had its inception in the planned confiscation of the property of the supporters of the rebellion, but faltered when the confiscation drive failed to materialize. The resumption of trade for the majority of the citizens of occupied North Carolina came when Federal military officials requested an end to the shipping embargo to alleviate the problem of feeding a destitute population with little or no means of obtaining a livelihood.² The embargo prevented the owners of saleable property from supporting themselves with the proceeds of normal business activity.

Federal military authorities themselves operated several steamboats on the Cape Fear for both military purposes and for the relief of destitute citizens along the upper river. The boats were the nominal property of Fayetteville shipping interests and had been seized by the Federal officials.³

The resumption of normal steamboat traffic was complicated by the large number of river obstructions built by Confederate authorities. As Federal forces captured coastal areas in North Carolina, the obstructions were constructed to halt Union raids upriver into Confederate territory. Pilings, sunken sailing vessels that had been rendered useless by the blockade and "Yankee catchers" were utilized. The "Yankee catcher" was a

² Official Records (Army), Series I, XLVII, Part III, 70.

³ Wilmington Weekly Star, April 6, 1894; Fayetteville Statesman, July 18, 1874.

log crib filled with stones, supporting a sharpened, iron shod timber placed at an angle so as to impale an intruding vessel.

The removal of the wartime obstructions and wrecked vessels began first in 1865 on the commercially important Cape Fear⁴ and lasted well into the 1880's on other rivers. The problem of obstructions was often a considerable one. Over two miles of obstructions comprising 18 ships, several barges and numerous pilings and other devices were removed from the Neuse River below New Bern during this period. Other wrecked vessels upriver had also to be removed.⁵

The steamboat was extolled editorially as a means of recovery,⁶ and river steamboats were soon active. Business in the Cape Fear region resumed quickly, being an area of commercial importance. Also, the Cape Fear was probably the least damaged by the war of the state's river transportation systems. The postwar demand for cotton soon had cotton sheeting from Fayetteville mills moving down the Cape Fear to Wilmington by flatboat in 1865.⁷ By 1866, sailing vessels and ocean steamers were making Wilmington a regular port of call,⁸ and in 1867 five river steamers were active between

⁴ Wilmington Herald of the Union, May 2, 1865.

⁵ Kinston Journal, August 12, 1880.

⁶ Washington Eastern Intelligencer, June 15, 1869.

⁷ Wilmington Daily Dispatch, October 28, 1865.

⁸ Wilmington Daily Dispatch, March 10, 1866; Wilmington Sunday Morning Herald, February 18, 1866.

Wilmington and Fayetteville. Another steamer connected Wilmington and Southport at the mouth of the Cape Fear. Wilmington produced a 40 foot steam launch in 1868, and its engine was a product of Wilmington foundries and machine shops.⁹

Traffic was soon resumed on the Albemarle and Chesapeake Canal connecting Norfolk and the North Carolina sounds. The Dismal Swamp Canal remained eclipsed by the deeper and better Albemarle and Chesapeake Canal and troubled by financial and repair problems.

The recovery from the war was halted temporarily by a depression in agricultural commodity prices and an ensuing business slump in the years 1871-1873. Steamboats were driven to underbidding each other in an attempt to remain in an operating status, driving down rates and profits.¹⁰ New Bern, which had steamer service to New York and Norfolk in 1865, was hard pressed to support a weekly steamer service to New York by 1873.¹¹ Local merchants were reduced to seeking ordinances to prevent steamboat personnel from selling merchandise to New Bern residents and competing with local business.¹²

The growth of commerce experienced after the war was much more extensive in the years following the 1871-1873 depression. The steamboat

⁹ Wilmington Daily Post, April 12, 1868.

¹⁰ Tarboro Weekly Enquirer, November 15, 1873.

¹¹ New Bern Republican and Courier, March 29, 1873.

¹² New Bern Republican and Courier, November 15, 1873.

Olive, which had been placed on the Tar and Pamlico rivers in 1868, was sold after 18 months of profitless operation to the Old Dominion Line of steamers. The Old Dominion Line, which operated the Olive and other vessels between Tarboro and Norfolk, replaced the Olive in 1875 with a larger steamboat, the Pamlico. Two years later, the line added the Newberne in the same general area to handle the continued increase in shipping traffic.

While much of the commerce was basically unchanged from that of the pre-Civil War period,¹⁴ North Carolina had begun to produce increased quantities of manufactured goods which provided more traffic for the state's waterways. The pioneer textile industry and other light manufacturing enterprises noted in the prewar years were expanded. While few of the new enterprises could be termed large, small shops and factories turned out agricultural implements, wagons and buggies, tobacco products, fertilizers, textiles, wooden plates and buckets, millwork and other wooden products.

The availability of cheap steam power plants was also evident in the increased numbers of steam vessels of various sorts. Local labor

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Tarboro Southerner, October 3, 1878.

