Oldest English Gun in the U.S.?
Brad Rodgers displays contents of a 16th Century 2 pounder Falcon found off the east coast.

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Maritime Students Receive Academic Awards

In keeping with the program tradition of exceptional scholarship, three first year maritime history students competed for and received privately funded departmental and university scholarship awards. On November 29, 1989, the Department of History named Jay Chapman and Scott Moore as the recipients of the Lawrence F. Brewster Fellowships. These fellowships are presented to two outstanding history graduate students each year on the basis of their academic records, writing ability, and personal interviews.

At the same ceremony, Frank Cantelas was awarded the Mary F. Howard Scholarship in Marine Studies. Each university department involved in any form of marine study nominates one outstanding student to compete for the Howard Scholarship. It is awarded based on academic excellence, recommendation, resume, and a personal interview.

The faculty, staff, and students of the Program in Maritime History and Underwater Research wish to offer their heartiest congratulations to this year's recipients.

Briefs

Dr. William N. Still, Jr., founder and co-director of the Program in Maritime History and Underwater Research at East Carolina University, began an eleven-month fellowship on September 1, 1989, as the Secretary of the Navy's coveted Research Chair in Naval History. The fellowship, awarded for outstanding scholarship and expertise in naval history, honors Still as the resident specialist in naval history at the Naval Historical Center in Washington, D.C. During his tenure as Research Chair, Dr. Still plans to complete work on his book American Sea Power in The Old World: The U.S. Navy at War, 1917-1918.

During the current academic year, Dr. Carl E. Swanson, a member of the maritime history faculty, is serving as the acting director of the Program in Maritime History and Underwater Research at East Carolina University while Dr. Still is in Washington, D.C. Dr. Swanson, a specialist in colonial and economic history, has served as a member of the maritime history faculty for the past two years. In addition to his teaching responsibilities, the North American Society for Oceanic History recently named Swanson the new editor of the organization's newsletter which comes out three times a year. Dr. Swanson's book, Predators and Prizes: American Privateering and Imperial Warfare, 1739-1748, will be out sometime next year.

Program Archaeologist Brad Rodgers received two distinguished awards in 1989, a $4,000 research grant from the Wisconsin Coastal Zone Management and the Herbert R. Pascal stipend. The research grant helped fund a study of Death's Door in Wisconsin this summer. The Pascal stipend will be used to improve and expand the Program's conservation research collection.

The 1989 combined meetings of the North American Society for Oceanic History (NASOH) and the Society for the History of Discoveries (SHD), held in San Francisco the beginning of June, was organized by Dr. William N. Still, Jr. (NASOH) of East Carolina University and Dr. Sanford Bederman (SHD) of Georgia State University. ECU graduate students James Allan and Diane Cooper worked closely with Dr. Still throughout the spring on everything from program selection to local arrangements and catering. East Carolina University was well represented in a number of the sessions as papers were presented by Dr. Richard A. Stephenson, Dr. Carl E. Swanson, Gordon P. Watts, and ECU graduates James P. Delgado and Kevin Foster.
Beginning in January, 1989, the Program in Maritime History and Underwater Research will relocate to its new facilities at the corner of Cotanche and Ninth streets. The new building includes office space for the program's faculty, classrooms, storage, and a display area. The 16th century cannon conserved by students under the direction of Brad Rodgers and other artifacts will be on display in the building.

**Conservation Course Takes Off**

History 6840, The Conservation of Material from an Underwater Environment, got off to a flying start this semester under the tutelage of Prof. Brad Rodgers. The new course, which is designed to give an extensive introduction to the science of conservation, consisted of three hours of lecture and three hours of laboratory work per week. This year's class project was the conservation of a ship's block, a compound artifact (wood and metal), always a difficult undertaking.

The six students making up this year's class included David Baumer, Diane Cooper, Cris Gober, John Jensen, Glenn Overton, and Lolly Ritchey. Individual projects ranged from conservation ethics to hands on preservation of compound metal artifacts.

Ragsdale's lab facility was much improved this year by a generous donation of $5000 from the Dean's office for equipment and chemicals. The future looks good for further laboratory improvement with a move to new facilities now under construction behind the Allied Health building. Other welcome funding for 1990 will be provided by the Herbert R. Pascal memorial fund which awarded Rodgers a generous stipend to expand the conservation library.

