Pamunkey River Project and MAHS Fall Field School 2005

By John Dowdle

Over the Veteran’s Day weekend of 2005, MAHS conducted an Underwater Archaeology Field School in conjunction with its ongoing Pamunkey River Project. The field school was part of the initial exploration and survey of the White House Landing area along the river. Participants in the survey and field school included MAHS President Steve Anthony; MAHS Director of Education and Field School Supervisor Tom Berkey; and MAHS members John Dowdle and Dave Shaw. The MAHS Field School students were Jack Conroy and Chris Ginther. Bruce Terrell, Senior Underwater Archeologist with the National Oceanic and Atmospheric Administration (NOAA), is Project Archaeologist for the Pamunkey River Project, and he provided guidance and oversight for the event.

The White House Landing area has seen over 300 years of American history. One of the most interesting periods was during spring and early summer of 1862, when Major General George B. McClellan’s Union Army of the Potomac conducted a major offensive operation to take Richmond, the political and economic capital of the Confederacy. Civil War historians call this the Peninsula Campaign, as McClellan’s strategy was to move his forces up the Virginia peninsula from Fort Monroe, around the Norfolk area, to threaten the

The Virginia Peninsula Showing the York and James Rivers and Their Tributaries Planned as Conduits for McClellan’s March on the Confederate Capital of Richmond (inset: Gen. George B. McClellan).

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Notes from the Prez – Steven Anthony

Spring has arrived and its time to shake out the dive gear and tune things up for the summer field season. This is also a good time to bring everyone up to date on the many MAHS activities and accomplishments over the long winter months.

In November, MAHS conducted a field expedition to White House, Virginia, a little hamlet on the Pamunkey River. White House served as General George B. McClellan’s supply depot during the Civil War, and MAHS discovered several wrecksites near the shoreline that became the focus of our study. See the related article for the full story. MAHS will continue investigating these sites during the summer months as well.

In January, Jim Smailes and Ray Hayes represented MAHS at the SHA conference in Sacramento. Also, Jack Conroy joined the Board of Directors as the new MAHS Treasurer. Welcome aboard Jack. Later in January, Tom Berkey organized the Introductory Course once again and this year’s classes were very well attended. Previous plans to update the Photography and Videography class were also fulfilled this year when Ted Kron joined the MAHS faculty to provide the students with the latest developments in digital photography.

On February 4, 2006 the MAHS Pamunkey River project team conducted a one-day expedition to White House to scope out the wrecksites for the upcoming summer Field School. Dennis Knepper provided a permanent fix for the datum points which, surprisingly, turned out to be quite a challenge on the shoreline sites. We also reestablished the baseline and additional measurements were retrieved from the bow section of Hull #1.

Later in the month MAHS received word that the treasure salvage company, Sea Hunt, was at it again and had reapplied to Virginia for another permit to excavate the LaGalga and Juno. The application was submitted despite the Supreme Court decision declaring Spain as the rightful owner of these wrecks. So, MAHS registered its opposition with the Commonwealth of Virginia and notified Spain’s U.S. counsel of the impending threat to these sites. To the best of our knowledge, a Virginia recovery permit was never issued to Sea Hunt for this work.

In a similar incident, MAHS learned that treasure salvors had obtained permits from Richard Lawrence, head of the underwater archaeology branch of the state of North Carolina to salvage Spanish shipwrecks reported to reside along the North Carolina coast. Stunned by this news, MAHS took action to protect these wrecks and again alerted the Kingdom of Spain.

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Confederate capital from the rear. Key to McClellan’s plan was the creation of supply bases along both the James and York rivers and their major tributaries in order to support his army of over 100,000 soldiers. The Pamunkey River and the Mattaponi River, which join to form the York River at West Point, several miles below White House Landing, were major arteries used to supply McClellan’s army. The White House Landing site was a key transportation node in peacetime, being the crossing point of the Richmond and York River Railroad, and it became a vital supply link for McClellan during his campaign.

The Union campaign stalled outside Richmond, and in July 1862, McClellan abandoned his efforts to take the city, retreating instead to Fort Monroe. During the retreat, ships, barges and supplies were either left behind or burned to keep them from being captured by the Confederates. Research indicates that many of the barges and ships used around White House Landing may have suffered this fate. It is the remains of these vessels that MAHS hopes to locate and survey over the next several years.

Previous MAHS surveys have documented the presence of remains along this stretch of the river. A visual survey was conducted in 2003, discovering various wooden structures along the shoreline that might be wharf or vessel remains (MAHSNEWS 2003), while a remote sensing survey in 2004 indicated a large number of submerged anomalies in the area (MAHSNEWS 2004). The present survey and field school focused on the White House Landing area for several reasons, including the historical activity documented there and the more practical aspects of landowner approval and access availability.

The project was conducted over a period of three days. Tom, Steve, and Dave arrived midday Friday, November 11, to meet with the present landowners. Two local historians, James Harris and Terri Lindsay (Secretary of the New Kent County Historical Society), introduced the MAHS team to the Powells, the property owners. After introductions, Dave, Steve, Jack, Chris and Tom conducted a low-tide shore reconnaissance until just before dark. They discovered what appeared to be the remains of four wrecks along the shoreline. After taking initial measurements and photos, the crew headed to motel accommodations in nearby West Point to meet the rest of the MAHS team, due in later that evening.

On Saturday morning, after a breakfast-and-planning session, the MAHS team arrived at the Powells’ home around 9:00 AM to meet with Bruce Terrell and discuss the survey. Bruce provided the Powells with a historical and archaeological perspective of the area and described MAHS’ work plan for the weekend, as well as plans for ongoing research. The Powells were enthusiastic, gracious hosts and offered to support MAHS’ efforts in future surveys of the area. The MAHS team then prepared for the day’s activities. Steve gave a safety briefing to everyone, as well as a course overview to Chris and Jack. Tom then led the two students in a dry-land exercise practicing trilateration mapping techniques. The rest of the team set up the zodiac boats and gear. During this time, Bruce sought out and met with other local citizens who had additional historical knowledge of the area.