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The naval stores industry had declined to some extent by the late 1890's, as forests had become exhausted from cutting and tapping for turpentine. One of the reasons for the decline in sales could have been the tendency of naval stores dealers to dilute turpentine with the cheaper petroleum products becoming available. See Wilmington Semi Weekly Messenger, April 6, 1897; Wilmington Weekly Star, April 12, 1889.

easily produced barge-like "flats" of native lumber, and the simple steam machinery of the time was often adapted to propel the "flat". Improved efficiency and lower capital requirements led to bigger and more powerful steamboats. Coal was cheap and readily available, easily replacing the less efficient and cumbersome wood fuel of the pre-Civil War era.

The increase in steamboat numbers was prompted and aided by a considerable number of internal improvements projects after 1870 when federal funds began to be expended within the state in quantity. Federal funds had been earlier expended on the Cape Fear below Wilmington beginning in 1823 and ending in 1856 when a storm wrecked most of the im-
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 provements then accomplished up to that time. Other federal work had
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 been done on the Pamlico in 1847, and a system of navigational aids had long been maintained along the state's coast.

The new improvements were carried out by the Army Corps of Engineers, which was unanimous in its uncomplimentary appraisal of the
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 improvements attempted by the state of North Carolina. The engineers loftily condemned the state work as badly managed and a waste of money. The Engineer Corps performed a valuable service in removing both wartime

15
 United States, War Department, "Report of the Chief of Engineers".
 House Executive Document 2011, 47th Congress, First Session, 148.

16
 United States, War Department, "Report of the Chief of Engineers".
 House Executive Document 1844, 45th Congress, Third Session, 540.

17
 United States, War Department, "Report of the Chief of Engineers".
 House Executive Document 1598, 42nd Congress, Third Session, 744. A federal project on the Tar River in 1883 was criticized due to allegedly wasted funds. The project director apparently spent his time at pleasure rather than at work. See Tarboro Southerner, August 2, 1883; June 21, 1883.

and natural obstructions from the North Carolina waterways. All of the state's navigable rivers received federally supported snagging, bank clearing, dredging and other work designed to ease the passage of steamboats and other river traffic.

Policies of the Corps of Engineers also served to aid the state in another way. Taking a practical attitude toward the advantageous expenditure of funds, the Corps of Engineers refused to attempt projects that would benefit private interests. The refusal of the Corps of Engineers to improve the upper Cape Fear unless the Cape Fear Navigation Company monopoly was ended undoubtedly hastened the purchase¹⁸ of the company's rights by the United States in 1881. A similar prohibition of monopoly placed on the Clubfoot Canal failed to get the¹⁹ nearly defunct canal into public ownership. In a similar vein, the Corps of Engineers refused to improve waters crossed by stationary bridges and required drawbridges to be installed before work on such streams would be undertaken.

The effect of the federal improvements was to allow a more extensive and widespread navigation of the state's rivers. The Corps of Engineers cited the presence of six to eight steamboats on the upper Neuse

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United States, War Department, "Report of the Chief of Engineers". House Executive Document 1598, 42nd Congress, Third Session, 747.

19

United States, War Department, "Report of the Chief of Engineers". House Executive Document 3078, 52nd Congress, Second Session, 161.

20

United States, War Department, "Report of the Chief of Engineers". House Executive Document 3078, 52nd Congress, Second Session, 157.

in 1881 in comparison to one active before the undertaking of an
 21
 improvement project on that river.

Despite the obvious advantages improvement of river
 navigation offered, the Kinston Journal repeatedly campaigned for
 a railroad rather than improvement of the Neuse. 22 The Journal
 was not alone when it considered river improvement of doubtful utility.
 This was the view held by the Corps of Engineers, which repeatedly
 expressed the opinion that North Carolina rivers were not capable of
 permanent improvement on an economic basis.

The federal program of internal improvements continued to
 and beyond 1900 but with predictable results. As the Kinston Journal
 had intimated, navigation in the upper reaches of rivers within the
 state depended on the supply of water available, and even after im-
 provements navigation was generally restricted to only a portion of
 the year. The improvements in North Carolina had been of some benefit to

21

United States, War Department, "Report of the Chief of
 Engineers". House Executive Document 2278, 48th Congress, Second
 Session, 169.

22

The Kinston Journal acidly commented that river improve-
 ment funds would be better spent for artesian wells to increase the
 navigable depth of rivers than for the proposed improvements. The
Journal also asserted that most of the available funds went to the
 North and West, citing requests from Michigan and Wisconsin for funds
 for improvements that totalled two and a half million dollars. The
 total revenue collected from Michigan and Wisconsin by the federal
 government was less than the tobacco tax alone from North Carolina,
 the Journal stated. See Kinston Journal, February 20, 1879; June 3,
 1880; July 15, 1880.

the steamboat transportation industry, but permanent and adequate improvement was far too expensive for the limited benefits which would result.

