MUSEUM STUDIES COMPLEMENT MARITIME PROGRAM

The Department of History offers three courses in museum studies. These classes are designed to allow the students to gain a broad experience in the functioning of a museum. A course in "Techniques of Museum and Historic Site Development" introduces the student to material culture studies while another in "Field and Laboratory Studies in Museum and Historic Site Development" emphasizes how a museum works. The third course, "Historic Preservation Planning," offered jointly by the Departments of History and of Geography and Planning, is a study of historic structures. All three courses are popular among planning, home economics, and history majors, as well as students in the maritime program.

Students in the field studies course have been involved with museum projects, many of them maritime related. In 1984, students created an exhibition on Civil War blockade runners at the historic Humber House in Greenville, North Carolina. One of two projects conducted the following year exhibited artifacts from the USS Monitor at the Nature and Science Museum in Charlotte, North Carolina.

The most recent exhibit, in 1987, was at the Elizabeth II boatshop in Manteo, North Carolina. A section of the boatshop was converted into an exhibition area focusing on the construction of Elizabeth II and boatbuilding in eastern North Carolina. Students conceptualized the major themes, constructed the necessary display cases, and installed the museum exhibits.

The Department of History also cooperates with museums in offering internships to students. In several cases these internships have led to careers in museum work. Maritime museums that have employed students in the Program include the Mariners' Museum, the Peabody Museum, the Hampton Roads Naval Museum, and the Philadelphia Maritime Museum.

An exhibit case used to promote the Program in Maritime History and Underwater Research at various functions and meetings, is annually designed by students. A recent example is a maritime exhibit put together by members of the program. It drew considerable attention while displayed at the Joint Meeting of the International Commission of Maritime History and North American Society for Oceanic History held in Charleston, South Carolina in September. The case displays artifacts conserved in the Program's laboratory, models constructed by students in the Program, and photographs of past field schools and projects. Exhibits are used for recruitment purposes while at the same time making available to the public the research conducted by the Program in Maritime History and Underwater Research at East Carolina University.
Research Semester in Bermuda

Prior to the wreck of the Sea Venture in 1609 more than two dozen Spanish, Portuguese, and French vessels found their final place of rest on the reefs of Bermuda or near the islands. These islands became a dangerous navigational landmark, one that was to be avoided, if possible. For the ships returning from the New World, Bermuda, her shoals, and the calm of the Sargasso Sea lay on the home-bound route.

This September, similar to last, through the cooperation of the Institute of Maritime History and Archaeology (IMHA), the research body of the Bermuda Maritime Museum (BMM), an East Carolina University team of five graduate students and two professors conducted research in Bermuda. This team assisted Steve and Cathy Hoyt, IMHA co-directors, in the systematic excavation of a supposed mid-sixteenth century vessel which lies approximately three miles west-southwest of the archipelago. Last year an ECU dive team documented the remains of the Confederate blockade runner, Nola and in 1983 another team recorded the wreck of the blockade runner, Marie Celestia.

This year the seven member team re-excavated the remains of an unidentified wooden vessel, referred to as the New Old Spaniard, (NOS). A salvage team only partially documented the wreck in the sixties and removed all diagnostic artifacts. While virtually no artifacts remain in situ to reveal the anthropology of the vessel, the keel, floors, futtocks, and keelson, provide additional structural information concerning naval construction during the sixteenth and seventeenth century. A coin dated the wreck to 1560; however, the results of this year’s excavation may yield a later date, possibly as late as the first quarter of the seventeenth century.

The project focused on the reexcavation and documentation of this vessel. Nearly four feet of overburden covered the timbers. Due to previous uncoverings this sand contained no in situ artifacts, nor a reliable stratigraphy; therefore, water dredges removed this sand carefully, yet rapidly. The underwater archaeologists prepared intricately detailed scale-drawings to draft a site map. They also took photographs to create a photomosaic. A metal detector survey located bottom and sub-bottom targets of metallic concretions within the area. It detected many objects that were plotted on the site map.