The plan was to finish diving and data collection by November 2005 Pamunkey expedition members at the foundation ruins of the White House. Back row: T.Lindsay and J.Harris;  Front row L-R: J.Conroy, T.Berkey and C. Ginther. Photo by J. Dowdle.
3:30 PM and pack up the gear before dark, as sunset was around 5:10 PM. By midday, the team moved out to the survey site. The survey area chosen contained two vessels, which appeared to be located side-by-side, parallel to the embankment. Dave and Steve reconnoitered the area while the other team members prepped for the survey. After the initial reconnaissance, the team decided to wait for the tide to drop to its lowest point to expose the second hull along the shoreline.

Mud surrounding the wreckage made moving around the site an “interesting” experience, as it was firm in some areas and very soft in others. More than once, team members ended up in amusingly undignified positions. In the meantime, Steve and Dave set up a granny line to use around the site, while John and Tom began initial measurements on the timbers of the first hull, closest to shore. When Bruce returned, he assisted Chris, Dave, and Tom, as they collected data on the first and second vessels. The second hull also seemed to have a keelson along its length, which indicated that it may have been a small ship or schooner rather than a barge. The team also discovered several artifacts possibly related to the wrecks including:

- stoneware bottle base
- polychrome white ware
- salt-glazed stoneware
- a leather shoe heel

At the same time, Steve and John suited up to conduct an underwater survey to determine whether any anomalies or items of interest were present in the water on the river side of the second hull. They found the water to be a ‘refreshing’ 55 degrees Fahrenheit with zero visibility. The divers conducted the survey totally by feel, surfacing to report any results to Jack, who was acting as the data recorder on the bank. Using a semi-circular radial survey technique with a line attached to a steel rod adjacent to the bank, they conducted the search moving out from the bank in 3-meter increments. If an anomaly was found, one diver would tug on the line to signal the other to move down to his location, and then both divers examined the feature together and surfaces to give Jack their impressions. Initial indications from the features identified by Steve and John indicated the probable outline of a third vessel parallel to the first two, creating the type of temporary wharf seen in historical photographs of the White House Landing.

The team wrapped up its work right before dark, but remained awhile to observe optimal low tide conditions. Their patience was rewarded as the light from the three-quarter moon exposed the remains of at least 3 other wrecks along the shore line. The team then moved back to the motel in West Point for the evening and after dinner formally transposed the data from the day’s survey.

The next morning several team members returned to the site to complete or clarify measurements from the previous day, but tide conditions along the bank were not conducive to gathering accurate measurements. So, the team did what they could along the bank and then walked over other parts of the area, including the extant brick foundations of the White House and the historic springhouse, in anticipation of future exploration. Finishing by early afternoon, the group headed back to northern Virginia.

Steve Anthony prepares for a dive to survey beyond the second hull. Photo by J. Dowdle.

Barges moored parallel to the shoreline to create a temporary wharf, with a double-turreted ironclad in the background.

The survey and field school were deemed a success and proved to be one of the more enjoyable field schools MAHS has held in the region in terms of weather, as the November days were mild and sunny with a gentle breeze. The weekend provided a wealth of information and future opportunities for MAHS to map...
and survey a little explored aspect of the American Civil War from an underwater archaeological perspective. The event also provided a valuable training opportunity for students, as well as a controlled environment in which to develop appropriate low-visibility survey techniques for later use at the site. Lessons—learned in the areas of site preparation, equipment, and procedures were collected and will help to make the next survey even more productive. With the active support of people like the Powells, James Harris, and Terri Lindsay, and with archaeologists like Bruce Terrell providing assistance and guidance, MAHS will have a unique opportunity to explore and survey this part of underwater Virginia for years to come.

Note: Bruce Terrell contributed some of the historical research for this article. The map on page 1 is the “Map of the Peninsula of Virginia: Showing Route of McClellan’s Army Toward Richmond” by Robert Knox Sneden, from the collections of the Virginia Historical Society, Richmond. More historical background can be found via the Pamunkey Project link at www.mahsnet.org.

T.Lindsay, C.Ginther and T.Berkey inspect White House Hull #1. Two additional hulls lie submerged to the right. Photo by J. Dowdle.

Drawing of Hull #1, showing detail of the bow area. Map by C.Ginther, D.Shaw, T.Berkey, and T.Lindsay.
The 39th annual meeting of the Society for Historic Archaeology (SHA) was held in Sacramento, California, from January 11 – 16, 2006. The conference drew more than 800 participants, including several MAHS members. The theme of the conference this year was “Life on the Edge,” an all encompassing topic covering the edge of empires, oceans, and disasters through studies of technologies, innovations, partnerships, and cultures. In addition, the conference commemorated the disparate but related 100th anniversaries of the Antiquities Act and the San Francisco earthquake.

The number and variety of presentations in underwater archaeology grows each year. In 2006, more than 50 underwater papers were presented. One of the more heralded of these presentations was by George Bass, considered by many to be the father of underwater archaeology. His paper, “Rewriting History with Bronze Age Shipwrecks,” discussed the excavation of two ancient wrecks off the Turkish coast. Dating from about 1200 BC to 1300 BC, these sites have served as catalysts for re-examining existing interpretations of early seafaring in the eastern Mediterranean. Phoenician sailing was originally thought to have begun only in the Iron Age, but these wrecks showed the major role played by Phoenician merchant-sailors throughout the preceding Bronze Age.

MAHS Advisor, John Broadwater, spoke about the British ships sunk at Yorktown during the American Revolution, and about the battle between the *USS Monitor* and *CSS Virginia*. Since the majority of naval battles during these wars were fought in coastal or inland waters, archaeologists are provided with the opportunity to examine and interpret submerged sites within broader contexts, beyond just the battle that resulted in a particular ship’s loss. For example, the *Betsy* was one of 23 transport ships awaiting the embarkation of British soldiers who were to evacuate Yorktown and escape encirclement by American and French troops. Her scuttling is a physical reminder of the results of the Battle of the Capes in which the French Navy repelled the Royal Navy, which succeeded in preventing the evacuation of Cornwallis’ army and compelling their ultimate surrender. Just 81 years later, the first battle of ironclads occurred at Hampton Roads, the first incident in the very long struggle by the Union Navy to maintain the blockade of Southern ports during the Civil War.