Progress reached the steamboat itself as well as the waterways in which it travelled. Designers built better boats with such innovations as steam heat. Electric lights also made an appearance in boats built toward the end of the century.

An increase in size was also evident in the steamboats destined for use on the sounds of North Carolina. One boat, completed in 1890, had 32 staterooms with the previously mentioned steam heat and electric lights. Its power plant was twin triple expansion engines capable of a top speed of fourteen to fifteen miles an hour. The boat made the 156 mile trip between New Bern and Elizabeth City in twelve hours.²³

This average of about thirteen miles an hour is highly revealing when compared to past speed of travel by steamboats. Although postwar internal improvements had greatly expanded the range of the steamboat in North Carolina and had allowed better speeds to be attained, the steamboat was still relatively slow when compared to the railroad.

Thirteen miles an hour was considered a good average speed for steamboats in 1851,²⁴ but it was little better than the nine miles an hour averaged by steamboats in 1819.²⁵ As in all transportation, speed was

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Edenton Fisherman and Farmer, January 27, 1893; February 17, 1899.

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Wilmington Daily Herald, December 2, 1859.

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New Bern Carolina Centinel, February 13, 1819.

limited by a relationship of factors such as load capacity, efficiency and initial and operating costs. The usual river steamboat in North Carolina was also limited in both size and hull shape by the waters in which the boat was used, Steamboats on shallow, twisting rivers by necessity were the opposite of the ideal hull shape for speed, i.e., a long, narrow and deep hull with considerable length in relation to width.

Engine design had been much improved, but the average steam engine in North Carolina was of the non-condensing type for economy reasons. The non-condensing type allowed steam to escape once it had passed through the engine. avoiding costly condensers to reclaim boiler water but requiring a constant intake of water to replenish boilers. The water supply was often the water in which the boat floated, complete with suspended mud, other impurities and even corrosive salt in brackish waters. Boilers suffered as a result, but apparently this system offered economies in comparison to other arrangements. The exhaust of steam from steamboats was described as similar to the sound of railroad locomotives,²⁶ which also exhausted steam under pressure, providing an audible warning of arrival that often preceded visual sightings of boats by a comfortable margin.

Maintainence of steamboats apparently remained a problem after the Civil War. Numerous instances of overhauls and refurbishings are found in contemporary sources. Overhauls usually took several weeks, with

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Stanton, Steam Navigation on the Carolina Sounds, 17.

substitute steamers commonly being used in order to maintain normal
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 service.

Effective lubrication of engines remained a problem with the primitive greases and oils of the period and was complicated by engine design. Steam engines for boats, especially on the western rivers, had been roughly standardized as an economy measure. The "standard" model of engine was a cheap, simple horizontal cylinder design with a piston travel of approximately eight feet. The lengthy
 28
 piston travel was conducive to rapid wear of both cylinder and piston.

Judging from the frequent overhauls, it may be presumed that the paints and preservatives of the period were little better than the lubricants. Besides the effects of the weather, steamboats were subject to considerable abuse as the result of cargo handling and the less than dainty proclivities of the average passenger in the nineteenth century.

Another problem for the operators of steamboats was the result of a change in the ownership of steamboats. This change had caused a decline in the number of general freight and passenger steamboats operating as common carriers. Many of the heavy users

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Elizabeth City North Carolinian, January 13, 1892; Kinston Journal, November 6, 1879; Murfreesboro Albemarle Enquirer, September 2, 1880.

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The "standard" engine was utilized in pairs and was often used to aid in steering, the engines being controlled separately. See Louis C. Hunter, Steamboating on the Western Rivers: An Economic and Technological History (1949), 141-142.

of water transport found it economical to operate their own steamboats rather than patronize the general carriers.²⁹ Large numbers of tugs, freight boats, steam propelled "flats" or barges and assorted service craft became evident in the 1880's and 1890's. These two decades represent the peak of steam navigation in North Carolina in the post-Civil War period and rival the years immediately prior the war in the numbers of steamboats in use. After the 1893 panic, the remaining years of the 1890's averaged forty steamboats of all types in use within the state. The Cape Fear had from one quarter to one-half of the total steamboats on its waters during the peak year of steamboat activity.

