Changes in the Governance of MAS

There have been some important changes in the group that manages the Museum and the Society. We have a new President, Phil Graham, who is on the faculty of the University of Connecticut. Much thanks to Freddie Dimmick who served as President in a difficult time and has brought the Society into a much stronger position. Also much thanks to Past President Tonya Largy who also brought the Society through some difficult times to a stronger place. Tonya will not continue as a Trustee.

A new Trustee is Gene Winter, who is stepping down as Museum Coordinator. Dave DeMello is taking over as Coordinator. There are two other new Trustees who bring important experience to our board. One is Vic Mastone who is Director of the Massachusetts Board of Underwater Archaeological Resources. The other is Joe Bagley who is the Boston City Archaeologist. Both of these new perspectives will prove very interesting.

President’s Review

Some MAS accomplishments of the recent years:

• MAS Board and Massasoit Chapter Members Delivering Education Programs at the Robbins and Outside the Museum
• Working to be NAGPRA Compliant
• Seeking and Winning Funding from Grants
• Planning and Upgrading Museum Security
• Researching, Designing and Installing New Exhibits
• Providing Students the Opportunity to Inventory or Analyze Museum Artifacts
• Continually Improving and Expanding the Beautiful Museum – Content and Appearance
• Maintaining and Improving our Website
• Expanding and Updating the Library Facilities (and Supporting its Foundations)
• Opening the Library for Public Use
• Serving as a Repository for Section 106 Material from CRM Firms
• Preparing Speaker Programs for Society Members and the Public
• Welcoming a New MAS Chapter – Western Chapter of the MAS
• Exploring the Promise of the On-Line Museum Store
• Visiting State Senator Exploring Partnering Ideas
• Establishing an Endowment Fund

You have done all this as a volunteer team. This is only a sampling of your accomplishments; there are others. I am honored and very happy to serve with you. Thank you all.

Freddie
Regional News from the World of CRM  
(Compiled by John E. Rempelakis, MassDOT)

In Massachusetts, Connecticut and Rhode Island, some interesting CRM archaeological surveys have been conducted recently by cultural resources firms for federal and state agencies and private developers/organizations tasked with complying with environmental/historic preservation laws and regulations. The following project summaries afford a glimpse of some of the important archaeological work that has taken place recently in southern New England.

Massachusetts  
Newton-Davis Mill Site, Royalston, Massachusetts  
(Contributed by A. Peter Mair II, PAL Inc.)

PAL recently completed an intensive (locational) and site examination survey for a proposed bridge replacement project in Royalston, Massachusetts. The bridge is located on a stone and earthen dam that impounded the water course to provide power to a mill complex that operated from the mid-1800’s to the 1920’s.

Historic maps and census data place the beginnings of the mill sometime before 1850. Seth Holman established a sawmill and gristmill on the site. Holman added woodworking machinery and originally made complete chairs. Eventually, the operation shifted to producing sawed and turned chairs, tubs, and pails, and a large variety of wooden ware for factories in Gardner, Winchendon, and elsewhere. His son, Seth N. Holman, assisted in hauling and sawing. In 1858, the Holmans sold the mill and house to Maynard Partridge, who ran the business for ten years, producing lumber and turning chair stock. In 1876 the mill was converted to steam power. From 1877 to 1900, John Milton Partridge operated the mill. In 1905, the mill and mill privilege were sold to Willard H. Newton and Willie Davis, Newton’s business partner. Newton and Davis replaced the old up and down sawmill with a circular blade. The original, heavy timbered mill burned down in 1905. Newton and Davis rebuilt, using in part a building from the next water privilege. Newton and Davis soon added a number of portable saw mills (circular saws powered by a steam boiler and engine on frames that could be transported to wood lots). Waste material fed the boiler and sawn products were transported to the mill, greatly lowering costs. Newton and Davis continued to operate the mill until 1925 when Newton died intestate, leaving the property to his son Leon. It is assumed that the mill was demolished shortly after Newton’s death and in 1935 all woodlots and other lands owned by Newton and Davis were seized and sold at auction to cover delinquent taxes.

The intensive (locational) survey identified different aspects of the mill, visible portions of dry-laid stone-walls associated with the mill foundation, dam, mill pond, and tail race. The site examination included mapping of these features, as well as the investigation of a stone cobble floor next to the mill race (see photo). Given the proximity of this feature to the tailrace and wheel pit, and the recovery of melted glass and lead, it could be argued that the “stone floor/platform” is the location of the original sawmill that burned in 1905. The 50 centimeter thick accumulation of cobbles could have supported heavier machinery utilized in a sawmill. Alternatively, the cobble platform could have supported “turning” machines, as evidenced by the recovery of shaping knives (see photo). It is possible the new “1906” mill was built on the location of the previous mill and the lower cobble platform was the location of the turning mill that was added to the complex.