Dave Conlin, of the National Park Service (NPS), and Hans Van Tilburg, of the National Oceanic and Atmospheric Administration (NOAA), spoke about the discovery in 2002 of the Japanese midget submarine sunk by the *USS Ward* a few hours before the Japanese attack on Pearl Harbor. Five of these secret weapons had been sent to participate in the attack, and none returned home. Lying in deep water, this intact midget sub is a tomb and it has become the focus of a joint NPS/NOAA preservation effort.

The topics of other presentations varied in distance and time, from the results of local archaeological investigations along the Sacramento Riverfront to explorations of nautical archaeology in Africa which included work on a late 18th-century shipwreck off the west coast of Ghana and a 17th-century Portuguese frigate off Mombassa, Kenya. Recent work that was presented included investigations of shipwrecks dating to 1495 at “La Isabela” in the Dominican Republic. This site was reportedly Columbus’ first settlement and thus is called the “birthplace of the Americas.” Another paper discussed the adaptation of a traditional astronomical instrument, the astrolabe, by the Portuguese for determining latitude at sea.

A number of papers addressed topics relevant to the geographic location of the conference, northern California. The notorious Donner Party incident, for example, occurred near Truckee, California, north of Sacramento, in the 1840’s. Recent forensic archaeology that included DNA analysis of archaeological bone samples from one of the Donner campsites along Alder Creek suggested that while cannibalism was a factor in

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The Advisory Council on Underwater Archaeology Meets with the Society for Historical Archaeology in Sacramento, California

By Ray Hayes

The Advisory Council on Underwater Archaeology (ACUA) is an international advisory body concerned with issues related to underwater archaeology, conservation, and submerged cultural resources management. The ACUA is an independent corporation that is formally affiliated with the Society for Historical Archaeology (SHA). The Council is composed of twelve elected members and appointed Associate members (non-voting) who represent various constituencies. Among those constituencies are graduate students, avocationals, and representatives of support technologies. The Council also recognizes an Emeritus membership. The ACUA convened in this year Sacramento, California, on January 10 and 13, 2006, prior to and during the 39th Annual Meeting of SHA.

The meeting was chaired by Mark Staniforth, from Flinders University (Adelaide, Australia), and co-chaired by Matt Russell (University of California, Berkeley, formerly with the National Park Service’s Submerged Resources Center).

Three newly elected members of the Council were introduced: Annalies Corbin (PAST Foundation, Columbus, Ohio); Dolores Elkin (National Institute of Anthropology, Buenos Aires, Argentina); and Claire Peachey (Naval Historical Center, Washington, D.C.).

As one of the agenda items for this meeting, the ACUA officially recognized MAHS as an Institutional Associate member. Having had the honor and privilege to serve as an Individual Associate member of the Council since 1997, I am no longer eligible to continue in that capacity. However, now that MAHS is an Institutional Associate member, representatives, including myself, may be designated to attend the 2007 meeting in Williamsburg, Virginia, and the 2008 meeting in Albuquerque, New Mexico. According to newly approved ACUA Policies and Guidelines, terms for all Associate members are now reduced to two years. However, Institutional Associates are not limited to two consecutive terms, but may be renewed indefinitely by vote of the Council. In support of this new recognition for MAHS, former ACUA Chair, Toni Carrell (Ships of Discovery, Corpus Christi, Texas, soon to be relocated to Albuquerque), commented that MAHS is clearly the principal organization in the United States that is dedicated to educating and preparing avocational divers to support underwater archaeological projects.

Another agenda item included an announcement that several letters were prepared and sent on behalf of the ACUA during 2005. Letters of support and endorsement for the National Historic Preservation Act and the Alabama Underwater Cultural Resources Act have been forwarded to the respective agencies. A letter of concern has been drafted and delivered to the National Geographic Society regarding its persistence in sensationalizing the activities and plunder of treasure hunting corporations. A letter has also been submitted to the Smithsonian Institute in response to an article in the Smithsonian Magazine about the retrieval of coins from the S.S. Columbia, in clear violation of the UNESCO Convention on cultural resources in international waters.

The Publications Subcommittee, chaired by Felipe Castro (Institute of Nautical Archaeology, College Station, Texas), announced the completion of a brochure in Portuguese on underwater archaeology. The brochure will be added to previous publications by the ACUA in English, Spanish, and French. Distribution of this new publication will be to universities, government officials, and archaeological organizations in countries where Portuguese is spoken. It was noted that although commercial treasure hunting may not be a local or regional problem in these areas, looting by sport divers is common. These brochures will explain why such activities should be halted.

The Education Subcommittee was represented by Annalies Corbin, who led a discussion about heightening the visibility of the ACUA and promoting maritime and underwater archaeology as an attractive and viable career option for students. Several ideas were proposed, including an ACUA hosted-reception and a roundtable luncheon at the next national meeting. It was agreed that a student reception is already hosted by SHA. If ACUA could become a co-host, there would not be a need to find program time for a second reception. A third idea was to sponsor a prize to the best student paper delivered in the underwater component of the annual SHA meeting. Unfortunately, the ACUA has limited funds to cover the costs of any of these options. Sponsors from the corporate sector (e.g., publishers or technology companies) would have to be solicited to raise money for these activities.

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The pool session for the 2006 Basic Underwater Archaeology Class was held at the Jim McKay Natatorium at George Mason University, on Sunday, March 26. Fifteen students participated in the session. MAHS Director of Education, Tom Berkey, led the class with assistance from Ray Hayes, Jim Smailes, Dave Kerr, and Dennis Knepper. Also in attendance were Mark Little, Bill Rutkowski, and Bill’s son Joseph.

While the model shipwreck, *Lil’ Sinkenteeen*, was being assembled on the bottom of the pool, Ray walked the group through a review of the practical aspects of trilateration and then had them practice the techniques on dry land, mapping in benches, chairs, and other objects pool-side.

