Basin Harbor Maritime Museum Thrives on Action

The Basin Harbor Maritime Museum is pleased to announce that Museum nautical archaeologist, Kevin Crisman, recently released a book entitled, The EAGLE, An American Brig on Lake Champlain During the War of 1812. This is a wonderful story of history, discover, and nautical archaeology about a Vergennes built fighting ship. The book can be purchased at any Vermont Bookstore, or by sending $22.95 plus $1.95 postage to New England Press, PO Box 575, Shelburne, Vermont 05482.

With the success of last year’s bateau building, it was logical for us to think about constructing another boat. We have decided to try and build a full-size 54 foot replica of the Revolutionary War gundola PHILADELPHIA. An historic member of Arnold’s fleet, the PHILADELPHIA was sunk in the Battle of Valcour Island on October 11, 1776, and later raised by Col. Lorenzo Hagglund in 1935. It is presently the centerpiece of the Naval History exhibit at the Smithsonian Institution. Activity has already begun on the PHILADELPHIA project. A budget and project plan are being finalized; Museum member Bob Carroll of Westport is building a model from plans supplied by the Smithsonian Institution. Potential funding sources are being investigated.

The Museum’s small boat collection continues to grow. With the assistance of Board member Dick Adams, we have acquired a 20th century dugout canoe. The canoe, in good condition, is believed to be an Addison County craft from the Hospital Creek area. Charlotte members Bill and Barbara Horsford also have given the Museum a wonderful gift—a beautiful 15 foot “Ladies” Adirondack Guideboat. We are researching these and our other small lake craft and are hoping to be able to construct a building to restore and exhibit our growing small boat collection.

Contributed by Arthur P. Cohn
Basin Harbor Maritime Museum

Don’t Miss the
VAS TWENTIETH ANNIVERSARY
ANNUAL MEETING, October 15,
at the Sheraton—Burlington
After 20 Years, What’s the Prognosis?

Erosion Threatens Two Important Archeological Sites

Although construction activities are typically seen as the primary threat to archeological resources, the forces of nature also take their toll. On going severe erosion along many of Vermont’s rivers and parts of Lake Champlain has destroyed all or portions of important sites and each year continues to threaten our archeological heritage. The Division is extremely concerned with immediate, specific erosion problems that have resulted in broad-scale destruction of two very important archeological sites and are continuing to threaten their surviving portions.

Prehistoric site Vt-WN-41 is located along the Connecticut River, in Windsor County, at the edge of the Bellows Falls hydroelectric project, operated by the New England Power Company. The site extends for a minimum of 2,100 feet along the river and is at least 300 feet wide. Recent preliminary archeological studies at the site were sponsored by New England Power Company, at the Division’s request, and were conducted by the University of Maine, Farmington, under the direction of Dr. James Petersen and Michael Heckenberger.

This research, carried out in the fall of 1987, determined that Vt-WN-41 is clearly eligible for inclusion in the National Register of Historic Places. The National Register nomination for the site is in preparation and we anticipate that it will be formally listed within the next twelve months. Vt-WN-41 is a deeply stratified site that contains a remarkably clear and abundant record of 4000 years of human history in this
Erosion Threatens

portion of the Connecticut River Valley. In addition, several burials have eroded out of the river bank and were destroyed within the last eighteen months. It is likely that additional human burial remains exist within the remaining portions of Vt-WN-41.

A significant portion of the site has already been destroyed by erosion. It appears that a 45'-60' wide strip of land (and several thousand feet long) has been lost into the river within the last five years alone. Fortunately, the recent studies by Petersen and Heckenberger indicate that extensive portions of this important site remain intact. These remaining portions of the site are seriously and immediately threatened by on-going erosion. Although the immediate problem involves the large site area described above, we believe that other significant archeological resources are being destroyed by erosion elsewhere along this and other impounded stretches of the Connecticut River. Erosion of this magnitude may very well be a major problem not limited to this locale.

The second threatened site is situated along Lake Champlain, in Addison County. The remains of one of Vermont's rare 18th century colonial homestead sites is located at the top of a steep, high, eroding embankment. Built by Peter Ferris in 1765, it was one of the earliest homesteads in the Champlain Valley. In April 1776, the homestead offered accommodation to a Congressional delegation that included Benjamin Franklin. In October 1776, members of the Ferris family witnessed Benedict Arnold’s destruction of his own naval fleet and then aided Arnold and his retreating troops. This resulted in a remarkable eyewitness account of Benedict Arnold’s actions that provides a radically new perspective on his character and conduct during this period of his life and on this episode of the American Revolution.