Interviews with local residents and descendents of
the last mill owners provided important information to fill out the preliminary picture of mill operations as interpreted from the field investigations, including an annotated postcard of the mill complex from 1906 (see photo). The postcard depicts the “new” sawmill erected shortly after the original sawmill burned. Visible in the photograph at the east end of the mill is a tall stack, possibly for the steam boiler that powered the mill. The postcard clearly shows that there was an opening in the dam prior to the construction of the 1936 bridge. This opening housed the gate structure that regulated the water level in the mill pond. The photograph/postcard shows what appear to be wooden “bumpers” facing the dam on both sides of the gate structure (affording protection to the masonry of the overall mid-nineteenth century rural industrial setting.

The Edgewood Apartments Site, Plainville, Massachusetts
(Contributed by Brian D. Jones, Ph.D., AHS Inc.)

The Edgewood Apartments Site is situated on a glacial outwash plain adjacent to a 38-acre wetland in Plainville, Massachusetts. Artifacts from the site consist overwhelmingly of quartz lithic-reduction materials distributed in two adjacent loci. An extended site examination determined that the site is predominantly an Early Archaic “Gulf of Maine Archaic Tradition” activity area. Evidence from a small number of non-quartz artifacts indicates that a limited Late Archaic Otter Creek component is also present in the southern portion of the south locus. In total, seventy five 50x50-centimeter excavation quadrants (18.75 square meters) were excavated at the site in early July of 2012, in part with the help of UConn Archaeology Field School volunteers.

The Edgewood Apartments Site was identified as a Gulf of Maine Archaic Tradition site based on lithic technological patterning comparable to that observed at other Gulf of Maine Archaic sites across New England. Two radiocarbon dates were recently returned from charred samples recovered from the site, confirming the Early Archaic chronological association of the assemblage. The first was assayed from an 80 mg nutshell fragment identified by Kimberly Kasper (Rhodes College, Memphis, TN) as Carya (hickory).
Radiocarbon data

This nutshell was not recovered from a feature, but its subsoil context is spatially associated with the highest quartz count in the north locus, the area also associated with the greatest concentration of quartz micro-cores. This sample was dated to 8830+/-40 rcBP (Beta-327481). (The notation rcBP indicates radiocarbon years before the present. The chart above shows the actual data and gives the dates after calibration for variation in atmospheric carbon over time.) A second sample of charred material was identified by Tonya Largy as very dense, but non-species specific hardwood. The charcoal was collected from a soil sample taken from a small feature at the base of the subsoil in the south locus, also in an area of high quartz concentration. This small ca. 60mg sample returned a date of 8600+/-40 rcBP.

The dates fall within a calibrated date range of 10,150 and 9500 years BP. They do not overlap at the 2-sigma calibrated range, suggesting they reflect separate events. They fall in the expected “pre-bifurcate point” date range indicated by most other dated Gulf of Maine Archaic Tradition sites in southern New England, between about 9000 and 8500 rcBP (e.g. Bolian 1980: 125; Curran 1994: 46; Maymon and Bolian 1992: 123; Forrest 1999; Jones and Forrest 2003: 85). The relatively late dates of 7830+/-130 and 8110+/-90 rcBP from the Whortleberry Hill Site in Dracut, Massachusetts (Dudek 2005: 17) and its possible association with Piedmont Tradition projectile points raises the interesting possibility of cultural hybridization at that site.

Gulf of Maine Archaic Tradition sites remain relatively poorly documented in New England (but see Peterson and Putnam 1992; Robinson 1992, 1996). It is very likely that the human population density of New England was low throughout the early Holocene, and subsequently sites are expected to be relatively rare. Nevertheless, it is probable that Gulf of Maine Archaic sites have been missed during archaeological surveys because many regional archaeologists remain unfamiliar with the techno-complex, although it has been documented for over 30 years. The situation is exacerbated by the lack of diagnostic bifacial tool forms associated with this tradition. Diagnostic bifacial artifacts represent the core of the typological-chronological sequence in New England, and assemblages without formal bifacial artifacts are often dismissed as lacking a cultural-historical context, and are thus believed to not meet National Register criteria for site significance. Familiarity with Gulf of Maine Archaic assemblages permits one to recognize its most diagnostic artifact type, the quartz micro-core (or “core-scaper”, see Forrest 1999: 90) (see photo below). These distinctive, small single-platform cores are not like any tool form produced in later periods and should be considered diagnostic of the tradition when encountered in the field.

