WHERE FIRE MEETS WATER: ARCHAEOLOGICAL INVESTIGATIONS OF THE CENTERBOARD SCHOONER

by

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ABSTRACT

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The Centerboard Schooner is a late 19th-century wreck located on the Blackwater River near Milton, Florida. Students from the University of West Florida investigated this site during the 2010 and 2011 maritime field schools. Excavations on the Centerboard Schooner provided evidence that this vessel was most likely abandoned before the 20th-century. The schooner's size and archaeological data suggest that it was built on the Gulf Coast. Other regional shipwrecks identified as schooners were used in comparison to better understand the role that this schooner played in the maritime economy. The Blackwater River is rich with maritime history. Historical documentation indicates that this schooner may have been a casualty of Confederate actions during the American Civil War. Archaeological and historical data suggest that the Centerboard Schooner operated during the middle to late 19th century as a regional merchant vessel.

CHAPTER I

INTRODUCTION

In 2010 and 2011 students from the University of West Florida conducted field investigations on a wreck known as the Centerboard Schooner (8SR01978) located in Marquis Bayou along the Blackwater River (Figure 1). Kirk Sanborn, a local of Milton, informed Dr. Bratten of the Anthropology Department of where it was located. The wreck was identified as a 19th century schooner constructed with a centerboard. Measuring 52 ft (15.8 m) in length and 19.6 ft (5.9 m) wide, the schooner's dimensions fit well with coastal merchant schooners. Schooners were valued as costal trading vessels for a several reasons. The fore-and-aft rigging is less complicated and the sails could be furled and unfurled from the deck, requiring fewer men to work them. This vessel also sails better in a variety of wind directions, allowing it to maneuver more effectively in inland waterways like bays and rivers (Chappelle 1967:279). Schooners greatly ranged in size and were built from anywhere between two to seven masts. This study utilized the artifact assemblage, ship construction elements, and historical documentation, to indicate the vessel's usage and deposition.

Like many vessels, schooners were built with economic and environmental constraints in mind. There are a few key elements of a schooner that archaeologists can uncover to better understand the role a vessel played within a maritime environment. The vessel's size and hull construction can determine the type of schooner and in what kind of areas it would have sailed. This technique is especially helpful when the identity of the vessel cannot be determined. This thesis examines the size and construction of the Centerboard Schooner, and compares its characteristics to other known schooner wrecks found along the Gulf Coast to better understand how this vessel was utilized during the 19th century.

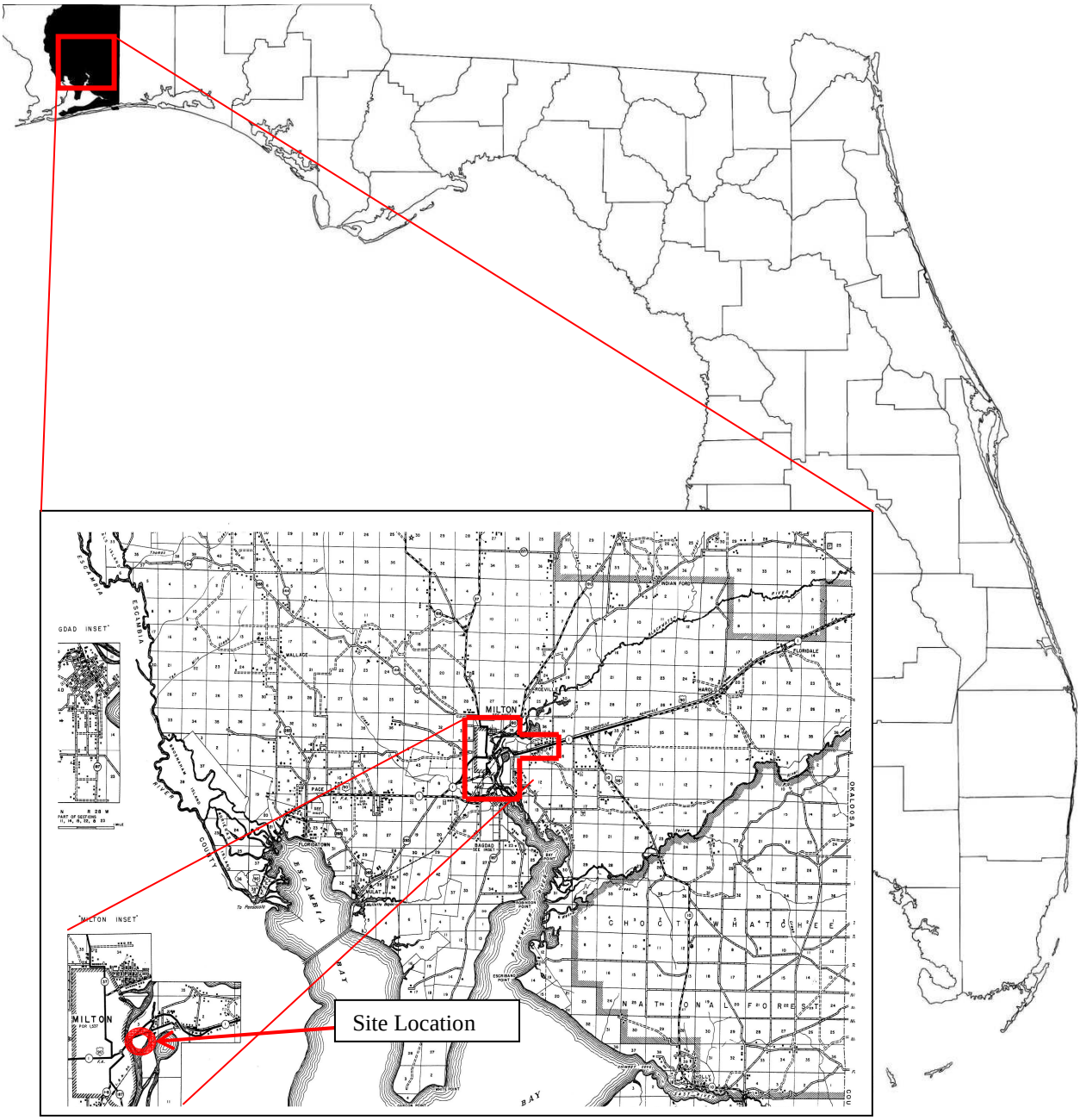


FIGURE 1. Location of Centerboard Schooner (8SR01978) in Marquis Bayou. (Images obtained from the Florida State Road Department).

Initial field investigations began at the end of the 2010 maritime field school. During the last week of the field school, students conducted non-intrusive documentation of the site to determine the site's boundaries. It was during the 2011 field school that excavations and more detailed documentation began with the goal of finding an *in situ* artifact assemblage and specific ship construction details. Divers placed excavation units forward and aft of the centerboard trunk to locate the vessel's mast steps. Artifacts recovered included ceramics, glass, fauna, and faunal remains. An additional unit was placed in the bow to reveal construction elements and artifacts with better context than those found on the surface. This proved to be successful for finding diagnostic artifacts that could give the schooner a more specific usage time frame. The artifacts found within the bow include ceramics, personal items, and an intact minié ball.

While the data collected from field investigations supported the theory that the schooner operated during the 1860s, a different approach was needed to show what the schooner did during that time. A comparison of local shipwrecks has been used in the past to show vessel usage (Moore 2002; Perrine 2012). This thesis compares ten schooners that operated along the Gulf Coast and using Moore's (2002) schooner categorization, determined where the Centerboard Schooner is categorized. Moore's categorization has three groups: coastal, fishing, and regional, all based on the length of the schooner. The other schooners included in this comparison are the *Governor Stone*, (Sikes 2004), Hamilton's Wreck (Moore 2002), *Geo T. Lock* (Holland 2006; Sjordal 2007), *Palafox* (Sjordal 2007), *Guanacaste* (Sjordal 2007), Bethune Schooner (Baumer 1991), Ballast Cove Wreck A (8FR903) (Horrell 2005), *Dinty Moore* (Sjordal 2007), and Snapper Wreck (Raupp 2004).

The results of this comparison show that the Centerboard Schooner was most likely a regional schooner. Its small size and centerboard would have made the schooner a desirable

vessel to travel through the innercoastal waterway and into rivers along the Gulf Coast. Wood samples taken from sections of the Centerboard Schooner confirm that the schooner was also built locally. Wood samples from the futtocks and floor timbers revealed that they were constructed out of Torreya (*Torreya taxifolia*), a timber found only along the banks of the Apalachicola River. Other locally sourced timber included Yellow Pine (*Pinus spp.*) and Oak (*Quercus spp.*). In addition to the wood samples indicating the Centerboard Schooner was built along the Gulf Coast, a comparisons using the *Annual List of Merchant Vessels* show that most southern built schooners were smaller than those built in the north. The smaller size is reflected in both tonnage and depth of hold.

It is still unclear when or how the Centerboard Schooner sank. Archaeological evidence in the form of charred woods indicates that the schooner was burned. There are two scenarios that are most likely based on historical and archaeological sources. During the Civil War, the Blackwater River was subject to a scorched-earth policy carried out by Confederate troops in 1861. Primary historical documents generated by this event provide a list of the property damaged and the effect it had on the locals. These letters list the name of schooners that were sank at this time that may be potential matches for the Centerboard Schooner. The artifact assemblage shows that the Centerboard Schooner operated during this time and it is possible that it was burned and sank by members of the Confederate Army. The other scenario is that the schooner survived the Civil War and was abandoned after the vessel had become too obsolete to sail. The small artifact assemblage supports this second theory and indicates thorough salvage.

Many questions can be answered for wrecks that have no written history. While the identity of the Centerboard Schooner may never be found, its contributions to the archaeological record are significant. The abundance of schooner wrecks within the Pensacola Bay Area show

how important these vessels were to the maritime economy. Careful considerations were taken when the Centerboard Schooner was built to ensure that it could successfully travel to any port along the Gulf Coast. The shallow hull allows for the schooner to sail into shallow water and the centerboard adds stability by counterbalancing the top heavy sails when the vessel is light on cargo. Its small size allows the schooner to maneuver in narrow waterways. This study demonstrates through archaeological investigations and vessel comparisons how the Centerboard Schooner operated during the latter part of the 19th century.

CHAPTER II

HISTORICAL CONTEXT

Blackwater River Maritime History

The lumber industry during the 1800s fueled the growing economy in Escambia and Santa Rosa counties. In the years leading up to 1800, the landscape of Santa Rosa County had already been noted for its abundance of waterways and timber that were ideal for water-powered mills. From 1765 to 1766 four saw mills were in operation in the surrounding Pensacola area (Phillips 1998:149). Over the next seventy years, saw mills appeared in greater numbers and farther distances from Pensacola. Shortly after Florida became part of the United States of America in 1821 and with the invention of the steam engine, the shores of the Blackwater River became a hub of maritime industries. By 1834, twenty-five mills were in operation along waterways that flowed into the Blackwater River (Eisterhold 1973:267). In 1834, a lumberman could reach a profit of $2.00 per one-thousand feet of lumber cut, an attractive investment for mills that could produce upward of 25,000 feet of lumber a day (*Pensacola Gazette* 1834: March 26). Many businessmen such as Alexander McVoy, William J. Keyser, Joseph Forsyth, and Ezekiel Simpson became successful at cutting and shipping lumber.

The introduction of steam power to saw mills in the 1840s allowed lumbermen to relocate their operations from the tributaries to the main waterways. This new location provided mills direct access to shipping lanes. For example, lumber mills operated by Forsyth and Simpson were able to move from their location at the Arcadia Mill Complex south to Bagdad along the Blackwater River. The town of Bagdad began as the living quarters for the employees of the Forsyth and Simpson mill. From 1840 to 1845, the lumber mills exported over 6 million feet of lumber, 780,000 laths, and 400,000 shingles (Rucker 1990). Between 1821 and 1858, 162 million feet of lumber were exported from the Pensacola area (Eisterhold 1973:279).

Forsyth and Simpson's mill complex was the largest in the area with the ability to saw up to 20,000 board feet of lumber a day (Eisterhold 1973:274). Forsyth and Simpson shipped lumber, sash, laths, panel doors, and shingles to New Orleans and other cities (*Pensacola Gazette* 1850 [Appendix A]). Their use of the Woodworth planing machine ensured the best way to mechanically plane, grove, and tongue wood for sale.

Along with lumber, other industries used the waterways of the Blackwater River to produce marketable products. William Keyser operated a successful sawmill during the mid-19th century alongside a general merchandise business. Keyser shipped bales of cotton, hides, and deerskin along with lumber and laths (*Pensacola Gazette* 1850 [Appendix A]). The Blackwater Iron Foundry, founded in 1860, produced iron and brass casts along with parts for saw mills, grist mills, and steam engines (Rucker 1990). Other products like juniper buckets, silk, bricks, and textiles all found their way from Santa Rosa County to other parts of the world. Philips notes during his survey of mills that the decrease in water-powered sawmills within the interior allowed for a direct increase in grist mill production. Phillips attributes this change to the use of steam power and the depletion of timber within the region allowing for more productive agricultural lands (1998:154-155).

Shipbuilding provided another industry for this area. Numerous shipyards operated during the 1850s on the Blackwater River. Joseph Bowers, James Fitzsimmons, and William Peterson ran three individual shipyards that together in 1850 performed 10,000 dollars' worth of ship repairs. William M. Ollinger, Martin F. Bruce, and Fredrick G. Howard were three prominent shipwrights who began their work in the area at the Pensacola Navy Yard in the late 1850s. Ollinger and Bruce established a shipyard together on what is now known as "Shipyard Point" in Bagdad (Woolsey 1994:49). Howard purchased land across from the Milton waterfront

for his own shipyard. At the time, both shipyards were contracted by the Confederacy to build a gunboat to support the protection of the Gulf Coast from a Union attack or invasion (Woolsey 1994:45). These two shipyards were two of the main targets for Confederate attacks during the scorched-earth policy carried out in March of 1862.

These shipyards, along with others located south of Milton, serviced numerous ships that were owned and operated by businesses along the Blackwater River. Rucker (1990) notes that the Forsyth and Simpson Company owned both the schooner *Martha* and steamer *General Hamer* during the 1850s. The ownership of two types of ships also may reflect the value in both sail and steam powered vessels at the time. The schooner could travel further and faster, but relied on the wind for power. The steamer could move goods at a more predictable pace and with fewer sailors and easily navigate small waterways with the ability to move forward and backward on command. The *Gen. Hamer* could transport roughly 60,000 feet of lumber with 30,000 laths and still have room for other goods. The *Martha* could carry up to 67,000 feet of lumber. Both ships sailed regularly to New Orleans from Pensacola (Appendices A, B, and C).

By the 1860s, the majority of the lumber mills had converted to using steam power, which allowed mill owners to build along the bays and large bodies of water. No longer tied to the waterpower of small tributaries, steam powered mills could produce lumber more efficiently. With their new location near deeper water, larger shipping vessels could load the cut wood directly. With the partnership of Pensacola owned vessels, pine from Santa Rosa County was shipped to Rio de Janeiro, Barcelona, England, and California (Rucker 1990).

Pensacola had three forts to protect the entrance to the bay. The construction of the forts began in 1829 under the supervision of Captain William H. Chase (Driscoll 2007). The three forts (Pickens, Barrancas, and McRee) were each built around the entrance of Pensacola Bay

with Fort Pickens on Santa Rosa Island, Fort McRee on Perdido Key, and Fort Barrancas on the mainland. These three forts provided an overlapping field of fire to any hostile ships that entered the bay through the pass. The construction of these forts utilized local resources including clay for bricks and pine for lumber. Fort Pickens finished construction in 1831 with Fort McRee and Fort Barrancas completed in 1837 and 1839 respectively. Before the Civil War, both Pickens and McRee remained unmanned except for a few harbor pilots living in Fort Pickens and an ordinance sergeant and his wife occupying Fort McRee.

When Florida seceded from the Union on January 10, 1861, Lt. Adam J. Slemmer retreated from Fort Barrancas to Fort Pickens with 30 sailors and 51 soldiers (Parks 1978:3). Two days later, seven companies occupied Fort Barrancas and the Navy Yard under the Command of Captain Chase. Fort Pickens remained under Union control throughout the Civil War. The Confederacy attempted only one land-based assault but was unsuccessful. The most action these forts saw was an exchange of artillery on November 22-23, 1861, and January 1-2, 1862. The November engagement resulted in 6,000 cannon balls fired with 5,000 being from Fort Pickens. As a result of this artillery exchange, houses in Pensacola shook violently, and large amounts of dead fish floated on the surface of the bay (Parks 1978:18). During the January 1st and 2nd shelling, Fort McRee's powder magazine exploded rendering the fort useless and started a large fire in the Navy Yard. The front lines in Tennessee later required the need of additional forces so the troops stationed in Pensacola were ordered to withdraw (Brigadier-General Jones, United States War Department 1862:849). The loss of Fort Henry on the Tennessee River and Fort Donelson on the Cumberland River was the start of events that would lead to the burning of the Blackwater River (Rucker 2002:3).

In February 1862, these two forts fell at the hands of Union General Ulysses S. Grant. If Grant could not be stopped, important sections of Mississippi and Alabama would fall into Union hands (Rucker 2002:3). In response, the Confederacy reinforced the area with additional troops. These reinforcements came from the lower South, and Pensacola was brought into the fight. General Braxton Bragg ordered the withdraw of his nearly 8,000 troops from the Pensacola area to reinforce lines in Tennessee. General Bragg directly placed Brigadier-General Samuel Jones to carry-out the order. On March 9, 1862, Brigadier-General Jones writes to Colonel Thomas Jones about his proposed plan for the abandonment of Pensacola, "I have ordered…to burn and destroy all public buildings, including the railroad depot, all machinery and machine shops, cotton, lumber, the wharves, and all boats of every description in Pensacola" (United States War Department 1882:848). He also wrote, "I have ordered Lieutenant-Colonel Beard…[to] take his men on the steamer *Tom Murray*…proceed to Criglar, Bagdad, and Milton, burn the *Tom Murray* and all boats, every foot of lumber and the saw-mills, breaking and destroying the machinery" (United States War Department 1882:848). Brig-Gen. Jones' direct orders to Lieutenant-Colonel Beard read as, "Your work is to begin by daylight tomorrow morning. You will burn every saw-mill, planning mill, sash factory, every foot of lumber, and all boats…I rely upon you to execute your orders that nothing of material value to the enemy shall be left in that vicinity" (United States War Department 1882:849). Lieutenant-Colonel Beard quickly secured the aid of Alexander McVoy as a guide. That night, Beard and 100 Confederate soldiers and officers boarded the *Tom Murray* and made their way from Deer Point to Colonel William Miller's mill on the north side of East Bay (Rucker 2002).

On March 11, 1862, Beard and his men began the destruction and burning of Santa Rosa's maritime industry (Figure 2). The first attack occurred at Miller's saw-mill when all the

lumber, vessels, and buildings were quickly engulfed in flames. Beard then proceeded up the Blackwater River destroying everything in his way. Using the steamer *Tom Murray* for transportation, the troops quickly steamed up river without any worry of current or wind. They proceeded to E. A. Pearce and Son sawmill. On their way to the mill, the soldiers encountered a number of oyster boats that worked for E. A. Pearce. Without allowing the oystermen to remove "the slightest article," the Confederates set fire to the boats and continued on (Blount 1862:325). Pearce was not at his mill at the time of the attack, and women of the family were helpless as they watched Beard and his men set fire to the mill and one million feet of lumber (Beard 1862).

The troops then reached the mill of Criglar, Batchelder and Company. Here they destroyed two saw mills, a planning mill, one blacksmith shop, four scows, three skiffs, and one sloop among other things. The men also burned 3.5 million feet of lumber along with the steamer *John Hunt* and the schooner *Civility* (Beard 1862).

The third stop for the Confederates was the E.E. Simpson and Company mill complex in Bagdad. The destruction of the site started with a steamer that they encountered on the way that was carrying the Simpson family. The family was allowed to return to land before the steamer was set afire. E. E. Simpson's losses as accounted by Beard read, "1 saw mill, 1 planning mill_office_blacksmith shop. Carpenter shop, 3 dwelling houses. Schooner *Martha*. Sash Factory, ice house, 1 scow, a large lot of lumber, supposed 8 million feet [sic]" (Beard 1862). Mr. Simpson requested to delay the burning of the lumber till nightfall when the wind would have lulled, but the soldiers refused and his house caught fire multiple times. Luckily the fires were extinguished quickly with the help of his slaves and his fire engine (Schmidt 1992:610).

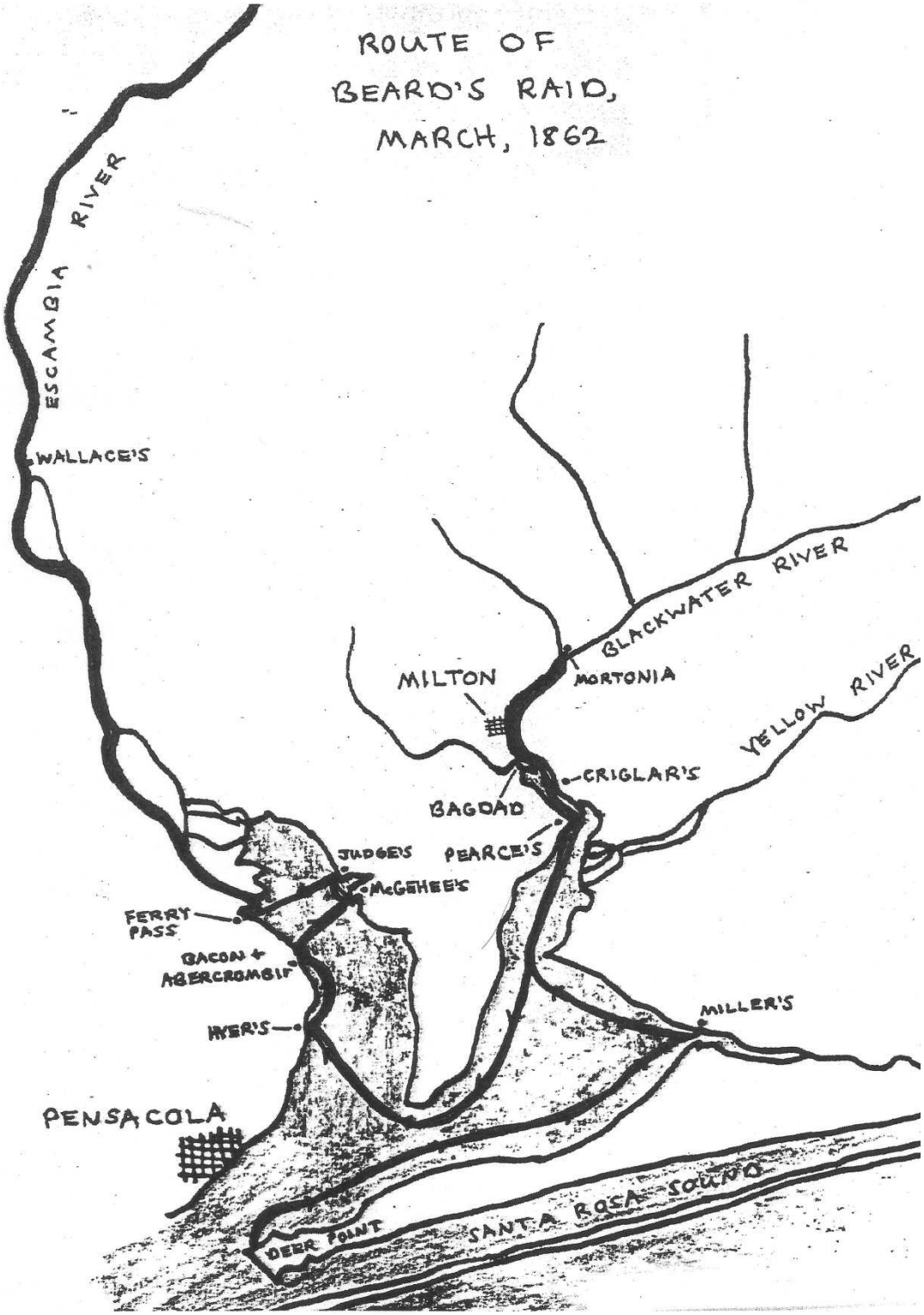


FIGURE 2. Map of Beard's Raid drawn by Brian Rucker. (Courtesy of Rucker, Brian Rucker 2002 Bad Day at Blackwater: Confederate Scorched Earth Policy in West Florida. *Pensacola Historical Society* 6 (1): 3-13) .

Beard and his men also destroyed the properties of Gen. Jackson Morton, C. P Knapp and Dycus, and the Keyser, McVoy and Company. Between these mills, the Confederates burned five saw mills, five schooners, and over 5 million feet of lumber (Beard 1862). Alexander McVoy (Beard's guide) must have felt an immense amount of guilt and sorrow for his part in the raid as he watched his business burn to the ground.

Beard continued to follow orders into Milton: "There, at the earnest solicitation of the citizens, I deferred burning anything until my return from General Jackson Morton's at the head of the Blackwater. Returning, I destroyed everything at Milton embraced in your order" (War of the Rebellion 1882:859). Because it appears that the winds were quite high on this day, the people of Milton asked for Beard to delay the torching of the buildings. The next morning, Beard continued his raid into the Escambia River: "[I] proceeded up the river, burning as I went all that could be burned. A large amount of square (ship) timber which could not be burned was turned adrift. I found it necessary to burn the gunboats at Bagdad and Milton, it being impracticable to tow them up the Escambia, as they could not pass the bar; in fact, only one of them was launched" (United States War Department 1882:859). The unfinished gunboat was being built by F.G. Howard and was expected to carry two ten inch guns of 9,000 pounds. The other boat had been built by Ollinger and Bruce and it was designed to hold one ten inch and one rifled 32-pounder (Schmidt 1992:604).