The Ferris site can help illuminate a poorly documented period of Vermont history by providing information on everyday life in this part of the Colonial frontier. Of equal, or perhaps greater importance is this site’s association with the Battle of Valcour Island and the critical days that followed Benedict Arnold’s defeat in that important episode of the American Revolution. The Ferris site is the only known existing historic property, except for the fragments of the shipwreck Congress, found in Vermont waters by the Champlain Maritime Society, that has a close, direct geographic association with these nationally important events.

Historic documents mention that American soldiers were buried on and around Arnold’s Bay and, in fact, the remains of one soldier was found eroding out of the embankment within the last twenty years.

A significant portion of the site has already been destroyed by erosion: only a small portion of the house foundation remains on the bluff. Foundation stones are found scattered all along the steep scarp and at the base of the bluff. Fortunately, a small amount of vegetation has secured enough of a foothold to stabilize the last remaining corner of the foundation. The field investigations are providing information on the extent and integrity of the site areas east of the remnant. We anticipate that remains of outbuildings as well as features and other deposits associated with this site will be uncovered. The remaining corner of the homestead, and as yet unidentified parts of the site, are seriously and immediately threatened by on-going erosion.

The Division and other concerned parties believe that bank stabilization plans to halt erosion and protect these irreplaceable archeological resources must immediately be devised and implemented. We have asked both the U.S. Army Corps of Engineers (for the Ferris Homestead Site) and the Federal Energy Regulatory Commission (for Vt-WN-41) to study these emergency situations and take prompt action to halt erosion and protect the remaining irreplaceable archeological resources. Clearly, the Division will look to assistance from, and involvement by, other individuals and agencies who may have direct or indirect interest or jurisdiction in conserving these important resources and...
Guest Editorial

An Open Letter to the VAS

As a long time member of the VAS (since the early 70s) I must admit to feeling a little disheartened about the present state of our Society. We seem to have lost our sense of purpose, our enthusiasm, a good part of our membership and the feeling that we are contributing to archaeological interests in Vermont.

As a Board member I suppose I should point the finger towards myself and the lack of leadership, but it's more than that. To sustain an interest in archaeology you need more than two meetings a year, an occasional newsletter and a possibility of joining a small field school at a cost of $200.00.

Shouldn't there be more input from the state level? There is a wealth of archaeological prospects - prehistoric, historic, and industrial - in Vermont that should be investigated. We advocacy archaeologists (or what the Brits call "Independent Archaeologists") want to be involved. It is hard to be enthusiastic unless you can work with professionals on site and get your hands dirty troweling, to savor the thrill of uncovering an artifact, cleaning, conserving, and eventually seeing it on display. That's the gut feeling of archaeology, the sense of fellowship at a dig, the sense of accomplishment when things come together and the afterglow of a job done well.

The Board wants and needs input from the membership. Help us put a little spirit and enthusiasm back in the Society; send us your comments and let us know your wishes, thoughts, and suggestions.

Sincerely,

Bill Murphy

Goodenough-Wheeler Farm Locale of Two Archeological Workshops

Two workshops being offered by the Vermont Historical Society offer the chance to explore, map, excavate and interpret a 19th century farm site at historic Kents' Corner in Calais, Vermont. Participants will receive an introduction to the principles of historic archeology and actual hands-on field experience in surveying, evaluating, and interpreting a site. This short course is designed for people who want to use archeology in their investigation, interpretation, and enjoyment of history. The program is designed to acquaint teachers, students and other interested persons with a wide range of interpretive techniques. The workshops will begin on Wednesday evening and end mid-afternoon Sunday.

Site History: In April 1789, the Abijah Wheelock family built a log cabin and established the first permanent white settlement in the town of Calais on a ninety-acre parcel called "Lot 51." Abijah's farm passed through fourteen subsequent owners before it was acquired by the Vermont Historical Society in 1981. One of these owners, Alfred Goodenough, built a substantial house in 1857 on a rise overlooking the community of Kents' Corner. The house burned in 1988 just days after its owners, Benjamin and Luthera Wheeler, celebrated their fiftieth wedding anniversary. The foundations of the house, outbuildings, and the nearby stone-lined well have been the subject of this archeological investigation. In 1997, workshop participants began work on the original cabin site established by Abijah Wheelock in 1789.

The workshops, co-directed by Eleanor Ott and Douglas Frink, will be conducted from July 6-10, 1998, and August 10-14, 1998. The Registration fee of $210.00 includes twelve sessions in the classroom and field; an information packet; four lunches; and dinner on Thursday, Friday and Saturday. A deposit of $50.00 must be received the registration deadline (July 1 or August 1), and the balance will be due upon confirmation of the registration. Scholarships are available. For more information contact the Vermont Historical Society, 802-320-2291.