Lacking formal bifaces, Gulf of Maine Archaic sites remain difficult to identify in the field, especially from the small samples provided by preliminary surveys. The Edgewood Apartments Site also shows that Gulf of Maine Archaic sites need not be as large and complex as Sandy Hill, nor must they always include evidence of habitation floors, ocher and graphite use, or groundstone implements such as the rods and full-channel gouges sometimes reported. Most of these are only likely to occur at base-camps occupied over seasons or longer. Sites produced during this phase of the early Holocene must include logistical support camps and material-processing stations. The Edgewood Apartments Site is interpreted as an example of such a satellite camp. The finds likely reflect two episodes of activity adjacent to a relatively large wetland area. In the north locus, this activity was focused largely on the production of small quartz flakes from prepared cores. These might have been used to re-arm composite hunting weapons or to produce plant-processing tools such as grater boards. The south locus contains a more generalized assemblage of expedient tools, cores and tabular choppers, perhaps associated with food-processing or other tool-manufacturing activity (see photo below). In both assemblages, the full suite of manufacturing stages is present, from large, rough shaping flakes, to core rejuvenation flakes, to small discarded core fragments.
Gulf of Maine Archaic Tradition quartz micro-cores. Core platforms are oriented up in the photograph. The presence of carbonized hickory nutshells suggests the site may have been used in the fall, when hickory nuts were available. The site’s occupants evidently stayed long enough to light a fire, probably to warm themselves and cook a meal, some of which ended up back in the coals. Fall is also the time that wetland plant foods develop their greatest starch stores and are ripe for harvest. Based on the identification of numerous wetland plant species from Sandy Hill (Jones and Forrest 2003), it is reasonable to speculate that the occupants of the Edgewood Apartments Site visited this location to gather a large number of cattail, water plantain or other rhizomes and process them into a starchy paste or dried them for transportation back to a base camp.

The Edgewood Apartments Site represents an important case study for New England archaeologists. Though only a handful of artifacts were identified during the initial site survey, early recognition of the Gulf of Maine Archaic techno-complex led to additional focused excavation resulting in the recovery of an assemblage that will be used to shed further light on the details of this poorly-documented quartz-knapping tradition. Small sites such as this are important for developing a better understanding of life during the early Holocene in New England, in particular the range of variation in land use and associated site types produced during this time. AHS hopes that new data from the Edgewood Apartments Site will continue to raise awareness of the rich Gulf of Maine Archaic presence in the region.

Quartzite tabular chopper. Such coarse edged tools are typical of these Early Archaic sites and may have been used for digging or plant food processing.

References
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Dudek, Martin G.

Forrest, Daniel

Jones, Brian and Daniel Forrest
**Connecticut**

**Cady-Copp House, Putnam, Connecticut**

(Contributed by Ross K. Harper, AHS Inc.)

The spaces around colonial-period houses were areas of intense construction and domestic activities, as demonstrated by excavations at a number of 18th-century house sites. Important clues about how domestic landscapes were formed and used are found in soil stratigraphy. One recent example is the ca. 1745 Cady-Copp House in Putnam, Connecticut. This house excavation and other house excavations (such as the excavations at the ca. 1750 Dr. Reuben Mason House in Gloucester, Rhode Island described below), reveal that 18th-century timber-framed houses in New England were typically constructed by first digging out the cellar hole and lining the walls with dry-laid fieldstone. Fireplaces were built of fieldstone that was chipped or “dressed” with hammers into various polyhedron shapes and “topped out” with brick above the roofline. Fieldstone foundation walls were often laid directly on the ground surface, with no builder’s trench. Wells were dug, gardens were planted, and fences and walls were built. Over time, flagstone or cobble paving was often laid in low muddy areas, basin-shaped holes were dug to store root vegetables or “sauce” over the winter, and all manner of household trash was tossed out of doors and windows into the yard. Archaeologists call such concentrations of domestic refuse “middens,” but the 18th-century agricultural writer Samuel Deane (1790) of Massachusetts referred to them as “Door-Dung” (which he asserted made good field manure).

Owned and operated by the Aspinock Historical Society, the Cady-Copp house is currently undergoing extensive renovations. The house was occupied by...
a number of owners, including the Reverend Aaron Howe, who tutored a number of important historical figures such as the botanist, congressman and Ohio Company agent Manassah Cutler, and congressman Amasa Learned. Remarkably, the house has not been occupied since the 1920s and was never fitted with modern utilities but for an early 20th-century hand pump in the pantry. The house has changed little from its 19th century appearance as evidenced by photographs. Part of the renovation involved the installation of French drains around the house to direct water away from the structure. In the area of the proposed drains, AHS excavated a 13-meter-long block one meter from the back wall of the house. This block and other excavation units around the house discovered a buried filled-in and sealed bulkhead entrance into the cellar, flagstone walkway, and midden outside the kitchen door. A concentration of clay marbles in a corner outside of a kitchen window revealed a play nook.

The soil stratigraphy was remarkably consistent around the house and showed that over time a dark and loamy topsoil accumulated from the ground surface, to 15 to 20 centimeters below surface. This soil was exceptionally artifact-rich and had undergone extensive organic enrichment and turbation when the house was occupied. Below the topsoil, a 20-to-30-centimeter-thick stratum was found that consisted of bands of displaced dark loamy topsoil and light grey to light brownish-yellow subsoils (in effect, mixed A, B and C Horizon soils). This soil was deposited by the house builders when the cellar was dug out when the house was built ca. 1745. This backdirt or ejecta contained few artifacts, including building debris such as broken green window glass, hand-wrought nails, and red brick fragments. Below the cellar ejecta stratum, at 45 to 50 centimeters below surface, was a Buried A topsoil, the original ground surface when the house was built, and which had been sealed beneath the ejecta. This black fine sandy loam was compressed and was typically 3 to 5 centimeters thick. No artifacts were recovered from the Buried A topsoil stratum, which indicated that the house lot had not been occupied before the house was built, and that the house lot had never been plowed. The Buried A topsoil, however, was charcoal-rich, which suggests that the trees and brush had been burned off the lot prior to the house construction. Yankees commonly burned forests to create houses and fields. Below the Buried A topsoil were intact subsoils. These included a strong brown B1 transitioning into a light yellowish-brown B2 and then a light olive-gray C Horizon subsoil, the latter beginning at about 95 centimeters below surface.