The totals for these years show that individuals are listed as owners of approximately one-third of the boats, a trend in marked contrast to the multiple ownership common before the Civil War. This trend was the result of increasing competition from railroads and a general decline in profitability for steamboats. Less able to return a reasonable dividend to investors, the steamboat was passing into the hands of the owner-operator, who could usually earn a living with the boat, serving as captain. The

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One of the new type of steamboat proprietors was P. D. Robbins of Hallsville, Duplin County, who was very likely the only North Carolina Negro to own a steamboat. Owner of a sawmill, Robbins built a 70 foot steamboat, the St. Peter, which was on its maiden voyage down the Cape Fear with a full cargo when it broke its shaft. No further mention of the St. Peter is found in contemporary sources. Robbins had hired a Captain Dicksey to operate the vessel. It is likely that Dicksey was white, as a tugboat captain by the same name was known in the Wilmington area. See Wilmington Weekly Star, November 23, 1888; December 28, 1888. See also Washington Gazette, October 24, 1889; Annual Reports of the Board of Railroad Commissioners of North Carolina 1891-1897; Second Annual Report of the North Carolina Corporation Commission (1900).

record book of the Bay River Transportation Company of Stonewall, North Carolina shows that the company sold its remaining steamboat to the boat's captain in 1901 for an amount sufficient only to pay the boat's debts.³⁰ The small size of the usual steamboat company limited financial reserves for "hard times" and made them particularly vulnerable. The only large firm to operate steamboats in North Carolina was a Virginia company, the Old Dominion Line. The Old Dominion steamers operated only in the northern half of the state's coast, but it survived long past its smaller competitors, since it handled a considerable portion of the less difficult and more profitable Chesapeake Bay traffic.

Commercial ownership of steamboats was widely varied, and many operated both as private and public carriers. Merchants, fishery operators, lumber firms and commission agents for various sorts of produce all operated boats and were not averse to accepting freight and passengers to help defray expenses. This practice served to further cut the revenue available to the common carrier freight and passenger boat.

Besides industrial and mercantile operation of steamboats, railroads operated steamboats as extensions of rail passenger and freight service.³¹ In 1890 the Norfolk and Southern Railroad Company contracted with the Wilmington Steamboat Company (Delaware) to operate freight

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"Meetings of the Bay River Transportation Company", Pamlico County Historical Association Collection, East Carolina Manuscript Collection, East Carolina University, Greenville, North Carolina.

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Kinston Journal, November 27, 1879.

steamboats on the Cape Fear in conjunction with the railroad.³² As late as 1893, the Norfolk and Southern operated seven steamboats within the state.³³ Although no steamboat line operated a railroad, the Cape Fear Harbor and Coal Company, a Southport towing and coal firm, contemplated buying the Brunswick, Western and Southern, a rail line proposed to connect Wilmington and Southport.³⁴

The railroad itself was to be the biggest factor in the demise of the steamboat as a major form of transportation in North Carolina. The growth in population and wealth of the nation had created pressures that had resulted in expansion westward, especially from the northeastern portion of the country.

This expansion offered a fertile path for the railroad, and a growing need for transportation was experienced not only in the western areas but also in the eastern industrial growth. The Civil War was the means of a convincing demonstration of the worth of the railroad for efficient land transportation.

The South, in particular, was treated to a lesson in the value of railroads. Cut off from ocean commerce by the blockade and with interior lines of transport and communication, the railroad was a highly important economic and military necessity during the war years. The end of the war saw southern railroads back into activity within weeks after the surrender.

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Stanton, Steam Navigation in the Carolina Sounds, 12-13.

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Third Annual Report of the Board of Railroad Commissioners of North Carolina for the Year Ending December 31, 1893 (1894), 17.

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Southport Leader, January 19, 1893; February 2, 1893.

The industrial North was as willing to serve the South with manufactured goods as it had done in the pre-war years, and the South's timber and agricultural products were in demand. Coupled with a continued growth westward in the nation, the net effect was to place primary emphasis on the railroad as commerce and population continued a shift away from the coast.

The old complementary nature of the steamboat-railroad relationship rapidly disintegrated with railroad expansion. The rails soon began to parallel natural water routes, and active competition began on an enlarged scale.

In North Carolina, parallel rail and water routes existed along the Neuse after 1855, and rail service had been in use between New Bern and Norfolk since the Ante-Bellum period competing with the steamboat services between the two cities. Wilmington was also served by rail before the war, but no navigation existed between Wilmington and other ports except by ocean steamer due to the absence of an inland water route. Although water navigation was possible between Norfolk and Wilmington for approximately half the distance, the remainder of the connecting sounds were impassable except to occasional small vessels.

Railroad mileage in the state grew rapidly after the war and doubled during the last decade of the nineteenth century.³⁵ The Roanoke

³⁵ Hugh Talmadge Lefler, A History of North Carolina (1956), II, 623.

River area had partial rail service in 1882 and the important trade center of Fayetteville was connected by a branch line to Raleigh in the same year. Fayetteville had been the focal point for plank roads and was the inland terminus of the heavy traffic in goods on the Cape Fear, but was slow to be linked by rail to other business centers. In 1896, Fayetteville was connected by rail to Wilmington, completing dual water and rail services on all of the state's usable river systems.