In the end the fires set by the Confederates consumed the lumber mills, shipyards, brickyards, and all vessels in the area. Decades of growth, prosperity, and development were destroyed in one day. Beard also wrote about the spirit of the people who lived and worked along the river: "I cannot close this report without remarking upon the sacrificing patriotism of those whose property – in many cases all they had – was destroyed. While they regretted the

necessity none shrank from the sacrifice, and in many cases were prepared themselves to apply the torch to all they possessed" (United States War Department 1882:860). Only in Bagdad was there any collateral damage as a result of the raid. Three houses owned by Overman, Simpson, and Bushnell all burned because of their proximity to the mill (Schmidt 1992:610). Rucker (1990) estimates that three-quarters of a million dollars' worth of damage was done or about 17.2 million dollars in today's money.

The aftermath of this scorched-earth policy left the maritime communities of the Blackwater River broken and discouraged. There are two conflicting documents that were written afterward that reflect on the events of Beard's Raid. One is the report of Beard himself that was used to record the events as they played out. In this document, Beard describes the properties that were burned including mills, houses, lumber, and any associated vessels. According to Beard, the citizens supported the actions of the Confederate Army, taking the torches themselves to set the fires.

Local citizen A. C. Blount wrote a letter to Governor John Milton that painted a different picture. In this letter, Blount describes the actions of the Confederacy as being harsh, and in which Beard refused all request by the locals to save any piece of property. For example, While in Milton, some soldiers were ordered to burn any bales of cotton that they could find: "There were 5 bales of cotton belonging to a poor widow who entreated to be allowed to remove it into the interior, this was refused and the cotton burnt" (Blount 1862). There are other instances when it seems that the men under the control of Lieutenant-Colonel Beard went beyond their orders and simply set fire to any property that may benefit the Union. In a couple of instances, the soldiers did not allow the owners of either the vessels or mills to retrieve any important documents, personal effects, or money that remained inside. Blount wrote at the end of his letter,

"The effect of this unnecessary wanton and obvious vandalism reaches much beyond the individuals who have suffered. This milling business was the only support of Milton, Santa Rosa County and contributed in no little degree to the prosperity of Pensacola. The sudden and utter destruction of…Milton, depopulates St. Rosa County and inflicts a…state upon Pensacola she will not recover from for many years" (Blount 1862). The industries located along the Blackwater River would indeed recover; however, these events were not forgotten. Some business owners actually sued the Confederate Government. The Ollinger and Bruce firm sued for $11,247.50 worth of damages to their shipyard (Rucker, 2002:11).

The decades following the Civil War would be viewed as a boom era for the lumber industry (Massey, 1960). As with most things this time of great industrialization would come to an end. The highly valued yellow pine was no longer available. McLellen (1994) writes, "Millions of trees were fed to the saw mills, and if the pine was too small for the sawmill, it was turpentine to death." When the saw mills closed down so did the maritime economy. By the 1930s, steam powered vessels outnumbered sailing vessels. The schooners that were once busy with trade were no longer needed (Sjordal 2007:20). Many schooners would be abandoned or sold away.

Schooner History and Development

In Florida's panhandle during the 19th century, there was no easy way to move goods across land unless the company had access to a nearby railroad; even then railroads only reached a limited area. Due to such limitations, sailing vessels were a good alternative and were widely used for their ability to transport goods to an expansive market. Different ships evolved over time to meet different types of needs. For example, large square-rigged ships sailed across oceans carrying a large amount of cargo. These ships were not as numerous as other vessels, like

schooners, because of their complexity and operational costs. The more popular clipper-ships were large and fast. It was, however, at the expense of the cargo capacity that the clippers became famously fast for their trips rounding Cape Horn in South America.

The schooner's popularity took root during the 1760s with American shipbuilders. While in existence for many decades previously, it was in Virginia that shipbuilders began to construct the "Virginia Model" (Figure 3). With the success of the Virginia Model, colonies all along the Atlantic began to build copies of this schooner. During the Revolutionary War, schooners rose in popularity for their ability to outpace British ships. Privateers, slavers, pirates, and blockade runners all found great value with the schooner's fast speed and ability to be sailed with a small crew (Moore 2002:23). During the War of 1812, schooners were prized for their ability to out-distance pursuing ships. In 1814, 90% of foreign trade was conducted with Baltimore Clipper Schooners (Figure 4).

These schooners were the largest and did not usually sail transoceanic travels, but they could, however, complete trips to nearby ports efficiently and quickly. Because of the less turbulent waters of the Gulf of Mexico, compared to the Atlantic or Pacific, costal schooners were able to travel to ports like Vera Cruz, Kingston, and Havana in addition to the numerous American ports along the Gulf Coast. The large square-rigged ships successfully carried out bulk trades like those in the British East India Company, but with all their success, the amount transported by square-rigged ships was dwarfed in comparison to the amount that schooners transported during the age of sail.

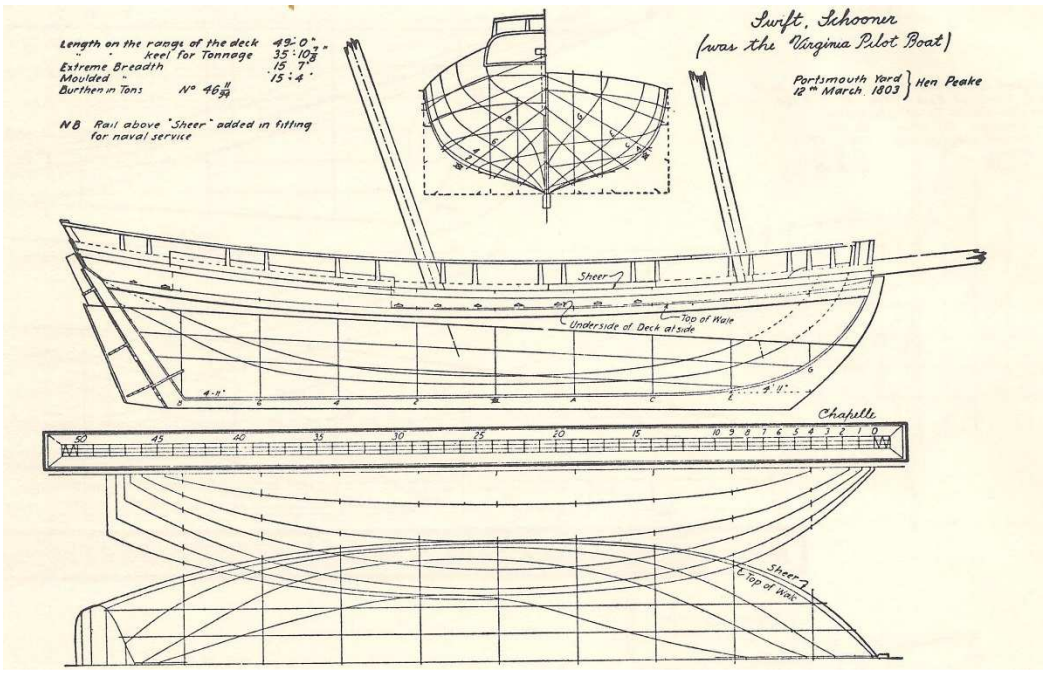


FIGURE 3. Lines drawing of "Virginia" model schooner *Swift.* (Howard Chapelle 1935*The History of American Sailing Ships*. Bonanza Books, New York).

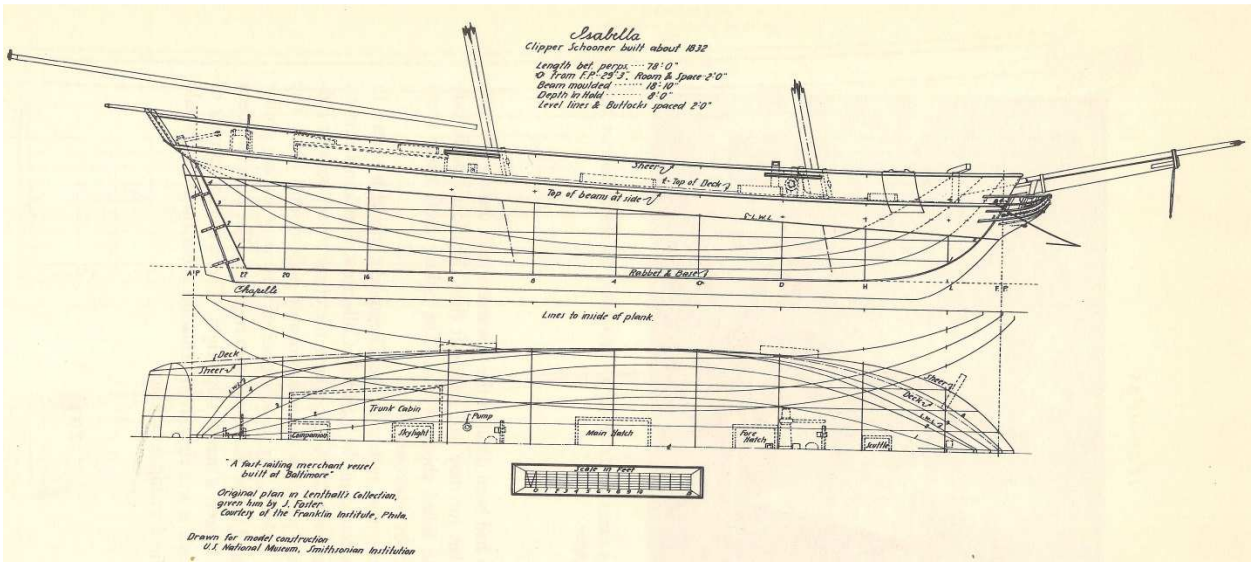


FIGURE 4. Lines drawing of *Isabella*, a clipper schooner. (Howard Chapelle 1967*The Search for Speed Under Sail 1700-1855*. Bonanza Books, New York).

It was the schooners' speed that created a rapid turnover of cargo and greater profits that made them more profitable than large ships (Chappelle 1935). Schooners that operated in Santa Rosa and Escambia Counties are prime examples of how these vessels helped produce great profits in the lumber trade. The fore-and-aft rigged schooners were valued as costal trading vessels for a several reasons. The fore-and-aft rigging is less complicated than the square rig and therefore requires fewer crew. The sails could be furled and unfurled from the deck instead of sending men aloft. This vessel also sails better in a variety of wind directions, allowing it to maneuver more effectively in inland waterways like bays and rivers (Chappelle 1967:279). Because of this success, the schooner was one of the most important trading vessels in North America.

Schooners were typically medium-sized vessels that were capable of both deep and shallow water sailing. Schooners are characterized as having at least two masts with fore-and-aft rigged sails, meaning that the sails were rigged with a set of triangular sails that were either set forward and/or aft of each mast (Horrell 2005:91). Many schooners added square topsails to either the fore or main mast or both. The majority of schooners used for transporting cargo along the coast had two or three masts, with three-masted schooners dominating the coastal trading after the Civil War. The three masted schooner *Richard A. Bingham* was built and operated in Pensacola in 1903. This schooner sailed to Belize, Mexico, and Cuba carrying cargos of cut lumber (both yellow pine and mahogany), phosphate, laths, shingles, doors, and other goods. This ninety-foot schooner required a crew of five and could sail the thousand mile round trip to Belize in seventy-one days (Heier 2000:143-145).

During the early 1800s, shipbuilders began to experiment with schooner designs. Along the West Coast where the waterways are deep, schooners were keel vessels with sharp bottoms.

Along the Atlantic and Gulf Coast, the waterways are typically shallow and contain sandbars, and as a result, the majority of schooners were flat-bottomed with centerboards (MacGregor 1982:52). Inland communities located along bays and rivers needed a way to ship to navigate these shallow waterways and carry a large cargo load. As a result, shipbuilders constructed coastal trade schooners with a flatter hull that did not penetrate deep into the water, a characteristic known as a shoal-draft. With a shoal-draft, schooners could achieve fast speeds with less drag in the water and sail into shallow waterways. With the addition of a centerboard, a board which acts like a fin, the shallow draft schooner could sail well in deep water and thus to more distant ports. Ships could sail up river in shallower waters to obtain the cargo and then sail back out to the ocean to travel to a coastal city.

The first patent for the centerboard was issued to the Swain brothers of New Jersey in 1811. The centerboard schooner was developed later between 1815 and 1821 in Chesapeake Bay, Virginia (Chappelle 1935:169). The idea of using a centerboard had been around since 1774 with the "adaptation" credited to Captain Schank of the British Navy (Chapelle 1935:166). His creation was really more of a "drop keel" or "dagger board" which differed from a centerboard in that a centerboard pivoted at the fore-end with hoisting tackle at the aft-end while the dagger board only moved up and down through the hull of the ship. After the Civil War, the three-masted schooner became popular for timber trade. The deep-draft keel and the shoaler centerboard were the two types that became the most popular. By the late 1870s, the construction of the two blended to form the deep centerboarders (Chappelle 1935:259).

Centerboard schooners remained popular during the introduction of steam as a result of their low operating costs and efficiency. It is noted by Chapelle (1967) that "centerboards were given to vessels that were required to handle well in confined water" in all types of loads and

drafts (p. 279). Schooners with a centerboard could navigate shallow confined waterways, a characteristic that was favorable on the Blackwater River. The design also enabled the vessel to sail well when light, unlike other vessels with deep keels. Like most developments in the maritime community, a variety of designs entered the field.

Chappelle (1967) notes that by 1845 the use of the centerboard had been fully explored. The disadvantages of the centerboard being placed through the keel had been solved by placing the centerboard next to the keel. The placement next to the keel also allowed the centerboard to be placed alongside the mast to help obtain better balance between hull and rig, a popular characteristic of two-masted schooners. In a paper presented at the Society of Naval Architects and Marine Engineers by W. P. Stephens in 1895, the centerboard was seen as a dangerous addition to yachts but a great aid to cargo vessels. Stephens noted that since its first use on the Hudson River in 1840, the addition of the centerboard to the schooner led to its "permanent and useful place in the coasting trade," writing:

> In the hands of competent and honest shipwrights, the centerboard coasting schooner has disproved all theories as to the nonutility of the type for sea-going purposes; in a hull of moderate first cost and running expense, it has carried safely, swiftly, and profitably its cargoes of coal, lumber, sugar, firewood, barley, bricks, or general freight, both on the Lakes and on the Atlantic; across Nantucket Shoals and around Hatteras in winter, light or loaded, taking in and landing its cargoes in localities inaccessible to the keel vessel (1985:22).

Stephens does point out the flaws associated with the use of a centerboard on a shallow draught vessel, citing that the "centerboard is an accessory to the sacrifice of the beam and lack of proportionate depth…". He continues, "the accepted law of naval design and construction fail to give any reason why such craft capsized no oftener and kept afloat as long as they did…" (Stephens 1985:20).

Chappelle (1935) believes that this lack in seaworthiness is not due to the design of the vessel but to those who could not pilot the ship well. He notes that schooner insurance premiums made no mention as to whether or not a vessel was mounted with a centerboard. Some shipbuilders placed the centerboard alongside the keel as to not cut a large slit into the keel potentially weakening the timber. Whether the centerboard was placed on the keel or off-center makes no real difference. The centerboard trunk is a case which was built with great longitudinal strength and served to protect the centerboard and to aid in strength to the ship. MacGregor notes, "The two-masted schooner on the Atlantic coast continued to be built as late as 1914 and remained in use on the main coast, in Chesapeake Bay and the Gulf of Mexico carrying general cargoes, although lumber provided a regular trade to many." (1982:59-60).

The use of the schooner was not limited to the waters of the United States. For example, seventy schooners were responsible for transporting 60 million oranges and 15 million lemons from the Azores to London in 1854 alone. Schooners were also utilized in the salted cod trade from Newfoundland to Spain, Portugal, and Italy (MacGregor 1982:68-71).

The schooners' versatility is what made it successful as a merchant vessel. The use of the centerboard crossed the span of sizes of schooners. The largest schooner outfitted with a centerboard was the large five-masted schooner *Governor Ames*. This schooner was 265 ft long (80.7m) and 50 ft wide (15.2m) and operated along the Atlantic coast The adaptability and variation is a why the schooner was so successful as a merchant vessel. The need for merchant vessels to navigate all types of waterways was necessary to the maritime economy.

CHAPTER III

2010 AND 2011 FIELDWORK ON THE CENTERBOARD SCHOONER

Site Location and Environment

The Centerboard Schooner wreck is located on the south shore of Marquis Bayou. Marquis Bayou is a small tributary that flows into the Blackwater River across from the Milton waterfront (Figure 5). This bayou is surrounded by swamp land except for the presence of a railroad bed and track along the south side. The water is brackish with a high tannin content, giving the river its dark color. Visibility within these waterways varies from zero to five feet depending on depth and local rainfall. Runoff generated by rainfall, greatly affects the water clarity. During the summer months frequent thunderstorms create runoff into the river introducing a higher concentration of fine sediment dispersed throughout the water resulting in poor visibility. In addition, slow water flow, especially in Marquis Bayou, allows for fine sediments to accumulate. Such sediments have covered the site's exposed timbers and have accumulated on the starboard side of the wreck, burying the wreck in at least a foot of mud and silt. Divers without proper training can quickly stir up this sediment and reduce visibility.

There are not any known terrestrial sites associated with the Centerboard Schooner wreck, and a quick pedestrian survey of the land northeast of the site along the south bank did not reveal any remaining structures. Submerged pilings exist along the entrance to the bayou along the north bank which provides evidence of former development. These pilings wrap around the mouth of the bayou into the main waterway. Along the south side of the bayou are submerged planks that extend out from the bank. These planks are visible from the surface and continue deeper into the bayou along with pilings. What these planks are attached to remains

FIGURE 5. Photo of site location facing southwest. (Photo by author, 2011.)

hidden by thick reeds and undergrowth. The sediment around the site's boundaries also contains a large amount of processed and raw timber.

Local marine fauna varies greatly. Blue crabs and small fish such as bass and perch were often found within the site's units and around exposed timbers. Larger vertebrates like alligators, catfish, turtles, and gar were not seen on site, but are known to exist within the area. Sea grass represents the majority of local flora existing on the site. The shallow area of the wreck is the only ideal spot for vegetation, for it is the only place that light can penetrate to allow for photosynthesis.

Field Methods

The Centerboard Schooner wreck is located in a quiet bayou in shallow water. The wreck rests parallel to the bank with the centerboard trunk and sternpost just under the surface of the water. Oil entered Pensacola Bay in June of 2010 from the BP oil spill. To avoid the oil slick, UWF's field school focus shifted from operations in the bay to the wrecks of the Blackwater River. Tidal flow and distance from the pass prevented any oil from entering the river system, which allowed for faculty and students to continue diving. As an orientation to the different wrecks found within the Blackwater River, students began dives on the Centerboard Schooner. While other wrecks in the river have been documented in the past, as noted above, the Centerboard Schooner had not.

Divers accessed the wreck using vessels from UWF's Marine Service Center (MSC) and launched from the Milton boat ramps located just north of the Milton waterfront. Although the majority of the wreck is located in about three feet (1m) of water, the use of self-contained breathing apparatus (SCUBA) is necessary for prolonged investigations of the ship's construction and to conduct excavation. Archaeologists placed a thirty-nine meter baseline down the centerline of the wreck running on the starboard side of the centerboard trunk. The ship rests in its natural upright state, pointing almost north and runs parallel with the south bank. Documenting the ship was made easier to due to its upright orientation, a very fortunate occurrence given the steep slope of the bank. The site's boundaries were defined using baseline/offsets to the furthest known extents of the ship. The baseline was extended to its length to allow for any related documentation of artifacts or structures that may beyond the hull and aid in the investigation of the wreck (Figure 6). Divers used mylar to write their notes

underwater and then redraw them on graph paper to scale. Photographs of the site, taken by students and supervisors, provide additional documentation to aid in the drawings of the site.

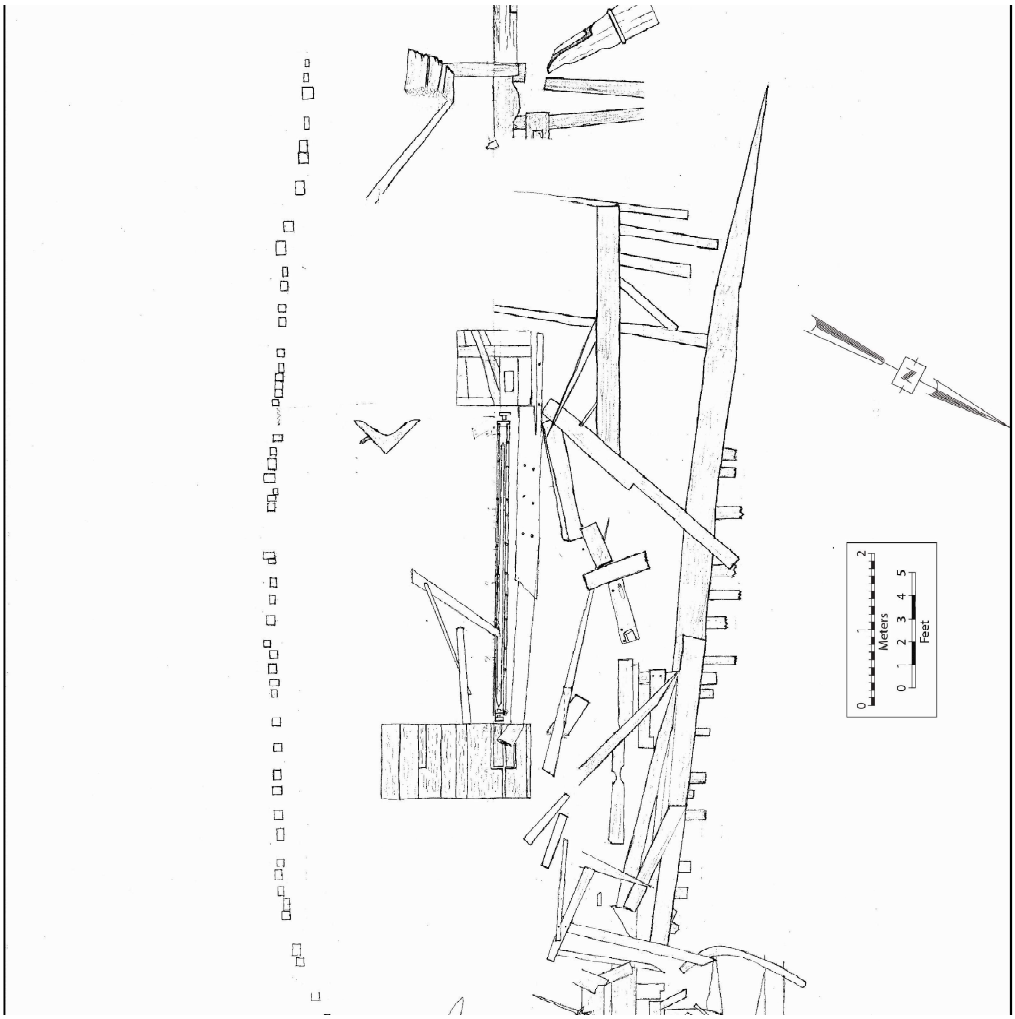


FIGURE 6. Site plan of Centerboard Schooner. (Courtesy of the University of West Florida Archaeological Institute, 2014.)

These photographs included all exposed features including sternpost, rudder, futtocks, and centerboard. Water runoff from rain and the depth at which the photograph was taken affected the quality of the photos. Some intact features like the rudder and a knee could be raised out of the water after *in-situ* documentation for photographs and then placed back in their original positions (Figure 7).

Due to the steep slope of the bank, the starboard side of the ship remains mostly buried under sand, silt, and mud, but many of the ship's components on the port side are visible above the sediment. The futtocks and ceiling planking are still visible on both the port and starboard sides. The sternpost, keelson, and keel are also visible in the stern of the vessel. The stem is also visible. The most prominent feature is the centerboard trunk. The trunk houses the centerboard and is still in good condition. The centerboard is in the upright position within the trunk. The port side is mostly exposed and juts out from the bank in the deeper water.

FIGURE 7. Rudder being measured and photographed. (Photo by author, 2011.)

While the ship can be more easily documented with the exposed timbers on the starboard side, boat traffic has impacted the ship itself as evidenced by several broken futtocks. These broken timbers were documented in the 2010 fieldschool season and also in 2011, with an additional broken futtock. During the winter months, the water level of the Blackwater River lowers, allowing the uppermost features to be exposed. The centerboard trunk and starboard side futtocks can be seen above the water line during these months (Figure 8).

The initial goal of the 2010 field season was to record the exposed features including the futtocks, stem, centerboard, trunk, and sternpost. Students measured these features using baseline offsets and triangulation from a tape set along the centerline of the ship. The overall size of the vessel was measured to find an approximate tonnage of the schooner. Dr. Christopher Horrell found the approximate tonnage of Ballast Cove Wreck A (8FR903) by using Charles Desmond's tonnage formula. Multiplying the length, beam, and depth of hold together by .75 and then dividing by 100, will provide an approximate tonnage of a vessel (2005:182). The length of the Centerboard Schooner is 52 ft (15.8 m) and the beam is 19.6 ft (5.9 m). Since the depth of hold is not known for the Centerboard Schooner, a measurement of 3.5 ft (1.06 m) is substituted based on a schooner of similar size (Sikes 2004). Inserting these measurements into the formula gives the Centerboard Schooner an approximate size of 25.9 tons. This tonnage only represents the known dimensions of the vessel. The actual length is probably longer and the beam is most likely wider as well.

The futtocks and floor timbers were documented in their relation to the baseline. Divers counted fifty-five starboard-side futtocks, attached to thirty-two portside floor timbers. After closer observation of the starboard futtocks (Figure 9), students discovered that the timbers

FIGURE 8. Centerboard Schooner during the winter. (Photo by author, 2012.)

FIGURE 9. Futtocks on starboard side. (Photo by author, 2011.)

had split, creating the illusion of paired and tripled futtocks. Further excavations along the starboard-side futtocks will need to be conducted to accurately count the number of futtocks. Attached outer-hull and ceiling planking were also documented with the futtocks along the starboard side.