**Rhode Island**

**Dr. Reuben Mason House, Glocester, Rhode Island**
(Contributed by Ross K. Harper, AHS Inc.)

The ca. 1750 Dr. Reuben Mason House is in the Chepachet Village Historic District and is also undergoing a renovation with designs for public education. The Glocester Heritage Society, which has a 99-year lease on the house, has completed restoration of the exterior and in the future will operate a museum dedicated to Dorr’s Rebellion in 1842 (the house was used as a field hospital during this brief armed conflict). Unlike the Cady-Copp House in Connecticut described above, most of the lot surrounding the Mason House has been impacted by a variety of factors, including a cemetery, a circular driveway and the installation of various underground utilities. The reconstruction of Route 44/Putnam Pike (formerly called the “Great Country Road”) by RIDOT will impact the front yard of the Mason House as the planned road cut here is extensive. The excavation of nine 1x1-meter units and six 50x50-centimeter shovel test pits provided an opportunity...
to explore some of the remaining undisturbed soils around the house. The intact soil stratigraphy was consistent and correlated well with what had been found at the contemporaneous Cady-Copp house in Connecticut. The most informative units were four to six meters from the front of the house and three to four meters from the edge of the road.

Below the ground surface was a dark loamy topsoil generally 25 to 30 centimeters thick. Because the excavation units were in the front of the house near the road and therefore away from the house, artifact concentrations were comparatively lower and represent more of a scatter of domestic refuse rather than concentrated midden deposits. Overall artifact size was small, indicative of heavy trampling over time. Some of the artifacts included a 1722 British Hibernia half-penny, a European flint strike-a-light, a one-piece cast-pewter button and a section of an embossed knee-buckle frame. Below the topsoil was cellar eject, a mix of topsoil and subsoils (i.e. displaced A, B and C Horizon soils) that were shoveled out of the cellar hole when the house was constructed and spread around the outside of the foundation wall. As with the Cady-Copp House, the cellar ejecta gradually became thinner, tapering as one moved away from the house. The cellar ejecta generally ranged from 25 to 30 centimeters in thickness and contained a few artifacts related to construction, including broken green and blue-green window glass, hand-wrought nails, mortar, and brick fragments. From deep in the cellar ejecta a complete iron plow blade was discovered, evidently lost when the loose soil was being spread around the house at the time of construction. Also like the cellar ejecta soils at the Cady-Copp House, the displaced upper subsoils (B Horizons) were predominately in the lower part of the cellar ejecta, with lower displaced subsoils (C Horizon) predominately in the upper part of the cellar ejecta (in effect, reverse stratigraphy from the cellar construction).

Below the cellar ejecta stratum was an intact black fine sandy loam Buried A topsoil at approximately 50 centimeters below surface. Predictably, the Buried A topsoil was somewhat compressed and charcoal-rich. One artifact was found, a sherd of British brown stoneware, which was resting on top. The Buried A topsoil had never been plowed and was the ground surface when the house was built ca. 1750. Below the Buried A topsoil stratum were entirely intact subsoils, including B1, B2 and C Horizons, the latter beginning at approximately 100 centimeters below surface. Other discoveries from the excavations include two early to mid-19th-century post holes, a buried walkway made of crushed coal ash and asphalt resting on a layer of fill and the remnants of a stone-lined well that was evidently bulldozed and filled during road construction sometime in the 20th century.

Domestic landscapes can undergo a wide diversity of cultural and natural processes over time and leave complex soils for archaeologist to decode. Recent excavations at 18th-century houses in New England are showing that distinct patterns in soil stratigraphy and artifacts can be found related to house construction, landscaping and a wide variety of domestic activities.

‘Round Robbins
By Dave DeMello, Museum Coordinator

Improvements to the Robbins

The following were accomplished using funds provided by the Mayflower Bank and the Frederick Lobl Charities Trust, Bank of America Trustee:

1. The three air conditioners in the building were replaced this year with new energy efficient units. This is a continuation of our Green Initiative. You can read about this program on our web page at massarchitecture.org. The link to that page is just below the photo of the MAS Bulletin CD.

2. The lighting in the Robbins is being replaced section by section as the funds become available. The fluorescent lights throughout the structure are of an antiquated design. Although replacement bulbs are available, the ballasts are no longer manufactured. New energy efficient units have recently been installed in the new Artifact Processing Lab / Graphics Art area, soon to be dedicated in memory of Jean Jacques Rivard, and in the basement.