Branch lines were soon extended to almost all centers of trade in the state and the steamboat was under heavy economic attack as a means of transportation. The steamboat was forced to lead a more or less marginal existence, relying on traffic either uneconomical or too bulky for the railroads to handle. The steamboat also operated as "feeder" lines to the railroads in many instances. The relative cheapness of water transport would be an asset, but would not do more than sustain steamboat use in narrowly defined areas of transportation.

A comparison of the services offered by the two competing types of transportation is illuminating. Both the steamboat and the railroad had inherent advantages, but the railroad had a superior technology that would be the deciding factor in getting and keeping passenger and freight customers.

Few advantages fell naturally to the steamboat, which was much more subject to weather influences, had a multitude of navigational problems and a rather definite low average speed. The steamboat was able to effect landings at numerous points along rivers at little or no cost, where the railroad was much less flexible.

The steamboat had many disadvantages that tended to cause a desertion of the passenger traffic to the railroad. Many steamboats displayed a cavalier attitude to schedules and passengers in general when seasonal items such as produce and cotton offered a greater potential in revenue. Weather conditions such as high winds caused groundings and other inconveniences such as captains refusing to leave port due to the weather. The high, bulky superstructures of the average steamboat coupled with shallow draft made the boats badly susceptible to the effect of wind such as the fall and spring gales characteristic of the North Carolina sounds.

Railroads offered similar accommodations with little chance of delay or seasickness. Improved safety devices and design had greatly reduced the chance of accidents on both boats and trains although accidents still occurred. Steamboat boiler explosions continued at a lesser pace but tended to be spectacular due to the central location of boilers. The remoteness of danger from boiler mishaps or fires aboard trains was obvious. Fires aboard the usual wooden vessel of the period were particularly dangerous and destructive of life.

The demand for speed by passengers and freight patrons put the relatively slow steamboat at a serious disadvantage. Costs of transportation to the consumer were often much the same whether by train or boat, but the trains were much faster and more efficient. By the 1870's, freight

trains were averaging the same speed as the best steamboats, about fourteen miles an hour. Passenger trains were averaging as high as 26 miles an hour on main lines and seventeen miles an hour on branch lines.³⁷ A locomotive in 1857 hauled an 800 ton load at twenty miles an hour, both the speed and capacity being far in excess of the Southern steamboat of the period and indeed a much later period.³⁸

Speed and cheapness of transportation were directly involved in a new source of revenue and competition between the steamboats and the railroads in eastern North Carolina.

The new rivalry was prompted by an emerging fresh produce industry and a revitalized fishing and fish processing activity. Fish, both fresh and preserved, had been a source of income to the state before the Civil War. Both sailing vessels and steamboats had been used to carry fish and some produce to markets outside the state for a number of years.

North Carolina fishermen had adopted the use of the highly effective seine net after 1800 in harvesting the state's plentiful resources of fish, but the fishing industry made its biggest advance in the adoption of steam power to fishing. After the Civil War, Captain Peter M. Warren of Edenton adapted the steamboat to fishing, constructing a boat in 1872 that followed his plan using steam power for handling nets and propelling the boat.³⁹ Warren's model evolved into a shallow draft sidewheel steamboat

³⁷ John H. White, Jr., The American Locomotive; An Engineering History (1968), 74, hereinafter referred to as White, The American Locomotive.

³⁸ White, The American Locomotive, 73.

³⁹ Lonn, Salt as a Factor in the Confederacy, 246.

with the machinery and sidewheels in the extreme stern, leaving the deck area forward open for the handling of the nets and the catch. Use of steam powered winches allowed the use of nets up to 2,400 yards long and vastly increased catches of fish.⁴⁰

The increased catches of fish and better transportation to market soon found new customers, and railroads and steamboats made special accommodations to carry the considerable traffic in fish and fishing supplies. The Old Dominion Line line of steamboats built an ice plant and pier at Roanoke Island,⁴¹ and both steamboats and railroads cooperated to get the highly perishable fish to market.⁴² A special train from Elizabeth City took 28 hours to Philadelphia and an added five hours to reach New York.

The amount of fish shipped was large. From one North Carolina shipping point, 13,700 boxes of iced fish were shipped in the 1882 fishing season. By 1892, the amount of fish shipped from the same shipping point had risen to 23,900 boxes. The Albemarle Sound area of North Carolina alone produced an estimated 45,000 barrels of herring and 19,500 boxes of other types of fish in 1896. Fisheries in the Albemarle Sound area also used an estimated 20,000 barrels of salt yearly and other supplies.⁴³ The large quantities of fish produced and supplies

⁴⁰ Edenton Fisherman and Farmer, June 28, 1895.

⁴¹ Elizabeth City Falcon, June 24, 1887.