Photos by D.Knepper and M.Little.
Teams were assigned sections of the wreck to map and were sent into the pool to try out their mapping skills underwater. It’s pretty busy with seven teams of divers on the wreck at one time. But with a little patience and courtesy, everyone got their data.

After collecting a good set of data, the students were given black plastic to cover their masks and were sent back to the wreck to try again in simulated low visibility conditions. All agreed that decreased visibility added to the challenge of bringing back good data.

Photos by D.Knepper and M.Little.
Ongoing Research on the MAHS Pamunkey River Project
By Dennis Knepper and John Kuch

In early February of 2006, a small team of MAHS researchers returned to the White House Landing site for a day of mapping and recording. The focus of the work was Hull #1, which lies between White House Landing and the railroad bridge at West Point. The vessel is situated at the waterline and is partially exposed during low tide. The project was thus timed for the coincidence of low tide and midday on a weekend day, allowing the team to travel to the site from Washington and return in a single day.

A map of the vessel had been initiated as part of the field school in November (see the lead story in this issue of MAHSNEWS). The baseline used for that work was re-established and then re-oriented somewhat to extend directly along the centerline of the hull. The compass orientation of the baseline was recorded and both ends of the line were surveyed to permanent datum points placed on the terrace above the floodplain of the river.

Winds were blowing out of the southeast the day of the survey, and they acted to contain the water flowing downstream toward the Pamunkey’s confluence with the Mattaponi at the York River. The effect of the winds was keep the tide from fully ebbing so that the wreck stayed submerged even at lowest ebb. Nevertheless, extensive probing along the submerged stern and the starboard side of the vessel allowed the team to make accurate measurements of the length and beam of the surviving portion of the hull.

In the portion of the bow that was exposed, a keel-like stem post was present that extended a short way into the hull, but did not connect with a keelson. Thus it was unclear whether or not the vessel was keeled. Careful work beneath the bow established that a keel-like timber was present in that location. The timber was found to reach deep into the muddy sediments along the stream bank, but with some concerted effort the molded dimension (the depth) of the timber was recorded.

In spite of the fact that the tides did not cooperate fully, making the documentation tasks that had been planned more difficult to complete, the main goals of the day were met. The team felt that the day trip to the site had been worthwhile and that good data had been collected.

In late March, another team of MAHS researchers returned to White House Landing, this time to work on one of the terrestrial portions of the site. Prior to the Civil War, the White House plantation was owned by the Dandridge and Custis families, and it was at White House that George Washington courted and eventually married Martha Dandridge Custis. The overseer of Washington’s Mount Vernon estate outside Washington, D.C., James Anderson, came to manage the White House plantation following the deaths of George and Martha. Anderson and his wife, Helen, were buried near the house. The exact location of the graves has been lost. MAHS member, John Kuch, a detective with the Fairfax County Police Department, offered the services of thermal imaging equipment used in surveillance and crime investigations in an attempt to locate the graves. The imager operates by detecting differences in surface temperature between objects. Excavated and redeposited earth, such as would be found in a grave, absorbs and retains heat more readily than undisturbed ground. Modern graves are easily located using thermal imaging technology. But use of the technique in archaeology was
considered experimental, since it was unclear at the outset how well 200-year-old excavations might be detected.

James Harris, New Kent County historian, pointed out the general area in which the graves were thought to be located in a large, open yard area northwest of the White House foundations. A baseline was established across the field, and 25-foot-wide survey lanes were laid out perpendicular to the line. The thermal imager is about the size of a small, VHS video-cassette recorder, and passes were made walking slowly while sweeping the imager across the ground surface within each survey lane.

The results of the survey were somewhat less positive than anticipated. Two unusual, oval-shaped anomalies were detected and mapped. While clearly not grave shafts, they consisted of ring-like alignments, possibly the remnants of stone or brick walls. The remainder of the field, including the area around the house foundations, was then surveyed for evidence of outbuildings. The baseline was used to map the location of the visible foundations of the White House and of a springhouse to the south that appears in photographs of the area taken during the Civil War. Finally, a scale drawing of the house foundations was completed.

According to Mr. Harris, the field had been bulldozed several years ago so that the entire surface of the field had been disturbed. Many anthills and mole disturbances were noted in the loosened earth, as well. All of this activity produced background disturbances that may have masked any vestiges of archaeological features.

Nevertheless, the survey was considered a useful exercise. Two features possibly related to outbuildings were located and mapped, and the White House foundations, their location within the field, and their relationship to the springhouse were mapped. While extensive evidence of buried archaeological features was not collected, the team was able to assess the thermal imaging equipment in terms of its utility in archaeological surveying within disturbed field contexts.
Maryland’s 15th Annual Workshop in Archaeology, was held on March 18, 2006, at the Maryland Historical Trust, in Crownsville, Maryland. The featured speaker this year was Julie M. Schablitsky of the University of Oregon, who spoke on the “Archaeology of the Donner Party.” Dr. Schablitsky has been working on this project for several seasons, and as part of her presentation explained how archaeologists occasionally find themselves studying popular mysteries that are laced with an often contradictory array of personal recollections, sensationalized media accounts, and myriad secondary histories. The fate of the Donner Party is among this type of story, and determining what really happened requires wading through many false assumptions and oversimplifications. The common telling of the tale is rather straightforward, focusing on early pioneers becoming snowbound and ultimately turning to cannibalism to survive. Using archaeological data, psychological and physiological analogies, as well as new technology including DNA analysis, the research team was able to reconstruct the saga of the Donner Party in all its complexity and has succeeded in humanizing the tragedy of settlers trapped in the Sierras during the ill-fated winter of 1846-47.

Two maritime projects were highlighted in the Workshop. Tom Berkey presented the latest findings of the MAHS survey of the Pamunkey River. This project, featured in previous articles in this issue of MAHS NEWS, is a long-term study of a section of the river that was an important logistics base for General McClellan’s Peninsula Campaign in the spring of 1862. Under the direction of archaeologist Bruce Terrell, MAHS completed a sidescan survey of an xx mile reach of the river in 2004 and recently conducted a survey of vessel remains located at White House Landing.