3. Installation has been completed for the heating units in the library and in the Barbara Luedtke Hall. These two areas have previously not been serviced by the existing system. With all the cost and effort that is being expended to upgrade the library it was unacceptable that this important space be virtually unusable three to four months in the year. Also the MAS board has shivered through more than their share of Trustee Meetings.
New laboratory

New Exhibits

A new artifact exhibit is currently on display at the Museum and another display has been expanded.

Two display cases in the Wapanucket room now hold items from the Edward Bielski / Dick Bent collection. Both were collected in Southeastern Massachusetts, mainly from Plymouth to Carver. One of the high points of the exhibit is a pre-contact copper axe. When it was discovered it was one of only five found in New England. This tool and a copper bead were recovered from a shell midden, which explains their excellent state of preservation. Other items on display are a number of beads fashioned from stone, copper and intact small mollusk shells.

One wall of the Barbara Luedtke Lecture hall is lined with photographic portraits of contemporary Native Americans taken by Jack Szelka. A new unit has been installed that will allow us to display 40 more of Jack’s exceptional photographs.

These two exhibits inaugurate a newly instituted program that will put more of the Society’s extensive collection of artifacts on display. The contents of cases which now hold the Bielski / Bent Collection and the portraits displayed on the new wall unit in the Barbara Luedtke room will be changed on a regular basis, tentatively every six months.

Chapter News

Reactivation of a Western MA Chapter

Aaron F. Miller

After a brief hiatus, MAS activity in the western part of the state is on the rise. Currently, the Western

Massachusetts Chapter (formerly the Norwottuck Chapter) is in the process of revitalization. The chapter has been organized and our programs are in the process of development. Presently, we are scheduling a bimonthly speaker series (beginning this January) highlighting archaeologists and enthusiasts working and living in the region. Upcoming events will include museum and site visits, educational outreach, and other activities exciting for any-aged archaeology enthusiast. It is our hope that eventually the Western Chapter and its members can directly sponsor or participate in fieldwork and laboratory projects focusing on the rich prehistoric and historical archaeology of Western Massachusetts. If you are interested in joining the new chapter, becoming involved and attending our lectures and programs please look for updates under “What’s New” at

www.massarchaeology.org, check out our page on Facebook, email us at taylors_fort@yahoo.com, or write to: Western Massachusetts Chapter of the Massachusetts Archaeological Society, 30B Jacksonville Rd, Colrain MA 01340.
Central Mass chapter of Massachusetts Archaeological Society Fall 2012 Report
Janet M. Bessette

The Central Mass chapter of the Massachusetts Archaeological Society began their busy season of monthly lectures in October, 2012. Our Schedule of speakers for this season is as follows:

Oct 6, 2012 Eugene C Winter, Jr.
Title: Historic Maps of the Merrimack River

Nov 3, 2012 Daniel Fernandez-Davila
Title: Peruvian Cloud Canopy Cultures

Dec 1, 2012 Cory Fournier
Title: Native Stone Pile Sites in So New England

Apr 6, 2013 Cathy Taylor
Title: Upton Beehive

May 4, 2013 Ellen Berkland
Title: Sites in Boston Harbor

Jun 1, 2013 Michael Zimmerman
Title: Sites in Israel

We meet at 7:30 PM for a business meeting, followed by light refreshments, and an entertaining speaker at 8:00 PM. The location is the Zion Lutheran Church at 41 Whitmarsh Avenue in Worcester MA. All are welcome to attend.

Please check the web site for further details of our planned events at http://www.massarchaeology.org/
Hope to see you there!

Janet M Bessette, Chapter Chair
Curt Hoffman, Vice Chair (programs)
Thirza Joost, Treasurer
Alan Smith, Corresponding Secretary
Mary Aronson, Recording Secretary

Massasoit Chapter
Judy Macioci, Chapter Co-chair

The Massasoit Chapter meets on the third Thursday of each month with about seventeen active members. Our meetings usually include a presentation from one of our members or from a local historian/archaeologist followed by a lively discussion.

Highlights from this past year’s presentations include:
“Old Maps and Boundaries” by Elaine Nudd
“Boston Harbor Islands” by David Burbine
“Wampanoag Recipes” by Patty Martin

We have begun a new Fall Lecture Series at the Robbins Museum. The first three lectures covered native recipes, the Iroquois Nation and a Nineteenth Century shipwreck in the North River. See the MAS website (www. massarchaeology.org) for details.

Our traditional summer cookouts were held in July at the home of Murray Hamlet in Kingston and in September at the home of Elaine Nudd at the Gurnet. Members were treated to days at the beach with lots of food, fun and frivolity.