⁴² Elizabeth City North Carolinian, February 15, 1888.

⁴³ Edenton Fisherman and Farmer, September 20, 1896.

used represented important amounts of revenue to the fortunate carrier that could obtain the business of carrying it to and from the fisheries area.

Another segment of the state's economy found a ready market in the North for fruits and vegetables. The climate in North Carolina allowed an advantage to farmers interested in the profitable early spring vegetable market in such cities as Philadelphia, Boston, and New York and even Baltimore.

The greatly increased availability and reduced cost of the post-Civil War transportation made it easy and profitable to ship produce to Northern markets, a contrast to the influx of Northern food products into the South before the Civil War. Items such as ice, cheese, butter, coffee and preserved meats were still obtained in quantity from the North, but were offset by the sizeable quantities of vegetables and fruits shipped north in the period from 1870 to the turn of the century.

Much of the produce was shipped by steamboat, and the produce trade was an important portion of the steamboat's business. A report sent to the Albemarle Steam Navigation Company by one of its agents reported 1,900 barrels of peas from North Carolina shipped to New York and Baltimore within a five day period.⁴⁴ The crops shipped from the state included peaches, pears, grapes, potatoes, beans, peas, cabbage, tomatoes and watermelons. Less prosaic produce shipped were strawberries, asparagus,

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Elizabeth City North Carolinian, May 23, 1872; June 13, 1872.

cucumbers, eggplant and radishes. Peanuts, which were a popular item for shippers prior to the Civil War, had a smaller but consistent market.⁴⁵

The growth of produce as a means of income was aided by the conversion of depleted turpentine lands into farm land.⁴⁶ The produce industry also attempted unsuccessfully to attract immigrant workers, inducing lines to offer reduced steamboat fares to North Carolina points such as New Bern.⁴⁷

The boom in produce growing led to considerable activity on the part of both rail and steamboat lines to attract the business of the produce shipper. The competition led to efforts of the two rivals to capture the produce traffic to the exclusion of the other. The Old Dominion Line of steamers, prompted by complaints of produce shippers and growers about rail service, polled shippers to see if they would be willing to ship exclusively by water. The Old Dominion Line offered a tri-weekly service from Elizabeth City to northern points as an inducement. The Norfolk and Southern railroad, stung by the offer, soon announced that delays that had angered produce shippers had been eliminated and that proper ventilation of produce cars had been arranged.⁴⁸

⁴⁵ Kinston Journal, May 26, 1881; Edenton Fisherman and Farmer, October 25, 1889.

⁴⁶ Wilmington Messenger, September 7, 1897.

⁴⁷ Goldsboro News, February 3, 1869; Kinston Journal, September 25, 1879; January 15, 1880.

⁴⁸ Elizabeth City Falcon, June 10, 1887.

As with the fisheries, both rail and steamboat lines offered special routing, produce sheds and extra steamboats trips and rail cars as necessary. ⁴⁹ Steamboats were inclined to abandon regular passenger and freight service in order to fully capitalize on the profitable fish and produce traffic. ⁵⁰ Railroads cannily added special trains and additional cars in order to maintain regular schedules, keeping customers and possibly gaining friends at the steamboat's expense.

Despite the effect of competition in tending to keep rates down, both steamboats and railroads were the subject of considerable complaints about high freight and passenger rates. Regulation of either form of travel in the field of rates was minimal until the end of the nineteenth century, and both rails and steamboats were inclined to charge what they thought the traffic would bear within competitive limits. When competition was lacking, rates rose suddenly. Tarboro residents noticed an immediate increase in rates when one of the two steamboats serving Tarboro ceased ⁵¹ operation.

Freight rates were normally higher for short distances, a fact

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Edenton Fisherman and Farmer, June 16, 1893; Kinston Journal, March 11, 1880; Wilmington Weekly Star, March 22, 1888.

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Washington Progress, February 7, 1888; February 14, 1888.

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Tarboro Enquirer Southerner, January 23, 1874. Shippers were largely at the mercy of the rail and steamboat lines due to the poor roads. The Kinston Journal declared that there was no lawful road two miles long in the entire eastern portion of the state. State requirements for public roads were seldom met due to the inefficiency of the overseer system. See Kinston Journal, January 3, 1879.

that caused considerable complaints among shippers.⁵² This disparity lessened as transportation advanced but remained a problem. Rail rates were somewhat higher than those of the steamboat in the early post-Civil War period. Costs of shipping a bale of cotton in 1877 were:⁵³

By steamboat, Tarboro to Norfolk, \$1.50
to Baltimore, \$2.25
to New York, \$2.55.
By rail, Tarboro to Portsmouth, Virginia, \$2.35
to Baltimore, \$3.00
to New York, \$3.50.