Dave Howe, now with the Institute of Maritime History, presented the latest findings from the SHIP Project, which uses volunteers to scout for wrecks and other submerged sites, map them, gather archival data, compile the results into a computer database, and report all findings to the Maryland Historical Trust. In three years, working on weekends with a small crew, 46 locations in Maryland have been investigated. Of those sites, cultural material was found at 12 locations, while the remainder either contained no cultural material or were dismissed as requiring no further research. In 2006, continued archival research, a full schedule of weekend trips, and a week-long field expedition are planned.

Also during the workshop, Maryland State Underwater Archaeologist and MAHS Advisor, Susan Langley, presented this year’s Maryland Maritime Archaeology Program’s “ Volunteer Appreciation Award” to Tim Jeffas, a former member of the Southern Maryland Chapter of MAHS, for his many years of service and maintaining the buoy on U-1105.

Dr. Langley also held a session on Rock Art in Maryland in which she discussed prehistoric Native American petroglyphs and pictographs. Petroglyphs are designs carved in stone. While common in the Southwestern United States, prehistoric petroglyphs are rare in Maryland. The focus of Langley’s presentation was the preservation of the Bald Friar Petroglyphs, which are located along the Susquehanna River between Cecil and Harford Counties. She also held a session for children, exploring pictographs or rock paintings. In a hands-on demonstration, the children learned about rock art and were given an opportunity to paint their own designs on rocks that they could take home.

Other presentations on prehistoric archaeology included the Barton Native American site in western Maryland, a locale that has produced a wealth of information on the prehistory of the Upper Potomac River Valley. A demonstration was also held showing the basic techniques archaeologists use in re-assembling the fragmentary remains of broken ceramics using appropriate conservation-grade materials. Attendees had the opportunity to practice these skills. Another practical session involved making and using prehistoric cordage. Attendees were shown how to obtain natural fibers, different ways to twist the fibers into cord, and how to use the cordage for various purposes, such as stringing the trigger of a trap or stringing a bow or a drill.

Maryland State Underwater Archaeologist, Susan Langley, presents this year’s MMAP “Volunteer Appreciation Award” to Tim Jeffas.
Lewes, Delaware Shipwreck Update

In late 2004, an Army Corps of Engineers dredge working on a beach replenishment project hit a debris field about 2,000 feet off Lewes Beach near Roosevelt Inlet and began pumping thousands of artifact fragments ashore along with 165,000 cubic yards of sand. It was a beachcomber’s paradise, but a nightmare for historic preservationists. Originally thought to be the remains of an early Dutch coastal whaling settlement, several months of research determined that the artifacts were from a merchant ship that sank sometime in the mid-1700s.

Dolan Research, the maritime cultural resource management firm from Philadelphia that conducted the initial survey of the dredging corridor, was hired by the Corps to assess the site. An initial survey was conducted in February of 2005 and a formal assessment of the site was conducted the following April.

Lee Cox, of Dolan Research, said that most of the artifacts are buried in four feet of sand on the bay floor, in waters that vary up to about 14 feet, depending on tidal conditions. Divers worked for 11 days in the spring of 2005 doing survey and recovery work, using surface supplied air and a communications system to maintain coordination with a dive supervisor onboard a command boat.

Little or none of the ship’s fabric was disturbed by the dredge,” said Dan Griffith, director of the Lewes Maritime Archaeological Project which oversees research at the site. “Nothing of this magnitude has been discovered since the DeBraak,” Griffith said. HMS DeBraak was a British warship that sank in a storm in 1798. What remained of its hull was discovered in Delaware waters in 1984. Since its recovery, the hull has been kept wet in an area warehouse in an effort to preserve it.

Griffith said his working theory is that the artifacts date to 1769-1775. “We haven’t seen any data that would change that,” Griffith said. The theory being developed is that the vessel was a merchant ship sailing from Philadelphia, New Castle, or some point to the north, and was delivering products southward. Curator of Archeology for the Delaware State Museums, Chuck Fithian, and a few other archaeologists are working on stabilizing and cataloging the thousands of artifact fragments from the site (at least 38,000 to date). The artifacts include glass case bottles, fragments of ceramic plates, spoons, wide mouth storage jars, shoe buckles, rifle trigger guards, tobacco pipes, and pieces of chamber pots. At least nine “military miniatures” were found among the many artifacts found on the beach. Inaccurately referred to as “toy soldiers,” Fithian noted that the pewter figurines were not children’s toys but were actually used by strategists in tabletop war games. Among the miniatures found were a kneeling rifleman, a color guard soldier, and a sailing ship.

Griffith noted that goods aboard the merchant vessel have been identified from five countries – England, Germany, Holland, South Africa, and China. None of the artifacts appear to be French, “which says something about the British relations with the French during that period,” said Griffith. Researchers have identified fragments of more than 250 individual jugs along with numerous pieces of stoneware and mineral water bottles. Fithian noted the salt-glazed stoneware they found is like modern day Tupperware and can hold a wide range of materials. Tobacco pipes were found as well. Fithian said smoking tobacco was a common past time in the 18th century. Men, women, and even children smoked tobacco on a regular basis. He said some of the pipes found may be of Dutch origin and pipes frequently have a makers’ mark on them.

Archeologists hope these marks can help them identify exactly where the pipes came from.

Divers have located several millstones on the bay floor that have provided both evidence and more questions. “We know there were several mills in the area and the stones could have been headed to those,” Griffith said. Two of six visible millstones were recovered using lift bags. The two stones were selected because they could be removed causing minimal disturbance to the shipwreck site. The larger millstone
weighs an estimated 500 pounds, measures about 43 inches in diameter, and is about five inches thick. The smaller stone weighs about 200 pounds and is 28 inches in diameter.

Two things archaeologists know for sure – the millstones were being shipped new because none of the furrows that would have been cut by a miller customizing them for specific grains are present, and they didn’t come from France. “French grinding stones were built from four pieces because the stone didn’t occur in great veins as it did in Great Britain,” says Fithian.