Excavation within the ship was necessary in an attempt to find the schooner's mast step and uncover the keelson. Students established one meter by one meter excavation units fore and aft of the centerboard trunk along the baseline. The two units were placed on either side of the trunk because the masts on schooners of this size were usually placed in those positions (Figure 10). A third unit was later placed in the bow after the initial units did not contain the mast steps. This unit's boundaries were defined by the architecture of the bow and, thus, were larger than the first two. A water induction dredge allowed controlled excavations. This dredge uses a pump to move water through an exhaust hose, creating suction at the dredge head. This process allows the divers to remove sediment out of a unit in a controlled environment. Everything that enters the dredge system passes through a mesh bag. This bag is emptied and sorted by students and supervisors at the end of the day.

A magnetometer survey was also conducted along the site. The site is in close proximity to a railroad and steel bridge. The initial reading of the site indicated a very large amount of ferrous material, but that reading may have been compromised due to a passing train. The survey team conducted a second reading; after analyzing the data found that the railroad tracks create too much disturbance for an accurate reading.

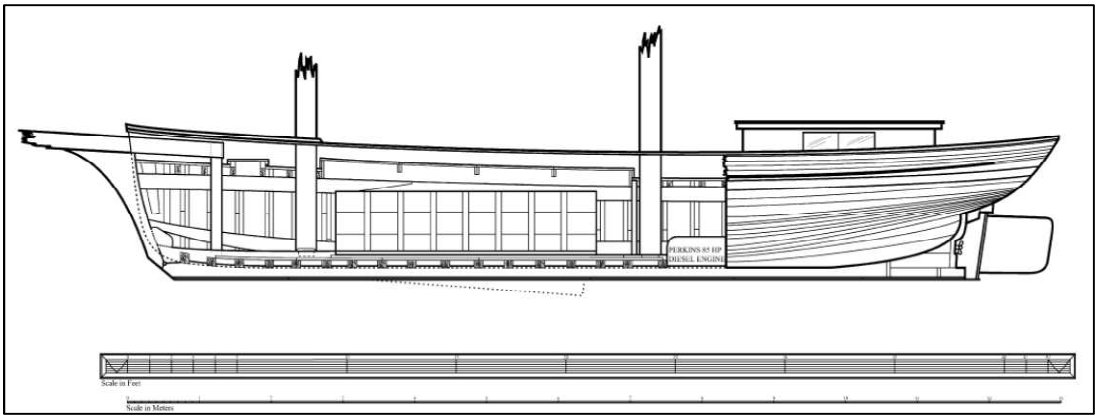


FIGURE 10. Longitudinal section of *Governor Stone*. (Kathryn Sikes 2004 *Governor Stone*: Analysis of an 1877 Two-masted Schooner from the Gulf of Mexico. *The International Journal of Nautical Archaeology* 33(2): 297-314).

Ship Construction

As noted above, many of the ship's components were documented. The dark, brackish water is ideal for preserving wood that is not buried. Such preservation allowed divers to access much of the site without excavating. Documented construction elements include stem, breast hook, futtocks, outer hull planking, floor timbers, ceiling, keelson, keel, centerboard, trunk, sternpost, rudder, and a knee. In addition to *in situ* elements, much of the site has become littered with natural and processed timber. Excavation was impeded by an assortment of wood lying across the wreck at multiple angles. Outside of the site boundaries, the area is full of discarded timber ranging in size from small planks to large, square timbers. While the timber within the site boundaries was documented, most loose timbers were considered intrusive and not considered part of the original schooner. Ten wood samples were taken from the Centerboard Schooner's timbers (Table 1). Of the ten components sampled, four are yellow pine (*Pinus spp.*): keel, ceiling planking, centerboard, and trunk. The breast hook, sternpost, and keelson are oak (*Quercus spp.*), and the stem is white oak (*Quercus alba*). The floor timbers and

TABLE 1
WOOD SAMPLES

Description/Location	Species	
Keel	Yellow Pine	(*Pinus spp.)*
Ceiling Planking	Yellow Pine	(*Pinus spp.*)
Centerboard	Yellow Pine	(*Pinus spp.*)
Trunk	Yellow Pine	(*Pinus spp.)*
Breast Hook	Oak	(*Quercus spp.*)
Sternpost	Oak	(*Quercus spp.*)
Keelson	Oak	(*Quercus spp.*)
Stem	White Oak	(*Quercus alba*)
Floor Timbers	Torreya	(*Torreya taxifolia*)
Futtocks	Torreya	(*Torreya taxifolia*)

futtocks are torreya (*Torreya taxifolia*), a species that extends along the limestone bluffs on the eastern bank of the Apalachicola River for a 40-mile stretch (Salter 1990).

Centerboard and Trunk

The centerboard trunk is 13.7 feet (4.15 m) in length. The centerboard is placed on top of the keel and, thus, the baseline runs alongside the centerboard trunk (Figure 11). The trunk is 20 cm (7.87 cm) wide, and the planking is between 2 and 4 cm (~1 in) thick. The planking used to build the trunk is secured on top by copper bolts that are assumed to run through the top-level planks. In Chapelle's illustrations of a centerboard trunk he notes that multiple bolts were used to fasten the planking of the trunk at different levels (Figure 11, 12). The use of copper may be for aesthetics or copper's lack of reaction with saltwater. The internal spacing between the trunk and centerboard is 13 cm (5.11 in), with the average thickness of the centerboard being 3cm (1.18 in). Because of its size the centerboard is made from multiple pieces of wood. Two large drift bolts on both the fore and aft end of the centerboard fasten the planks together (Figure 11). A series of smaller bolts throughout the centerboard planks hold them together in pairs. As described by Chapelle (1994:156) and visible on the Centerboard Schooner wreck, an eye bolt is placed on the fore end of the centerboard. This eye bolt is where the centerboard pivoted to be

lowered and raised. Shipwrights inserted a lead weight into the lower planking on the aft end to compensate for water resistance and for the buoyance of the wood. This lead weight is presumed to be present on the Centerboard Schooner but not documented as seen in Figure 12.

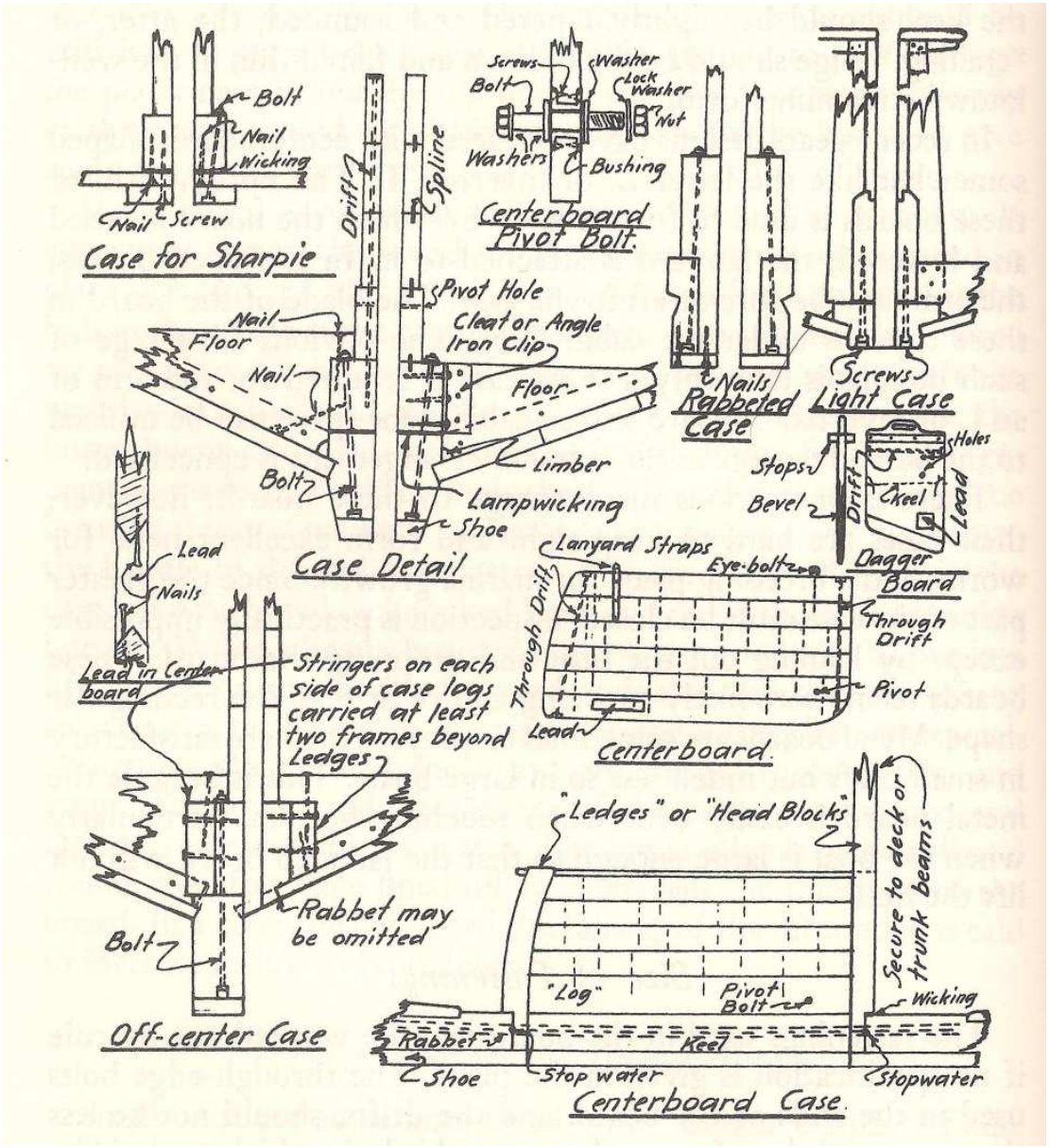


FIGURE 11. Centerboard and cases illustrations. (Chapelle Howard 1994 *Boatbuilding*. Norton, New York).

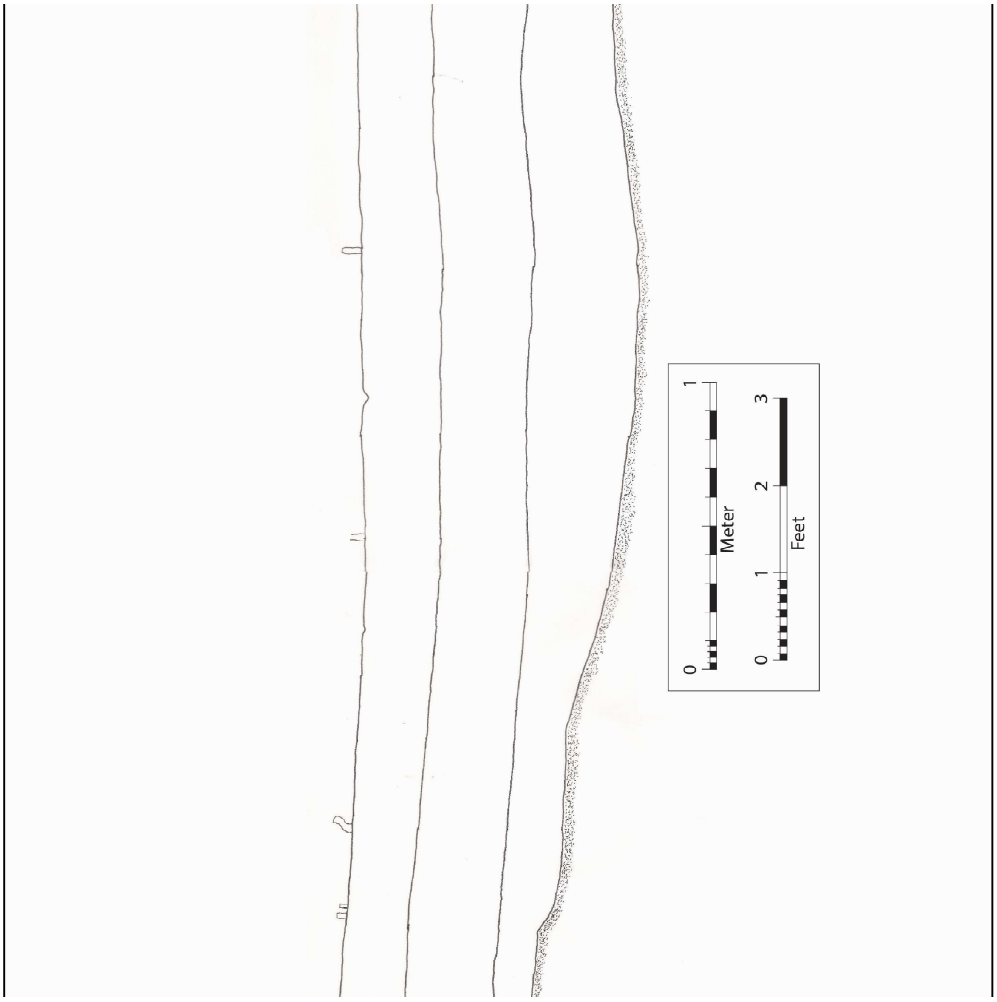


FIGURE 12. Drawing of centerboard trunk facing starboard. (Drawing by author, 2014.)

Futtocks

Only the futtocks on the starboard side of the vessel remain. There are 55 documented futtocks, but as a result of degradation and partial burial under the sediment the exact number of futtocks is not known. The timbers are exposed anywhere from a couple centimeters to 50cm above the sediment. These futtocks have an average molded and sided dimension of 12cm and 13cm respectively (Figure 13). These measurements came from the average dimensions of the

futtocks because each timber is in a different state of decay. The spacing between the futtocks also varies, averaging 22.3 cm. Since the ship sank, the timbers on this side of the vessel have warped and moved from their original position. More excavations within the starboard side of the vessel is needed to determine the original placement of the floor timbers and attached futtocks. Iron fasteners attach the futtocks and outer-hull planking, and where visible, to the ceiling planking.

Floor timbers

Thirty-two floor timbers are exposed on the port side of the vessel. Due to the steep slope of the bank the timbers jut out horizontally, and are covered by either ceiling planking or debris. The sided dimensions of the floor timbers average 14cm and the molded dimensions average 13cm. The longest timber (futtock 3) measures four meters long with the majority extending three meters from the keelson. There is no apparent outer-hull planking attached to these timbers. It is possible that there is still attached planking on the underside of the vessel.

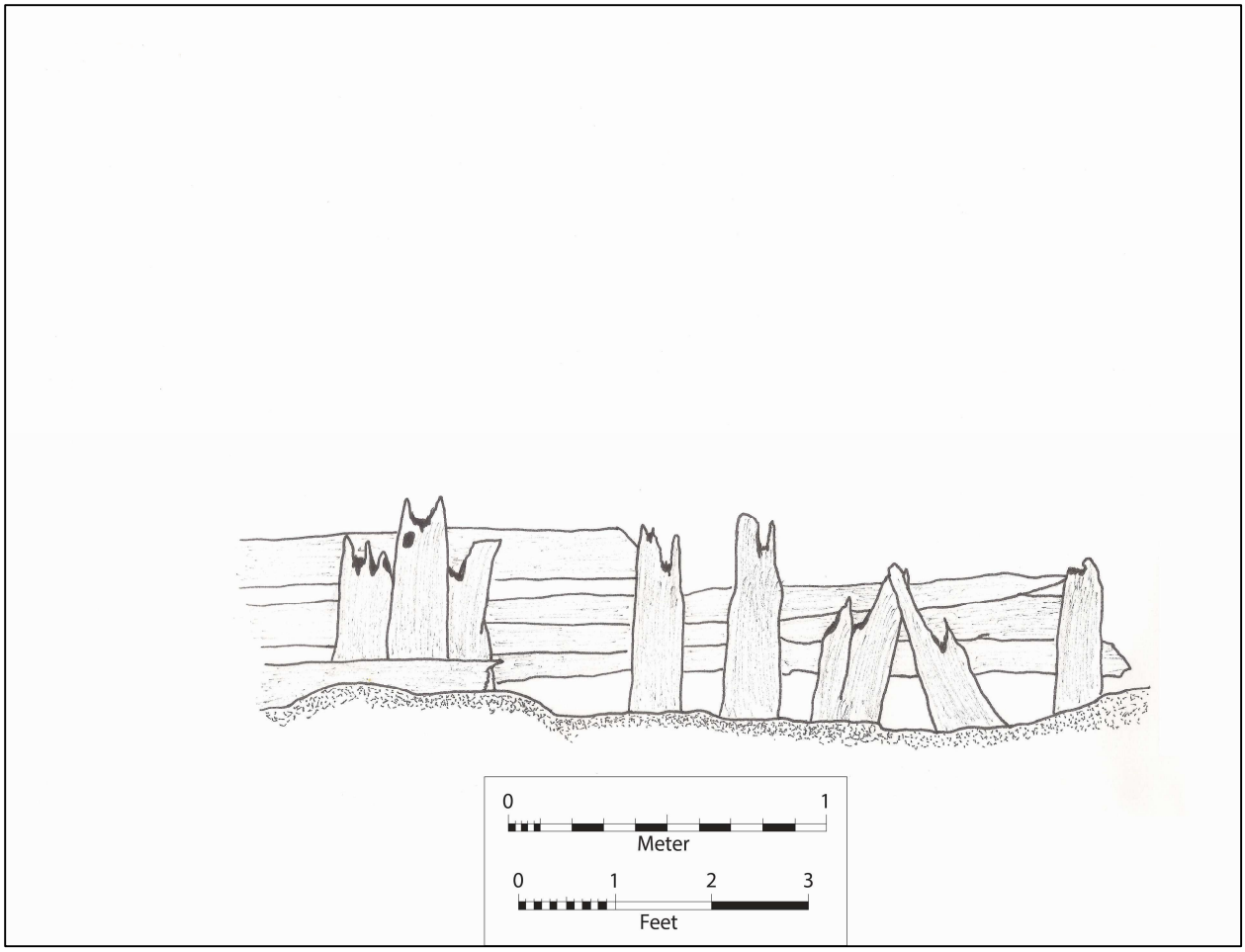


FIGURE 13. Drawing of futtocks with exposed outer hull planking. (Drawing by author, 2014.)

Ceiling Planking

Ceiling planking is visible in five sections of the Centerboard Schooner. Within the starboard side, ceiling planking is visible in the bow, midship, and sternpost. Both mid-ship units placed in front of the centerboard trunk reached intact ceiling planking at 60cm (23 in) (188N, 200E) and 70cm (27 in) (188N, 201E) below surface (Figure 14). At both the stem and sternpost, ceiling planking was visible. In the bow, the planking aided excavations by acting as a wall to hold back sediment. At the sternpost, a small section of the ceiling planking is attached to the sternpost components. Near the sternpost, three detached ceiling planks remain above the sediment. The lengths of the planks are only exposed for 50 cm (19 in). The port-side of the

vessel near midship is where the most planking is visible. The centerboard trunk prevents most of the sediment from covering the exposed timbers. Alongside the trunk on the port side, the ceiling planking is 30 cm (1 ft) wide and is attached by three pairs of iron fasteners. The paired fasteners are spaced 40 cm apart and 8 cm in between. Along the outer edge of the vessel where the floor timbers exist is a ceiling plank that is 7.7 m (25.2 ft) long and 40 cm (15 in) wide at its widest point. As the timber extends to the stern, the width of the last four meters decrease by 10 cm (4 in) each meter. This ceiling plank most likely followed the curve of the vessel to the stern and was cut to fit along with the other planking attached to the stern.

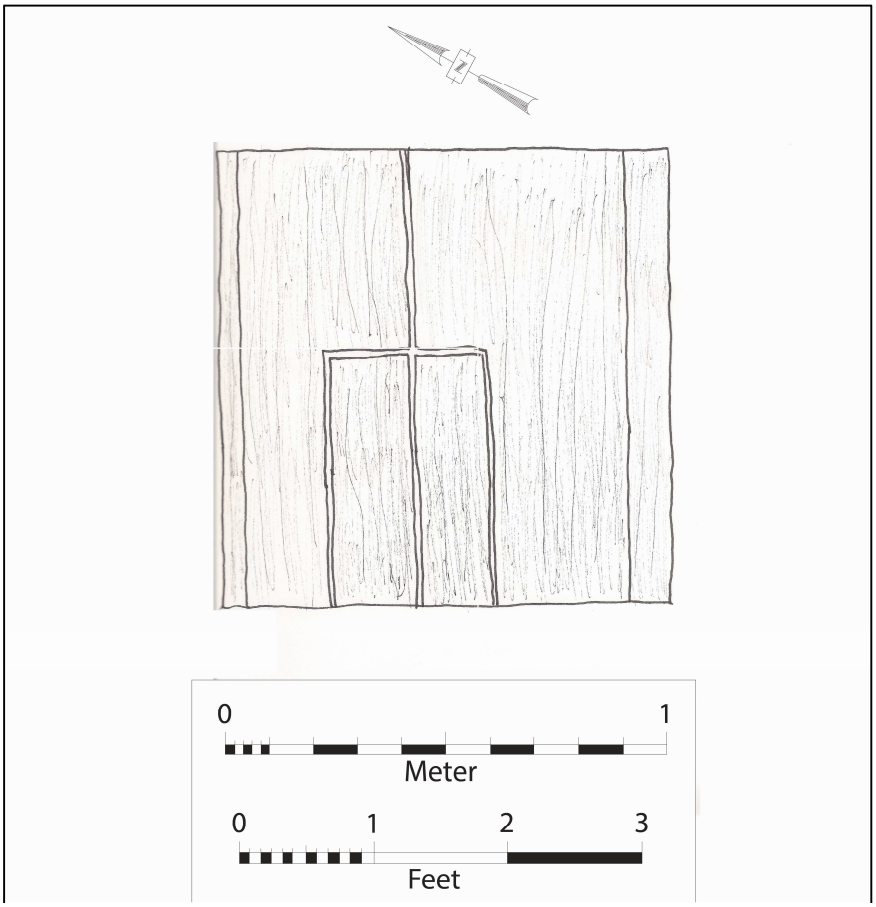


FIGURE 14. Drawing of unit 188N, 200E with exposed ceiling planking. (Drawing by author, 2014.)

Sternpost

The sternpost is one of the more complex features remaining. The height from the bottom of the keel measures 150 cm (59 in) tall is still intact with the keelson and outer-hull planking. The keel and keelson are 21cm (8.2 in) molded and 45cm m(17 in) sided. On the top of the keelson, near to where the sternpost is, are rabbets that were cut out most likely for floor timbers to be attached. Four large bolts are located on the back of the outer post 13cm, 41cm, 59cm, and 86cm, respectively, from the bottom of the keel. There are three planks between the keel and keelson, each measured 5 cm in thickness (Figure 15).

Rudder

A rudder rests in the sediment near the sternpost. The remains of the rudder are 170 cm (27.5 in) by 53 cm (20.8 in) wide at the base. There is an iron band that is 6.5 cm (2.5 in) wide that wraps around the rudder 56 cm (22 in) from the bottom. This band is most likely a part of the pintle and gudgeon that attached the rudder to the rudder-post.

Artifact Assemblage

The artifacts collected from the Centerboard Schooner represent a broad collection of artifact types. These types range from ship construction to personal items. The schooner is located in an ideal preservation setting with both brackish water and fine sediment. The reduced amount of salt in the brackish water creates a more stable environment for the unburied artifacts and any artifacts that are buried are in an anaerobic environment due to the fine sediment. The state of preservation varies among each type of artifact and conservation techniques also differed depending on how the artifact's stability.

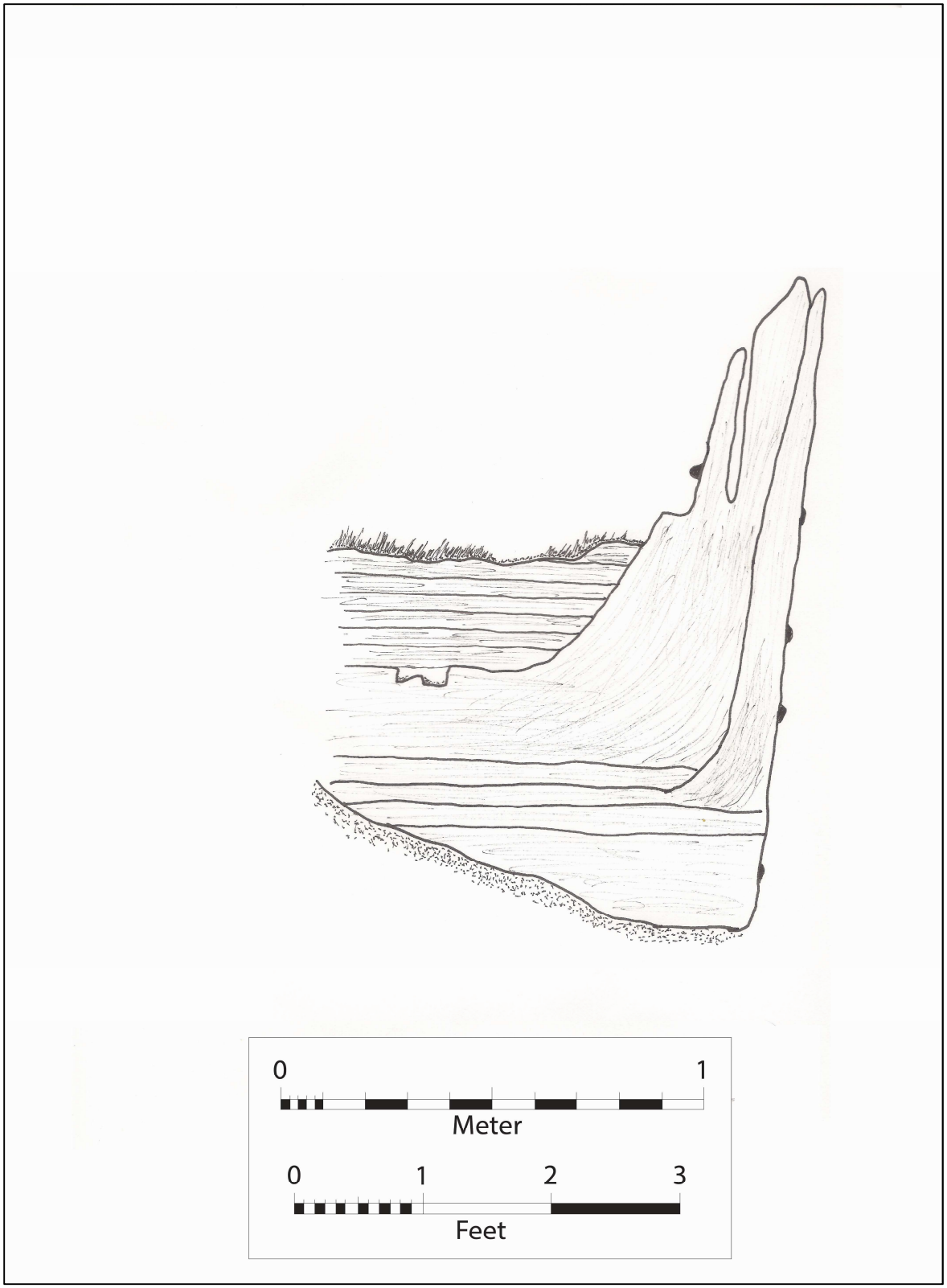


FIGURE 15. Drawing of sternpost with keel and keelson. (Drawing by author, 2014.)