When the crew was not excavating, drawing, or resting on the bow of the Institute’s recently acquired research vessel, they conducted a magnetometer survey of the immediate area surrounding the NOS. Underwater tow boarding supplemented electronic reconnaissance. These two methods encountered other shipwreck remains.

When rough seas or bad weather prevented the ECU team from working on the NOS, they assisted in the conservation laboratory. The graduate students processed the artifacts retrieved from the San Pedro, another early Spanish vessel, and the NOS in preparation for conservation. Some developed and printed black and white film to produce a phonomosaic of the site, while others produced a site map from the scale drawings. Activities on land as well as on and under the water kept this seven member team extremely occupied due to the unusually calm oceanic conditions experienced during most of September.

However on September 25, Hurricane Emily hit Bermuda. It left the BMM without electricity and terminated the project. Next fall, if ECU returns to Bermuda, it will undertake the systematic excavation of the area surrounding the NOS in hopes to locate undisturbed artifacts and additional vessel remains.

Program Assists Research on CSS Alabama

The program is going to assist the excavation and possible recovery of the CSS Alabama, the famed Confederate raider. This warship sank or captured sixty-five Union ships. Captains Max Guéroult of the French Navy is assembling a multi-national scientific team and, through the Program’s interest in the maritime history and archaeology of the American Civil War, it has joined the project. The ship lies 180 feet of water off the coast of France.

Program in Maritime History and Underwater Research
East Carolina University
Co-directors: William N. Still, Jr., Ph.D. Gordon P. Watts, Jr., M.A. Staff Archaeologist: Bradley A. Rodger, M.A.
Students in the Program in Maritime History and Underwater Research have been involved in projects on three continents this past year.

SOUTH AFRICA - Lynn Harris, a student from South Africa, is currently doing historical research and a magnetometer survey to locate and identify seventeenth to nineteenth century shipwrecks off Cape Town, South Africa. The project is being conducted with the South African Cultural History Museum and the South African Navy Diving Unit. To date, no underwater archaeology has been done in South African waters. This project is potentially valuable for providing new information on the maritime history of Cape Town.

SPAIN - Jonathan W. Bream conducted research in the Archives of the Indies in Seville. He worked for the Institute of Maritime History and Archaeology, the research division of the Bermuda Maritime Museum. Spanish documents contained archival evidence on Bermuda before British colonization. Twenty-six legajos (a collection of papers or letters) were searched, many yielding information concerning Bermuda in the sixteenth century.

JAMAICA - Dave Cooper and Kaea Morris were part of an international team that excavated one of four Spanish vessels sunk in 1691 off Pedro Banks, Jamaica. They spent five weeks working on board the research vessel, Morning Watch. Artifacts recovered included one hundred flintlock pistols, three hundred eye-glass lenses, and six silver planters.

ST EUSTATIUS - Kathy Bequette returned to the Netherlands Antilles again as a graduate assistant for the College of William and Mary's field school in underwater archaeology. A shipwreck site in the harbor containing ballast stones, a swivel gun, and artifacts dating to 1750 was excavated.

NORTH CAROLINA - Joe Friday is doing intensive historical and archaeological research on the slop-of-war, USS Huron, which ran aground in a gale at Nags Head, North Carolina in 1877. The loss of ninety-eight lives in the disaster directly led to the expansion of the US lifesaving services along the North Carolina coast. This is a cooperative project with the Underwater Archaeology Unit of the North Carolina Division of Archives and History. Joe was project archaeologist during the summer and compiled a map of the wreck site.

NORTH CAROLINA - Claude Jackson, Lynn Harris, Joe Friday, and Jonathan Bream conducted a survey and excavation of a ship that was discovered on Lake Phelps. The late eighteenth or early nineteenth century craft was abandoned and presently rests on the receding shoreline of Lake Phelps. The group took extensive measurements of the lines and supplemented these with photographs to document this vessel type. The ship is located on the state boat of North Carolina.