**An Historical Treasure From a Watery Grave**

A heavily encrusted and rusty hunk of iron dredged up from the Atlantic Ocean and donated to East Carolina University appears to be the oldest English cannon ever found near the U.S. east coast. The cannon, which was fully loaded with powder, wadding, a two-and-a-half inch iron ball, and a canvas bag filled with a dozen smaller iron balls the size of large marbles called grapeshot, dates back to the time of Sir Walter Raleigh, the Lost Colony of Roanoke, and the Spanish Armada.

Students under the direction of Brad Rodgers helped conserve the gun which has been identified as a piece of field artillery measuring four and a half feet in length and weighing about 300 pounds. Conservation of the gun required approximately four years of low amperage electrolytic reduction which removed the calcium carbonate concretions and iron corrosion products while stabilizing the metal and inhibiting further rusting. This slower process 'rebuilt' some of the surface features which aided in its identification.

"When I first saw it, I believed it was a swivel-mounted cannon that was no more than 100-to-200 years old," Brad Rodgers, ECU's preservation specialist said. However, as the concretions began falling away it became obvious that this was a very old and unusual gun unlike any he had ever seen. Rodgers enlisted the help of the Tower of London, who referred him to C.J.N. Trollope, an ordnance expert in England, in identifying the piece.
Trollope identified the gun as an English Falcon from the late sixteenth century based upon its moldings, bands around its barrel, and its muzzle, an uncommon type found on only three other surviving English guns. "If it's this old," Rodgers said, "then it dates from the time of the first English colonists on Roanoke Island and it could be the oldest English cannon ever found in the United States."

Gordon Watts, co-director of ECU's Maritime Program, referred to the cannon as "an historical treasure" and speculated it could have been from one of Sir Francis Drake's vessels, or aboard a ship supplying Jamestown, or even aboard Sir Humphrey Gilbert's vessel SQUIRREL which was lost at sea. A variety of possibilities exist, according to both Watts and Rodgers, but the only way to know for sure how the gun came to be off the east coast is to survey the site and recover whatever information is still there. Watts hopes ECU can obtain funding and equipment for an expedition to the offshore site where the cannon was found. He suspects the location is a shipwreck which might yield other artifacts such as ceramics or coins that could tie the wreck to a particular period.

Museum Internships

While most second year Maritime History and Underwater Research graduate students spend their fall research semester in Bermuda, a handful of students through the years have traded the underwater experience and training for the opportunity to work as an intern with a maritime museum. Over the years ECU graduate students have completed successful internships at numerous museums including the Treasure Island Naval, Marine Corps, and Coast Guard Museum in California, the North Carolina Maritime Museum in Beaufort, the Mariners' Museum in Virginia, the National Maritime Museum in San Francisco, Mystic Seaport Museum in Connecticut, and the Smithsonian in Washington, D.C.

Student interns complete a minimum of 270 hours of work while at the museum to fulfill the requirements for the six semester hours of credit earned in History 6850. A wide variety of duties and responsibilities were experienced by the two most recent internships at Mystic Seaport and the Treasure Island Museum. While interning at Mystic Seaport, graduate student David Baumer was assigned to the Shipyards Research Projects where he worked on the documentation of the JOSEPH CONRAD and researched the history and construction of welled fishing vessels. At Treasure Island, Diane Cooper, another ECU graduate student, experienced nearly every facet of museum work including selling in the gift shop, exhibit construction and installation, guiding tours, and conducting naval command indoctrinations.

A museum internship offers non-diving maritime history students an experience as rich and valuable as that received in Bermuda by the other graduate students during their fall research semester. The internship allows the students to gain practical experience in the field which complements the classroom training they received in the university. As one director noted at the completion of an internship, this alternative experience "must be evaluated as an unqualified success."

Bermuda 1989

During the fall of 1989, second year students in East Carolina University's Program in Maritime History and Underwater Research traveled to Bermuda where they joined the Bermuda Maritime Museum's investigation of a shipwreck site believed to date from the late sixteenth or early seventeenth-century. Our staff has determined this date based upon exposed structural remains of the vessel, artifacts recovered, and a cannon bearing the date 1577.