Ballast-like stone was found on the beach. The stone was fragmented and only a small amount was discovered, but, Griffith noted, the materials are definitely non-local. “We think most of the weight for ballast was supplied by heavy cargo including bricks and millstones (paying ballast).” Lead sheets with nail holes were also found. The sheets may indicate that the vessel had lead sheeting to protect the wooden hill from shipworms in tropical waters. Yet, eighteenth-century accounts tell of lead sheeting being imported, and so it remains to be seen whether the ship was actually sheathed with lead or whether the lead was cargo – or both. Griffith noted that this question will be among those addressed in the next round of diving.

Fithian said the vessel is giving archeologists a chance to define intercoastal trading during the 18th century. This was a very vibrant trading time for Delaware in which the area was connected to a wider world of economic Atlantic trade. Analysis of the site should supply a wealth of direct information about that trade – what goods were coming in, where they were going, etc., etc.

German salt-glazed stoneware bottle sherd from the Lewes shipwreck site. The impressed seal indicates “Selters” mineral water from the southwest part of Germany. Photo courtesy of the Delaware Department of State, Lewes Maritime Archaeology Project.

A British historian working in London is assisting in research into the identity of the vessel – its name, country of origin, cargo manifest, owner, insurer, and possibly even the captain’s name. Griffith said that after considerable research, the historian has narrowed the list to two ships that were in-bound commercial vessels from that period – Severn (1774) and Commerce (1771). The historian is using insurance records along with cargo listings and other documents to determine whether either vessel might be the wreck off Roosevelt Inlet.

Security is provided by local law enforcement. “The shipwreck site is state property, embedded in subaqueous lands of the State of Delaware,” Griffith noted. A Public Notice will be published soon in local papers placing an indefinite restriction of access to the site as provided for under the State Antiquities Act, as amended in 2005. Marine Police and State Police will provide enforcement. “We have an exclusive access right indefinitely for this shipwreck.” Plans are underway for additional work this summer. “We’re in the middle of reviewing the final report that the underwater archaeologists did for the Army Corps of Engineers in the middle of spring [2005],” Griffith said. We have received notice of a grant award, and so are finalizing the Corps permit application and request for proposal for bidding later this month. I expect diving to occur in mid-to-late summer.”

This article was complied in part from reports in the Delaware Cape Gazette by Henry J. Evans, Jr., and in the Delaware Coast Press by Adam Donnelly.
One of the highlights of the monthly membership meetings is the Speaker Series that we’ve had for a number of years. We started the year with our own Pamunkey River team of Tom Berkey, Jack Conway, Steve Anthony, and Dave Shaw, who presented the overview of the Pamunkey River project. The project, highlighted in this issue of MAHSNEWS, involves a long-term study of a portion of the Pamunkey River which was a major route for McClellan’s Peninsular Campaign in the Spring 1862. Following a presentation of the area’s history by Steve, the other team members explained the side-scan sonar survey conducted in 2005, work done along the shoreline near White House, the former home of Martha Custis, and the discovery of the remains of at least four vessels. The project is in its early stages and will provide many students and MAHS members opportunities to dive on Civil War-period wrecks for years.

In February, the exciting adventures of the “Cruise of the Sea Eagle,” a 3-masted sailing vessel outfitted as a German raider in World War I, was presented by author Blaine Pardoe. The story reads like an adventure yarn worthy of Clive Cussler, complete with an eccentric German noble, Count Felix von Luckner, for a ship’s captain, but it is all true. The SMS Seeadler, as she was known in German, slipped past a Royal Navy blockade in December 1916 disguised as a Norwegian freighter. She had a crew of 6 officers and 57 men most of whom were selected for their ability to speak Norwegian, as well as Captain’s wife (actually a young sailor in a dress and blonde wig). In the open seas, she raided merchant shipping for more than a year, at one stretch capturing and sinking 15 ships totaling nearly 30,000 tons from December 21, 1916 to September 5, 1917. A modern-day pirate, von Luckner was also humane, conducting his raids without any casualties (sadly, there was one accidental death), making him a legend on both sides of the war. The Sea Eagle continued her assault until her demise on reefs in the South Pacific.

April’s speaker was MAHS member John Kuch, who gave a presentation about the recent thermal imaging project at the White House site on the Pamunkey River. The project, reported in an earlier article in this issue of MAHSNEWS, was designed to locate the graves of the former caretakers of the estate. John, a detective with the Fairfax County Police, has spent the last 14 years in the electronic surveillance section. He conducted a live demonstration of the thermal imaging equipment used in the field project. The range of the device varies from 100 to 200 yards depending on the size of the target.
Review of *The Life and Times of a Merchant Sailor: The Archaeology and History of the Norwegian Ship "Catharine"*, by Jason M. Burns

Book Review by Dennis Knepper

Historical archaeologists often find themselves in the advantageous position of having two complementary sources of information with which to work—historical documents and archaeological data. Maritime archaeology, as a branch of historical archaeology, is well placed to use both types of data. An effective example of the interweaving of documentary and archaeological research is found in *The Life and Times of a Merchant Sailor: The Archaeology and History of the Norwegian Ship "Catharine"*, written by Jason Burns, Underwater Archaeologist for the State of Georgia. Burns successfully uses a wide assortment of historical information along with the results of a recent archaeological survey to tell the story of the wreck of a nineteenth-century merchant vessel off Pensacola, Florida.

Burns is Georgia’s first State Underwater Archaeologist. With a Bachelor of Arts in Anthropology from the University of Florida and an Master of Arts in History/Historical Archaeology from the University of West Florida (UWF), he has worked on the *H.L. Hunley* and *CSS Alabama* projects, and has served as the Director of Conservation and Underwater Archaeologist for the Lighthouse Archaeological Maritime Program, a maritime historic preservation organization based in St. Augustine, Florida. The study of the *Catharine* is an outgrowth of Burn’s academic work at UWF. The archaeological investigation consisted of a remote sensing survey, coupled with extensive mapping and non-intrusive documentation, with the latter activities conducted as part of the 1998 UWF Nautical Archaeology Field School.