Ceramics

Divers recovered six fragments of plain whiteware near the site. These fragments collected in 2010, fit together to form most of a plate. Whiteware has a production date range of 1830 to the present day (Miller 1991:5). Maker's marks found on the base of plates aid in identifying a more specific production time frame, but the section of the plate that would have contained the makers mark has not been found.

Another type of ceramic is hand-painted tile (Figure 16). These decorative tiles were used in a number of ways. Often these tiles were decoration around fireplaces and doorways. This tile fragment was most likely used as a floor tile because of the thickness of this

FIGURE 16. Hand-painted tile.

ceramic (3/4 in), but Horrell (2005:181) notes that tiles could have been used as ballast or to create oyster beds. Oyster larva could attach to the smooth surface of the tile to create artificial oyster reefs.

The bow unit contained one fragment of Bristol Glazed Stoneware. This ceramic type has a production range of 1835-1900 (Greer 1981). Originally developed in England, Bristol Glazed Stoneware was adopted quickly by American potters and soon replaced salt-glazed stoneware. This stoneware was often used for mugs and bottles ranging in size from half gallon to pint (Hume 1969:112; Hume 2001:324)

One intact brick was found near the shipwreck. Because of the numerous brick yards that were operating in the area at the time, the brick can be assumed to have been made locally. The database created for this thesis using the *Pensacola Gazette* from the 1850s shows that brick was an export of Pensacola. The only bricks that were being imported were for the construction of the forts at the mouth of the bay. The brick artifact is uniform in shape but shows a small amount of flaring on the top, a characteristic of hand-made bricks (Jan Lloyd, personal communication). The brick's size (L 8 6/8", W 4 3/8", T 2 3/8") is larger than most bricks, which may mean that the brick is older as brick size usually decreased over time (South 1964). In addition to the intact brick, two small brick fragments were also found.

Glass

Both intact glass bottles and glass shards were found on the Centerboard Schooner. The glass bottles are both made of clear glass and indicate twentieth-century production. Some bottles have threaded tops and seams that run the length of the bottle indicating machine production. Two types of glass are represented by the small fragments: soda-lime bottle glass

and light olive colored glass. Olive colored glass was widely used during the late 1800s and quickly dropped out of fashion after 1900. Both types of colored glass fragments are too small to determine shape or type.

Wood

As noted above, the site contained a large amount of scattered wood. The majority of the wood was indistinguishable or did not provide any archaeological information. These pieces were left in a discard pile just outside of the site's boundaries along the baseline tape. The wooden artifacts that were collected include a cleat, tongue and groove plank, brush, charred wood, a wood fragment with paint, and modified wood. The cleat was discovered within the bow unit and remains in excellent condition (Figure 17). The artifact measures 46 cm (18 in) in length without any concretion remaining from where it would have been secured to the ship. The tongue and groove plank was most likely used as a part of an interior bulkhead or wall. It measures 30 cm (11.8 in) in length and 9 cm (3.5 in) in width. The deck brush was found on the surface within the futtocks on the starboard side (Figure 18). This hand brush could have been used as a deck brush for cleaning. The dimensions of the brush are 18 cm long, 5.4 cm wide, and 1.9 cm thick.

Fauna

The remains of a cow mandible were found within the 188N, 201E unit. Both sides of the mandible were unattached but were found near each other. The first mandible part discovered (11X-014) was still largely intact with four molars attached to the jaw (Figure 19). The other side (11X-024) was discovered to be in worse condition with only three molars attached. Artifact 11X-014 contains both premolars and molars. Cattle tooth eruption for

premolars is between 24-36 months, and the eruption of permanent molars is between 6-30 months (Pace and Wakeman, 1983).

FIGURE 17. Wooden cleat after conservation.

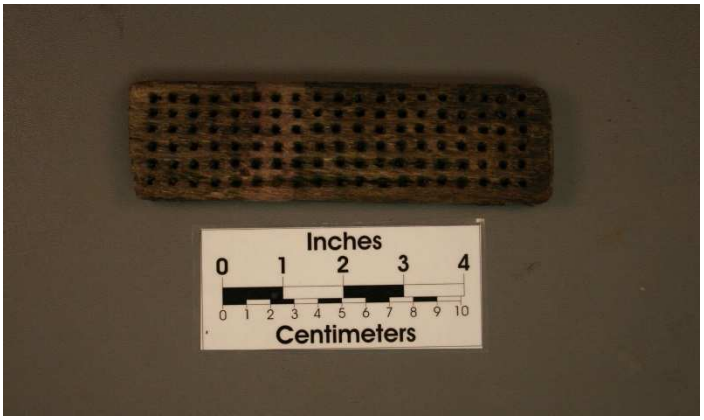


FIGURE 18. Wooden deck brush after conservation.

FIGURE 19. Cow mandible after conservation .

The development of the teeth reveals that the cow was mature. One other bone fragment was found on the site. This fragment is too small to determine where or from what animal it came from but does appear to be from a large vertebrate.

Flora

Multiple seed types were found while dredging. The small seeds were often found fragmented, but the largest seed, a peach pit, was found intact. Whether or not these artifacts are intrusive is unknown for it would be plausible for the seed to have been discarded by a passing boat or entered the site by drifting. A broken section of a pecan shell was also found on the site.

Textiles

One well-preserved leather artifact was collected out of the 183.5N 200E unit. This piece of leather is triangular in shape (Figure 20). The stitching still remains on the leather and this artifact may have been used to attach two articles of clothing. In addition to the leather artifact, a small fragment of fabric was also recovered.

Metal

Numerous concretions were found throughout the site. These concretions are formed by an electrochemical reaction and explained by Donnie Hamilton, "This corrosion over time results in insoluble precipitates of calcium carbonate and magnesium hydroxide. These precipitates intermix with sand, marine life, and corrosion products (especially ferrous hydroxide, ferrous sulfide, and magnetite) to form a hard dense layer of encrustation or concretion around the metal. The encrustation accumulates on the original metal surface to form a perfect mold around the object…" (Hamilton 1998:41). Over a long period of time the metal inside the concretion dissolves. In some cases conservation can reverse this process in the lab if enough metal exists

or make molds of the concretion to represent the shape of the original metal. Many of the concretions on the Centerboard Schooner, were too small or fragmented to determine specifics of the original object. The majority of metal artifacts are represented by iron fastenings. These fasteners are mostly iron nails or the remains of iron nails. The largest fastener is a lag bolt that was found near the port side floor timbers (Figure 21). This bolt measures 16.5 cm long and is 2.5 cm thick. These bolts attached heavy timbers together, whether or not the lag bolt was a part of the Centerboard Schooner at one point or part of the cargo is not known. Many of the concretions have degraded past the possibility of recovering any original iron. The best preserved iron fastener is 11X-021 (Figure 22); it measures 15.7 cm long and is 1.68 cm thick.

FIGURE 20. Leather artifact after conservation.

FIGURE 21. Lag bolt.

FIGURE 22. Artifact 11X-021; Iron fastener.

Personal Items

This category is represented by three buttons and two pipe stem fragments. Two of the buttons are stamped brass with four holes punched in a sunken panel (Figure 23). The decoration is plain, so specific identification is difficult. These two buttons were utilized between 1837 and 1865 based on Stanley South's button typology derived from his studies at the Brunswick Town site (Hume 1969: 91). A prosser button was also collected. This four-hole smooth, beveled rim represents 98% of all types of prosser buttons collected on archaeological sites. Production of this type of button began in 1840 (Sprague 2002:123).

Two kaolin tobacco pipe stem fragments were found within the bow unit. These two pipe stems have a bore diameter of 5/32". Originally made by hand, pipe stems began to be machine made during the mid-to late 19th century. Broken pipe stems are a common artifact because they were widely available due to their cheap price and smokers often discarded the stems once they became clogged or broken (Hume 1969:297).

Ordinance

A single Minié ball was uncovered in the bottom of the bow unit dredge spoil (Figure 24). This ammunition is commonly called a “three ringer” as a result of the three rings molded around the back that were filled with grease to make reloading easier for troops. This ammunition was in full production by the Civil War and was one of the most popular types of ammunition used with the Model 1855 rifle (Moller 2011:586). This artifact is believed not to have been fired. If the bullet had been fired the front cone of the round would have flatten out.

FIGURE 23. Brass button after conservation.

FIGURE 24. Minié ball after conservation.

Miscellaneous

A cork was found by divers and appears to have been modified with a knife. The cork was crudely cut, possibly to fit a bottle. A small metal ring was also found. This ring is made of lead and could have been used as a sealant on the ship. Molten lead was used with oakum to create a watertight seal. The ring shape could be from where a seal was created around a pipe.

Artifact Conservation

Artifacts recovered from the Centerboard Schooner were documented and conserved at the UWF Maritime Conservation Lab. Conservation of artifacts at this facility follows the guidelines set by Donny Hamilton's *Methods for Conserving Archaeological Material from Underwater Sites*. This manual outlines conservation techniques for all types of artifacts found within submerged archaeological sites. This process allows waterlogged artifacts to be cleaned, stabilized, and dried for permanent storage.

Artifact Analysis

Because of the Centerboard Schooner's close proximity to land and popular boating locations, any surface-collected artifacts may have been deposited after the ship had sank. Several pieces of modern trash were found on the shipwreck during the fieldschool. Shipwrecks are often popular fishing destinations as a result of their ability to attract marine life. A site's use as a fishing location increases the opportunity for trash to be deposited. The glass bottles mentioned above are prime examples of intrusive material. These bottles are clearly machine made, with mold seams that run the length of the bottles. This manufacturing technique began in 1905, but the absence of bubbles indicates that the manufacturing date is most likelydates post 1930 (Jan Lloyd, pers. comm., 2013). Because of their placement within the timbers of the shipwreck only the artifacts found within the bow unit can be used to aid in dating the Centerboard Schooner.

The artifact assemblage gives the Centerboard Schooner wreck a Terminus Post Quem (TPQ) of 1855. The .58 caliber Harper's Ferry minié ball was not introduced to America until 1855. The Minié ball was developed originally in France in 1848 by Captain Claude Étienne Minié, and was manufactured in America by Harper's Ferry Amory in 1855. This projectile was revolutionary at the time because it could be loaded quickly and shot accurately (Kinnard 2000). Minié developed his bullet to be slightly smaller than the rifled barrel to allow it to be dropped down the barrel (O'Connell 1989:191). He also made the base of the bullet into a conical cavity. This cavity allowed for the expanding gas to push the thinner wall of the bullet outward. This reaction sealed the bullet against the rifled bore to make for a longer and more accurate shot. The Minié ball could be fired from a rifle three times a minute and be accurate up to 100 yards (Kinard 2000). If more carefully aimed, the bullet could have lethal force at 500 yards. This model was adopted and improved in the United States during the 1850s and was manufactured for use in the Model 1855 rifle (Kinnard 2000).

The Bristol glazed stoneware fragment was also found in a similar context as the Minié ball. This ceramic type began production in 1835, and around the 1880s, its popularity rose quickly. Bristol glazed stoneware was often used for jugs, crocks, jars, and other utilitarian forms (Hume 2001:112). This artifact is one of the few that were found below the ceiling planking of the shipwreck. These two artifacts, along with the plain brass buttons, place the Centerboard Schooner as operating around the 1850s to early 1860s (Figure 25).

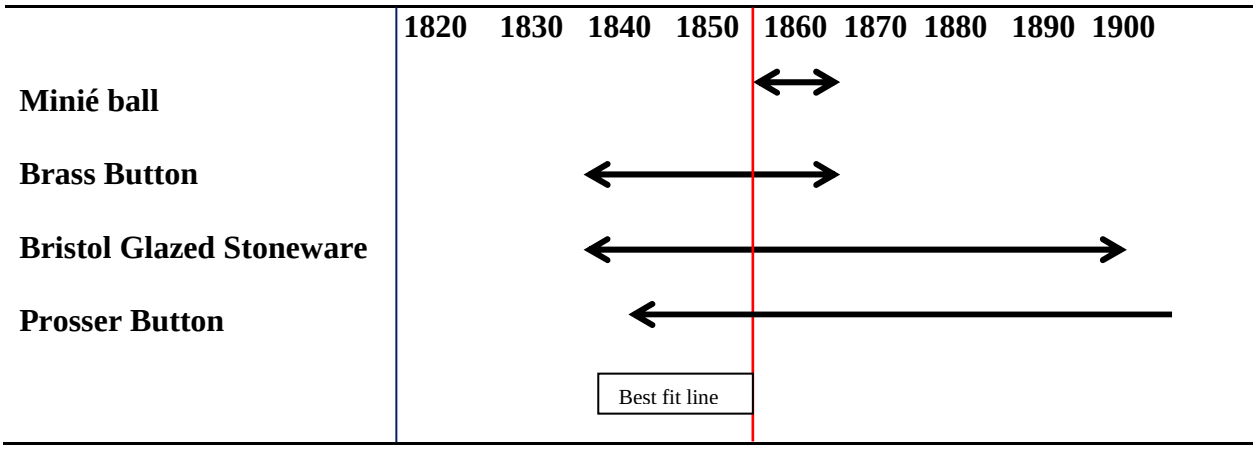


FIGURE 25. Artifact chronology chart.

Ship Deposition

There are two possible scenarios on how the Centerboard Schooner came to rest in its current location: the ship was either abandoned, or set on fire by the Confederate Army during the Civil War. Ship abandonment has already been shown at Shield's Point (Sjordal 2007; Pickett 2008; Holland 2006), in Morton's Basin with the Bethune Schooner wreck (Baumer 1991), and along the Pensacola waterfront with the B-Street Schooner (Perrine 2012). Ship abandonment can be characterized by three general criteria outlined by Nathan Richards' research in Australia: intact structural remains, absence of rigging or propulsion, and scarcity of artifacts (2002:329).

All three of these criteria apply to the Centerboard Schooner. While numerous artifacts were found, only a few of these artifacts were diagnostic. The only area where diagnostic artifacts were located was between the timbers in the bow unit. If the ship had been abandoned, this area may have not been cleaned out or salvaged because of a lack of interest in these items. Surface-collected artifacts on the Centerboard Schooner generally included glass bottles, fasteners, ceramics, and modified wood, further supporting the theory that ship was salvaged as no other artifacts were recovered.

Much of the structural remains on the Centerboard Schooner are intact. Many of the ship's timbers are still fastened to each other, and most remain in their original positions. The keel and keelson are still attached to the stem and sternpost with both outer hull planking and framing intact. The centerboard and trunk are still in their original position over the keelson. Both the bow and stern are generally intact, and the only sign of stress in the timbers seems to be from the weight of sediment within the ship's hull. No visible evidence of a wrecking event exists though many ships along the Gulf Coast sank due to hurricanes (Burns 2000; Worth 2009; Moore 2002). Richards (2002:345) notes ship salvage can be detailed into three stages: primary, secondary, and tertiary. Primary salvage refers to the pre-depositional salvage efforts. The missing superstructure from the Centerboard Schooner could have easily been salvaged before deposition, and the lack of ballast at the site supports this claim. Pre-discard salvage allowed the owner of the vessel to liquidate some sections in order to minimize the cost of a lost ship. The mast, rudder, spars, and other easily removable parts could be sold to build or modify other vessels. Secondary salvage occurs just after the abandonment by the owner/abandoner when the vessel cannot remain afloat or is towed to an abandonment site. The distinction between these two stages is hard to determine archaeologically. The tertiary stage can occur multiple times over a long period after initial abandonment. Valuables from a wreck can be collected by sport divers, or other resource like iron can be removed long after the vessel's original abandonment.

Another popular technique during abandonment is to set fire to the vessel once it has been deposited in its final resting place. By burning the remainder of the vessel, unsalvageable wood can be destroyed and removed from sight. This technique can also be used to remove the wood so that metal fasteners can more easily be gathered. The Centerboard Schooner shows signs of charring on the fore and aft portion of the centerboard trunk and also on the sternpost

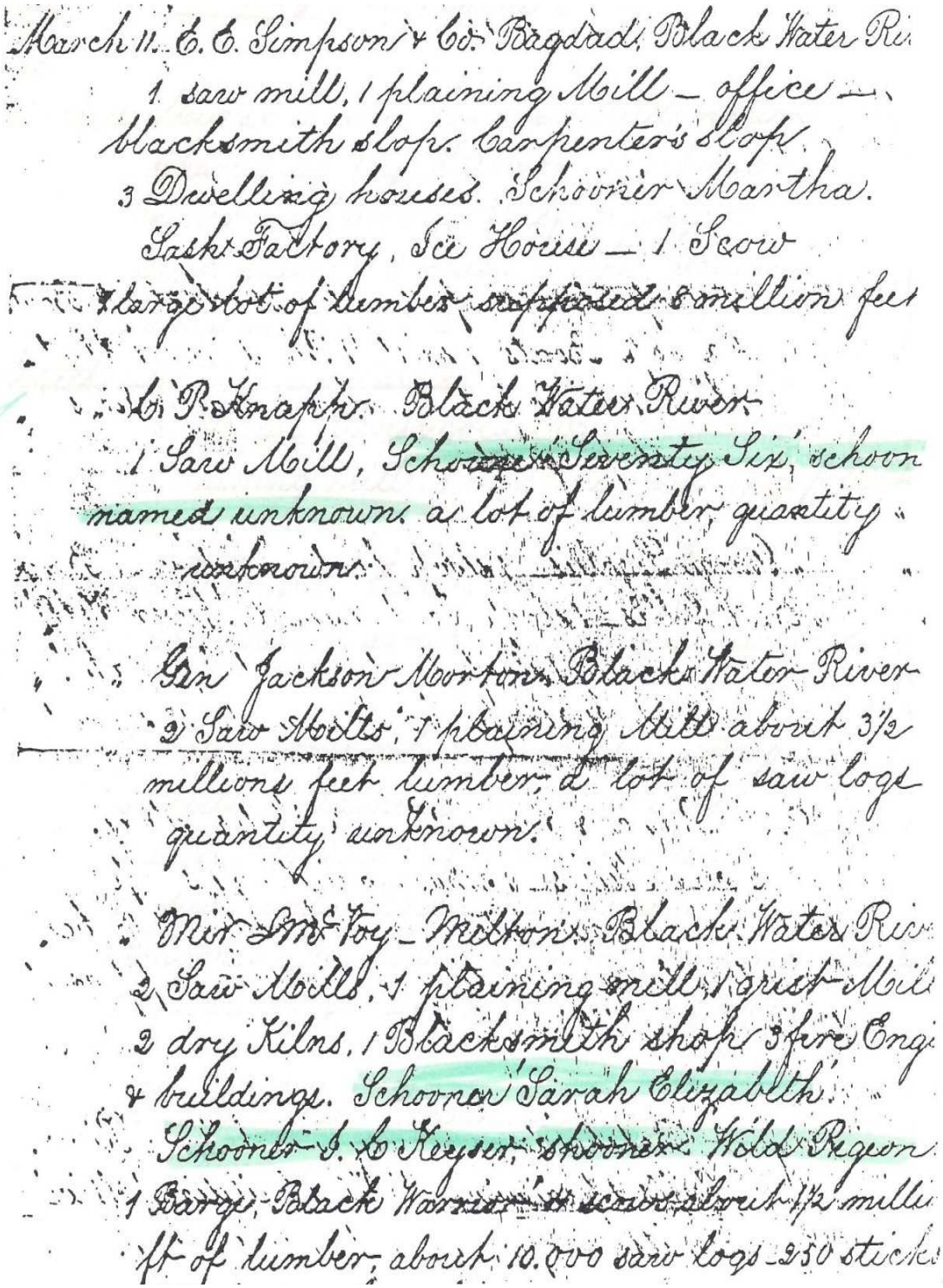
(Figure 26). Other vessels in the Pensacola area were also burned after they were abandoned. The B-Street Schooner is proposed to have been burned after it was abandoned near the Pensacola waterfront (Perrine 2012). The Shields Point wrecks also were set afire after their abandonments (Sjordal 2007).

FIGURE 26. Forward section of centerboard trunk. Notice the charring on the head block. (Photo by author, 2011.)

One of the most important indications of vessel abandonment is location. Abandoned vessels should never be a navigational hazard (Richards 2002). Following this criteria, the Centerboard Schooner's location is out of the main channel and in a small bayou. Richards (2002) also notes that ship abandonment areas may be linked to nearby shipyards. A local example is the Shield's Point wrecks that were abandoned near the Bay Point Shipyard (Sjordal 2007, Holland 2006, Pickett 2008). This shipyard could have salvaged components from the derelict ships to build new vessels or repair others. The location of the Centerboard Schooner is

also near a shipyard. Fredrick G. Howard built and owned a shipyard across from the Milton Waterfront, which operated before the Civil War (Woolsey 1994). The ideal place to salvage ships would be in the nearby Marquis Bayou, because of its close proximity to a shipyard and not in a main navigation channel. Perrine (2012) attributes the B-Street Schooner's location as a possible need for fill to build up the waterfront. Derelict ships can be used to support fill areas to build up expanding waterfronts. In addition to Pensacola, other cities like New York and San Francisco have examples of abandoned vessels to physically support a developing waterfront (Perrine 2012). The Centerboard Schooner could have also been used in this fashion . The Pensacola and Atlantic Railroad was built in 1882 and may have needed reinforcement from the steep slope of the river bank. This scenario is unlikely however because of the absence of ballast or fill along the bank.

A second theory for the Centerboard Schooner's deposition is Beard's Raid in 1862. The historical documents related to this event name several schooners that were set afire during the raid. The most important document was created by William K. Beard himself. This report lists properties that were damaged and is organized by each business with associated structures and ships. The closest named property was owned by C. P. Knapp along the Blackwater River. Along with destroying Knapp's saw mill, Beard's men also sank the schooner *Seventy-Six* and another unnamed schooner (Figure 27). In addition to these schooners, 27 other vessels were burned. Of those 27 vessels, only two are named as schooners: *Civility* and *Martha*. Both *Civility* and *Martha* are documented in the *Pensacola Gazette* as carrying lumber and cotton during the 1850s, with the *Martha* operating for E.E. Simpson and the *Civility* operating for J. G. Mclean, J.C. Cater, and by Keyser, McVoy and Company (Beard 1962).


March 11. C. C. Simpson & Co. Bagdad. Black Water Ri
1 saw mill, 1 plaining Mill — office —
blacksmith shop. carpenter's shop.
3 Dwelling houses. Schooner Martha.
Sash Factory, Ice House — 1 Scow
large lot of lumber supposed 6 million feet

C. P. Knapp. Black Water River.
1 Saw Mill, Schooner Seventy Six, schoon
named unknown. a lot of lumber quantity
unknown.

Jas Jackson Morton. Black Water River
2 Saw Mills. 1 planing Mill about 3½
millions feet lumber. a lot of saw logs
quantity unknown.

Mr McVoy — Milton. Black Water Riv
2 Saw Mills. 1 plaining mill. 1 grist Mill
2 dry Kilns. 1 Blacksmith shop 3 fire Engi
4 buildings. Schooner Sarah Elizabeth.
Schooner J. C. Keyser. Schooner Wild Pigeon
1 Barge. Black Warrior — cargo about 1½ milli
ft of lumber, about 10.000 saw logs 250 sticks

FIGURE 27. Section of Beard's List describing the property destroyed at C.P. Knapp, Jackson Morton, and McVoy mills. (William K. Beard 1862 List of Property Destroyed as Near as Could Be Ascertained at the Time. Rebel Records, Vol VI, pp859-860. National Archives and Records Administration.)

Conclusion

The physical evidence supports both theories. The artifacts found on the Centerboard Schooner reveal a time frame of operation that began around the Civil War. While only two artifacts have diagnostic properties, the Minié ball and the Bristol Glazed stoneware could have been deposited on the ship either during or before 1862. The ship's remains however, are better characterized as part of an abandonment rather than a wrecking event. The lack of superstructure, rigging, and location suggests that the schooner was abandoned in the small bayou once it was no longer needed. The parts of the ship, like superstructure and rigging, that are often removed before abandonment could however been scavenged in the years after the ship had sank due to its location near shore and in shallow water. The physical signs of burning support both theories on how the vessel sank. Further research, both archaeologically and historically, might determine the true fate of the Centerboard Schooner.

CHAPTER IV

SCHOONER COMPARISON

Merchant Shipping in Pensacola

Merchant ships helped drive the booming economy of Pensacola and the surrounding area during the 19th century. From 1820 to 1855 exports from Pensacola reached markets on the Gulf Coast and East Coast as well as foreign markets in Central and South America. During the 1820s and 1830s, trading along the Gulf Coast dominated the export market, accounting for approximately 90% of trade destinations (Polk 1971: 132). Starting in the 1840s, trading to foreign markets almost tripled from 3% to 8%. In addition to the increase in foreign markets, an increase in the amounts of ships being used for trade also occurred. James Polk (1971:132) documented 283 ships operating in Pensacola during the 1850s, an increase of 52% from 1821. The majority of exports from Pensacola went to New Orleans by way of schooner, but ports like Mobile, Biloxi, and Apalachicola were also popular. While the lumber companies utilized schooners for coastal trade, other vessels such as barques and brigs were also used to sail to distant ports. For example, in November of 1850, Alexander McVoy owned two brigs *John R. Rhoads* and *Orizana*. These brigs traveled to New York and Boston respectively with a combined cargo of 225,000 ft of lumber (*Pensacola Gazette* 1850, Appendix A).