Prior to the fall arrival of ECU staff and students, volunteer Canadian divers prepared a map of the site which enabled initial investigation of the wreck to begin over the summer. Kaea Morris, an ECU graduate student employed by the Bermuda Maritime Museum as an underwater archaeologist, served as director of the project working with Holly Holland, a Texas A & M graduate student, and Lynn Harris, an ECU graduate.

In August 1989, ECU graduate students Lolly Ritchey, Cris Gober, and Marvin Peebles arrived with staff members Gordon Watts and Brad Rodgers to assist in the wreck's investigation. During their stay, staff and students conducted on-site testing and documentation of the wreck. Using a baseline deployed earlier by the Canadian diving team, workers placed a grid over the ballast mound covering a portion of the lower stern section of the wreck. This section extended from the sternpost scarph to a maststep approximately 30 feet forward of the sternpost. Grid sections were systematically excavated using induction dredges and exposed material mapped in situ. A second section of previously exposed stern structure that lay immediately north of the previous section was also exposed and documented. Before the project was completed several additional test excavations were dug in an area northeast of the wreck where additional hull remains were exposed during salvage operations more than a decade earlier.

To date, investigation of the wreck has generated considerable information concerning the ship's structure. Features of the surviving hull include characteristics currently considered as indicative of sixteenth-century vessels. Exposed floors were found to be detailed into the 1st futtocks. In the vicinity of the
mast step the keelson is enlarged and supported by a series of buttresses placed on top of the bilge ceiling. Gudgeons found on the sternpost are flattened and suggest a transom stern. Although few artifacts have been found to date, ceramic sherds include a variety of earthenware characteristic of the Iberian storage jar. Artifacts, structural details, and the four cannon recovered from the site all suggest the wreck is one of the most important to be identified in Bermuda.

Bermuda Field Semester offers students Lolly Ritchey and Martin Peebles an opportunity to examine early wrecks and wreck material such as this gun dated 1577

blockade runners. The second team, headed by Brad Rodgers, spent their time working with various Wisconsin organizations at Death's Door, Wisconsin.

Wisconsin State Underwater Archaeologist Dave Cooper records target positions while graduate student John Jensen and Archaeologist John Ford navigate via instruments.

Summer Field Schools

Each summer ECU conducts a summer field school in Maritime history and Underwater Research designed to introduce students to American maritime history, ship construction, underwater research techniques, on-site artifact conservation and storage, and related topics. During the first two weeks students live on campus and attend classroom lectures and pool training sessions on the sinkentine, a submerged fiberglass simulated shipwreck. Staff and students spend the remainder of the summer field school working on a specific project and site in the field.

In 1989 ECU's summer field school students worked on two separate projects. After the initial two week on-campus introduction period the students divided into two research teams under the direction of Gordon Watts and Brad Rodgers. Watts took his team south to Wilmington, North Carolina, where they joined Fort Fisher and the Underwater Archaeology Unit of the North Carolina Division of Archives and History to locate and identify wreck sites of several Civil War

Return to Death's Door

Fast currents, ice flows, and violent weather could be the explanation why so few shipwrecks remain beneath the waters of Le Porte des Mortes Passage, Wisconsin. Scores of ships are known to have sunk within the "Death's Door," yet only a handful seem to have survived. As part of our summer field school, ECU students and archaeologists helped perform a magnetic or remote sensing survey of this dangerous strait. Situated atop Wisconsin's beautiful Door Peninsula, Le Porte des Mortes Passage has been used for three centuries by vessels plying Green Bay and Lake Michigan.

The project was jointly funded by ECU, the State Historical Society of Wisconsin, the University of Wisconsin, the Wisconsin Sea Grant Program, and the Wisconsin Coastal Management Program. Wisconsin State Underwater Archaeologist and ECU graduate David Cooper directed the survey for the state while ECU's Brad Rodgers instructed graduate students Cris Gober and Lolly Ritchey in survey procedures and Great Lakes maritime history. Graduate student John Jensen, a veteran of last year's field school, joined the team as archaeological assistant. David Tenneson assisted for the state of Wisconsin.
Approximately 11 square kilometers were surveyed, covering the entire passage. Several known sites were precisely located and students braved the frigid waters to scout the wrecks. The investigators collected information about the present condition of each wreck to update Wisconsin's inventory. Many magnetometer "hits" were investigated, but so far no new sites have been found. There are, however, smaller targets left to be reconnoltered next summer. The researchers hypothesize that the rugged geographical and high energy environmental conditions of the strait dispersed the wrecks, pushing them onto shore or into the deeper waters of Lake Michigan or Green Bay. Those interested should watch for Cooper and Rodger's final report.