Committee reports

Site Conservation and Legislative Action Committee Report
Alan F. Smith, Chair

Review of the 187th Formal Session of the Massachusetts Great and General Court

The two-year Formal Session of the Massachusetts Legislature (2011-2012) ended on July 31, 2012 and we are now in the five-month informal (recess) session of lawmaking in which many bills will pass with little legislative or public review. In the informal session the House and Senate keep bills moving toward the Governor’s desk for his signature with a skeleton crew as long as all members present agree. Only three or fewer members of the Senate are usually present and only six or fewer in the House during the recess period. Bills that require roll call votes, such as bonds, land transfers, and veto overrides are not considered in informal...
sessions but the rest of the bills (usually over 1000) are being heard, reported out of committees, approved by the legislature, and many (201 in the 2010-2011 recess period) signed by the Governor with hardly anyone present.

The 187th Formal Session will not be known for its focus on the protection of cultural and natural resources even though it protected 12,953 acres of land last year. Instead, enormous sums of money and time were spent trying to stop the destruction of the same: specifically, the Massachusetts Historic Commission and the Massachusetts Endangered Species Act (MESA) legislation which would have gutted the Commission and MESA. The legislation to gut the Commission was defeated. The MESA legislation was amended by House Bill 4360 on the last day of the session and will be reviewed formerly in the 188th Session of the Massachusetts Legislature in January.

Some good news in July 2012: the Community Preservation Act (CPA) bill called An Act to Sustain Community Preservation (H. 765) passed the Massachusetts state legislature and was signed by the Governor. In recent years as more municipalities adopted the CPA, the matching funds dwindled (down to 22%) in the CPA Statewide Trust Fund in what was in the beginning a 100% match. Instead of an increase in the registry of deeds recording fees that funded the original bill, the funding that passed in this bill contains an annual transfer of $25 million from the state’s budget surplus into the CPA Statewide Trust Fund. This bill will also allow for improvements to the existing CPA programs and should bring in many new towns and cities to the CPA program.

A bill (H.890/S.1650) that had unprecedented and overwhelming public support but lobbying pressure to protect corporate profits stopped its passage was the updating of the Bottle Bill. With 77% of the public, 208 cities and towns, Governor Patrick, and a majority of legislators supporting this bill, it should have passed easily. It would have reduced the recent artifacts in our duff. The updated bottle bill would have added water, juice, sports drinks, and similar beverage containers to the current deposit law. Instead, every year for fourteen years one billion bottles got buried and burned instead of recycled. It is very clear that big business is dictating how Beacon Hill votes. This bill will be filed again in the 188th Session of the Massachusetts Great and General Court.

An Act to Protect the Natural Resources of the Commonwealth (H.1124/S.350) otherwise known as The Article 97/ Public Lands Preservation Act would have corrected a long-standing problem within our laws designed to protect cultural and natural resources, open space, and parkland in Massachusetts. “Article 97 Lands” are protected by Article 97 of the state Constitution which states “lands and easements taken or acquired for such purposes shall not be used for other purposes or otherwise disposed of except by laws enacted by a two thirds vote, taken by yeas and nays, of each branch of the general court.” What was intended to be a legislative check/mandate to ensure that lands acquired for conservation purposes were not converted to other uses turned into a legislative loophole where it did the exact opposite as the state and municipalities viewed Article 97 land as “land in holding” or “free for the taking” by Article 97 transfer. In recent years Article 97 transfers have become routine business where nearly every land transfer proposal received a unanimous vote of the legislature. Expect this bill to be filed again.

Development Committee Report

We have received an invitation to request a grant from the Lobl Trust for 2013. The uses of monies from 2010 and 20011 grants are described in the ‘Round Robbins section of this Newsletter.

Book reviews

Across Atlantic Ice: The Origin of America’s Clovis Culture, by Dennis J. Stanford and Bruce A. Bradley (University of California Press, Berkeley CA 2012)

by Curtiss Hoffman

For the past several decades, research into the earliest human occupations of the Americas has been a seething cauldron of competing ideas. The standard model of the mid-20th century, once an article of faith for Americanist archaeologists – hardy Siberians crossing into Alaska no earlier than ca 14,000 BP by a land bridge, spreading down an ice-free corridor into the upper Great Plains, and then dispersing across two continents, slaughtering megafauna all the way – has been challenged repeatedly, with increasing support for alternative routes and timings. But perhaps no challenge has been as robust, and literally as far-fetched, as Stanford and Bradley’s “Solutrean Hypothesis”, which is the subject of Across Atlantic Ice. While up to now this idea has mainly circulated at professional conferences and journals, the book makes the argument comprehensible to the educated general audience for the first time.
What Stanford and Bradley propose, in brief, is that recently discovered evidence from the eastern U.S. pushes back the date of the earliest occupation of the New World well before the Clovis horizon, far enough back in time that the long-observed similarities between Clovis and Western European Solutrean technology may actually be of relevance. They claim, in short, that seal-hunters from northern Spain and southwestern France, ca 17,000 – 19,000 years ago, crossed the North Atlantic along the Pleistocene ice margin, opportunistically hunting seals, until they came to the unglaciated portions of eastern North America. Once here, they settled in, and evolved Clovis culture out of their pre-existent technology.