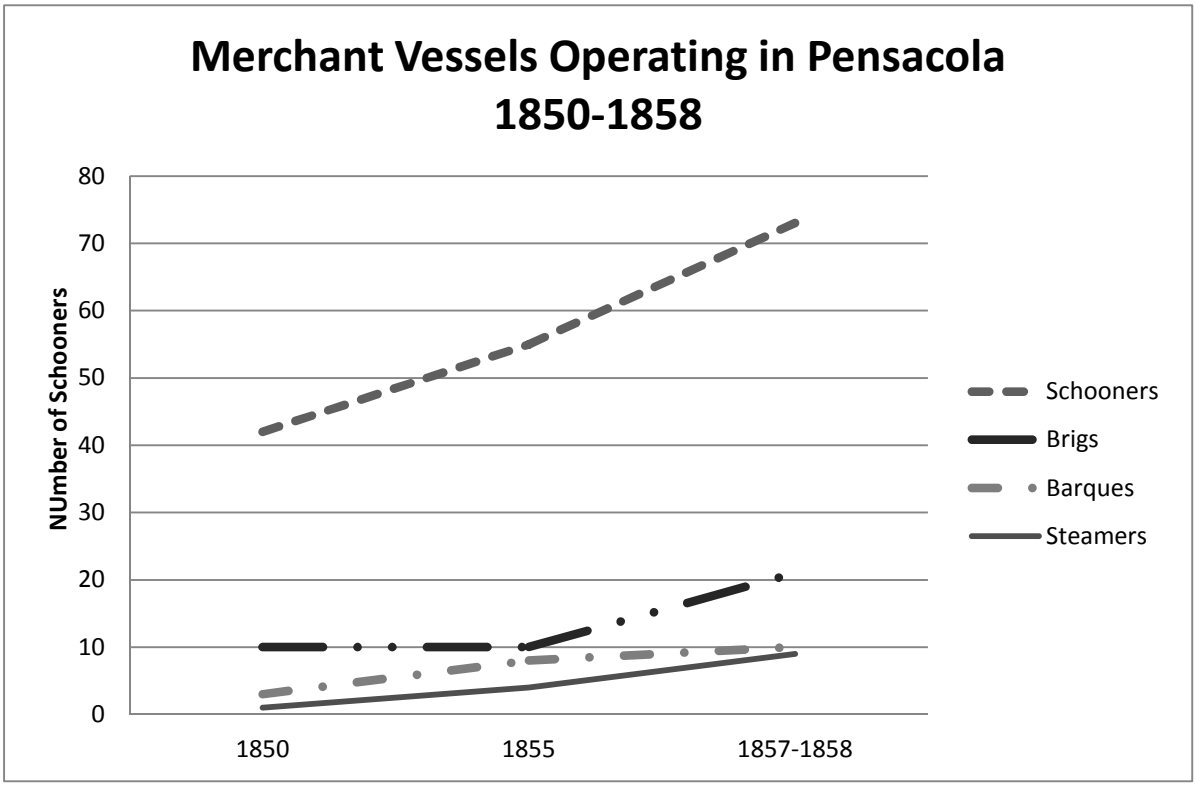
Using the section of the *Pensacola Gazette* titled "Pensacola Port," the exports from ships can be analyzed to show the role that schooners played within the local economy. The majority of exports can be broken down into six groups: lumber, brick, cotton, hides, shingles, and laths. Lumber accounts for the majority of exported goods. From 1854 to 1857, 37.56 million ft of lumber were exported (Polk 1971: 138). The second largest represented export is cotton at 4.61 million bales.

Merchant shipping throughout the 1850s was dominated by schooners (Table 2). During the year 1857, schooners represented 65% of merchant vessels (Polk 1971: 136). In addition to lumber, other groups of exports were carried at the same time, such as cotton, shingles, and laths. During the Antebellum Period, schooners averaged 100,000 feet of lumber per trip. The other types of vessels (brigs, barques, and ships) averaged 500,000 feet of lumber (Eisterhold 1973: 279). The price of lumber from 1850 to 1860 was around $14 per thousand feet (Polk 1971: 137). This price meant that schooners transported on average $1,400 worth of lumber per trip in addition to other goods (Appendix A, B, C).

Not only did schooners flourish before the Civil War, they continued well into the early 20th century. *The Annual List of Merchant Vessels of the United States*, provides a list of schooners operating out of Pensacola. This list was compiled each year to document existing registered American vessels. Basic vessel dimensions, included length, breadth, and depth of hold. When and where the vessel was built, along with the home port, tonnage, and official number were also noted. The years 1901, 1910, and 1920 were chosen as a reflection of the peak of merchant sailing after the Civil War in Pensacola.

Sixty schooners were listed in 1901 as having their home port as Pensacola. The one detail that stands out from the table is the range in the years that the vessels were built. The oldest is the *Osprey*, which was built in 1858 in Boothbay, Maine. Forty-three (71%) of the schooners were already over ten years old. The length of time that the schooners had already been operating suggest they remained valued vessels.

TABLE 2.
MERCHANT VESSELS OPERATING IN PENSACOLA



According to the *Annual List of Merchant Vessels*, schooners built locally averaged 43 feet in length and 13 tons. These schooners were built in Pensacola, Milton, and along the Blackwater River and Santa Rosa Sound. The smaller dimension of the locally built schooners was intentional. These vessels sailed inland waterways and near the shore to relatively close Gulf ports. Schooners built in the northeast averaged 68 feet in length and 38.8 tons. The difference in size between northern-built schooners and southern-built schooners illustrates that vessels were built for a regional purpose. The same contrast is also evident in the depth of hold. Schooners built on the Gulf Coast were constructed with an average depth of hold of 4.08 feet where the vessels built in the northeast had an average depth of hold of 7.7 feet. The schooners with the shallow draft were built primarily to navigate shallow inland waters. While not

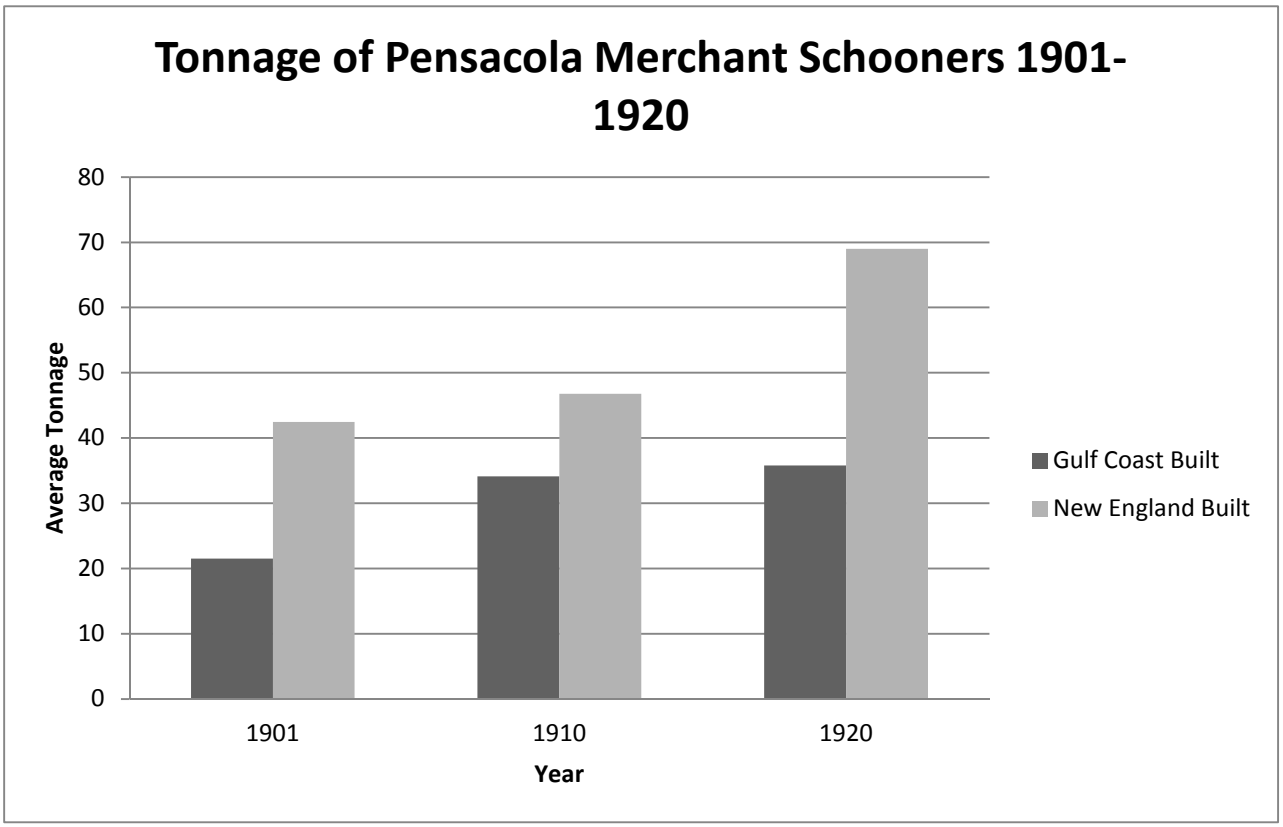
indicated on the *Annual List of Merchant Vessels*, these shallow draft schooners could have been outfitted with a centerboard to compensate for the shallow draft.

Using data collected from the *Annual List of Merchant Vessels* reveals a distinct correlation between vessel size and the location in which it was built (Table 3). Schooners that were built along the Gulf Coast were smaller in length and had a shallower draft. Schooners built in the Northeast were longer and with a deeper draft. Moore (2002) divided merchant schooners operating in the Gulf Coast into three categories: regional, coasting, and fishing. The coasting schooners were the largest, with lengths of over 100 feet and depths of hold greater than eight feet. Fishing schooners were between 50 and 90 feet long with depths of hold between 5.5 and 10 feet. The Centerboard Schooner's dimensions most closely fit a regional as categorized by Moore: length under 50 feet and depth of hold less than five feet. Because schooners could be used to serve multiple purposes, some overlapping within this categorization occurs. The Governor Stone is the smallest vessel in length but was a fishing schooner and the Centerboard Schooner is slightly longer than the grouping of regional schooners but exhibits no signs of being a fishing schooner. This grouping technique may help identify types of unknown schooners that operated along the Gulf Coast from the 1850s to the early 20th century.

Moore (2002:31) found similar statistics within merchant ships designated as regional freight. Moore's findings show regional freight schooners averaged 46.5 feet in length and 4.3 feet in depth of hold. Of the 60 schooners in the 1901 *Annual List of Merchant Vessels*, 41 were built along the Florida Gulf Coast and all have a smaller depth of hold than those built in the northeast (Table 4). The depth of hold for Gulf-Coast-built schooners ranges from 2.7 to 6.1 feet, with 39% of the schooners having a depth of fewer than four feet. This statistic is similar in both 1910 and 1920. In 1910, regionally built schooners' depths of hold ranges from 3.1 to 8.1

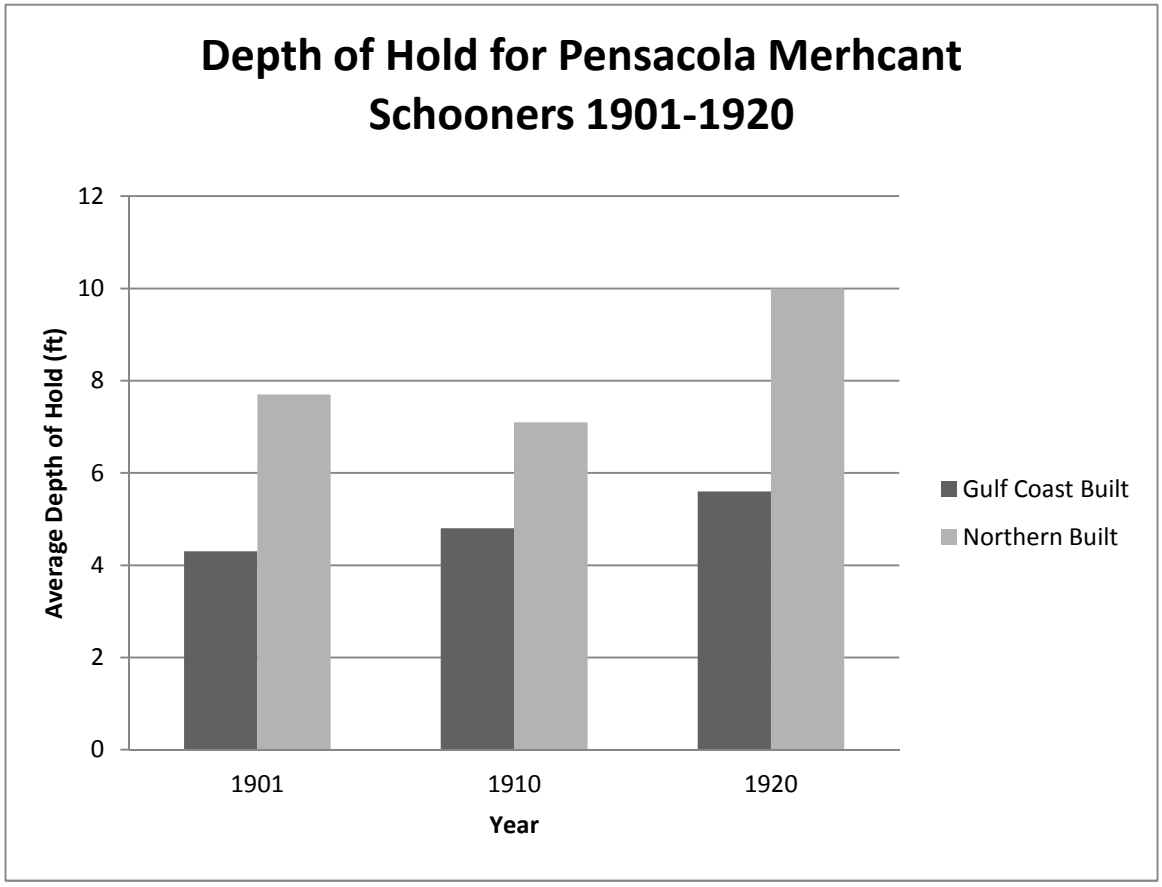
feet. This same year, 42% of the schooners had a depth of hold of fewer than five feet, and in 1920, 26% of the schooners had a depth of hold less than five feet with a range of 3.2 to 8.4 feet.

TABLE 3.
AVERAGE TONNAGE OF SCHOONERS



*Listed as having Pensacola as the home port.

TABLE 4.
AVERAGE DEPTH OF HOLD FOR SCHOONERS



*Listed as having Pensacola as the home port.

Ship Comparison

The Centerboard Schooner is part of a vast maritime history within the waterways of the Pensacola area. Many other schooners have been investigated along the Gulf Coast and by a comparison of their construction creates a better understanding of the role that this schooner played within the maritime landscape. A few key construction components serve well for comparison. Overall dimensions, including length and breadth, can group the schooners into the three main types of merchant schooners operating during the late 1800s to early 1900s (Table 5). Other construction techniques such as framing patterns can provide a possible dating technique for when the Centerboard Schooner was built.

TABLE 5.
GULF COAST SCHOONER'S OVERALL DIMENSIONS

Vessel Name	Length (m.)	Breadth (m.)
Governor Stone	12.9	3.8
Centerboard Schooner	15.8	6.0
Hamilton	19.2	N/A
Ballast Cove Wreck A	19.8	6.7
Bethune Schooner	28.0	7.6
Snapper Wreck	33.0	7.0
Dinty Moore	42.0	9.5
Palafox	45.8	11.9
Guanacaste	53.0	8.9
Geo T. Lock	54.9	11.9

Two schooners are not located in the Pensacola Bay area: one wreck is further east in Franklin County (Horrell 2005), and the other schooner is still in operation (Sikes 2004). Both the vessel's usage and time frame in which it operated can be better understood by comparing the dimensions and construction design of the Centerboard Schooner with other locally documented shipwrecks. This technique has been used successfully in other theses on shipwrecks without any historical documentation identifying the vessel (Perrine 2012; Moore 2002). This method is successful because merchant vessels were constructed with specific details that related to the region in which the vessel sailed.

The design and construction of schooners also changed over time as new practices became more popular with shipwrights. The first set of comparisons is between overall dimensions. Schooners of a similar size may have had similar roles within merchant trading. In addition, the Centerboard Schooner's frame design is compared to the other schooners. Frame design changed over time as new styles became popular, and this comparison may provide insight into when the Centerboard Schooner was built.

A schooner's size can reflect the vessel's intended use. The 10 schooners sampled fit into the three merchant categories detailed by Moore (2002). All these vessels have been archaeologically investigated along the Gulf Coast with eight vessels residing in the Pensacola Bay area.

The *Governor Stone* and Centerboard Schooner are the shortest vessels, measuring around 50 ft in length. *Governor Stone* was documented as both a merchant and a fishing vessel that was built in Biloxi, Mississippi, following the Civil War (Sikes 2004). This vessel was also built with a centerboard and exhibits similar construction techniques to the Centerboard Schooner, such as having two masts, doubled frames, and shallow draft. Local schooners known as the Hamilton Wreck and Snapper Wreck operated as fishing vessels in the Pensacola area during the early 20th century (Moore 2002; Raupp 2004). In addition to the Hamilton Wreck and Snapper Wreck, the Bethune Schooner and Ballast Cove Wreck A are also within the fishing category based on length; however, the Bethune Schooner was most likely a coasting schooner that transported bricks, as indicated by its location and associated documentation (Baumer 1991). The largest vessels, *Dinty Moore*, *Palafox*, *Guanacaste*, and *Geo T. Lock* were all coasting schooners. These vessels are all over 100 ft long and were involved with the lumber trade (Sjordal 2007, Holland 2006, Sjordal et al. 2004).

The Bethune Schooner is also located in the Blackwater River and was nominated to the National Register of Historic Places 1991. After field investigations, the Bethune Schooner was estimated to be 92 feet (28m) long on deck with a beam of 25 feet (7.62m). The approximate tonnage for this vessel is 93.2 tons. The Bethune Schooner sailed to Gulf Coast ports as a regional schooner and its large size may suggest it was built in a different part of America. Baumer (1991) narrowed down the identity of the wreck to two ships: the *Hornet* and *William*

Ebbitt. Where the *Hornet* was built is unknown, but the *William Ebbitt* was built in New York City and had very similar dimensions to the Bethune Schooner. The Bethune Schooner lies near the Jackson Morton brickyard once was and is documented as being abandoned before 1866. The Bethune Schooner is also equipped with a centerboard.

Further down the Blackwater River, at Shields Point, lie four schooners. These large schooners operated during the beginning of the 20th century as coasting schooners and schooner barges, transporting lumber as their main cargo. The *Dinty Moore* was built as a schooner barge in Pensacola in 1921 by the Bullock & Caldwell Company. The vessel was used in the West Indian and Coastwise Trading up until her abandonment in 1937 (Sdjordal 2007:30).

In 1919 the *Palafox* was built in Pensacola. This vessel was constructed by William V. McDonald as a single-deck, three-masted lumber schooner (Sjordal 2007:23). The *Palafox* was built locally from yellow pine and live oak with galvanized iron fasteners and fitted with two four-cylinder internal combustion, semi-diesel engines (Sjordal 2007:27). The *Palafox* operated as a schooner until 1925, when it was listed as abandoned. Sjordal notes that the *Palafox* then reappeared on the *Annual List of Merchant Vessels* as a schooner barge owned by the Pensacola Barge and Transportation Company. The vessel was again abandoned in 1933.

The third coastal schooner is the *Geo T. Lock*. This schooner was built as a single-deck, four-masted schooner with the ability to carry 788 net tons of cargo (Sjordal 2007:30). This large schooner was built in West Lake, Louisiana, in 1917. Like the *Palafox*, the *Geo T. Lock* was also built using oak and yellow pine. While attempts were made during construction to make the schooner more seaworthy, it was repaired only two years after construction. Holland believes that during this repair the Geo T. Lock was modified to a barge (Holland 2006:28).

Numerous repairs were made to the vessel in 1920, 1922, and 1925 before it was officially listed as abandoned in 1933 (Sjordal 2007; Holland 2006).

The last coastal schooner listed is the *Guanacaste*. Unlike the other three locally built vessels, this schooner was built in the Northwest, in Portland, Oregon, in 1917. She was built as a four-masted, single deck, twin-screw schooner, and built primarily of fir. After a six-year sailing career in the Northeast, *Guanacaste* was sold and became a fishing vessel operating out of Pensacola. Similarly, the *Guanacaste* was converted to a schooner barge until she was abandoned in 1938 (Sjordal 2007:37).

These four schooners represent a group of vessels that not only operated between ports along the Gulf Coast, but also sailed to other areas of the world. The *Palafox* and *Geo T. Lock* both transported lumber and coal to Cuba. The *Geo T. Lock* had been converted to a schooner barge before making the scheduled trips to Cuba, and the *Palafox* was still a twin-screw propelled schooner when it made its trips across the Gulf. *Guanacaste* operated in the Northeast in New York and Delaware as a general freight schooner (Sjordal 2007:36).

The fishing and regional designated groups have some overlapping designations due to the schooners being close in size and operating as both regional freight and fishing vessels. In addition to the lumber trade in Pensacola, the fishing industry was also a very successful trade. The Hamilton Wreck, Snapper Wreck, and *Governor Stone* are all documented as fishing schooners at some point in their histories. From 1880 to 1930, Pensacola was known as the "Snapper Capital of the World" (Raupp 2004:7). As fishing became more popular, lumber trade declined. Steam and diesel engines replaced sails as more effective ways to propel vessels. Another adaptation to schooners was the use of live wells within the hull to keep fish alive for as long as possible. Once ice could be produced locally, these fishing schooners were outfitted with

ice boxes. Keeping the fish on ice proved to be a better way of preserving the fish, and thus the fishing schooners could stay at the fishing grounds for longer periods of time.

The Snapper Wreck is the only clear representation of this type of fishing schooner. The Snapper Wreck (8SR1001) was documented and investigated in 2001 and found to be a local two masted schooner (Raupp 2004). This schooner was locally known as a snapper smack and was reported to have an operational date from 1890 to its abandonment in 1936. These schooners got their name from the sound of the water "smacking" around the live wells within the vessels (Raupp 2004:64).

Another fishing schooner met a similar fate probably due to the Hurricane of September 27, 1906. This site named Hamilton's wreck was investigated by Robin Moore (2002), and revealing the hull design was concluded to be a fishing schooner (139). The deeper draft would have allowed space for live wells to keep fish as opposed to coastal schooners that have shallow drafts.

The hull design of fishing schooners is much different than that of regional freight schooners. As opposed to the shallow-draft, flat-bottomed hulls like the Centerboard Schooner, fishing schooners often had V-shaped hulls with deep drafts. This design allowed for better accommodations of both ice boxes and live wells within the schooners and also allowed for better sailing in deep, offshore waters.

Analysis

The Centerboard Schooner was most likely not a fishing schooner based on hull design and a lack of artifacts associated with fishing. A known fishing schooner, the Snapper Wreck, also located in the Blackwater River, had a deeper draft due to its "V" shape (Raupp 2004:68). The most similar vessel to the Centerboard Schooner is the wreck designated as Ballast Cove

Wreck A (8FR903) by Dr. Christopher Horrell (2005). The name of the vessel was not identified, but after an investigation of the artifacts, location, and architecture, the vessel was determined to be a centerboard schooner. Fishing equipment discovered within the hull of the shipwreck, which the author attributes to either the vessel being used for fishing at some point or the crew used the equipment for recreational use (Horrell 2005:217). Horrell also notes that schooners of this size served many purposes during their careers. Regional schooners such as the Centerboard Schooner and 8FR903 were easily adaptable and could be used for fishing, transporting general freight, lumber trading, or harbor piloting (Horrell 2005:217).

Based on the grouping method provided by Moore (2002), the Centerboard Schooner is possibly a regional merchant schooner. Because of the varying industries that operated out of Pensacola during the latter part of the 19th century and into the 20th century, the Centerboard Schooner could have been modified to serve different purposes. The archaeological record shows no sign of this vessel being used as a fishing schooner, and its size and design are concurrent with those of vessels known to have been regional Gulf Coast schooners.

In addition to overall dimensions, the size and spacing of the frames can also distinguish the Centerboard Schooner as a regional maritime vessel. Both the fishing and regional schooners' frame designs are very similar. Both the measurements for the molded and sided dimensions are close in length. The Centerboard Schooner's molded (13 cm) and sided (14 cm) are the second smallest of the 10 schooners. The *Governor Stone* has the smallest frames, with the molded and sided dimensions being 10.2 cm and 5.7 cm respectively (Sikes 2004:309) (Table 6).The molded and sided dimensions of the four coasting schooners are quite different from the other schooners. With the exception of the *Guanacaste,* the framing for the large schooners was

designed so that the frames were not square. Either the molded or sided lengths are about twice as long as the other (Table 7).

Two key characteristics of the Centerboard Schooner that can be used to date the vessel's construction include the location and design of the centerboard. Sikes (2004:311) notes that centerboard schooners built outside the Gulf Coast usually fitted the centerboard off-center. By placing the centerboard off the centerline of the schooner, the keel and keelson were not compromised. Shipwrights in the late 1800s to early 1900s in Biloxi placed the centerboard on top of the keelson and between the two masts. The large centerboard trunks occupied almost the entire space between the two masts (Figure 9).

