

The 2002 Core Banks Beach Wreck Survey

A Field Survey Conducted By SIDCO In Support Of The NCUAB Beach Wreck Program.

The North Carolina Outer Banks are alive with history. Though rich with a biological ecosystem unique in all the world and picturesque landscapes that rival those of the world's greatest natural marvels, the Outer Banks have seen historic occurrences that would boggle the mind. The first European settlers, the birth of a nation, a devastating Civil War, and two world wars have all left their marks in the form of cultural deposits and historic sites all up and down the NC coast. Shipwrecks, abandoned towns and villages, military installations and forts, fishing camps and houses are just a few of the assets that are in jeopardy here. Vandalism, looting, storms, hurricanes, and time are just a few of the enemies that attack these assets everyday; yet, the very banks themselves are made up of cultural debris. Pieces of shipwrecks, abandoned cars and trucks, tree trunks washed up from the Caribbean all end up above the tide line and moving sand is trapped by the introduction of a barrier. As the sand builds up, a dune is formed. Later maritime grasses begin to grow and roots from them hold the sand in place. Eventually no evidence of the item is left as sand completely covers it.

Nearly every dune on the banks was formed by this very process and undisturbed the dune will remain covering the rich historic artifacts that created it. But storms cause overwash, plants die and their roots wither away, hurricanes and Nor'easters flood the tidal plain and move centuries of sand away, revealing the cultural time capsule below. Left unrecorded, this time capsule falls prey to the "enemies" mentioned earlier.

Surface Interval Diving Company (SIDCO) is a nonprofit corporation dedicated to the preservation of historic shipwrecks and submerged sites for the express purpose of public education and display. SIDCO was founded in 1996 and has worked very closely with state, federal and local authorities to protect and preserve North Carolina's maritime history.

In an attempt to gather the data left at these sites, SIDCO, in cooperation with the North Carolina Underwater Archaeology Branch, and the NC Department of Cultural Resources, has completed a field survey of the exposed sites on the Core Banks, from Cape Lookout to Portsmouth.

Recorded from these sites are measurements, fastener patterns and types, GPS (Global Positioning System) coordinates, photographs, sketches, examination of structure features, and placement of a permanent NCDRCR tag to help track the movements of the item due to storms, and also discourage vandalism and looting. This report will document the findings of this survey in spring of 2002, and add to an ongoing record of an overall documentation and attempt to save the data from these non-renewable resources.

Beach Wrecks South (Cape Lookout to Drum Inlet)

On April 27, 2002, members of SIDCO assembled to accomplish the field survey of the Southern end of the Core Banks. After establishing a campsite near *Alger Willis Fishing Camps*, the team began a systematic survey of the area. Using ATV's (All Terrain Vehicles) specially equipped with modern GPS positioning systems and UHF Two-way radio communications, the team mapped the entire Southern end of Core Banks in a two-day time period, locating seven shipwreck structures and re-examing one. The ATV's carried two persons, a driver and a spotter. The driver operated the vehicle in the rough terrain, while the spotter watched the dunes and beach for wreck debris and maintained radio operations. Other than a few mechanical problems that were settled early, the mission was a COMPLETE success.

The wreck deposits found were anything from a single timber to an entire keel and keelson to a section of outer hull, complete with sonar transducer. The time periods ranged from early 1800's to modern day. Often the structure still had artifacts other than structure still attached, including ballast stones, fasteners, coal, hardware, pieces of masonry, fittings and electronic equipment (modern wrecks).