A Note to Lake Champlain Divers and Other Friends

I'm pleased to let you know that the Vermont Underwater Historic Preserves are now open. This is the first year we've succeeded in opening the Preserves early in the diving season! For now, the Preserve program includes the General Butler, the Phoenix, and the Coal Barge sites. We plan to open one or two new Preserves next summer.

The Preserve brochures and guidelines and Diver Survey questionnaires are available at various dive shops and sporting goods stores on the Vermont side of Lake Champlain, at eight lakeside Vermont State Parks, and from our office. Let us know if there are other places, particularly in New York State, that may be interested in having copies of the brochures.
3 → A Note to Divers

The Abandoned Shipwreck Act (S.358/H.R.74) was finally passed by the United States Congress and signed into law by the President. Although this law has no real effect on Lake Champlain's wrecks, this is an important and necessary piece of federal legislation. Of particular interest to us on Lake Champlain are the sections of the law that encourage States to create underwater parks and recreational access to sport divers. It is my understanding that Vermont's small—but clearly pioneering—Underwater Historic Preserve Program helped inspire these parts of the law. Skin Diver magazine took a remarkable anti-bill position on this proposed law. You may remember several editorials urging divers to contact their congressmen. Unfortunately, the editorials were full of seriously inaccurate, misleading, and inflammatory statements. Based on the misinformation getting passed around, some divers were led to believe that they could never dive on a wreck again! This is contrary to the intent of this law. Fortunately, common sense prevailed and the bill was passed and signed into law. If anyone wants a copy of the bill as passed, let me know and I'll send you one.

Giovanna Peebles

Essex Junction Surveys Identify Two Prehistoric Sites

(Note: this article is a condensed version of a report prepared by James Petersen, Michael Heckenberger, Peter Thomas and others. A full citation appears below.)

In May, 1985, the UVM Consulting Archaeology Program conducted a Phase I archaeological survey for the Town of Essex in an area of Essex Junction, Chittenden County, Vermont that was to be developed as a park. Two aboriginal archaeological sites (VT-CH-234 and VT-CH-235) were identified during the Phase I survey. Five weeks of field work, totaling about 450 person days, were devoted to additional testing in June and early July 1985. Extensive and intensive excavation was undertaken at VT-CH-234 and extensive testing and surface collection were undertaken at VT-CH-235 by UVM field school students working under the direction of Dr. James Petersen.

This work and brief subsequent work at VT-CH-235 by personnel from the UVM Consulting Archaeology Program documented that both archaeological sites had been disturbed by historic period cultivation. The combined work also documented a relatively low density of aboriginal artifacts and some historic period artifacts spread across both sites. Relatively brief occupations dating to the Late Archaic period (ca. 4000 to 1000 B.C.) and Late Woodland period (ca. A.D. 300-1300) occurred at both sites. In addition, an early Middle Woodland period occupation (ca. 100 B.C. - A.D. 300 and possibly a Contact/Historic period occupation (ca. A.D. 1600-1750) are also represented at VT-CH-234. Historic Euroamerican remains are all quite recent, probably attributable to the period from 1890 to the present.

Several episodes of archaeological excavation and surface collection at the Pearl Street Park sites produced a combined inventory of aboriginal and historic cultural remains which appears rather meager when compared with inventories collected from large, multicomponent residential bases located around Shelburne Pond or on the floodplains of the Winooski or other major rivers in western Vermont. However, this perspective is largely offset by a more fine-grained analysis of the aboriginal remains from these two sites, particularly in light of sampling limitations and the fact that these sites undoubtedly functioned in substantially different ways than those adjacent to major rivers and ponds. It is inferred that these fragmentary remains are the product of repeated short-term usage of these sites and this general locale by small family groups who used foraging strategy to collect plant and animal food resources during the warmer seasons of the year. Upwards of 250-500 similar occupations may be represented along the adjacent half-mile segment of Sunderland Brook.

We can only speculate about the actual reasons that aboriginal populations repeatedly returned to these sites on the upper reaches of Sunderland Brook. However, it seems most likely that it was a combination of travel and local resource utilization that attracted presumably small mobile groups of hunter-gatherers. Sites such as VT-CH-234 and VT-CH-235 may have been used as people moved along a travel route up the small Sunderland Brook drainage from its mouth on the lower reaches of the Winooski River near Lake Champlain to its headwaters, or back again, as the know distribution of sites along the brook might suggest. From the headwaters of Sunderland Brook, movement would have been unrestricted across the broad, level delta plain present in this portion of the Winooski River drainage. It would have been particularly easy to cross into the main valley of the Winooski River, only about 0.5 km to the northeast. Travel would have been unimpeded to and from the Alder Brook drainage, another Winooski River tributary about 5 km to the east, or even the
Browns River just beyond Alder Brook to the northeast. The Browns River would ultimately provide access into the Lamoille River drainage, one of the four largest drainages in western Vermont.