While the mast steps were not discovered during excavations on the Centerboard Schooner, the centerboard is placed mid-ship on the keel, between the area where the masts should be. Lines drawings from similar sized centerboard schooners (*Governor Stone* [Figure 10] and *Santiago* [Figure 28]) show the main mast located just aft of the centerboard trunk while the fore mast is either just fore or much further to the bow. Chapelle (1967:283) notes that by 1845 the use of the centerboard had become "fully explored." During this time it was common for the centerboard to be placed alongside the keel and mast to allow for a more balanced vessel between the rig and hull. The centerboard on the Centerboard Schooner is placed overtop the keel.

TABLE 6.
FRAME DIMENSIONS OF REGIONAL/FISHING SCHOONERS

Vessel Name	Molded (cm)	Sided (cm)	Space (cm)	Frame Design
Governor Stone	10.2	5.7	40.0	Paired
Centerboard Schooner	13.0	14.0	22.0	Paired
Hamilton	16.0	15.0	20.0	Paired
Ballast Cove Wreck A	19.0	15.0	19.0	Paired
Snapper Wreck	18.0	15.0	20.0	Paired

TABLE 7.
FRAME DIMENSIONS OF COASTING SCHOONERS

Vessel Name	Molded (cm)	Sided (cm)	Space (cm)	Frame Design
Dinty Moore	27.0	11.4	24.6	Paired
Palafox	30.0	15.0	32.7	Paired
Geo T. Lock	15.0	30.0	75.0	Paired
Guanacaste	22.5	26.0	50.0	Paired

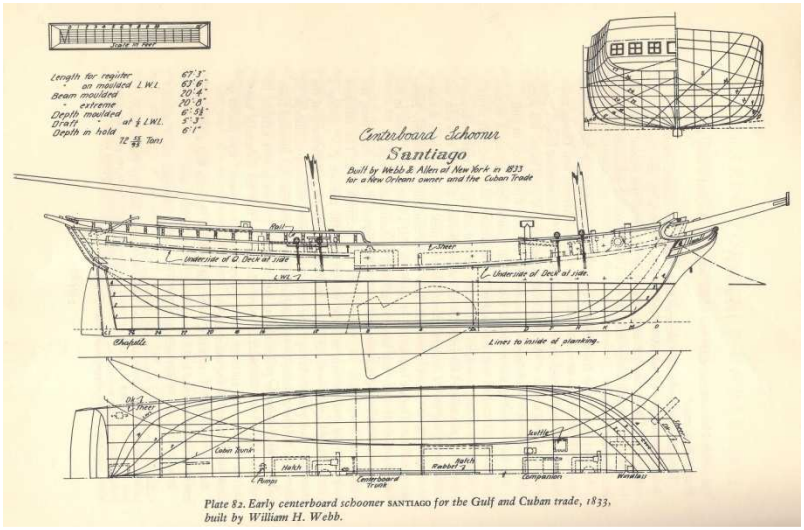


FIGURE 28. Lines drawing of centerboard schooner *Santiago*. (Howard Chapelle 1967 *The Search for Speed Under Sail 1700-1855*. Bonanza Books, New York.)

Excavations of Centerboard Schooner suggest that the main mast-step should be located somewhere between where the bow unit and where unit 188N, 200E is located (Figure 29). The unexcavated space between the two units is approximately 3.5 m (11.48 ft). Excavations to the rear of the centerboard trunk revealed a disarticulated collection of timber covering the intact components of the ship. The ceiling timbers in this section are nonexistent, allowing the keelson to be visible.

Conclusion

Data gathered from ship construction elements off the Centerboard Schooner does not yet yield a specific date, but a broad date range of operation. Based on frame design and centerboard trunk placement, the Centerboard Schooner was most likely built in the mid to late 1800s to early 1900s. The placement of the Centerboard on the centerline of the keelson was popular during the late 1800s and early1900s as opposed to the earlier tradition of fitting the trunk off-center. The comparison of the other schooner paired framing reveal that the Centerboard Schooner most likely was built around the same time. Its dimensions of length and breadth suggest this vessel was involved in the coastal trading market.

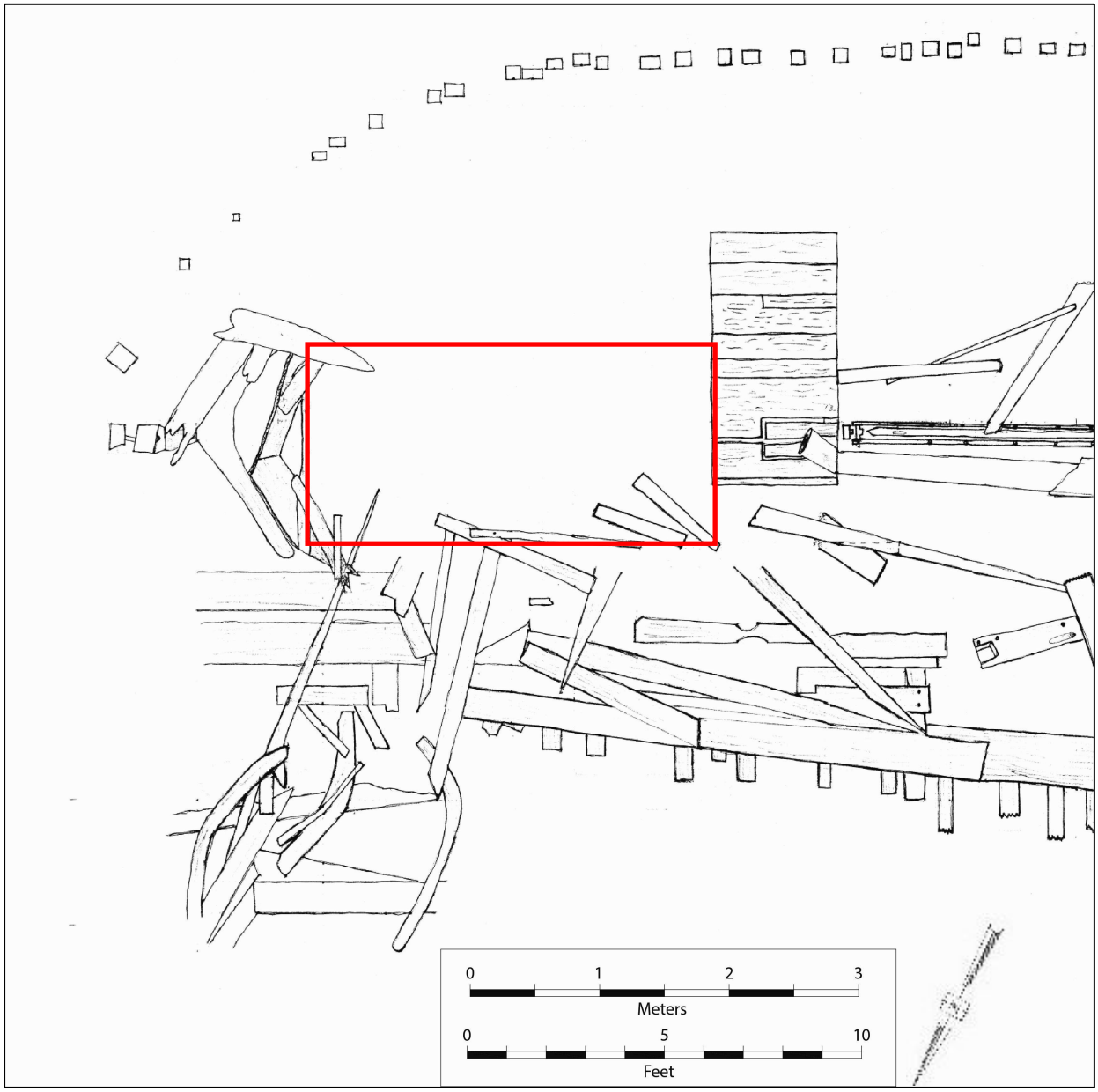


FIGURE 29. Proposed mast step location. (Drawing by author, 2014.)

CHAPTER V

DISCUSSION AND CONCLUSION

The archaeological and historical investigations of the Centerboard Schooner were designed to shed light on an unexplored shipwreck. Neither method identified the name of the Centerboard Schooner, but very valuable information was obtained through this research. The archaeological excavations in 2010 and 2011 uncovered significant details of both the ship's construction and artifact assemblage. How the Centerboard Schooner operated within the Pensacola Bay area was relied on the use of both the locally documented history and comparisons to other known schooner shipwrecks.

Initial dives on the site to documented all existing elements of the schooner that are exposed above the sediment. The existing ship's length 52 ft (15.8 m) and breadth 19.6 ft (6 m) were documented along with many other construction elements. The sternpost, centerboard, ceiling planking, frames, futtocks, and stem are all exposed and, due to the shallow depth of the wreck, pose a danger to present-day watercraft. Many of the port-side futtocks have been broken off as a result of impact from modern vessel traffic within Marquis Bayou.

Many challenges were present in accurately measuring and drawing the existing shipwreck. Not only was visibility in the water very limited (often less than one foot), but fine sediment could be stirred up if divers were not careful, completely restricting visibility. The amount of disarticulated timber over the site also impeded divers in both excavations and documenting original ship components. Where these timbers came from or why they were deposited over the site is not known. Divers discovered at the end of the site excavations that many large cut timbers were stacked near the site on the slope of the bank. These timbers

resemble steps and may have been used to reinforce the bank to prevent erosion. The need to reinforce the bank of the bayou may be one reason for the schooner's location.

Excavations within the shipwreck revealed key components in identifying the schooner. The Centerboard Schooner is assumed to be a two-masted vessel. The first units were placed on either side of the centerboard trunk to unearth either the main or fore mast. These units were unsuccessful in finding either mast step. The two units placed in front of the centerboard reached the schooner's ceiling planking. The unit placed aft of the centerboard revealed the keelson underneath many disarticulated, cut pieces of lumber. After the first units proved to be unsuccessful, a larger unit in the bow exposed the structural components. Not only was the aft section of the stem exposed, but the ship's breasthook along with ceiling and hull planking were also exposed. Within this unit, many of the diagnostic artifacts were recovered. The minié ball, along with brass buttons, glass, and textile artifacts, was discovered within the context of the shipwreck. While the keelson was discovered in the bow, divers were unable to document it.

The most numerous material recovered during excavations were pieces or charred wood and charcoal. These pieces of burnt wood are assumed to represent parts of the ship that no longer exist, which include the upper deck, superstructure, and rigging. These pieces of wood and the charred marks on the centerboard trunk may indicate that the ship was still afloat when it was burned. References to local history and popular methods of ship abandonment indicate that the Centerboard Schooner could have sunk for two different reasons. The first hypothesis that the schooner was sank by the Confederates during the Civil War. Confederate soldiers, led by Lieutenant Colonel William K. Beard, traveled up the Blackwater River and burned much of the local waterfront industry, including many ships. Beard's correspondence mentions two schooners that his men sank, the *Seventy Six* and the *Sarah Elizabeth*. Both of these schooners

were located near Milton, with the schooner *Seventy Six* located at C. P. Knapp's mill and the schooner *Sarah Elizabeth* located at L. McVoy's lumber mill. In addition to these two named schooners, a number of "unknown" schooners were also sunk (Beard 1862). This historical event and the artifact date range of the Centerboard Schooner make this theory on how the Centerboard Schooner sank plausible. Further research however is needed to either confirm or deny this theory.

The other theory on how the Centerboard Schooner concerns abandonment, a method common to many present-day shipwrecks on the Blackwater River. Toward the end of the 1920s and 1930s, many sailing vessels were replaced with screw-driven vessels. Once these sailing vessels were no longer useful, they were abandoned in the river system off the main waterway. The Shield's Point wrecks are a representation of a local ship graveyard. Some evidence suggests that the Centerboard Schooner met her fate in the same fashion. The lack of artifacts associated with either the rigging and crew members suggests that the schooner was salvaged. While the sternpost remains mainly intact, the hardware used to attach the rudder to it no longer exists on either the sternpost or the rudder. The location of the wreck off the main waterway may have been an attempt to prevent the abandoned schooner from impacting passing ships. In addition, burning abandoned ships was a popular method to remove those ships from sight.

Because of the lack of historical evidence and diagnostic artifacts, a comparative method was used to try to identify the role that the Centerboard Schooner played within the maritime economy. The Centerboard Schooner is included within the" regional schooner class" based on basic dimensions provided by Moore's (2002) schooner grouping. This class of schooners operated along the Gulf Coast, carrying freight to nearby ports using inland waterways. The hull structure and centerboard of the Centerboard Schooner supports this theory. These types of

schooners were prized for their ability to navigate shallow and narrow waterways with both light and heavy loads. This advantage in navigation would have been necessary to move goods down the Blackwater River and to nearby ports in Pensacola, Mobile, New Orleans, and Apalachicola. In addition to moving freight, these smaller schooners could also to ferry passengers and act as harbor pilots for larger vessels.

The main goal for the investigations of the Centerboard Schooner was to document the shipwreck and attempt to determine the role the vessel played within the maritime landscape. During the late 1800s, this schooner would have carried small freight to other ports along the Gulf Coast. Most likely built in the Gulf Coast, it would have been owned by a local company and sailed by a small crew. As a well-built schooner, its life would have been long, probably undertaken on multiple roles as a merchant vessel, ferry, and harbor pilot. The vessel was probably abandoned once it became too expensive to repair. The schooner's owners salvaged her, tied her up in Marquis Bayou, and set fire to the hull till the schooner disappeared below the water.

While much of the remains are documented, further excavations are needed. The starboard side of the vessel between the outer hull and centerboard is buried under fine sediment. Excavations within this area may reveal how the centerboard is attached to the keelson and framing. Excavations around the outer hull may also reveal how the ceiling planking, futtocks, and outer hull planking are fastened together. This area of exacavation may also reveal signs of repair or heavy use. This thesis can be used for further investigations on the Centerboard Schooner as well as other schooners along the Gulf Coast. The investigation of this shipwreck is a testament to the importance of maritime archaeology. With the addition of general, or ideally, specific historical documentation, unidentified shipwrecks can be given historical significance.

Further research and public education of the shipwrecks within the Blackwater River will preserve this rich maritime heritage.

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APPENDICES

APPENDIX A

LIST OF MERCHANT VESSELS DOCUMENTED BY *PENSACOLA GAZETTE* 1850

TABLE A
LIST OF MERCHANT VESSELS OPERATING IN PENSACOLA IN 1850

VESSEL TYPE	**VESSEL NAME**	**OWNER/HOME PORT**	**CARGO**	**NOTES**
SCHOONER	*A??EHA*	HANSON, APALACHICOLA	SAND?? FOR NEW ORLEANS	
SCHOONER	*ALBERT VINAL*	FETTYPLACE, MOBILE	BALLAST	
SCHOONER	*ALICE*	MINOR, NEW ORLEANS		CARGO TO H.F. INGRAHAM, J. HONAKER
SCHOONER	*ALICE*	MINOR, NEW ORLEANS		
SCHOONER	*ALICE*	MINOR, NEW ORLEANS	65,000 FT LUMBER, 30,000 LATHS	BY J. C. POOLEY
SCHOONER	*ALICE*	MINOR, NEW ORLEANS	75,000 FT LUMBER, 54,000 LATHS BY CRIGLAR & CO, 80 BALES DOMESTICS BY FORSYTH & SIMPSON	
SCHOONER	*ALICE*	MINOR, NEW ORLEANS	75,000 FT LUMBER, 54,000 LATHS BY CRIGLAR & CO, 80 BALES DOMESTICS BY FORSYTH & SIMPSON	
SCHOONER	*ALICE*	MINOR, NEW ORLEANS	BALLAST	
SCHOONER	*ALICE*	MINOR, NEW ORLEANS		
SCHOONER	*ALICE*	MINOR, NEW ORLEANS	64,000 FT LUMBER	BY CRIGLAR AND CO TO TAMPA BAY-GOVERNMENT STORES
SCHOONER	*ALICE*	MINOR, NEW ORLEANS	65,000 FT LUMBER, 70,000 SHINGLES	BY CRIGLAR AND CO
BRIG	*AMANDA PARSONS*	DRINKWATER, POINT ISABEL	BALLAST	
BRIG	*ANDEW RING*	FRANKLIN, BANGOR	240 TONS GRANITE	

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*ANN ELIZABETH*	DAVIS, NEW ORLEANS	22,000 FT LUMBER	BY C.P. KNAPP
SCHOONER	*ANN ELIZABETH*	MASSOR, BRASSOS		
BARQUE	*AURORA*	CASTNER, PORTSMOUTH, N.H.	171 PIECES TIMBER	BY GILBERT & SECOR
SCHOONER	*AUSTRIA*	HANSON, APALACHICOLA	BALLAST	
SCHOONER	*AUSTRIA*	HANSON, APALACHICOLA	36,000 FT LUMBER	BY C.P. KNAPP
SCHOONER	*CARA*	PORTER, NEW ORLEANS	50,000 FT LUMBER, 10,000 LATHS	BY CRIGLAR AND CO
BRIG	*CARDENAS*	GOODING, HAVANA	160 BUNCHES BANANAS	TO A. MCVOY
BRIG	*CAROLINE*	LORING, NORFOLK	82,000 FT OAK PLANK	TO COM'DT NAVY YARD
SCHOONER	*CAROLINE HALL*	ROGERS, PORT LAVACA	75,000 FT LUMBER, 39,000 SHINGLES, 10,00 LATHS	BY A. MCVOY
SHIP	*CASPIAN*	TRUFAUT, BATH	630 BALES HAY	
SCHOONER	*CELSTIA*	WARD, NEW YORK		CARGO TO J.O. SMITH, J. BROSNAHAM, A. MCVOY, PATTISON & AVERY, C. WINTERS, E.W. DORR, H. HYER, J. STRONG, BROOKS & CO.
SCHOONER	*CIEERO*	SPEED, NORFOLK	69,000 FT LUMBER	BY A. MCVOY
BRIG	*CREED*	FRISBEE, CHARLESTON	ASSORTED CARGO FROM N. ORLEANS	BY A. MCVOY
SHIP	*DANUBE*	CHACE, NEW YORK	1000 BALES HAY	
SCHOONER	*DIAMOND*	STONE, NEW ORLEANS		CARGO TO FORSYTH & SIMPSON
SCHOONER	*DIAMOND*	STONE, NEW ORLEANS	41,000 FT LUMBER, 150,000 LATHS	BY FORSYTH & SIMPSON

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*DIAMOND*	MACK, NEW ORLEANS	20,000 FT LUMBER	BY C.P. KNAPP
SCHOONER	*DORA*	BOGHIEH, NEW ORLEANS	23,000 FT LUMBER, 8,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*DORA*	BOGHICH, NEW ORLEANS		CARGO TO J. HONACHER, S. BAROIA
SCHOONER	*DORA*	BOGHICH, NEW ORLEANS		
SCHOONER	*DORA*	BOGHICH, NEW ORLEANS	21,000 FT LUMBER, 10,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*DORA*	BOGHICH, NEW ORLEANS	22,000 FT LUMBER, 10,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*EAGLE*	LEWIS, NEW ORLEANS	BALLAST	
SCHOONER	*ELLA*	SCHEMBECK, NEW ORLEANS	BALLAST	
SCHOONER	*ELLA*	SCHEMBECK, NEW ORLEANS	82,000 FT LUMBER, 9,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*ELLA*	SCHEMBECK, NEW ORLEANS	75,000 FT LUMBER, 19,000 SHINGLES	BY CRIGLAR AND CO
SCHOONER	*ELLA*	SCHEMBECK, NEW ORLEANS		
SCHOONER	*ELLA*	SCHEMBECK, NEW ORLEANS		
SCHOONER	*EUGENE*	SAUNDERS, ST. MARKS	BALLAST	
SCHOONER	*EUGENE*	SAUNDERS, NEW ORLEANS	50,000 FT LUMBER, 15,000 LATHS	BY CRIGLAR AND CO
STEAMER	*GEN. HAMER (*owned by Forsyth and Simpson)	BOARDMAN, NEW ORLEANS		
STEAMER	*GEN. HAMER*	BOARDMAN, NEW ORLEANS	59,000 FT LUMBER, 24,000 LATHS, DOORS, BLINDS BY FORSYTH & SIMPSON, 23 BALES COTTON BY FOREHAM & BROTHERS	
STEAMER	*GEN. HAMER*	BOARDMAN, NEW ORLEANS		

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
STEAMER	*GEN. HAMER*	SIMPSON, NEW ORLEANS		CARGO TO PATTISON & AVERY, E.W. DORR, BAILS & HART
STEAMER	*GEN. HAMER*	SIMPSON, NEW ORLEANS	60,000 FT LUMBER, 73,000 LATHS, SAS?, AND PANNEN DOORS	BY FORSYTH & SIMPSON
STEAMER	*GEN. HAMER*	ROWE, NEW ORLEANS		
STAMER	*GEN. HAMER*	ROWE, NEW ORLEANS	63,000 FT LUMBER, 43,000 LATHS, QUANTITY OF SASH, PANNELL DOORS AND BLINDS	BY FORSYTH & SIMPSON
STEAMER	*GEN. HAMER*	SIMPSON, NEW ORLEANS	86,000 FT LUMBER, 21,000 LATHS, A QUANTITY OF SASH, PANNELL DOORS AND BLINDS	BY FORSYTH & SIMPSON
STEAMER	*GEN. HAMER*	ROWE, NEW ORLEANS		CARGO TO BURTS & HART, PATTERSON & AVERY, Z. SACHET AND W.J. STOKES
STEAMER	*GEN. HAMER*	ROWE, NEW ORLEANS		
STAMER	*GEN. HAMER*	ROWE, NEW ORLEANS	68,000 FT LUMBER, 20 BALES COTTON YARN, 270 PAIR SASH	BY FORSYTH & SIMPSON
STEAMER	*GEN. HAMER*	ROWE, NEW ORLEANS		
STEAMER	*GEN. HAMER*	ROWE, NEW ORLEANS	61,000 FT LUMBER, 17,000 LATHS	BY FORSYTH & SIMPSON
SCHOONER	*GEN. HARRISON,*	LEE, LOUISIANA		
SCHOONER	*GEN. TAYLOR*	BROWN, POINT ISABEL	32,000 FT LUMBER, 75,000 LATHS	BY W.J. KEYSER & CO
SCHOONER	*GEN. W. H. HARRISON*	COZZENS, NEW ORLEANS		
SCHOONER	*GEN. W. H. HARRISON*	COZZENS, NEW ORLEANS	BALLAST	
SCHOONER	*GEN. W. H. HARRISON*	COZZENS, NEW ORLEANS		
SCHOONER	*GENEVA*	WALLING, NEW ORLEANS	35,000 FT LUMBER	
SCHOONER	*GENEVA*	WALLING, NEW ORLEANS		

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*GEORGE E. PRESCOT*	GILKEY, CAMDEN, ME	1414 CASK LIME	
SCHOONER	*GOV. BENNETT*	SNOW, MOBILE		
SCHOONER	*GOV. BENNETT*	SNOW, NEW ORLEANS	140 BALES COTTON, 7,000 FT LUMBER	
SCHOONER	*GOV. BENNETT*	SNOW, NEW ORLEANS	41,000 FT LUMBER, 12,000 SHINGLES, 5,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*GOV. BENNETT*	LEE, APALACHICOLA	BALLAST	
SCHOONER	*GOV. BENNETT*	LEE, NEW ORLEANS	7,000 BRICKS, 12,000 FT LUMBER	
SCHOONER	*HENRY DELANY*	DOLE, LAVACCA	67,000 FT LUMBER, 50,000 SHINGLES	BY A. MCVOY
BARQUE	*HUALEE*	CLARK, NEW YORK		
SCHOONER	*ISAAC FRANKLIN*	FROST, PORTSMOUTH		
SCHOONER	*J. T. BRADFORD*	TAYLOR, TAMPA BAY	BALLAST	
SCHOONER	*J. T. BRADFORD*	TAYLOR, MOBILE		
SCHOONER	*J. T. BRADFORD*	TAYLOR, NEW ORLEANS	BALLAST	
SCHOONER	*J. T. BRADFORD*	TAYLOR, NEW ORLEANS	62,000 FT LUMBER, 20,000 SHINGLES	BY CRIGLAR AND CO
SCHOONER	*JAMES K. POLK*	FREDERICKS, NEW ORLEANS		
SCHOONER	*JAMES K. POLK*	FREDERICKS, NEW ORLEANS	BALLAST	
SCHOONER	*JENNY LIND*	NICOL, APALACHICOLA		
SCHOONER	*JENNY LIND*	NICOL, APALACHICOLA		
SCHOONER	*JENNY LIND*	NICOL, NEW ORLEANS	BALLAST	

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
BRIG	*JOHN R. RHOADS*	YORK, BALTIMORE	117,000 FT LUMBER	BY A. MCVOY
SCHOONER	*L. F. ROGERS*	ASHBEY, NEW ORLEANS	80,000 FT LUMBER 10,000 LATHS	
SCHOONER	*LAMARTINE*	ROBBINS, POINT ISABEL		
SCHOONER	*LOIS*	PUNNELLL, NEW ORLEANS		CARGO TO W. J. KEYSER, GILBERT & SECOR, M.N. SNOWDEN, J.G. MICHALOFFSKY
SCHOONER	*LOIS*	PANNELL, NEW ORLEANS		CARGO TO W.J. KEYSER & CO, M.N. SNOWDEN, G.W. BARKLEY, J.&S. GONZALEZ
SCHOONER	*LOIS*	PUNNELLL, NEW ORLEANS	35,000 FT LUMBER, 10 BALES COTTON	BY CRIGLAR & CO
SCHOONER	*LOIS*	PANNELL, NEW ORLEANS	42,000 FT LUMBER, 50 JUNIPER PAILS	BY KEYSER
SCHOONER	*LOUISANA*	ROBINSON, BILOXI	CYPRESS LUMBER	BY FORSYTH & SIMPSON
SCHOONER	*LOUISANA*	ROBINSON, BILOXI	35,000 FT LUMBER	BY FORSYTH & SIMPSON
SCHOONER	*LOUISIANA*	ROBINSON, BILOXI	BALLAST	
SCHOONER	*LOUISIANA*	ROBINSON, BILOXI	BALLAST	
SCHOONER	*MARIA*	JOHNSON, NEW ORLEANS	28,000 FT LUMBER	
SCHOONER	*MARIA*	JOHNSON, NEW ORLEANS	28,000 FT LUMBER	BY C.P. KNAPP
SCHOONER	*MARTHA* (owned by Forsyth and Simpson)	WEBBER, NEW ORLEANS		
SCHOONER	*MARTHA*	WEBBER, NEW ORLEANS	67,000 FT LUMBER	BY FORSYTH & SIMPSON
SCHOONER	*MARTHA*	WEBBER, NEW ORLEANS		
SCHOONER	*MARTHA*	WEBBER, NEW ORLEANS	155 BALES COTTON CLOTH, 30 PAIR SASH, 45,000 FT LUMBER	BY FORSYTH & SIMPSON