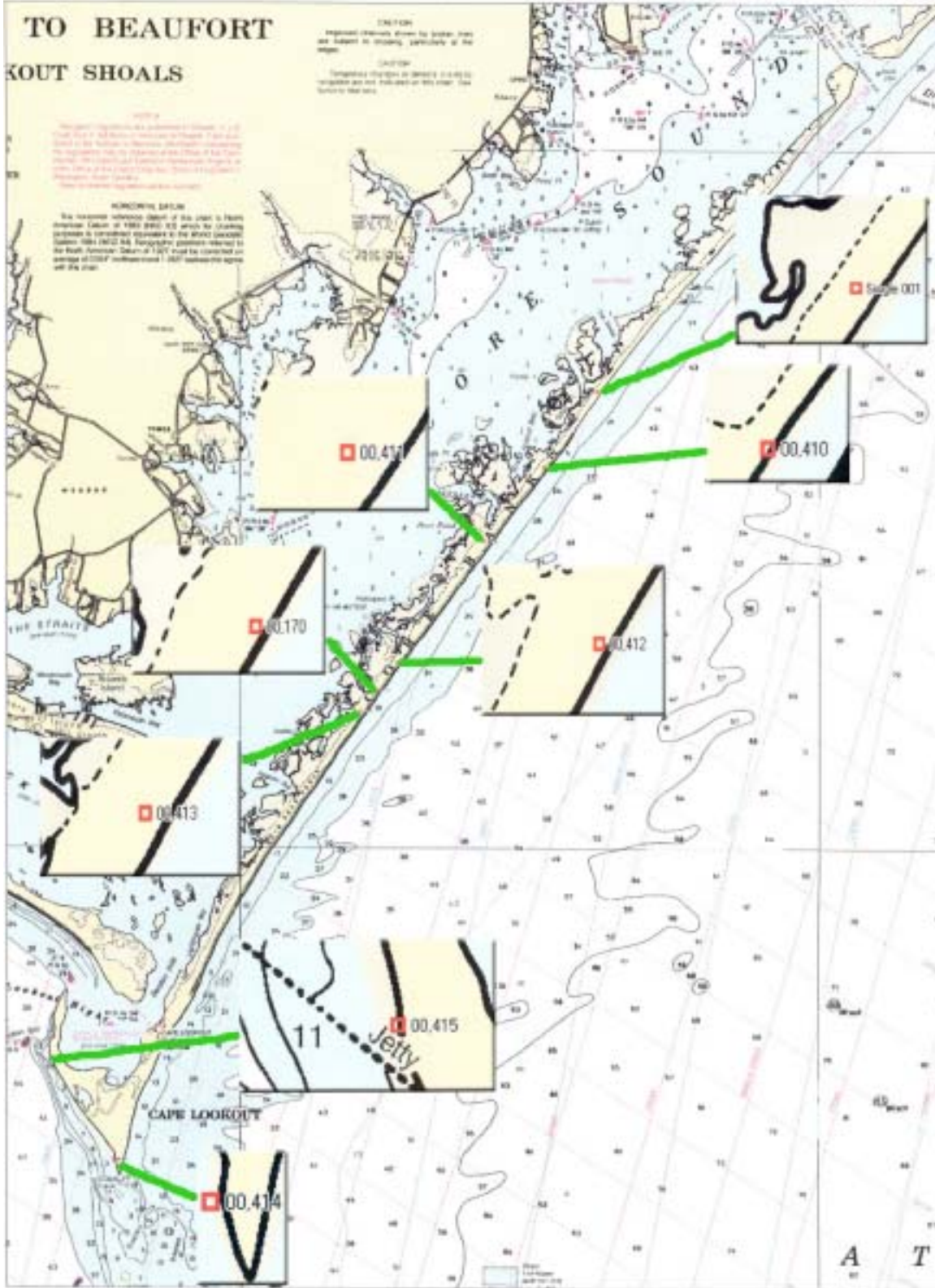


Charred wood and blackened iron fasteners are all that is left of this structure; fortunately it proved to be a fairly modern fishing camp and not an irreplaceable historic shipwreck structure. Sites like this are seen all up and down the North and South Core Banks area.

Several of the structures showed signs of vandalism and attempted looting. Two had been set on fire previously, and one still had a section of polypropylene rope attached that someone had used to attempt to drag the timber down the beach. There were several old campfire sights that may have contained remains of shipwreck structure. It is our hope that the presence of NC Department of Cultural Resources tags will discourage this kind of destruction.



The NCDWR information discs or "tags" used to mark and identify beach wreck structures.



Print Scale 1 : 133 648

The South Core Banks structures and their locations are shown above. The chart is taken from NOAA Chart 11544.

The South Banks targets:

Single 001

This was a single timber lying by itself high in the dunes, well away from the high water mark. It was not tagged because it was a single piece and we had a



limited number of tags. The timber was located at **N 34 46'.550 W 76 23'.840**. It measured 8'4" long and had several wooden fasteners or "tre'nles". These were the only fasteners present on the structure. The fasteners patterns were one in the middle of the timber and two more at the lower edge. This pattern continued for the length of the piece.

00, 410

The intricate makeup of this structure was both beautiful and complex. A multiple media structure of wood and stone, with both iron and brass fasteners,



all concreted together by coral remains and iron oxide. Though it was a single timber, the lower side was covered by a

mixture of ballast stone, coral and other organic matter and iron oxide (chemical "left-overs" from rusting iron). There were iron fasteners passing through the timber from the bottom, or ballast stone side, and a single "copper" or brass fastener on the opposite side, probably from sheathing or sealing planking. The structure was not previously tagged and DCR tag number 00, 410 was attached.

The site was located at **N 34 45'.468 W 76 24'.758**. The fasteners were placed in a "5-4-3" pattern much like dots on a set of dominos. The timber measured 10'X 12" X15".