VT-CH-234, VT-CH-235 and perhaps other sites located along this particular segment of Sunderland Brook apparently functioned more than travel stations. A number of loci within these site areas appear to represent small camps from which game, plant foods and other resources were acquired in the surrounding territory, if only during the course of a few days or weeks. Relatively clustered artifact deposits may represent the remains from both single or overlapping episodes of occupation, many of which may have been "residential bases" utilized by small groups moving through the area who were pursuing a subsistence strategy based on foraging. Several factors lead to this inference.

First, although artifact density is fairly low, a greater variety of activities are indicated by the artifact assemblage than might be expected at "field camps" where activities were focused on the acquisition and processing of a single major food resource. A brief summary of the assemblages is presented below.

From an 18 m$^2$ sample within Area 1, the artifact assemblage consists of a triangular projectile point, a partially reduced stone tool, a large flake scraper, a shattered ground stone tool which was probably an adze or axe, a total of 98 chert, quartzite or quartz flakes, sherds from one Early Woodland and one Early Middle Woodland ceramic vessel, and Feature 4, a small hearth characterized by a charcoal stain and a concentration of fire-cracked rocks.

A 7 m$^2$ sample within Area 2 contained an assemblage consisting of a small scraper, fragments of two bifacial tools, 17 quartz or chert flakes, sherd from one Late Woodland ceramic vessel and from a second vessel of unknown age, and 23 fragments of fire-cracked rock which suggest the presence of a hearth in the immediate vicinity.

The artifact assemblage from an 11 m$^2$ sample in Area 3 includes an expediency knife made by retouching the edge of a chert flake, 22 chert or quartzite flakes, sherds from one Early Woodland and one Late Woodland ceramic vessel and 38 fragments of fire-cracked rock.

A 23 m$^2$ sample in Area 4 produced a large triangular projectile point, a partially flaked tool, a large flake whose edge had been retouched for scraping, a broken Otter Creek style point whose base was reworked into a scraper, a total of 99 chert, quartz or quartzite flakes, portions of two Early Woodland ceramic vessels, 176 fragments of fire-cracked rock, and 303 pieces of burned bone, including deer and (snapping) turtle.

We can only speculate about the actual reasons that aboriginal populations repeatedly returned to these sites on the upper reaches of Sunderland Brook.

From a 7 m$^2$ sample of Area 5, the assemblage consists of one chert flake used as an expediency knife, a small chert scraper, one wedge, 15 chert or quartz flakes, sherds from one Early Woodland ceramic vessel and 21 fragments of fire-cracked rock. In addition, Feature 2, which measured roughly 80 x 70 cm by 50 cm deep, may represent a roasting pit from which 1,987 pieces of burned bone, including deer and beaver, one quartz flake, a small amount of fire-cracked rock and portions of an Early Woodland vessel were recovered.

Based on these assemblages, it is reasonable to conclude that small family groups periodically visited VT-CH-234 and probably VT-CH-235 and other adjacent sites. Hunting tools, particularly projectile points, were produced from partially reduced bifaces of several varieties of chert, quartzite and quartz. These were probably made to replace other points that had been lost or broken during use. Some of the stone used was acquired within 10-30 miles of the site; some of the chert may have been traded from distances of more than 100 miles. Flake knives, scrapers and wedges may have been used to produce items from wood, such as spear or arrow shafts, bows or traps.

At least within Area 1, ceramic vessels were manufactured on site, based on the presence of a scrap of ceramic clay that had not been mixed with temper before being accidentally fired. Pottery making is traditionally a female craft, both women and men, and probably children, made up the residential group.

None different ceramic vessels, representing a number of time periods, were recovered from the five sample areas with VT-CH-234. Whether all or most vessels were made on site is unknown. In general, these ceramic containers appear to be small to moderate-sized jars or small bowls. They were made by using coils rolled out from a clay paste mixed with granite temper. Coils were often blended together on the interior and exterior vessel surfaces with fabric wrapped paddles, then sometimes smoothed or decorated. Once formed, these small vessels were fired in an oxidizing environment (probably a shallow pit), then either fast or slow cooled. Some vessels may have had a...
fairly short life. since fragments of one or two were encountered in Areas 1-5. Baskets and bags made from cords of plant fibers were also used for carrying and storage.