The merchant ship, *Catharine*, was built in Canada in 1870. Christened *Eliza*, she sailed to Liverpool where she was sold under the name *Carnarvonshire*. She then served 20 years in the British Merchant Marine. Near the end of her career, she was bought by a Norwegian merchant for bulk cargo trade, renamed *Catharine*, and carried guano and, eventually, timber out of Pensacola. She ran aground on a sandbar in August of 1894 and eventually broke apart after 28 days in heavy surf.

To research the archaeological site, Burns consulted various primary sources, such as ship registers from Canada, England, and Norway, crew agreements, photographs, interviews, census records, U.S. Life Saving Service records, and contemporary newspaper accounts. His secondary sources included ship construction manuals, histories of shipbuilding in Canada and Norway, and archaeological reports. Armed with this material, he has created a narrative that flows evenly, is informative, and while not a dramatic tale on the order of television’s “DeepSea Detectives,” does hold the reader’s interest.

In placing the wreck of the *Catharine* in historical context, Burns examines the vessel’s history in light of the so-called “one more voyage” theory of shipwrecks. First proposed by Larry Murphy (1983) and later championed by Richard Gould (2000), the theory holds that in economic hard times, ships were often kept in service beyond their limits of seaworthiness. Those sailing onboard occasionally paid the ultimate price for their employers’ economy, if the vessels failed and sank on the high seas. The *Catharine* did sail well beyond the normal years of service for a vessel of her type. She was made of soft wood (mainly spruce), as was typical of Canadian vessels of that period. The average life of such a vessel was 15 years, while the *Catharine* was sailing in her 24th year when she wrecked off the Florida Gulf Coast. Other evidence of her owners’ thrift was the addition of steam-powered deck machinery that would have allowed for smaller crews. While acknowledging her age, Burns is not specific as to whether he thinks the vessel was a victim of the one-more-voyage syndrome, suggesting that the many modifications to the vessel made by her Norwegian owners may have been merely “a cultural adaptation to economic conditions.” How this differs from Murphy’s theory of cost-cutting in the face of economic stress is not made clear.

Burns’ study is short, totaling 113 pages, but it is succinct and focused. It is easily accessible and does not contain extraneous detail. The text and illustrations cover about 80 pages, while the remainder of the book includes three appendices, a glossary, references, and an index. The appendices consist of 1) a detailed summary of the ship’s voyages; 2) an artifact catalog, with a short section on the conservation and functional. Like the explanations of ship architecture, rigging, and deck machinery in the text, the
entries are clear, to the point, and limited to the artifacts and features found on the wreck. The bibliographic references are wide-ranging, with a good mixture of historical studies, period documents related to shipbuilding, and modern comparative archaeological studies. There are problems with missing references, though, which is a disappointing editorial shortcoming. The index is useful and does not appear to have been computer generated.

In sum, Burns offers an interesting story that is well researched and well written. His narrative describes the events surrounding a shipwreck in Florida, while his interpretation of the episode indicates how the ship and its history exemplified wider events in the world of commercial shipping at the end of the nineteenth century. A shipwreck is an event, and as such it is different from many other archaeological sites, particularly those occurring in terrestrial environments where sites typically consist of the accumulated debris of long-term occupation. But a shipwreck is also part of a socio-cultural process, and that process can be studied through the features and characteristics of the wreck—its cargo, evidence of repairs, its ownership history. The story of the Catharine is thus the story of the domination of timber shipping by Norway in the late nineteenth century and the reliance of Norwegian traders on sail long after other maritime powers had changed to steam propulsion. The Catharine’s part in this story, how this vessel connected Florida timbering with world markets via Norwegian shipping, is the heart of Burns’ ably told tale.

SHA Conference, continued from page 6

the tragedy that struck the party of emigrants, that aspect of the story may have been exaggerated.

The impact of Chinese immigration into California was the subject of another series of papers, highlighting significant contributions by Chinese immigrants in building the California territory, in gold mining, and especially in building the western segment of the Transcontinental Railroad. Sacramento was the starting point for the Central Pacific Railroad’s march eastward, and Chinese labor was a significant factor in its construction through the mountains.

Although the capital of a large U.S. state with the seventh largest economy in the world, Sacramento is really just a small town. It does have an excellent railroad museum, a transit system, and the recently renovated capital building, across from conference hotel. The building is open to the public for tours and was visited by many of the conference attendees in their spare time.

Next year the SHA conference will be closer to home. The meetings are scheduled to be held in Williamsburg, Virginia, affording more MAHS members a chance to attend. We are looking forward to presenting the results of our work on the Pamunkey River at the conference. We encourage MAHS members to take advantage of this opportunity to hear the wide range of topics and meet some of the many researchers who make up a national forum such as this.

A 2-6-0 steam locomotive, so called for the number and arrangement of wheels: 2 guide wheels and 6 driver wheels. Sacramento was the starting point for the western portion of the transcontinental railroad and has a large, very informative railroad museum. Photo by J. Smailes

The Japanese mini-sub image on page 6 is from http://www.soest.hawaii.edu/HURL/midget.html #images.
The Membership subcommittee report was distributed by Victor Mastone (Underwater Archaeologist, State Historic Preservation Office, Massachusetts). The subcommittee reported that approximately 10% (N=187) of the active SHA membership roster appears to be underwater-oriented. Another charge to the subcommittee was to estimate the global constituency for the ACUA. Many individuals involved in underwater archaeology are not members of international organizations such as the SHA, which meets annually, or the World Archaeological Congress, which meets every five years. These individuals are, however, active at the local, regional, or national level and should be considered as constituents for the ACUA in accord with its international mission. Further work was recommended to continue this study and to further define the many individuals, both professionals and volunteers, who support underwater archaeological research.

According to the ACUA underwater program coordinator, Jerome Hall (California State University), the Sacramento meeting drew over 800 registrants. There were 90 papers on the program in the underwater component. The next meeting will be in Williamsburg, VA. John Broadwater (Mariner’s Museum, NOAA, Newport News, VA) will coordinate the underwater program for the ACUA. Subsequent meetings of the SHA will be held in Albuquerque, NM (2008) and Toronto, Canada (2009). Underwater session coordinators for the latter two meetings have not yet been designated by Council, although the Submerged Cultural Resources Center and National Parks Canada will be contacted to identify representatives to organize these respective programs.