NORTH CAROLINA - Kaea Morris received a grant that allowed her to continue the Lake Phelps canoe project. Twenty-five canoes have been located that date between 2380 BC and 1400 AD. The longest canoe measures thirty-seven feet. Kaea hopes this project can be used as a model study for other lakes in determining the historical use of the coastal plains.

MARYLAND - Colin Bentley and Joe Friday did a magnetometer survey for the State of Maryland with the assistance of ECU graduate, Lee Cox, Jr., from the Philadelphia Maritime Museum. The project was located in Slaughter Creek near Cambridge. The state plans to build a bridge across the creek.

GEORGIA - Rita Fols-Elliot conducted a terrestrial and underwater survey on the partially submerged city of Petersburg. Located at the confluence of the Broad and Savannah Rivers, this town presently is inundated by Clark Hill Lake. Petersburg was the third largest town in Georgia during the late eighteenth and early nineteenth centuries. Rita delineated the town boundaries and old river channels.

GEORGIA - Brina Agranat and Kaea Morris worked in Savannah on the excavation of a late eighteenth century vessel. The derelict wreck is located on the banks of the Savannah River and will be destroyed when the Army Corp of Engineers widens the river. The two-masted wooden vessel was partially buried under several feet of silt and clay.

WISCONSIN - David Cooper continued investigating the schooner, Flying, wrecked in Garet Bay, Wisconsin, September 26, 1888. The vessel was locally constructed and used in lumber trade, aspects of its construction are being studied to learn about nineteenth century shipbuilding and commerce. This is the first such archaeological study in the area, and the data generated is hoped to lay the groundwork for future investigation.
COMPUTERS AND HISTORY

Most researchers are familiar with computers. Their presence facilitates the locating of books and documents in a library, as well as word processing papers and articles for publication. However, few researchers and maritime archaeologists deem these electronic devices worthy of anything more.

Computers aid magnetometer surveys and maritime history research at ECU. In the aspect of surveys, the IBM PC software package SURFER, designed to assist topographical studies, adapts readily to magnetometer surveys. The traditional mapper now inputs the coordinates and magnetometer readings into computer storage and the computer generates both a two-dimensional contour map and a three-dimensional view. This program reduces human error and the output can be enlarged or reduced to be included with reports. Magnetometer contour maps can now be produced in half the time.

On a larger scale, the mainframe computer system at ECU assists the analysis of quantifiable data. Jonathan Bream analyzes the register for the ship Santa Maria de Ysaiar, one of the ships of the 1554 Tierra Firme fleet. Presently Cliff Morgan is interpreting the data collected on shipping patterns of Charles Town, South Carolina during the French and Indian War. His data was collected from the South Carolina Gazette, for the period 1755 - 1763 of port entrances and clearances. Both of these maritime history graduate students employ the Statistical Package for the Social Sciences (SPSS) and have found interesting results.

Papers and Publications

Four papers were given by the staff, and students at the 1987 Conference on Underwater Archaeology held in Savannah, Georgia:

--- Broadwater, John, "Yorktown Shipwreck Archaeological Project Interim Report, 1986 Season."

--- Cooper, David, "Survey of the Schooner Fleetwing, Garrett Bay, Wisconsin."

--- Stephenson, Richard, "Environmental Processes in the Vicinity of Ronoake Island, North Carolina."

--- Watts, Gordon P., Jr., "A Decade of Research."

Staff papers and publications include:


Briefs

The Program in Maritime History and Underwater Research has expanded with the addition of new courses: Maritime History of the Western World from Prehistory to 1815; Maritime History of the Modern World from 1815; and Conservation of Materials. Field School also becomes a requirement.

The staff and students welcome Mary Miller as program secretary. She attended classes at Rutgers University in New Brunswick, New Jersey. Mrs. Miller is working part time for the Program, taking over for Katherine Ruffin. Mary and her husband, Richard, are expecting their second child in January.