Meals were cooked in shallow hearths, deeper roasting pits or other types of features depending upon the types of foods being prepared. Liquids were undoubtedly boiled using heated stones which were subsequently fractured and discarded nearby. Although bone preservation was very poor, portions of deer, beaver, small mammal, possibly bird and (snapping) turtle have been identified. Plant foods were probably utilized as well, but there is no surviving evidence in the archaeological record.

The composition of the bone assemblage suggests that entire game animals were butchered and consumed here by a small foraging group. At VT-CH-234, during an Early Woodland occupation in Area 5, cranial fragments, long bones and phalanges (foot bones) from a deer were all recovered in Feature 2 as were the ulna fibula and carpals (front and hind legs) of a beaver. The presence of both shell and phalanges from what is probably a snapping turtle in Area 4 also suggests on-site consumption, while the presence of turtle itself suggests a late

Site Identification Survey Will Help Locate Interstate Gas Pipeline

A 250 mile underground pipeline is being proposed to transport natural gas through Vermont, New Hampshire and Massachusetts to supply New England energy markets. The Champlain Pipeline is expected to carry 300 million feet of cubic gas each day, the equivalent of 50,000 barrels of oil. Its intended route will traverse Vermont from the United States-Canadian border at Highgate Springs to the Burlington area, and then, via Middlebury, Rutland and Springfield, to the New Hampshire border. A site identification survey will help locate and preserve archaeological sites and historic structures along the proposed route.
files were consulted to identify known prehistoric and historic sites; historic structure inventories and town maps were examined to identify historic structures and/or districts within the study area; and pertinent published and unpublished literature was consulted. Site data, when available, was recorded for all archaeological sites and historic structures within one-half mile on either side of the corridor.

Lisa O'Steen, the principal investigator and author of the study, has identified 21 recorded sites and structures in Vermont which fall within or along the pipeline corridor. These include 5 historic structures located in Highgate, Westford, Brandon, Rutland, and Mount Holly; one historic area, the Hawk Mountain Unit in Cavandish; and 15 prehistoric sites ranging from Late Archaic to Late Woodland. Included in the prehistoric sites are two sites along the Lamoille River in Fairfax; a lithics station in Williston; a lithics and ceramics site in Leicester; a site at a confluence of the Middlebury River in Middlebury; and a lithics scatter in Brandon.

O'Steen concludes that, although there are not enough data to generate a true model of archaeological sensitivity in the region, a review of known sites indicate a high archaeological sensitivity in numerous, often restricted areas, particularly those associated with water. Obvious prehistoric and historic sensitive areas identified are found within the following settings: riverine environments, upland environments with a water source or confluence, environmental ecotones, and raw materials sources. Areas expected to have low sensitivity include upland areas without water sources, areas with slopes exceeding 10 percent, and areas along small intermittent streams with no floodplain.

This preliminary analysis should permit officials to make in-

![Figure 1. Champlain Pipeline Corridor - project map showing U.S.G.S. topographic quadrangles.](image-url)
formed decisions as to specific corridor locations in the study area. Once the potential location is fixed, it will be necessary to conduct a further archaeological and architectural survey along the corridor in order to initiate field surveys.

The developers of the project, the Champlain Pipeline Company, expect to begin construction sometime in the early 1990s, after all federal, state, and local permits have been obtained. In the meantime, the review process is ongoing at state and local levels. More detailed information and maps of the proposed route are available from the Champlain Pipeline levels. More detailed information and maps of the proposed route are available from the Champlain Pipeline Company, 69 Swift St., South Burlington, Vermont 05403. (802) 865-3110, and also regional commission and town offices within affected areas.


New Face at DHP

The newest addition to the staff of The Division for Historic Preservation in Dan Cassedy, who holds the position of Environmental Review Coordinator. Dan came to the Division from PAF (Public Archaeology Facility). SUNY at Binghamton, NY.

Dan was born and raised in Plainfield, NH, earned his BA and MA in Anthropology at the University of New Hampshire and SUNY Binghamton, and is currently working on his PhD which is on the subject of lithic resources in northern New England. During the past 10 years, he has also worked on archaeological projects in New England, New York, Alaska, and England. Dan currently resides in Montpelier with his wife Beth and their 2-year-old son, Carter.

In his position, Dan reviews state (including Act 250 and federal projects to assure there are no adverse impacts on historical structures or archaeological sites. He looks to the VAS membership to act as watchdogs for sites that might be threatened by public or private construction projects. He can be contacted by phone at 828-3226, or by writing to DHP, 58 East State Street, Montpelier 05602.

Vic Rolando

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