On their way to Wisconsin the crew stopped at Fort Niagara, New York, to help ECU student Kurt Knoerl and Doc Knight's Old Fort Niagara Archaeological Team with their ongoing investigation of a submerged shoreline. The waters of the Niagara River have inundated the shore area near the fort once used for loading and fur trading activities. Kurt hopes to establish the extent of shoreline used during the late seventeenth/early eighteenth-century when the fort was first built. Although our crew's visit was short, it provided the students a glimpse of underwater work not focused on shipwrecks.

On the return trip to North Carolina, the ECU team visited the Lake Michigan Maritime Museum, in South Haven, Michigan, where they reviewed the excavations of the Great Lakes scow schooner ROCKAWAY. Our crew was warmly received by curator Ken Pott and given an opportunity to view Great Lakes Public History first hand.

Wilmington

Civil War blockade runners wrecked off the North Carolina coast near Fort Fisher, were the focus of ECU's 1989 summer field school offered through the Program in Maritime History and Underwater Research. ECU graduate students Frank Cantelas, Marianne Federal, and Martin Peebles, under the direction of Gordon Watts and in cooperation with the Underwater Archaeological Unit of the North Carolina Division of Archives and History, spent their time conducting remote sensing and visual surveys of these submerged sites. A great deal of emphasis was placed on learning the proper methods of surveying, mapping, and drawing the "parts and pieces" of the ship, such as frames and machinery, exposed on the site. This task was complicated by the rather dark and swift waters off Cape Fear.

Along with the underwater work, each student also researched, prepared, and presented reports pertaining to the historical background of selected shipwrecks, reviewed video tape recordings of the sites, listened to reports, and labored over drafting tables to transfer all the information gathered and drawn underwater onto graph paper for reduction in scale.

Many wreck sites, including the BEAUREGARD which the students investigated, were extremely well preserved boasting features such as fairly intact engine rooms. In all, students investigated, surveyed, and recorded twelve blockade runner sites along the coast. The information gathered through this and future field school endeavors will form the basis of a state feasibility study concerning a possible underwater park off Cape Fear.

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In Print

A limited number of the following publications are now available through the Program in Maritime History and Underwater Research. Requests should be directed to Mary Miller in care of the Department of History, East Carolina University, Greenville, North Carolina 27858-4353. Please make checks payable to East Carolina University.


In Search of Our Maritime Past, Proceedings of the Fifteenth Conference on Underwater Archaeology. Program in Maritime History and Underwater Research, East Carolina University. 1988.............$10.00
1990 FIELD SCHOOL  
IN  
MARITIME HISTORY AND UNDERWATER RESEARCH

During the second summer session in 1990, East Carolina University will sponsor its twelfth annual Field School in Maritime History and Underwater Research. This unique program has been developed to provide a limited number of qualified students with a basic introduction to American maritime history and the scientific methods and techniques employed in underwater archaeological research. Each student in the program will participate in classroom lectures, workshops, and seminars and the conduct of on-site research at the Apostle Islands National Park in Lake Superior. Following a brief on-campus introduction to maritime history and underwater research, field school operations will move to project quarters near Superior, Wisconsin.

Field research will be designed to locate, identify, and assess nineteenth-century shipwrecks that lie within the boundaries of the Apostle Island National Park. Program emphasis will be placed on historical research, remote sensing site location, and the conducting of shipwreck reconnaissance assessments. A number of known wrecks will be examined to facilitate identification, documentation, and assessment of research potential. Magnetic remote sensing equipment will be employed to locate previously uncharted wrecks for similar investigation. Historical research will be employed to assist in the location and identification of shipwreck remains. Students who participate in diving aspects of the project must make arrangements with the East Carolina University Diving Safety Officer to insure that all aspects of a 60 foot depth certification have been met prior to the initiation of field research.