--- Stem to Stern

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Editor: Claude V. Jackson, III
Contributors: Joe Friley, Lynn Harris, Bradley Rodgers, Jonathan Bream

Yorktown Shipwreck Archaeological Project

In 1781, the British General Lord Cornwallis attempted to secure a southern port in the Chesapeake Bay. Unable to shuttle his troops from Yorktown to Gloucester Point, he faced both a possible land attack by Washington's troops and an amphibious landing by the French. To deter the latter, Cornwallis scuttled his provision ships in the shallows of Yorktown harbor in the York River.

In 1982, a steel cofferdam was constructed around one of these ships. This is the second year that ECU has assisted in the excavation and the first field school cooperative program with the project. In the four weeks that this year's students worked on the Revolutionary War vessel, they received experience in excavation and site operations. Underwater work focused on excava-

Conservation Lab

Though a small facility, in need of equipment and personnel, the Program's conservation laboratory continues improvement under the direction of staff archaeologist Brad Rodgers. The renovation, reorganization, and operation of the lab began in 1986. Paramount among 1987's achievements was the completion of a computer listing for all of the more than 400 artifacts conserved thus far at the facility. Each artifact is listed according to its project location, date of accession, and artifact number. This insures that no artifacts become lost, misplaced, or deteriorate before receiving the attention they need.

One of the more surprising finds in the conservation lab this year was the discovery of a load of anti-personnel shot from the bore of a late seventeenth or early eighteenth century cannon. The fifty-three inch long gun has been undergoing electrolysis since 1984 and should be fully conserved in 1988. The perfectly preserved iron shot was sown into a canvas bag wrapped in hemp line, and sealed between a pair of wooden sabots. The exact age and possible identity of the gun awaits further study.

The recently added course, Conservation of Materials, will stress the practical aspects of artifact conservation. This course will include experimental artifact conservation in the laboratory, selected readings by experts in the field, and visits and lectures at other conservation facilities.

Line drawing of cannon and shot bag. Illustrations by J. Friday and B. Rodgers.

The Yorktown Shipwreck Project.

Practicing on the Sinkentine Program.

In preparation for the excavation, the first two weeks of field school were spent training on the Sinkentine in the campus pool. The Sinkentine, a fibreglass model of a section of a wooden ship, was constructed with a grant from the National Trust for Historic Preservation. It provided practice in rigging for the students and allowed professors to view the students' techniques. Students found the Sinkentine useful before excavating at Yorktown.
Maritime Theses

The following is an updated list of theses completed within the last year by students in the Program in Maritime History and Underwater Archaeology at ECU. They may be ordered through Inter-library Loan at your local, university, or public library from Joyce Library, East Carolina University, Greenville, North Carolina.

Where Have They Gone?

The ECU Program in Maritime History and Underwater Research has an impressive rate of student employment. This is an updated list since the last issue:

Brina Agrawal is a Ph.D candidate at the University of Alabama.
Kathryn Byrgette has accepted a ten year contract to work in St. Eustatius.
Robert Browning is curator of the USS Texas.
Cindy Cooke works as an archaeologist in Vermont.
David Cooper has accepted the position of State Underwater Archaeologist for Wisconsin.

1988 Summer Field School

This year, East Carolina University will again offer a Summer Field School in Maritime History and Underwater Archaeology at the Yorktown Shipwreck Archaeological Project. It is open to both graduate and advanced undergraduate students. Students receive a basic introduction to American maritime history, ship construction, underwater research techniques, and related subjects. During the first two weeks students stay on campus for classroom lecture and pool training sessions on the Sunken Mine. The remainder of the field school will be spent excavating a Revolutionary War vessel in the coterdum at Yorktown. This year the field school will be held June 23 - July 29, 1988. Information and applications can be obtained by writing to: Summer Field School Program in Maritime History and Underwater Research, ECU, Greenville, North Carolina 27858. Applications must be received by April 1, 1988.