00, 411



Site 411 was a large amount of structure, spread over a 100'X 100' area. It was most probably the keel, keelson and framing timbers, or some combination of the lower hull structure parts, from a single vessel. It was nearly impossible to re-build the pieces into a site drawing, so a partial sketch was done and photographs were taken, in an attempt to at least record the debris.



00, 412



The single timber we tagged 00, 412, still had a piece of old nylon rope still attached where a careless camper had attempted to drag it into their campfire. It was found lying near the high water mark, and in plain sight of passersby, at **N 34 42'.663 W 76 27'.276**. This timber had evidence of only a single iron fastener, and measured 12.5'X 1'2"X 1'. It is hoped by our team, that programs in the future will help dissuade vandalism like this.

SIDCO Team members take measurements on structure number 00, 412. This timber had a piece of rope still attached indicating an attempt to vandalize this historic artifact.



00, 170

Structure 170, had been previously tagged and examined. According to NC Underwater Archaeology Branch records, site 170 was named "Zahradka" after a NPS volunteer who first located the structure. The NCUAB also designated the site "0003SCB" adding it to their permanent record

of shipwrecks and submerged cultural sites throughout North Carolina. The site itself was extremely over-burdened by sand and shells. Very little was exposed during the survey. Only iron fasteners were found. The structure appeared to be upper bulwarks or lateral bulkheads with framing timbers and some sheathing present. The structure was located at **N 34 42'.250 W 76 27'.630**. There was no evidence of disturbance and though the NCUAB records mention a "171" associated with the 170 entry, no other structure was found in the near-by area.

00, 413



This structure was very similar to **00, 170**, in appearance and in the fact that it represented more lateral bulkheads rather than lower structure such as keelson or framing.

00, 414

The structure we tagged as **00,414** is lying upside down, fully exposed at **N 34 35'.519 W 76 32'.187**. Its fasteners were iron spikes and threaded bolts with nuts. The section measured 19' 4"X 5'X 2' 4". The structure appeared to be bow section, with associated framing timbers and a short keel with little or no keelson. The fastener patterns on the keel were "3 and 2, 3 and 2" and with the use of threaded bolt fasteners, it is possible that this is a more modern piece rather than an earlier wreck.



00, 415



We believe that this may be structure associated with the ill-fated fishing vessel *Josephine*. There is a huge amount of modern equipment present on the structure in the form of modern fittings including a sonar or “fish finder” transducer of some type and modern fasteners and materials. A brass strainer is also mounted on the bottom for engine cooling, thus suggesting a motor vessel. The structure appears to be from the starboard bow and also shows multiple coats of modern anti-fouling paint.

There is also one other piece of evidence that may suggest the fate of the vessel. There is a hole burned into the side of the vessel near the upper bulkheads that has penetrated to the outside of the ship. It is probably not from vandals as the piece looks to have been in place for some time and is awash at high tide. We believe that the *Josephine* may have been a casualty of a fire on board.



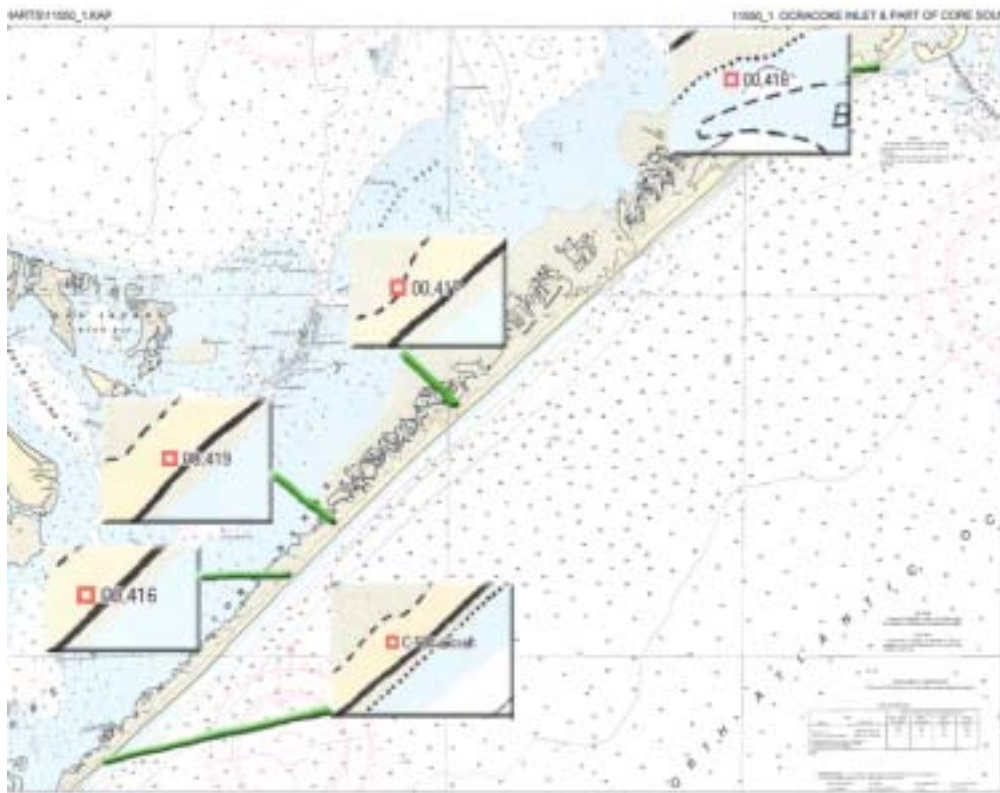
A closer look at the burned section (left side of photo) of the debris we believe may have come from the fishing vessel *Josephine*.