Undergraduate (senior level) and graduate level credit will be offered. A maximum of 5 semester hours credit can be selected from a variety of courses. A tuition and fee schedule is available upon request. Semi-private residence hall rooms can be reserved from $28.00 a week on campus. For the final four weeks, housing will be provided near the site, and students will be responsible for their own meals.

Applicants for the program should be enrolled in history, archaeology, geography, or related studies.

For additional details, medical forms, application, and tuition and fee schedule, please contact:

Dr. Carl E. Swanson  
Program in Maritime History  
and Underwater Research  
Department of History  
East Carolina University  
Greenville, North Carolina  
27858-4353  
Telephone: (919) 757-6097
Where Are They Now?

Over the years, the ECU Program in Maritime History and Underwater Research has graduated an impressive number of students who have found employment in the field. An equally impressive number have continued their doctoral studies at other universities. The following list updates the current whereabouts and activities of former program members.

James Allan--Ph.D. candidate, University of California, Berkeley.

David Beard--Archaeological head of the Underwater Archaeology Management Program (UAMP), Charleston, South Carolina.

Colin Bentley--sailing instructor, College of Charleston.


Robert Browning--U.S. Coast Guard historian.

Rita Folsé-Elliott--contract archaeologist, Georgia.

Kevin Foster--interim Director of the Confederate Naval Museum, Columbus, Georgia.

Lynn Harris--Assistant Head of the Underwater Division, South Carolina Institute of Archaeology and Anthropology at the University of South Carolina in Columbia.

Rick Heron--Ph.D. candidate at Texas A&M.

Kurt Knoerl--Archaeological Technician with UAMP in Charleston, South Carolina.

Dave Moore--contract researcher, Maryland.

Stuart Morgan--editor, Williamsburg, Virginia Gazette.

Bill Morris--archaeologist for the state of Virginia.

Bruce Terrell--archaeologist for the State of Virginia.

Wilson West--researcher, House of Representatives, Washington, D.C.

Papers and Publications

The following papers were presented by staff and students at the various conferences during 1989 and early 1990.


"A Brief Look at Old Problems and New Solutions in Naval and Maritime History," Ninth Naval History Symposium, Annapolis, Maryland, October, 1989.

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Staff and student publications during 1989 include:

Fonvielle, Chris. Introduction to *The Navy in the Civil War: The Atlantic Coast* by Daniel Ammen.


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**Maritime Theses**

The following is an updated list of theses completed within the last year by students in the Program or the Department of History, on maritime and naval topics. A complete list of all ECU maritime and naval theses is available upon request from the Dr. Carl E. Swanson, Acting Co-Director, Program in Maritime History and Underwater Research, Department of History, East Carolina University, Greenville, North Carolina 27858-4353. Copies of ECU theses may be ordered through Inter-Library Loan at your local university or public library from Joyner Library, East Carolina University, Greenville, North Carolina 27858.


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**Graduate Student Research**

The following list reflects the research areas of interest of the students currently enrolled in the program.

David Baumer: The history and workboat design of the North American fisheries.

Frank Cantelas: Centerboard schooners in the Great Lakes.

Jay Chapman: Post revolutionary American sea power.

Diane Cooper: Matthew Turner and the shipbuilding industry in the San Francisco Bay area, 1875-1900.

Cris Gober: A history of the USS KEARSARGE.

Bob Holcomb: Confederate ironclads, evolution of design.

John Jensen: Federal control over health laws: maritime quarantine regulation and the cholera scare of 1892.
John Kennington: A history of forces afloat of the Confederate Naval Squadron at Savannah, Georgia, 1861-1865.

T. Kurt Knoerl: An archaeological investigation of the cove area of Old Fort Niagara.

Roderick Mathers: Advice boats of the Royal Navy.

Betsy Mathews: A study of the construction and design of the six-masted schooner GEORGE WELLS.

Scott Moore: The evolution and design of the Greek naval forces and strategies in the Hellenistic Age.

Glen Overton: A detailed analysis of the USS SCHURZ.


Lolly Ritchey: STAR OF INDIA: Impact of unsanctioned American trade activities in the Mexican Territory of California, 1845-1846.

Steve Schmidt: An examination of the Potomac Flotilla operations and the loss of the USS TULIP.

James D. Spirek: A history of the relationship between corsairs and the Ottoman Empire.

Please forward all address corrections to the editor of Stem to Stern.