By 1890, rail rates had dropped considerably in relation to steamboat rates. A shipment of cheese cost twenty-five cents to go by rail between Wilmington and New Bern, a distance of about 90 miles. The same cheese cost another twenty-five cents by steamboat from New Bern to Stonewall,⁵⁴ approximately eighteen miles away.

As the advantage of cheaper rates by water lessened, the superior ability of the railroad to haul goods and people swiftly and cheaply caused a clear attrition among steamboats.

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High local freight rates were blamed by a Kinston sash, door and blind factory for its lack of success. The firm claimed that high local rates made its product non-competitive as close as Morehead City, where Baltimore and New York millwork firms held the market. See Kinston Journal, January 26, 1882.

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Tarboro Southerner, October 18, 1877.

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Invoice, Wilmington, New Bern and Norfolk Rail Road Company, September 14, 1894; freight list, Steamer Trent, September 14, 1894, in Pamlico County Historical Association Collection, East Carolina Manuscript Collection.

Seven steamboats were in use as freight boats between Fayetteville and Wilmington as late as 1898, even though rail service had been available between the two towns since 1890. As many as twelve boats had been active along the Cape Fear in the 1880's,⁵⁵ carrying approximately two million dollars in goods annually. As late as 1899, steamboat traffic on the Cape Fear was 115,000 tons⁵⁶ a year, with an added 10,000 tons carried on rafts without power.

Although the availability of rail service was the major cause of the steamboat's demise, an economic panic in 1893 aided the exit of some steamboats. The New Hanover Transit Company, which operated a steamboat and "trolley" line between Wilmington and nearby beach resort areas, failed and its boat was sold. The Southport Steamboat Company lost its two steamers that normally plied between Wilmington and Southport in the same manner.⁵⁷

As the rails pushed the steamboat into the economic fringes, an old competitor of the steamboat emerged again as a rival. The sailing vessel, long in the transportation background, had once again become a factor to be reckoned with.

The sailing vessel suffered all the ills of the steamboat and a few of its own, but had the distinct advantage of relatively low

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Wilmington Weekly Star, August 12, 1887.

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Wilmington Weekly Star, November 23, 1900.

57

Wilmington Weekly Messenger, March 8, 1893.

costs far under those of the steamer. Cheaper operation and initial cost and a willingness to cut rates had kept the sailing vessel alive. Rates for ocean travel under sail had consistently been below those of steamships, and a significance amount of the goods carried on inland waters had remained in the hands of the cheaper sailing schooners and other wind propelled vessels. Schooners regularly competed with steamboats for passengers to beach resort areas.

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Entire North Carolina counties were served by sail only, the sailing vessels being willing to operate in areas that were marginal for both steamboats and railroads. The sailing vessels usually carried goods to points where transshipments were available or to local markets.

An example of the type and quantity of goods carried by sailing vessels is shown by a survey conducted by the principal merchant in Shallotte, in 1890. The annual trade between the town and its vicinity and outside markets was carried exclusively by sail and was estimated as:

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1,134 casks turpentine	\$22,680
4,687 barrels rosin	4,678
600 casks strained tar	2,250
182 barrels crude tar	291
102 large barrels fish	1,536
250 barrels crude turpentine	525
130 bales cotton	5,850
2,020 bushels peanuts	1,818
500 bushels sweet potatoes	250
107 bushels cowpeas	125
chickens and poultry	250
eggs (10,000 dozen estimated)	2,000
2,000 bushels oysters	1,500
miscellaneous produce	2,500
	<u>\$47,273</u>

58

Elizabeth City Economist, July 30, 1878.

59

Southport Leader, March 13, 1890.

In many areas of North Carolina the sailing vessel outlasted the steamboat as a means of transportation on water. The lower initial outlay and cheap operational costs and its easy conversion to other tasks such as fishing made the sailing vessel a common sight in North Carolina well into the current century. The modern highway and the gasoline engine finally put an end to its usefulness.

The use of petroleum products and engines as a means of propulsion appeared prior to 1900, and a forerunner of the gasoline engine was used in a pilot boat at Southport in 1891. This vessel utilized a naphtha engine, which operated much like a steam engine. The gasoline engine was in marine use in the state by the late 1890's and rapidly became popular. The gasoline engine, like the naphtha engine, did not require a licensed engineer as in the case of the steam boiler. It was also lighter and cheaper in many cases and took up less space below decks. Fewer personnel were required for its operation, and the fuel was an easily handled liquid with a fraction of the bulk of less concentrated fuels such as coal.

The introduction of gasoline engines did little to reduce the use of steamboats except in the case of smaller vessels such as pilot boats and launches, since larger and more powerful gasoline engines were still in

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Southport Leader, January 15, 1891.

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Elizabeth City Fisherman and Farmer, July 31, 1896.

the future. However, the gasoline engine and its related technology was another factor that was gathering momentum to force the steamboat still further into the backwaters of commerce as a bulk carrier and as an isolated and outmoded means of transportation in remote areas.