Beach Wrecks North (Old Drum Inlet to Ocracoke Inlet)

After establishing our Base Camp, near *Old Drum Inlet*, we began a systematic search for wreck structure in the same manner as we did South Core Banks. Using two 2-man teams (driver and spotter) and GPS equipment we located five additional unmarked structures.

It should be noted that there were nearly twice as many structures located on South Core Banks, than there were North Core Banks. We are not sure why this is, but it was also noted that the North Core Banks have a much healthier ecosystem in regards to vegetation. The North Banks roads are far less traveled and the dune structure is much less pronounced. Instead of rolling dunes, North Core has a sharply “chopped off” high water mark. Clearly, North Core sees much less visitors than does South Core.

The North Core Banks Targets



Aircraft Debris

The first structure we found on the North Core Banks survey was a concentration of assorted aluminum aircraft parts, most probably from a C-130 aircraft.



The items had been dragged into a pile and included a tire with magnesium rim, wheel brakes assembly and landing gear, cargo bay ramp door and associated rigging, and miscellaneous aluminum panels and scrap. Our best guess was that it came from an artificial reef or fell off of a decommissioned or scrap airplane during the building of an artificial reef. No hazardous chemicals were seen. The debris lies at **N 34 53'.500 W 076 15'.890**.

00, 416



A single deteriorated timber was located at **N 34 56'.152 W 076 12'.560**. This structure was lying in the middle of an active beach buggy route and was daily subjected to repeatedly being run over by trucks and large vehicles. There were 6 fastener holes, but no fasteners were present. The piece was 10' X 10" X 6" and was photographed and tagged with DCR tag no. 00, 416.

00, 417



The next set of structure we found was located at **N 34 58'.370 W076 09'.850**. These were two small pieces separated by about 100 feet, but were very similar in construction and were probably associated with one another. The smaller piece measured 3' X 8" X 6".

The smaller piece was hard to identify, but the larger piece was most probably a framing timber. The smaller piece could have been a "knee" or may have been broken away from a larger section. The only fasteners noted were wood "tren'les" and the fastener patterns were in a straight line of 2 or more per foot. The larger piece of structure was tagged.



00, 418

This was most certainly the remains of a modern vessel, most probably a local fishing boat. The site is located at **N 35 03'.130 W 076 02'.67**. Theoretically it is possible that these could be further remains of the fishing vessel *Josephine*,





but a closer evaluation would be needed to verify the origin of the structure. The debris measured 35' X 6'3". All fasteners and hardware are modern and the vessel was equipped with iron motor mounts and a "keel cooler", a device mounted along the keel of modern boats to act as a radiator, using sea water to cool the engine's coolant as it flows by the keel. This was the port side, lower hull and the forward keel/ keelson. The outer hull was covered by multiple coats of anti-fouling paint. The structure was tagged.

00, 419

This single "footuck" timber was located at **N 34 56'.780 W 076 11'.830**. The fasteners are extremely sporadic and seem to have a very complex pattern. All fasteners appeared to be wooden. The piece measured 16' X 10" X 7" The structure was tagged.



Expedition Conclusions

Our work on the NC Outer Banks will most likely be an on-going project with a purpose of tracking the movement of known structures and identification of newly exposed structures. It is possible that our work area will later include Shackleford Banks and Ocracoke Island.

It would be a very tough job to do any more than this as the logistics of a project like this would break most organizations budgets. The financial strains of trying to preserve these structures further, either in place or by moving them to a safer area would be staggering, and way out of our capabilities.

So for now we will monitor these relics of our past and try to educate others to treat them with respect and dignity and learn as much as possible about them while they are still around for us to see.