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*MARTHA*	WEBBER, NEW ORLEANS		
SCHOONER	*MARY ELLEN*	MILLER, APALACHICOLA		
BRIG	*MARY FARROW*	WARREN, PORTSMOUTH	80,000 FT PINE LUMBER, LIVE OAK	BY GILBERT & SECOR
SCHOONER	*MELROSE*	MORE, NEW YORK		CARGO TO E. H. DELANO
SCHOONER	*MOBILE*	MANRY, MOBILE		CARGO TO E.D. AVERY, NAVY AGENT
SCHOONER	*MOBILE*	MAURY, MOBILE		CARGO TO H. HYER, A. MCVOY
SCHOONER	*MOBILE*	MAURY, MOBILE	SUNDRIES TO ORDER	
SCHOONER	*MOBILE*	MAURY, MOBILE		
SCHOONER	*MOBILE*	MAURY, MOBILE		
SCHOONER	*MOBILE*	MAURY, MOBILE		
SCHOONER	*MOBILE*	MAURY, MOBILE		
SCHOONER	*MOBILE*	MAURY, MOBILE		
SCHOONER	*MOBILE*	GRAY, MOBILE		
SCHOONER	*MOBILE*	GRAY, MOBILE		
SCHOONER	*MOBILE*	GRAY, MOBILE		
SCHOONER	*MYSTIE*	SMITH, TAMPA BAY	BALLAST	
SCHOONER	*MYSTIE*	SMITH, TAMPA BAY	60,000 FT LUMBER, 5,000 SHINGLES	BY CRIGLAR AND CO
SCHOONER	*N. C. V.*	WRIGHT, ST. ANDREWS	LUMBER	

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*N. C. V.*	WRIGHT, ST. ANDREWS	33,000 FT LUMBER	BY R. H. ROGERS
SCHOONER	*NEW REPUBLIC*	WHEELER, NEW YORK	78,000 FT LUMBER	BY T. J. GARDNER
BRIG	*ORIZAVA*	HINDS, BOSTON	138,000 FT LUMBER	BY A. MCVOY
SCHOONER	*PALSALAGA?*	MIHIGAN?, NEW ORLEANS		
BRIG	*PARTHENON*	DAVIS, ST. ANDREWS	CANNON BALLS AND SHELLS	TO CMMANDANT NAVY YARD
SCHOONER	*PATSALAGA*	MILLIGAN, NEW ORLEANS	25,000 FT LUMBER	
BRIG	*POCONOCKET*	BREWER, PRANKFORT, ME	GRANITE	
SCHOONER	*POWHATAN*	CARO, NEW ORLEANS	58,000 FT LUMBER, 35,000 LATHS	BY FORSYTH & SIMPSON
SCHOONER	*POWHATTAN*	CARO, NEW ORLEANS	160 BALES DOMESTICS, 44,000 FT LUMBER	BY FORSYTH & SIMPSON
SCHOONER	*POWHATTAN*	CARO, NEW ORLEANS	57,000 FT LUMBER, 20,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*POWHATTEN*	CARO, NEW ORLEANS		CARGO TO H.F. INGRAHAM, E.W. DORR, C.P. KNAPP, M. DEL BARCO, J. RUBY, PATTISON & AVERY, F. BOBE, W.B. DAVIS, PALMES & CO, J. ROSIQUE
SCHOONER	*PRINCETON*	OLDMIZON, MOBILE		
SCHOONER	*RANDALL MARSHALL*	WEST, NEW ORLEANS		BOUND FOR TAMPA BAY, PUT IN FOR BAD WEATHER
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS	BALLAST	
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS	BALLAST	
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS		

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS	1,400 BARRELS EAR CORN	TO CRIGLAR & CO
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS	70,000 FT LUMBER	
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS	70,000 FT LUMBER	
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS		
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS		
BRITISH BARQUE	*SNOWDEN*	SKAM, NEW ORLEANS		TO A. MCVOY
SCHOONER	*SOUTHERNER*	MORGAN, NEW ORLEANS	52,000 FT LUMBER	BY CRIGLAR AND CO
SCHOONER	*SPLENDID*	BUNNELL, NEW YORK		CARGO TO PATTISON & AVERY, GILBERT & SECOR, US NAVY AGENT, J.O. SMITH
SCHOONER	*SPLENDID*	BUNNELL, NEW YORK	100 BARRELS TURPENTINE BY A. MCVOY, 7 BALES DEER SKIN, 35 HIDES, 8 BALES COTTON, 67,000 FT LUMBER	BY W.J. KEYSER & CO
SCHOONER	*ST. DENYS*	BROMAN, KEY WEST	20,000 FT LUMBER, 28,000 SHINGLES, 20,000 LATHS	
SCHOONER	*SUSAN LUDWIG*	BENNETT, NEW YORK		
SCHOONER	*TALLAHASSEEE*	ROOKE, LAVACA	71,000 FT LUMBER, 38,000 SHINGLES	BY A. MCVOY
SCHOONER	*TWO MARYS*	APALACHICOLA	BALLAST	
SCHOONER	*TWO MARYS*	SILVIA, ST. ANDREWS BAY		
SCHOONER	*VICTOR*	PERRY, NEW ORLEANS	41,000 LUMBER	BY CRIGLAR & CO
SCHOONER	*WALTER*	M. PRITCHET, NEW ORLEANS		CARGO TO C.P. KNAPP, AND J, HONACKER
SCHOONER	*WALTER M.*	PRITCHETT, NEW ORLEANS	23,000 FT LUMBER, 8,000 LATHS	BY C.P. KNAPP

TABLE A (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*WALTER M.*	PRITCHETT, NEW ORLEANS	24,000 FT LUMBER	BY C.P. KNAPP
SCHOONER	*WASHINGTON*	?????, NEW ORLEANS		
BRIG	*ZAVALLA*	FRIEND, PRANKFORT, ME	GRANITE	
SCHOONER	???????	WALLING, NEW ORLEANS	35,000 FT LUMBER	

Data for Appendix A was gathered sourcing section of *Pensacola Gazette* titled Port. Arrivals and departures were noted one day each week for the year.

APPENDIX B

LIST OF MERCHANT VESSELS DOCUMENTED BY *PENSACOLA GAZETTE* 1855

TABLE B
LIST OF MERHCANT VESSELS OPERATING IN PENSACOLA IN 1850

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
BARQUE	*R.H. KNIGHT*	LUSCOMB, HAVANA	(OUT)173,818 FT LUIMBER	BY KEYSER, JUDAH & CO
BARQUE	*C. B. HAMILTON*	CHASE, HAVANA	(OUT)177,676 FT LUMBER	BY KEYSER, MCVOY & CO
BARQUE	*ROLLA*	RUGERS, NEW YORK	(OUT) 141,926 FT LUMBER, 30,000 LBS COPPER	BY KEYSER, MCVOY & CO, COPPER BY C.P. KNAPP & CO
BARQUE	*HAMILTON*	CHASE, HAVANA	(IN)FRUIT	TO KEYSER, JUDAH & CO
BARQUE	*ROBERT KNIGHT*	LASCUMB, HAVANA	(IN) CARGO	TO KEYSER, JUDAH & CO
BARQUE	*OCTAVIA*	WOODBURY, MATANZAS	(OUT) 151,000 FT LUMBER	W. H. JUDAH & CO
BARQUE	*ADELINE*	KLEINWORT, HAVANA	(OUT)	
BARQUE	*NASHUA*	BARILETTE, NEW YORK	(OUT)	
BRIG	*CONCHITA*	TREAT, HAVANA	(OUT)130,110 FT LUMBER	BY A. MCVOY
BRIG	*HENRY MATHEWS*	DAEREUAX, SEARSPORT	(IN) GRANITE	TO NAVY YARD
BRIG	*PLUMEAS*	CLARK, FRANKFORT	(IN)CARGO	TO NAVY YARD
BRIG	*PERSEVERANCE*	PLACE, NEW YORK	(IN)CARGO	TO W. H. JUDAH & CO
BRIG	*FRANCES JANE*	BEAN, BOSTON	(IN) ICE AND LUMBER	
BRIG	*PARAGON*	JOHNSON, ARANSAS BAY	(OUT)	
BRIG	*ABBY WATSON*	WATSON, TRINIDAD	(IN) BALLAST	
BRIG	*FREDONIA*	LORD, NEW YORK	(OUT)	
BRIG	*HUUTRESS*	VONPHITER, KEY WEST	(IN) SALT	

TABLE B (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
BRIG	*ISABELLA*	JEWETT, BOSTON	(OUT)	
BRIG	*JOHN A. TAYLOR*	FARUHAM, ROCKLAUD	(IN) CARGO	
SCHOOENR	*ELMA*	BELFOUR, NEW ORLEANS	(IN) BALLAST	
SCHOOENR	*ZULIME*	WEBBER, NEW ORLEANS	(IN)	
SCHOOENR	*SOUTHERN*	SNOW, NEW ORLEANS	(OUT) LUMBE	BY CRIGLAR AND CO
SCHOONER	*PHENIX*	WILLIAMS, NEW ORLEANS	(OUT) 48,629 FT LUMBER	B Y CRIGLAR AND CO
SCHOONER	*LUCY WITHAM*	MOLION, TORTUGAS	(OUT) 110,000 BRICK	BY ABERCROMBIE & CO
SCHOONER	*NEW REPUBLIC*	WALTERS, TORTUGAS	(OUT) 75,000 BRICKS	BY ABERCROMBIE & CO
SCHOONER	*VICTORIA*	WILLIAMS, GALVESTON	(OUT) 49,000 FT LUMBER, 10,000 LATHS	BY CRIGLAR
SCHOONER	*MONTERAY*	FAURCE, NEW ORLEANS	(OUT) 16,531 FT LUMBER, 68,630 LATHS	BY CRIGLAR & CO
SCHOONER	*DORA*	BOGHICH, NEW ORLEANS	(OUT) 21,798 FT LUMBER, 10,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*EMMA DE RUSSY*	COLE, GALVESTON	(OUT) 150,000 LATHS, 82,000 FT LUMBER, 40,000 SHINGLES	BY CRIGLAR AND CO
SCHOONER	*JAS. T. BRADFORD*	TAYLOR, NEW ORLEANS	(OUT)61,000 FT LUMBER, 15,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*PHENIX*	SMITH, NEW ORLEANS	(OUT) 39,000 FT LUMBER	BY CRIGLAR AND CO
SCHOONER	*SOUTHRON*	SNOW, NEW ORLEANS	(OUT) 62,000 FT LUMBER	BY CRIGLAR AND CO
SCHOONER	*W. H. MITCHELL*	EATON, WASHINGTON	(OUT) 149,105 FT LUMER	BY CRIGLAR AND CO
SCHOONER	*ELLA*	HARRISON, NEW ORLEANS	(OUT)63,000 FT LUMBER 30,000 LATHS	BY CRIGLAR, BATCHELDER & CO

TABLE B (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*SOUTHERN*	ELLIS, NEW ORLEANS	(OUT) 69,000 FT LUMBER, 29,000 LATHS	BY CRIGLAR, BATCHELOER & CO
SCHOONER	*POWHATAN*	CARO, NEW ORLEANS	(OUT)55,000 FT LUMBER, 35,000 LATHS	BY E.E SIMPON & CO
SCHOONER	*STAR*	BURNS, NEW ORLEANS	(OUT) 63,000 FT LUMBER, 40,000 LATHS, 7 BARRELS TURPENTINE	BY E.E. SIMPSON
SCHOONER	*MARTHA*	MILLER, NEW ORLEANS	(OUT) 52,264 FT LUMBER, 35,000 FT LATHS, 18 BALES COTTON, 40 BALES ___ GOODS	BY E.E. SIMPSON AND CO, BY H.AND G. FOREHEIMER, BY H.HYER
SCHOONER	*MARTHA*	MULER, NEW ORLEANS	(OUT)63,000, 17 BALES COTTON	BY E.E. SIMPSON, COTTON BY A. & J. FOREHLMER
SCHOONER	*MARTHA*	MILLER, NEW ORLEANS	(OUT) 45,316 FT LUMBER, 25 PANEL DOORS, 52 PAIR BLINDS, 250 SASH, 15, PAIR SASH DOORS, 100 BALES COTTON	BY E.E. SIMPSON, COTTON BY H. HYER
SCHOONER	*GOVERNOR*	ANDERSON, NEW ORLEANS	(OUT) 75,000 FT LUMBER, 50,000 LATHS, 60,000 SHINGLES	BY INGRAHAM

TABLE B (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*ZULIME*	WEBBER, NEW ORLEANS	(OUT)45,000 FT LUMBER	BY J. MITCHELL
SCHOONER	*CIVILITY*	GREEN, NEW ORLEANS	(OUT) 35,000 FT LUMBER, 48 BALES COTTON	BY J.C. CATER, BY KEYSER
SCHOONER	*BLOOM*	DALEY, NEW ORLEANS	(OUT)41,260 FT LUMBER	BY JACKSON MORTON
SCHOONER	*JENNY LIND*	SEAGREEN, NEW ORLEANS	(OUT) 25,905 FT LUMBER, 43 BALES COTTON, 40,634 FT LUMBER	BY KEYSER, JUDAH AND CO., BY MCVOY AND CO
SCHOONER	*WILLIAM & MARIA*	BARRETT, BALTIMORE	(OUT)192,000 FT LUMBER	BY KEYSER, JUDAH AND CO., BY MCVOY AND CO
SCHOONER	*MARY ELLEN*	WEIDST, N.O.	(OUT) 34,314 FT LUMBER 3,439 PICKETS, 44,000 LATHS	BY KEYSER, MCVOY & CO
SCHOONER	*CONQUEST*	JENKINS, NEW ORLEANS	(OUT) 50,000 FT LUMBER, 64 BALES COTTON	BY KEYSER, MCVOY & CO, COTTON BY KEYSER, JUDAH & CO
SCHOONER	*J. SIERRA*	WARLING, NEW ORLEANS	(OUT) 95,000 FT LUMBER	BY STOKES AND MICHELL
SCHOONER	*SOUTHERN*	SNOW, NEW ORLEANS	(OUT)50,000 FT LUMBER, 25,000 LATHS	BY W. L. CRIGLAR & CO
SCHOONER	*MAJOR DONALDSON*	LEWIS, BALTIMORE	(OUT)85,000 FT LUMBER	BY W. WEBB
SCHOONER	*SOUTH???*	KNOX, NEW ORLEANS	(OUT) 57,459 FT LUMBER, 10,000 LATHS	BY W.J. CRIGLAR AND CO

TABLE B (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*FANNY*	ROBERTS, NEW ORLEANS	(IN) BRICKS	FOR FORT BARRANCAS
SCHOONER	*CIVILITY*	GREEN, NEW ORLEANS	(OUT) 42,000 FT LUMBER	J. G. MCLEAN
SCHOONER	*WILLIAM CARROLL*	HAGAN, BUCKSPORT	(IN)CARGO	NAVY YARD
SCHOONER	*WILLIAM*	MILTON, KEY WEST	(IN)	TO ABERCROMBIE & CO
SCHOONER	*ELIZABETH*	ELLIS, NEW ORLEANS	(IN)CARGO	TO H. F. INGRAHAM
SCHOONER	*SAMUEL WELSH*	BARREU, ASPINWALL	(IN) CARGO	TO KEYSER, JUDAH & CO
SCHOONER	*GEN. TAYLOR*	MYERS, MOBILE	(IN) 53,000 FT LUMBER	TO NAVY AGENT
SCHOONER	*A.J. VIEO*	CARNER, NEW ORLEANS	(IN)	TO NAVY YARD
SCHOONER	*PAWHATAN*	CARO, NEW ORLEANS	(IN) CARGO	TO NAVY YARD
SCHOONER	*ALICE DAY*	ASHBEY, MATANZAS	(OUT) 120,000 FT LUMBER	W.H. JUDAH & CO
SCHOONER	*C. R. VICKERY*	HORTON, VERA CRUZ	(OUT)BALLAST	W.H. JUDAH & CO
SCHOONER	*PATSALAGA*	MILLIGAN, NEW ORLEANS	(IN)CARGO	WILLIAM B. DAVIS, M.N. SNOWDEN
SCHOONER	*DIAMOND*	BOWEN, NEW ORLEANS	(IN)CARGO	Z. SUCHETT
SCHOONER	*A.B. MOORE*	RUSSELL, INDIANOLA	(OUT)	
SCHOONER	*A.J. VIEO*	LIDDELL, NEW ORLEANS	(OUT) 37,000 FT LUMBER	
SCHOONER	*CIVILITY*	GREEN, NEW ORLEANS	(OUT) 183 BALES COTTON	
SCHOONER	*CIVILITY*	GREEN, NEW YORK	(OUT)	
SCHOONER	*DIAMOND*	BOWEN, NEW ORLEANS	(IN) CARGO	

TABLE B (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*DIAMOND*	BOWEN, NEW ORLEANS	(IN)	
SCHOONER	*EAGLE*	WINSLOW, NEW ORLEANS	(OUT)	
SCHOONER	*ELLA*	ELLIS, NEW ORLEANS	(IN)	
SCHOONER	*ELMA*	BELFOUR, NEW ORLEANS	(IN)	
SCHOONER	*ELMA*	BELFOUR, NEW ORLEANS	(OUT)	
SCHOONER	*ELMA*	BELFOUR, NEW ORLEANS	(IN)	
SCHOONER	*EMMA*	GOULD, TAMPA	(IN)	
SCHOONER	*G.B. SLOAT*	MEISHON, PHILADELPHIA	(OUT)	
SCHOONER	*HOPE & SUSAN*	PORTER, NEW ORLEANS	(IN)	
SCHOONER	*HOPE & SUSAN*	PORTER, MOBILE	(OUT) BALLAST	
SCHOONER	*HORNET*	MACK, NEW ORLEANS	(OUT)	
SCHOONER	*J. SIERRA*	WAILING, NEW ORLEANS	(OUT)80,000 FT LUMBER	
SCHOONER	*J. SIERRA*	WARLING, NEW ORLEANS	(OUT)	
SCHOONER	*JAS. T. BRADFORD*	TAYLOR, NEW ORLEANS	(OUT)	
SCHOONER	*JAS. T. BRADFORD*	TAYLOR, MADISONVILLE	(IN)	
SCHOONER	*JASPER*	TRESEA, APALACHICOLA	(IN)	
SCHOONER	*MARTHA*	MILLER, NEW ORLEANS	(IN)	

TABLE B (CONTINUED)

VESSEL TYPE	VESSEL NAME	OWNER/HOME PORT	NOTES	
SCHOONER	*MARTHA*	MILLER, NEW ORLEANS	(IN) CARGO	
SCHOONER	*MARTHA*	ROWE, NEW ORLEANS	(IN) CARGO	
SCHOONER	*MON???*	BETHEL, KEY WEST	(IN)	
SCHOONER	*MONTEREV*	FAUVE, NEW ORLEANS	(IN)	
SCHOONER	*MONTEREY*	PAUVO, NEW ORLEANS	(OUT)	
SCHOONER	*MORGAN*	????, ????	(IN)	
SCHOONER	*N. C. V.*	WHIGHT, ST. ANDREWS	(IN)	
SCHOONER	*N. C. V.*	WRIGHT, NEW ORLEANS	(OUT) 35,000 FT LUMBER	
SCHOONER	*PASCAGOULA*	HIBB, NEW ORLEANS	(IN)	
SCHOONER	*PHENIX*	WILLIAMS, APPALACIHOLA	(IN)	
SCHOONER	*POWHATAN*	CARO, NEW ORLEANS	(IN) CARGO	
SCHOONER	*POWHATAN*	CARO, NEW ORLEANS	(OUT)	
SCHOONER	*POWHATAN*	CARO, NEW ORLEANS	(IN)	
SCHOONER	*ROALES*	HARRISON, TAMPS	(IN)	
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS	(OUT)	
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS	(IN)	
SCHOONER	*SOUTHERN*	M???, NEW ORLEANS	(IN) CARGO	
SCHOONER	*SOUTHERN*	SNOW, NEW ORLEANS	(OUT)	

TABLE B (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*STAR*	BURNS, APALACHICOLA	(IN) BALLAST	
SCHOONER	*WALTER M.*	TAPKIN, NEW ORLEANS	(IN) BALLAST	
SCHOONER	*WAVE*	IRONS, INDIANOLA	(IN)	
SCHOONER	*WEST FLORIDA*	BURNS, NEW ORLEANS	(IN) CARGO	
SCHOONER	*WEST FLORIDA*	HARRISON, NEW ORLEANS	(IN) CARGO	
SCHOONER	*ZULETTE*	LAPKIN, INDANOLA	(IN)	
SCHOONER	*ZULIME*	WEBBER, NEW ORLEANS	(IN)CARGO	
SCHOONER	*ZULIME*	WEBBER, NEW ORLEANS	(IN) CARGO	
SCHOONER	*PACIFIC*	YALTS, HAVANA	(OUT)102,269 FT LUMBER	A. MCVOY
SCHOONER	*ELLA*	HARRISON, NEW ORLEANS	(OUT) 74,000 FT LUMBER 10,000 LATHS	BY CRIGLAR & CO
SCHOONER	*WEST FLORIDA*	HARRISON, NEW ORLEANS	(OUT) 40,000 FT LUMBER	BY CRIGLAR AND CO
SCHOONER	*?????? MARQUIZ*	LEND, NEW ORLEANS	(OUT) 33,131 FT LUMBER, 69,000 FT LUMBER, 29,000 LATHS	BY CRIGLAR, BATCHELOER & CO
SCHOONER	*STAR*	BURNS, NEW ORLEANS	(OUT)64,000 FT LUMBER, 50,000 LATHS	BY E.E. SIMPSON
SCHOONER	*MARTHA*	MILLLER, NEW ORLEANS	(OUT) 50,000 FT LUMBER, 130 DOORS, 76 PAIR BLINDS, 46 BALES COTTON, 11 BALES COTTON, 16 BALES COTTON, 105 BALES COTTON	BY E.E. SIMPSON, BY KEYSER, JUDAH, BY CATER AND LEIGH, BY HENRY HEYER
SCHOONER	*ZULIME*	WEBBER, NEW ORLEANS	(OUT)14,000 FT LUMBER, 28,000 LATHS	BY J.C. CATER, BY KEYSER
SCHOONER	*ALICE DAY*	MINOR, NEW ORLEANS	(OUT) 60,000 FT LUMBER, 30,000 LATHS	BY JOHN HUNT
SCHOONER	*M. MARCY*	RIDER, HAVANA	(OUT) 72,000 FT LUMBER	BY KEYSER, MCVOY & CO

TABLE B (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*CASPIAN*	BROWN, INDAINOLA	(IN)	
SCHOONER	*CIVILITY*	GREEN, NEW ORLEANS	(OUT)	
SCHOONER	*FAUNY*	FLANE, NEW ORLEANS	(IN)	
SCHOONER	*J.T. BRADFOR*	TAYLOR, NEW ORLEANS	(OUT)	
SCHOONER	*MARY ELLEN*	THOMPSON, ????	(IN)	
SCHOONER	*SARAH ELIZABETH*	WEBB, NEW ORLEANS	(IN)	
SCHOONER	*SOUTHRON*	SNOW, NEW ORLEANS	(IN) HAY	
SCHOONER	*WALTER M.*	TAPKIN, NEW ORLEANS	(IN) SHELLS TO NAVY YARD	
SCHOONER	*WALTER M.*	TAPKIN, NEW ORLEANS	(IN) SHELLS TO NAVY YARD	
SCHOONER	*WALTER M.*	TAPKIN, NEW ORLEANS	(IN)	
SCHOONER	*WEST FLORIDA*	HARRISON, NEW ORLEANS	(IN)	
SCHOONER	*ZULETTE*	LUFKIN, NEW YORK	(IN)	
SCHOONER	*ZULETTE*	LUFKIN, INIANOLA	(OUT)	
SCHOONER	*ZULIME*	WEBBER, NEW ORLEANS	(IN) CARGO	
SCJOONER	*HORNET*	MACK, NEW ORLEANS	(OUT)80,000 FT LUMBER, 45 BALES COTTON	BY AMOS & CO
SHIP	*SEA LION*	DAVIS, HANVAN	(IN)	
STEAMER	*GEN. HAMER*	BOARDMAN, NEW ORLEANS	(IN)CARGO	
STEAMER	*GORDON*	IVY, NEW ORLEANS.	(OUT)	

TABLE B (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
U.S. MAIL STEAMER	*FLORIDA*	SMITH, KEY WEST		
U.S. MAIL STEAMER	*FLORIDA*	COZZENS, KEY WEST		
U.S. MAIL STEAMER	*VANDERBILT*	FARWELL, NEW ORLEANS	(IN)	
U.S. STEAMMER	*FLORIDA*	COZZENS, KEY WEST	(OUT)	

Data for Appendix B was gathered sourcing section of Pensacola Gazette titled Port. Arrivals and departures were noted one day each week for the year.