By 1900, the steamboat was still much in evidence but with little of its former status and fame. No longer prominent, it survived along the Cape Fear and the canals entering the state from Virginia, and occasionally as "company" vessels and owner-operator enterprises on other rivers. Only on the state's sounds did it retain any of its former glory. The Old Dominion Line still operated several larger boats for freight and passengers in the northern sound area.

The steamboat had survived in a much altered form, but it was no longer the factor that it had been in the lives of many North Carolinians.

CHAPTER V
CONCLUSIONS

Steam navigation had a remarkable development in North Carolina despite the adverse conditions prevalent in the state. The only period in which the steamboat had anything approaching optimum conditions for development were the twenty years immediately prior to the Civil War. During those years the steamboat had the benefit of a prosperous economy and limited competition from railroads. In most of the years of its existence prior to 1900, the steamboat faced either serious developmental or competitive problems.

Some of these problems were of a permanent nature. Physical conditions found in North Carolina rivers, sounds and other inland waters made steam navigation difficult and troublesome at best. Most pressing of these problems were shallow water, shifting sand bars and narrow channels.

Attempts at improvement of the navigable qualities of rivers, inlets and harbors did little to alleviate these conditions. The amounts of private funds available for improvement were too small and state and federal appropriations were too limited and infrequent for permanent results. It is also doubtful that the technology of the times was sufficiently advanced to achieve the desired result even with larger funds. In any event, to create navigation in the state suitable for optimum steamboat operation condition would have required funds far in excess of any practical return or benefit for the money expended.

Even if easily navigable waters had been available, the steamboat suffered from a deficient technology. The early boats were unreliable and of poor durability and safety. Instances of inadequate power for operation under varying conditions recur constantly throughout the period from 1818 to 1900. The high investment cost of the pioneer steamboat forced owners to rely on rates that were not competitive with existing forms of water transportation.

The steamboat's greatest competitor, the railroad, soon surpassed the steamer's ability to carry heavy loads quickly. The steamboat was limited in size by the shallow and cramped waters on which it operated. Its top speed was relatively low. Improvements in steamboats failed to increase its efficiency adequately to compete with the railroad, and thus the steamboat became a victim of economics and deficient technology.

Since the steamboat was a commercial enterprise, economic factors were of great importance. The steamboat company was sensitive to business fluctuations and was especially vulnerable due to undercapitalization and a lack of financial resources. With one exception, the Old Dominion Line, steamboat companies operating in North Carolina were small. The high cost of the early steamboats required multiple ownership to provide sufficient funds to buy the vessels, and companies proliferated until the steamboat declined in the face of railroad competition.

The ownership of the steamboat changed as the industry faced leaner times. Ownership and operation of steam vessels by industries and mercantile houses lessened the opportunity for profitable investment in common carrier steamboats, and many of the latter passed into the hands of individuals who were both owners and operators. Such

owners were usually the boats' captains who possessed little capital other than the boat itself. Such a financial structure was the same as that prevailing in the ownership and operation of sailing vessels.

Sailing vessels and the steamships were both forced by the railroads into the role of high cost, short haul "feeder" carriers even though the chief advantage of water transport was low cost, long distance bulk cargo operation. Consolidation of ownership under a modern corporate structure might have provided the steamboat with the desired capabilities and financial stability.

Many of the difficulties encountered by steam navigation in North Carolina dated from the Civil War and its disastrous effects on the steamboat. The least of the effects was the wartime loss of many of the state's steamboats. The major result of the war was the elevation of the railroad as a means of transportation and the final determination of a north-south route for traffic and trade in eastern North Carolina. The emphasis that the railroad received as a means of transport during the war was to eclipse the steamboat with its limitations.

The war put an end to any hope for an east-west commerce through North Carolina ports and threw the steamboat into direct competition with the railroads rather than allowing coexistence as cooperators within a transportation network. The competition was somewhat one-sided and the outcome was predictable. The steamboat, like other forms of transportation, was replaced by more efficient and versatile forms of travel.

Railroads were able to haul freight cheaper and were better able to meet passenger demands for speed and dispatch. Railroads were also less

affected by factors such as weather that made the steamboat relatively unreliable. Railroads were more inclined to meet regular schedules while the steamboat readily left passengers and freight waiting while it hauled fish or produce.

As railroads reached out to serve all but the most minor of business centers, steamboat revenues shrank. Competing with the steamboat were the cheaper sailing vessels and even rafts, a situation that lasted into the twentieth century.

Severe competition and limited finances in the last decade of the nineteenth century had only one possible result. The era of the steamboat was near its end and not even the lack of a road system would save it. The steamboat had served the state well but had bowed in an inevitable progression to better forms of transportation.

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