A slate for election to the ACUA has been drafted for next year. The candidates are: Matt Russell, Jason Burns (Underwater Archaeologist, State Historic Preservation Office, Georgia), Ian Oxley (Heriot-Watt University, Edinburgh, Scotland), Marc Andre Bernier (National Parks Canada), Nathan Richards (East Carolina University, Greenville, North Carolina) and Susan Langley (Underwater Archaeologist, State Historic Preservation Office, Maryland). From this list of outstanding candidates, three new members will be elected to Council.

However, among these one candidate stands out as a MAHS affiliate. Susan Langley is a member of the MAHS Board of Advisors, a lecturer in the MAHS live lecture and video courses, an accomplished author, an active and recognized research diver, and a consistently strong supporter of avocational engagement in underwater archaeological field projects. This is an opportunity for underwater archaeological members of SHA to vote for Susan’s election to ACUA when the ballot comes out in the Spring edition of the SHA Newsletter. Susan would be an excellent addition to the membership of ACUA. She deserves the strongest endorsement for this position from MAHS!

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through its U.S. counsel. It is difficult to understand how a professional archaeologist charged with stewardship responsibility over significant cultural resources within its jurisdiction would not feel compelled to respect a decision by the U.S. Supreme Court protecting Spanish wrecks in American waters. MAHS remains committed to educating both the diving public as well as the professional archaeology community about the importance of protecting historic shipwrecks and will remain vigilant for activities that threaten these fragile and non-renewable resources.

March was also a busy month. On March 25, John Kuch and Dennis Knepper conducted a Thermal Imaging study of the grounds around White House. This area not only served as a Civil War depot but was also the Pamunkey River plantation home of Martha Custis Washington and then during the Civil War years of Robert E. Lee. See the related article for the full story.

On April 22, Earl Glock conducted the second annual EFR Course (PADI CPR/First Aid) for MAHS members at the Splash Dive Center in Alexandria, Virginia. He also conducted the Oxygen First Aid Course the next day on Sunday April 23. Dive safety is a top priority in all MAHS activities, and Dave Shaw has been working on a new MAHS first aid station and updating our Oxygen kit in preparation for the summer fieldwork.

If you had attended the 2006 Maryland Archaeology Workshop in March, you would have heard Tom Berkey’s report on the status of the Pamunkey River project. His presentation chronicled the November field activities and was reportedly well received by the audience.

And there is more education news. The MAHS video course continues to grow in stature and scope and is starting to gain more of an international presence. I am pleased to announce that MAHS is conducting an Introductory Course in Cyprus and a Field School in Egypt over the summer.

These and many more activities will continue during the ensuing months, and I invite all members to come out and join us in the action.

See you on the water,
Steven Anthony
President
MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY

Statement of Ethics

The Maritime Archaeological and Historical Society is organized for the purpose of enhancing public awareness and appreciation of the significance of submerged cultural resources and the science of maritime archaeology. In pursuit of this mandate, members may come in contact with unique information and cultural material associated with terrestrial and underwater sites containing evidence of the history of humankind. To protect these sites from destruction by commercial salvors and amateur souvenir hunters, the Society seeks to encourage its members to abide by the highest ethical standards. Therefore, as a condition of membership and pursuant to Article 2, Section 1 (A) of the bylaws, the undersigned executes this statement of ethics acknowledging adherence to the standards and policies of the Society, and further agrees as follows:

1. To regard all archaeological sites, artifacts and related information as potentially significant cultural resources in accordance with federal, state, and international law and the principles and standards of contemporary archaeological science.
2. To maintain the confidentiality of the location of archaeological sites.
3. To excavate, or otherwise disturb an archaeological site solely for the purpose of scientific research conducted under the supervision of a qualified archaeologist operating in accordance with the rules and regulations of federal, state, or foreign governments. Artifacts shall not be removed until their context and provenience have been recorded, and only when the artifact and related data have been designated for research, public display or otherwise for the common good.
4. To conduct oneself in a manner that protects the ethical integrity of the member, the archaeological site and the Society, and prevent involvement in criminal violations of applicable vandalism statutes.
5. To observe these ethical standards and aid in securing observance of these standards by fellow members and non-members.
6. To recognize that any member who violates the standards and policies of the Society shall be subject to sanctions and possible expulsion in accordance with Article 2, Section 4 of the bylaws.

Signature
Date

(Revised 1993)

MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY
P O Box 44382, L'Enfant Plaza, Washington, DC 20026

Application for Membership

Membership in the Maritime Archaeological and Historical Society is open to all persons interested in maritime history or archeology whether or not they are divers. Members of MAHS have first preference for enrollment in all courses and other activities and projects of the Society. To join MAHS, please sign the Statement of Ethics above and send it to MAHS along with your check and this application form.

Name (print)__________________________________________________________

Address____________________________________________________________

City __________________________ State __________ Zip ________________

Phone (H) ___________ (0) ___________ (FAX) ______________

Email_______________________________________________________________

Skills (circle): research/diving/photo/video/communications/drawing/writing/first aid/other:

DUES ENCLOSED

____ $30 Individual
____ $35 Family
____ $50 Sponsor
____ $100 Patron

Please mail this form along with your check to: MAHS at P.O. Box 44382, L'Enfant Plaza, Washington DC 20026.
General membership meetings of the Maritime Archaeological and Historical Society (MAHS) are held at 7:30 p.m. on the second Tuesday of each month. MAHS meets at McLean High School, in McLean, Virginia, except in July, August and December. The school is located on Davidson Road, just inside the Capital Beltway (I-495) - use Exit 45, coming from Maryland, or Exit 46, coming from Virginia. Meetings in July, August and December are held at other locations for special events and holiday parties. Please join us and bring a friend.

[Check the website www.MAHSNet.org for e-mail advisories about any schedule changes.]

Renew Now!

It’s time to renew your membership in MAHS. It’s easy. Just complete the application form on the inside back cover and sign the Ethics Statement, enclose a check for your dues, and mail! Thank you!