APENDIX C

LIST OF MERCHANT VESSELS DOCUMENTED BY *PENSACOLA GAZETTE* 1857-1858

TABLE C
LIST OF MERCANT VESSELS OPERATING IN PENSACOLA 1857-1858

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
STEAMER	*NEW BOSTON*	L. BERRY & SON, GENVA	(IN) COTTON AND PRODUCE	KNAPP AND GONZALEZ
SCHOONER	*???? JANE*	LAWRENCE, MOBILE	(IN) CARGO	TO Z. SUCHETT
SCHOONER	*A. J. VIEW*	KOUN, NEW ORLEANS	(OUT) 29,219 FT LUMBER, 8,000 LATHS	BY CRIGLAR & CO
SCHOONER	*A. VIEW*	KOUN, NEW ORLEANS	(OUT) 35,000 FT LUMBER	BY CRIGLAR & CO
BRIG	*A.B. COOK*	LIGHTON, ????	(OUT) BALLAST	
BRIG	*A.C. MERRIMAN*	SENTER, NEW YORK	105 STICKS TIMBER, 28,000 FT LUMBER	BY W. L. CRIGLAR & CO
BARK	*A.H. STEPHENSON*	MOUNT, HAVANA	(OUT) 241,483 FT LUMBER	BY KEYSER MCVOY AND CO
SCHOONER	*AID*	ROSUCRANTZ, MOBILE	(IN) SALT	TO CHAS, C. BARKLEY
SCHOONER	*ALICE DAY*	MYERS, MOBILE	(IN)BALLAST	
SCHOONER	*ALICE DAY*	MYERS, NEW ORLEANS	(OUT) 83,500 FT LUMBER 17,000 LATHS	BY CRIGLAR & CO
BRIG	*AMANDULE?*	HUGHES, KEY WEST	(IN)	TO KNAPP AND GONZALEZ
SCHOONER	*ANN ELIZA*	SNOW, NEW ORLEANS	(IN)ASSORTED CARGO	
SCHOONER	*ANN ELIZA*	SNOW, NEW ORLEANS	(OUT) 17,000 FT LUMBER, 134,000 SHINGLES, 35 BALES COTTON	BY CARTER & LEIGH, BY SNOW AND BROTHER, BY KEYSER, CUSHMAN & CO
SCHOONER	*ANN ELIZA*	SNOW, NEW ORLEANS	(IN) CARGO	TO C.P.KNAPP, W. H. BAKER & CO
SCHOONER	*ANN ELIZA*	SNOW, NEW ORLEANS	(IN)	
SCHOONER	*ANN ELIZA*	SNOW, NEW ORLEANS	(IN)	
SCHOONER	*ANN ELIZA*	SNOW, NEW ORLEANS	(IN)	TO KNAPP AND GONZALEZ

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
BARQUE	*ARCADIA*		(IN)	
SHIP	*ATHENS*	BEARD, MOBILE	(OUT)	
U.S.MAIL STEAMSHIP	*ATLANTIC*	TALBOT, KEY WEST	(IN)	TO KNAPP AND GONZALEZ
STEAMER	*ATLANTIC*	NEW ORLEANS	(IN)	TO KNAPP AND GONZALEZ
SCHOONER	*AURELIA*	HERARD, TAMPA	(IN)	
SCHOONER	*AURELIA*	WILSON, NEW ORLEANS	(OUT)	
BRIG	*AZORES*	STEVENS, MALARZAS?	(IN) BALLAST	
BRIG	*AZORES*	STEVENS, NEW ORLEANS	(IN)	
BRIG	*AZORES*	STEVENS, HAVANA	(IN) BALLAST	TO KNAPP AND GONZALEZ
SCHOONER	*BURISSA*	FOWLER, MOBILE	(IN)	KNAPP AND GONZALEZ
SCHOONER	*BURISSI*	FOWLER,BILOXI	(IN) BALLAST	
U.S.MAIL STEAMSHIP	*CALHOUN*	RATHBURN, NEW ORLEANS	(IN)	TO KNAPP AND GONZALEZ
U.S. MAIL STEAMER	*CALHOUN*	RATHBURN, KEY WEST	(OUT)	BY KNAPP AND GONZALEZ
U.S. MAIL STEAMER	*CALHOUN*	COZZENS, NEW ORLEANS	(OUT)	BY KNAPP AND GONZALEZ
U.S. MAIL STEAMER	*CALHOUN*	RATHBUN, NEW ORLEANS	(IN)	TO KNAPP AND GONZALEZ
U.S.MAIL STEAMSHIP	*CALHOUN*	RATHBOUN, KEY WEST	(OUT)	BY KNAPP AND GONZALEZ
U.S. STEAMSHIP	*CALHOUN*	RANBURN, NEW ORLEANS	(IN) BOUND TO KEY WEST	BY KNAPP AND GONZALEZ
SCHOONER	*CHARLES*	TUCKET, NEW ORLEANS	(IN)BALLAST	

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*COLORADA*	SHELDON, POWDER HORN	(OUT) 75,483 FT LUMBER, 35,000 LATHS	BY KEYSER, MCVOY & CO
SCHOONER	*COLUMBIA*	SAFFORD, GALVESTON	(IN)BALLAST	
SCHOONER	*CONQUEST*	HANSON, NEW ORLEANS	(OUT) 48,000 FT LUMBER	BY CRIGLAR & CO
SCHOONER	*CRANDALL*	CHASE, KEY WEST	(OUT)	
SCHOONER	*DIAMOND*	BOWEN, NEW ORLEANS	(OUT) 40,000 FT LUMBER, 65,000 LATHS, 566 CUBIC FEET SASH	BY E.E. SIMPSON & CO
SCHOONER	*DIAMOND*	BOWEN, NEW ORLEANS	(OUT) 45,000 FT LUMBER, 44,000 LATHS, 900 CUBIC FT SASH	BY E.E. SIMPSON & CO
SCHOONER	*DIAMOND*	BOWEN, NEW ORLEANS	(OUT) 45,000 FT LUMBER 47,000 LATHS, 500 CUBIC FT SASH	BY E.E. SIMPSON & CO
SCHOONER	*DORA*	BERNER, MOBILE	(OUT)1,000 CUBIC FT SASH DOOR,	BY E.E. SIMPSON & CO
SCHOONER	*DORA*	BOGHICH, NEW ORLEANS	(OUT)22,000 FT LUMBER	BY J. MORTON
SCHOONER	*DORA*	BOGHICH, NEW ORLEANS	(IN)	
SCHOONER	*DORA*	BOGHICH, NEW ORLEANS	(IN)	
BARQUE	*E. WRIGHT*	GIBBS, BOSTON	(OUT) 174,017 FT LUMBER	BY KEYSER JUDAH AND CO
BRIG	*EAGLE*	MCNEIL, APALACHICOLA	(IN)	
SCOONER	*ELIZA*	SNOW,NEW ORLEANS	(OUT)	
SCHOONER	*ELLA*	DOLE, PHILADELPHIA	(OUT) 150,150 FT LUMBER	BY KEYESER MCVOY & CO
SCHOONER	*ELLA*	ROBERTSON, NEW ORLEANS	(IN)	
SCHOONER	*ELLA*	ROBERTSON, NEW ORLEANS	(OUT) 75,000 FT LUMBER, 25,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*ELLA*	ROBERSTON, NEW ORLEANS	(IN) CARGO	BY CRIGLAR & CO

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
BRIG	*ELLEN JEWETT*	REED, FRANKFORT	(IN) BALLAST	TO KNAPP AND GONZALEZ
SCHOONER	*EMELINE*	HAIGHT, CONARDE, HAVANA	(IN)	
BRIG	*EMILY W. SEYBURN*	NICKELS, KEY WEST	(IN) BRICK AND STONE TO NAVY YARD	TO KEYSER, JUDAH & CO
SCHOONER	*EMMA DE RUSSEY*	ROACH, INDIANOLA	(OUT) 75,000 FT LUMBER, 10,000 LATHS, 300 CUBIC FEET SASH	BY CRIGLAR & CO\
SCHOONER	*EMMA DE RUSSEY*	ROACH, INDIANOLA	(IN)	
SCHOONER	*EMMA DE RUSSEY*	BERNER, NEW ORLEANS	(OUT)70,000 FT LUMBER, 15,000 LATHS	BY W. L. CRIGLAR & CO
SCHOONER	*EMMA DE RUSSEY*	BERNER,NEW ORLEANS	(OUT) 75,000 FT LUMBER	BY CRIGLAR AND CO
SCHOONER	*ENNIE*	TACONI, NEW ORLEANS	(OUT)	
SCHOONER	*ESSEX*	POST, NEW YORK	(IN) CARGO	TO KEYSER JUDAH AND CO
U.S. TRANSPORT STEAMER	*FASHION*	BUKER, TAMPA	(IN) BOUND FOR N.O.	
SCHOONER	*FLOMERFELD?*	STRING, TORTUGAS	(IN)	TO WM. H. BAKER & CO
SHIP	*FORTITUDE*	LORD, MOBILE	(IN)BALLAST	TO KNAPP AND GONZALEZ
BARK	*GEN. JONES*	SALFREY, HAVANA	(IN) CARGO	TO WM. H. BAKER & CO
SPANISH SHIP	*GEN. MINA*	ORTEGAN, HAVANA	(IN)BALLAST	TO KEYSER, MCVOY & CO
SHIP	*GEN. MINA (*SPANISH*)*	ORTIGA, VIGO (SPAIN)	(OUT) 202,807 FT LUMBER	BY KEYSER, MCVOY & CO
U.S. MAIL STEAMER	*GEN. RUSK*	COZZENS, KEY WEST	(IN)	BY KNAPP AND GONZALEZ
U.S. MAIL STEAMER	*GEN. RUSK*	COZZENS, KEY WEST	(IN)	TO KNAPP AND GONZALEZ
U.S. MAIL STEAMER	*GEN. RUSK*	COZZENS, NEW ORLEANS	(OUT)	BY KNAPP AND GONZALEZ

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
U.S. STEAMSHIP	*GEN. RUSK*	COZZENS, KEY WEST	(IN) BOUND FOR N.O.	BY KNAPP AND GONZALEZ
SCHOONER	*GEN. SCOTT*	HOLBROOK,NO	(OUT)23,000 FT LUMBER, 40,000 LATHS	BY W. L. CRIGLAR & CO
SCHOONER	*GEN. SCOTT*	HUNTINGTON, NO	(IN) 400 BARRELS SHELL	TO C.P. KNAPP
SHIP	*GEN. WASHINGTON*	POULAND, MOBILE	(IN) BALLAST	TO KEYSER, JUDAH & CO
SCHOONER	*GEORGE AND ADAMS*	C????, GALVESTON	(OUT) 160,000 FT LUMBER, 107 BALES COTTON	BY PIERCE, BY SUNDRY PERSONS
SCHOONER	*GLENVIEW*	BIXLER, BOSTON	(OUT)	
SCHOONER	*GLENVIEW*	BANE, CARDENAS	(IN)	TO WM. H. BAKER & CO
BRIG	*GOLDEN LEAD*	JOHNSON, NEW YORK	(OUT) 195,000 FT LUMBER	BY CRIGLAR & CO
BARK	*H. STEVENS*	FROST, KEY WEST	(IN)	TO KEYSER JUDAH AND CO
BRIG	*HAMILTON*	BAKER, TORTUGAS	(OUT)	
SCHOONER	*HANNAH*	O WHITMORE, BOSTON	(IN) 121 TONS ICE	TO J.R. BROOKS
SCHOONER	*HARD SCRABBLE*	GREGORY, INDIANNOLA	(IN) HAY	TO KEYSER JUDAH AND CO
SCHOONER	*HARPER*	HARRIMAN, TAMPICO	(OUT) 100,000 FT LUMBER	
SCHOONER	*HARPER*	HOS???	(IN) GRANITE TO NAVY YARD, HAY	
SCHOONER	*HARRIET LEWIS*	SAUNDERS, JAMAICA	(IN)DYE WOOD AND GU	TO MASTER
SCHOONER	*HARRIET LOUIS*	SAUNELS, PORT LAVACA	(IN)	TO KNAPP AND GONZALEZ
SCHOONER	*HORNET*	MARK, NO	(IN)	
SCHOONER	*HORNET*	MACK, NO	(IN)	

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*HORNET*	MACK, NEW ORLEANS	(IN)	TO CRIGLAR & BATCHELDOR
SCHOONER	*HORNET*	MACK,NEW ORLEANS	(IN)	
BRIG	*ISABELLA JEWELL*	REED, HAVANA	(OUT) 158,179 FT LUMBER, 100 BUSHLES, GROUND PEAS	MERRITT & MCCONNELL
BRIG	*ISSABELLA JEWETT*	REID, ????	(IN) FRUIT	TO KNAPP AND GONZALEZ
SCHOONER	*J. CRANDALL*	CHASE, FOR JEFFERSON	(OUT) BRICKS	BY BACON & ABERCROMBIE
SCHOONER	*J. SIERRA*	ROBERTS, POWDER HORN	(OUT) 80,000 FT LUMBER	BY CRIGLAR AND CO
BARK	*J.B. JOHNSON*	BLAKE, MOUTEVIDEO	(IN)	TO KEYSER JUDAH AND CO
SCHOONER	*J.T. BRADFORD*	TAYLOR, TAMPA	(IN)	
BARK	*J.W. FRIEND*	FRIEND, SEDGEWICK	(IN)	
SCHOONER	*JAMES DAVIS*	GINNS, PORTSMOUTH	(OUT) 136 STICKS TIMBER	VY KEYSER MCVOY AND CO
SCHOONER	*JAS. F. SMITH*	SNOW, GALVESTON	(IN)BALLAST	TO KNAPP AND GONZALEZ
SCHOONER	*JOS. SIERRA*	ROBERTS, INDIANOLA	(IN) BEEF & TALLOW	TO MASTER
SCHOONER	*JOS. SMITH*	SPARROW, PORT LAVACCA	(OUT)	
SCHOONER	*JOSEPH GRICE*	ROGERS, KEY WEST	(IN)	TO KNAPP AND GONZALES
SCHOONER	*JULIA ???*	LEAWING, ASPINWALL	(IN)	
BRIG	*KALLATHARDIN?*	ANESBURY, ST. THOMAS	(IN)	TO KNAPP AND GONZALEZ
SCHOONER	*KATE SUMLER?*	ANDRE, MOBILE	(IN)	
BARK	*LAWREGE (*SWEDISH)	SELSTROM, CAPE DE VERDE	(IN)	

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*LIZZIE MEZZICK*	HANSON, NO	(IN) CARGO	TO E.E. SIMPSON & CO
SCHOONER	*LIZZIE MEZZICK*	ROWE, NO	(IN)	
SCHOONER	*LIZZIE MEZZICK*	JOHNSON,NO	(IN)	
SCHOONER	*LIZZIE MEZZICK*	ROWE,NO	(IN) CARGO	TO E.E. SIMPSON & CO
SCHOONER	*LOUISA*	NEWCOMB, INDIANOLA	(IN) HAY	TO KEYSER JUDAH AND CO
SCHOONER	*LUCY WHITHAM*	MILTON, FT. JEFFERSON	(OUT) 109,000 BRICKS	BY BACON & CO
SCHOONER	*LUCY WHITHAM*	MILTON, FT. JEFFERSON	(OUT)80,000 BRICKS, 11,480 FT LUMBER	BY BACON AND ABERCROMBIE
SCHOONER	*LUCY WHITHAM*	MILTON, FT. JEFFERSON	(IN)	
SCHOONER	*LUCY WHITHAM*	WALINGTON, FOR JEFFERSON	(OUT) 100,000 BRICKS AND 10,000 FT LUMBER	BY BACON & ABERCROMBIE
SCHOONER	*MAGNET*	SHACKFORD, ST. THOMAS	(IN) BALLAST	
SCHOONER	*MAJOR BACHE*	COOPER, GALVESTON	(IN)	
SCHOONER	*MAJOR BACHE*	COOPER, GALVESTON	(OUT)	
SCHOONER	*MARTHA*	HARRISON, NO	(OUT) 55,000 FT LUMBER, 800 CUBIC FEET SASH	BY E.E. SIMPSON & CO
SCHOONER	*MARTHA*	HARRISON, NO	(OUT)	
SCHOONER	*MARTHA*	HARRISON, NO	(OUT)	
SCHOONER	*MARTHA*	HARRISON, NO	(OUT)	
SCHOONER	*MARTHA*	HARRISON, NO	(OUT) 65,650 FT LUMBER, 200 CUBIC FT SASH	BY E.E. SIMPSON & CO
BRIG	*MARTHA HILL*	DUNNELLS, KEY WEST	(IN)	W. H. BAKER AND CO

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*MARTON*	TAYLOR, HAVANA	(OUT)	
SCHOONER	*MARY*	MOORE, NO	(OUT) 50,000 FT LUMBER, 40,000 FT LATHS	BY KEYSER MCVOY AND CO
BRIG	*MARY*	HAMILTON, HAVANA	(IN) CARGO	TO WM. H. BAKER & CO
STEAMER	*MARY CLIFTON*	????, GENEVA		
SCHOONER	*MARY ELLA*	WOOD, GALVESTON	(IN)	
SCHOONER	*MARY ELLEN*	GAREETSON, NO	(IN)ASSORTED CARGO	
SCHOONER	*MARY ELLEN*	GAREETSON, NO	(OUT) 264,000 LATHS	BY KEYSER, MCVOY & CO
SCHOONER	*MARY ELLEN*	ROWE, NO	(OUT)8,237 FT LUMBER, 194,200 LATHS, 60 BALES COTTON	BY KEYSER, MCVOY & CO, COTTON BY GUNDERCHEIMER
SCHOONER	*MARY ELLEN*	ROWE, NO	(IN)CARGO	TO KEYSER, MCVOY & CO
SCHOONER	*MARY ELLEN*	GAREETSON, NO	(OUT)	
SCHOONER	*MARY ELLEN*	GARETSON, NO	(IN)	TO KNAPP AND GONZALEZ
BRIG	*MARY HAMILTON*	BAKER, MOBILE	(IN) BALLAST	TO KNAPP AND GONZALEZ
BRIG	*MARY HAMILTON*	BAKER, NEW YORK	(OUT)8,000 FT LUMBER	
SCHOONER	*MATCHLESA*	CLARK, ATTAKAPAS?	(OUT) BALLAST	
SCHOONER	*MAY*	MOORE, NO	(IN)	
SCHOONER	*MO??TON*	MCGEARY, CARTHAGENA	(IN)BALLAST	
SCHOONER	*MONTEREY*	FOURIA, NO	(OUT) 23,413 FT LUMBER	BY CRIGLAR AND CO
SHIP	*MONTEZUMA (*BRITISH)	HANNAH, MOBILE	(IN)	

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*N. J. BRAYTON*	ROGERS, NO	(OUT)BALLAST	
SCHOONER	*NAMEANG*	ROGERS, KEY WEST	(IN)	
SCHOONER	*NAMEANG*	ROGERS, PORTSMOUTH, N.H.	(OUT) 28,000 FT LUMBER, 111 STICKS TIMBER	BY KEYSER MCVOY AND CO
BARQUE	*NASAMISSIC?*	CARR, RIO JANEIRO	(OUT) 179,000 FT LUMBER	BY MASTER
STEAMER	*NEW BOSTON,*	BERRY, GENEVA	(OUT) 1300 BARRELS	BY KNAPP AND GONZALEZ
SCHOONER	*ONWARD*	HOPKINS,	(OUT) 34,000 FT LUMBER	BY KNAPP AND GONZALEZ
SCHOONER	*P????*	LATHAN, GALVESTON	(OUT) 62,512 FT LUMBER	BY W. MILLER
SCHOONER	*PHEONIX*	HARRISON, NO	(OUT) 25,200 FT LUMBER 86 BALES COTTON	BY CRIGLAR AND CO BY PENEY & CO
SCHOONER	*PHOENIX*	BROWN, NO	(IN) 1,000 SHELLS TO C.P. KNAPP	
SCHOONER	*PHOENIX*	BROWN, NO	(IN)	
SCHOONER	*PINTA*	LATHEM, GALVESTON	(IN)BALLAST	
SCHOONER	*PINTA*	LUTHAM, TAMPICO	(OUT) 62,000 FT LUMBER, 26,325 SHINGLES,	BY KEYSER, MCVOY & CO
SCHOONER	*PINTA*	LATHAM, GALVESTON	(OUT)	
SCHOONER	*PINTA*	LUTHAM, POWDER HORN	(OUT) 91,000 FT LUMBER	BY KEYSER JUDAH AND CO
BRIG	*POINTED*	HILL, HAVANA	(OUT) 2,000,898 FT LUMBER?	BY KEYSER JUDAH AND CO
SCHOONER	*POWHATAN*	CARO, NO	(OUT)48,000 FT LUMBER, 7 BOXES TABACCO, 250 BARRELS LIME	BY H. HYER, BY J. SIERRA
SCHOONER	*POWHATAN*	CARO, NO	(IN) CARGO	
SCHOONER	*POWHATAN*	CARO, NO	(IN) CARGO	

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
BRIG	*PULASKI*	HATHORN, NEW YORK	(IN) CARGO	TO KEYSER, JUDAH & CO
SHIP	*RATHBONE*	PRATT,	(OUT) 667,447 FT D???	BY KNAPP AND GONZALEZ
SCHOONER	*REBECCA*	LAWRENCE, MOBILE	(IN)	
MAIL STEAMER	*ROBERT*	WATERMAN, KEY WEST	(IN)	TO KNAPP AND GONZALEZ
MAIL STEAMER	*ROBERT*	WATERMAN, NO	(OUT)	BY KNAPP AND GONZALEZ
BRIG	*ROLLERSON*	ORLANDO, BOSTON	(IN)	TO KEYSER, JUDAH & CO
BRIG	*ROLLING WAVE*	COLE, GALVESTON	(IN)	TO KEYSER JUDAH AND CO
BARK	*SARAH*	B. H. HALE CROWTHER, HAVANNA	(OUT) 140,854 FT LUMBER	KEYSER, MCVOY AND CO
SCHOONER	*SISTER KATE*	TERRER, NO	(OUT)29,395 FT LUMBER, 20,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*SOUTHERN*	PERRY, NO	(OUT)50,000 FT LUMBER	BY CRIGLAR AND CO
SCHOONER	*SOUTHERN INDEPENDENCE*	GREEN, NO	(OUT)72,687 FT LUMBER, BY W. L. CRIGLAR & CO	
SCHOONER	*SOUTHERN INDEPENDENCE*	GREEN, NO	(IN)	
SCHOONER	*SOUTHRON*	PERRY, NO	(IN) ASSORTED CARGO	
SCHOONER	*SOUTHRON*	PERRY, NO	(OUT)65,000 FT LUMBER	BY MASTER
SCHOONER	*SOUTHRON*	PERRY, NO	(OUT) 60,000 FT LUMBER	BY CRIGLAR & CO
SCHOONER	*SOUTHRON*	PERRY, NO	(IN) CARGO	
SCHOONER	*SOUTHRON*	PERY	(IN)CARGO	TO W. L. CRIGLAR & CO
SCHOONER	*SOUTHRON*	PERRY, NO	(OUT) 69,000 FT LUMBER	BY CRIGLAR & CO

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*SOUTHRON*	PERRY, NO	(OUT) 55,000 FT LUMBER, 37,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*SOUTHRON*	PERRY, NO	(IN)	TO KNAPP AND GONZALEZ
SCHOONER	*SOUTHRON*	PERRY, NO	(OUT) 50,000 FT LUMBER, 50,000 LATHS	BY CRIGLAR AND CO
SCHOONER	*STAR*	THOMPSON, NO	(IN)50,000 BRICKS	TO FORT BARRANCAS
BARQUE	*STAR BRIGHT*	BEAAN, APALACHICOLA	(IN)BALLAST	TO KEYSER, JUDAH & CO
SCHOONER	*STAR BRIGHT*	THOMPSON, NO	(IN)?5,000 BRICKS	TO------ DERBY
SCHOONER	*UNION*	WEBB, INDIANOLA	(OUT)	
SCHOONER	*VELASCO*	BUTLER, GALVESTON	(IN) HAY AND MULES	TO KNAPP AND GONZALEZ
SCHOONER	*VICTORIA*	GOSNELL, NEW ORLEANS	(IN)BALLAST	
SCHOONER	*W.R. PETTIS*	BLANKNEY, PUNTA RASSA	(IN)	
SCHOONER	*WALTER M.*	TAPKIN, NO	(OUT) 40,000 FT LUMBER	BY CRIGLAR & CO
SCHOONER	*WALTER M.*	TAPKIN, NO	(IN)800 BARRELS SHELL	TO C.P. KNAPP
SCHOONER	*WALTER M.*	TAPKIN, NO	(IN) SHELLS	TO KNAPP AND GONZALEZ
SCHOONER	*WANKEAG*	HIGGINS, BOSTON	(OUT	
SCHOONER	*WEST FLORIDA*	BURNS, NO	(OUT) 70,000 FT LUMBER	CRIGLAR & CO
SCHOONER	*WEST FLORIDA*	BURNS, NO	(IN)CARGO	TO W. MILLER
SCHOONER	*WEST FLORIDA*	BURNS, NO	(OUT)	
SCHOONER	*WEST FLORIDA*	BORUS, NO	(IN)	

TABLE C (CONTINUED)

VESSELTYPE	VESSEL NAME	OWNER/HOME PORT	CARGO	NOTES
SCHOONER	*WEST FLORIDA*	BURNS, NO	(IN)	
SCHOONER	*WILLIAM*	PAGE, GALVESTON	(OUT) 112,345 FT LUMBER, 60,000 LATHS, 500 CUBIC FT SASH DOOR	BY E.E. SIMPSON & CO
SCHOONER	*WILLIAMS*	PAGE, CARDENAS	(OUT)	
SCHOONER	*ZUIME?*	CODINA, NO	(IN)CARGO	TO H. HYER AND OTHERS
SCHOONER	*ZUIME?*	CODINA, NO	(OUT) BALLAST	
SCHOONER	*ZULINE*	GODINA, NO	(IN)	TO KNAPP AND GONZALEZ

Data for Appendix C was gathered sourcing section of Pensacola Gazette titled Port. Arrivals and departures were noted one day each week for the year.