In order to substantiate this claim, the authors first spend a great deal of time detailing the technologies involved, and the similarities between them. In my opinion, this is where the book excels in providing the clearest, most detailed description of Clovis flaking patterns yet available. They further propose a means of evaluating the similarity between any two technologies on the basis of what the French term chaîne opératoire – the series of steps necessary to reach an observed final product. On this basis alone, the similarities between Clovis and Solutrean are indeed quite strong. But, of course, this does not constitute anything like proof.

They also spend a good deal of time debunking the Clovis-first hypothesis, using the most recently available climatological and archaeological data from both Siberia and Alaska. They show that it would have been extremely difficult for groups to have reached eastern Siberia in time to make the crossing; and that evidence currently seems to indicate that movement along the ice-free corridor was in the reverse direction of the standard model’s predictions: i.e., from south to north. They also point to the absence in northeast Asian assemblages of the appropriate time period of anything closely resembling Clovis – using the same kind of technological evaluation described above. Finally, the authors present some tantalizing evidence from recent finds both onshore and offshore in the mid-Atlantic region that are suggestive of something much more visually similar to Solutrean than the artifacts from pre-Clovis horizons at sites like Cactus Hill and Meadowcroft Rockshelter. Here, they are on shakier ground, since the artifacts in question are isolated finds, and not necessarily in good stratigraphic contexts. I would say that they make the best case that can be made for these items being Solutrean, but – despite my general receptivity to the Solutrean hypothesis – I found these claims not to be entirely convincing.

Perhaps the most significant shortcoming of the book is the authors’ failure to cite some of the pre-Clovis evidence which would not favor their hypothesis of an eastern origin for human occupation of the Americas during the middle Upper Paleolithic followed by a westward dispersal. This evidence includes sites in the China Lake complex in the Mojave Desert of California, which have been dated to between 19,000 and 25,000 years BP by both radiocarbon and cation-ration dating; the recently revisited Valsequillo site in central Mexico which has provided dates on the order of 20,000 years ago, and the Toper Site in South Carolina, where Goodyear has a definite pre-Clovis horizon dated to about 19,000 years ago underlain by what may be a cultural deposit dated by Optically Stimulated Luminescence (OSL) to 55,000 years ago. I heard Stanford give a talk on the Solutrean Hypothesis at the “Clovis in the Southeast” conference in 2005, and I also heard Goodyear’s response: “The Solutreans may have arrived on the east coast around 19,000 years ago – but if they did, the folks from Topper were there to meet them.”

In the end, what Stanford and Bradley have done is to delineate two cultures on opposite sides of the Atlantic, both of which appeared with no clear antecedents and neither of which left clear descendants. If Solutrean emerged on the northern coast of Spain around 19,000 years ago, why couldn’t it be the case that its origins lie in the New World rather than the reverse? Seal hunters following the depressed Gulf Stream from the eastern U.S. could well have landed on the Cantabrian coast, bringing their cultural artifacts with them! Until more Solutrean sites are excavated with modern techniques, this hypothesis seems no less plausible than that of the authors – and certainly it is more relevant to, and more respectful of Native peoples.

**Kids’ Archaeology Books 2011-2012**
Kathryn Fairbanks, Librarian

With the holidays ahead, you may be planning to give books to children or grandchildren. There are many kids’ books on archaeology, but not all of them have the right approach to the subject. Since even children’s books can be too pricey to order blind — on the internet, for example— we’ve reviewed some currently available there and in bookstores. Here’s what we found out:

Frankly, some of the books are disappointing—they
simply show monuments, like pyramids and ancient ruins, or arrays of arrowheads or gold objects, making archaeology a sightseeing tour or a treasure hunt. Such books have scant mention of the process or the purpose of archaeology, i.e., to learn about earlier people, how they lived with the environment and each other. At least one book blandly told kids to “dig”. Another one, designed for parents and teachers, did caution about the illegality of digging up public land, but ended by saying “Ask an archaeologist.” (Where do you find one?) Still another suggested creating a fake dig by planting objects for kids to find. Opinions differ strongly on this as a teaching method, since it makes “getting things” the goal.

On the bright side, many other books are amazingly good. Here are some of the best, with grade-levels suggested.

*The First Peoples of the Northeast* by Esther K. Braun. Filled with easy maps and diagrams keyed to the time periods; illustrations of seasonal activities, migrations, hunting, lifeways, and stone tools and weapons. For bright 5th graders and above. (Available MAS Gift Shop.)

*Inca Ice Maiden* by Johan Reinhard. Found in a frozen state in the Andean glacier, she is almost too-well preserved, so she may look scary for the littlest kids. Better for 4th-graders and up. (They love scary anyway.)

*Lucy Long Ago* by Catherine Thimmesh. Reconstructive illustrations of the early Australopithecus girl skeleton discovered in Ethiopia. Bright 5th grade and up.

*Mammoth Bones and Broken Stones: The Mystery of North America’s First People* by David Harrison. Beautifully illustrated reconstruction of how people managed the hunting of mammoths with hand-made stone tools, cooperation, and their wits. 3rd grade and up. (Available MAS Gift Shop)


*Mysterious Bones: The Story of Kennewick Man* by Katherine Kirkpatrick.

Best of the bunch! Everything, from the accidental discovery in Washington State and his archaeological lab work, to the controversy over his DNA ethnic identity. There’s an update (to 2011) on the resulting court case — all in terms a bright 4th or 5th grader can deal with.

*The Mystery of the Hieroglyphs: the Story of the Rosetta Stone* by Carol Donoghue. A heartbreaker by reason of its terribly high price (some editions over $100!) — but get it from your local library and read it with the kids. The full-size edition has a large photo of the Stone and keys to the three cartouches so that youngsters can arrive deductively at the phonetic values of the glyphs. Bright 4th grade and up.

*Origins and Ancestors: Investigating New England’s Paleo Indians* by James W. Bradley. Early, Middle and Late Paleo (13,000 to 11,000 years ago) in familiar places — Canton, Neponset River valley, Bull Brook in Ipswich, and Maine. Illustrations must have been done on-site — unmistakably Massachusetts. 4th grade and up. (MAS Gift Shop has this.)

*The Young Scientist’s Book of Archaeology* by Barbara Cork and Struan Reid. With its bright colors and patchwork design, you could mistake this paperback for a comic book treatment of the subject. But no! Its short paragraphs, correct vocabulary and realistic illustrations (e.g., in “Digging into the Past”—a two-page spread showing the multiple tasks going on in a site), give a myriad of topics that kids can look up in fuller treatments elsewhere if they want. On that same spread, for instance: Planning a dig, Surveying the site, Rescue digs, Industrial archaeology, How layers build up, Digging through time... Bright 3rd graders and up.

P.S. Not expensive!

**Update on the Upton Chamber Site**

*Tim Fohl*

In the the Spring, 2012 issue of the Newsletter I discussed the site in Upton, MA, which has a well known underground chamber, and its eligibility for inclusion in the National Register of Historic Places. The chamber is roughly hemispheric with a diameter of about four meters. The entrance is a tunnel a little less than five meters long, less than two meters high and between one half and two thirds of a meter wide. There are several large rocks against the walls of the dome at floor level. One of these is roughly one and a quarter meters across and about a meter high. This clearly must have been in place when the chamber was built since it cannot have been moved through the entrance.

Some vandalism has occurred in the past fifty years which caused the entrance to partially collapse. The
Town of Upton engaged Dr. David Stewart-Smith to repair it in the Fall of 2011. The appearance before and after the repairs are shown in the photos as is the projecting large rock in the interior. (The before picture is courtesy of Cathy Taylor. The other photos were taken by me.)

While the repairs were underway Dr. Frederick Martin arranged to have some samples taken from the sediment behind the wall of the entrance. The purpose was to have the sediment tested using Optically Stimulated Luminescence (OSL). These tests were hoped to yield information on the age of the chamber.

The method for collecting the samples was to drive a steel pipe into the dirt behind the wall being repaired and cap it when it was extracted.

The locations where the samples were taken are shown in the accompanying diagrams (courtesy of Dr. Martin). The three view drawing of the chamber shows the general location (designated by circles) where the probes were inserted. The profile drawing shows where each of the six samples were obtained. The sample that was selected for OSL testing, Sample 5, is designated with an arrow. Some loose sediment was also collected for calibration purposes. The samples which were not selected are being curated at the Robbins Museum. Sample 5 was sent to the USGS Luminescence Dating Laboratory in Denver, CO.

Quartz crystals which have been exposed to natural radiation have excited states. When light impinges on these states they discharge and emit light. The amount of light emitted depends on how long the sample has been in darkness. In OSL tests the light from the crystal is measured after a controlled exposure. If the radiation level is known, the time since the crystal last saw light can be calculated. In this case the radiation level was estimated from the radiation emitted from the loose sediment sample which was sent along with the sealed sample. Numerous small sub-samples from Sample 5 were tested separately.

OSL dating was first used in the 1980’s but it was not commonly used until fairly recently. In the last decade the technique has undergone considerable development in numerous laboratories. This has improved accuracy and reliability but has led to increased compli-
ication and cost. As in other methods there are errors inherent in the technique and errors based on environmental factors such as bioturbation. However, it has proven useful in many archaeological investigations and compares well with other dating methods such as radiocarbon dates.

The dates obtained from Sample 5 fall into two groups. The older group has dates between 1422 and 1492. The dates of the younger group were between 1592 and 1664. The differences depend on certain assumptions about the charging and discharging processes. However, the laboratory feels the results indicate that Sample 5 has been buried at least since the younger set of dates. Nevertheless, the results are accompanied with a number of caveats and it is suggested that more samples be tested. A fund has been established to pay for additional testing. If you are interested in contributing, send a donation to

Upton Historical Society
PO Box 222
Upton MA
02138

Profile view showing the detailed locations of the six samples (small cylinders). The selected Sample 5 is designated with an arrow.

The chamber is in Heritage Park on Elm Street. It is open to the public.

Three view of chamber showing location of samples

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