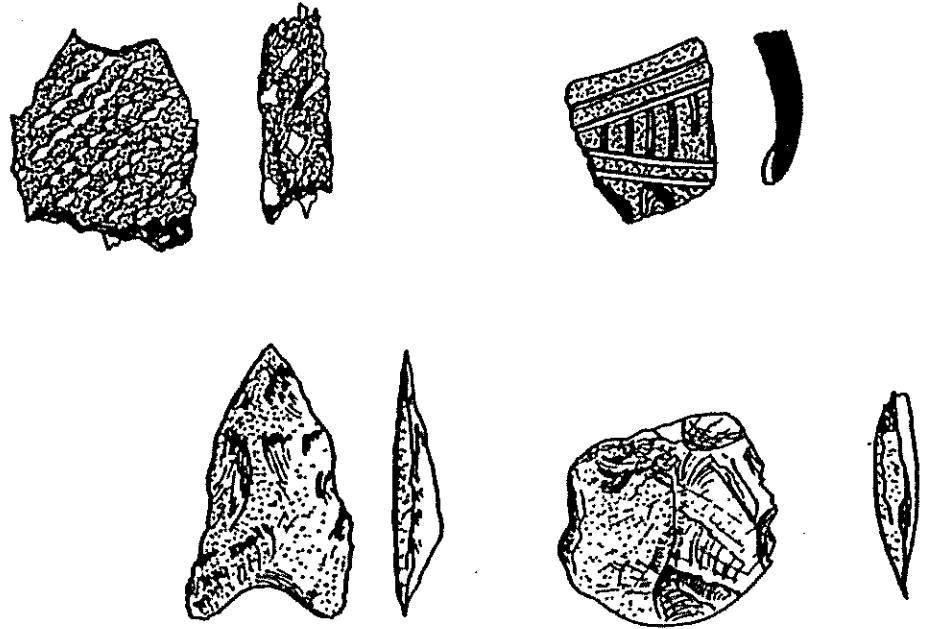




Conference on
New England
Archaeology

NEWSLETTER

Vol. 8, No. 1 January 1989



CONFERENCE ON NEW ENGLAND ARCHAEOLOGY

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COVER:

Materials from the Turners Falls
Anadromous Fish Research Facility
(see page 15).

CNEA

Conference on New England Archaeology

NEWSLETTER

CONTENTS

Meeting announcement - CNEA 1989	1
Workshop reports from 1988 conference	1
Contributed paper - Michael Roberts	7
Current Research by Topic	10
Prehistoric Lithic Analysis	10
Prehistoric Settlement Patterns: Coastal and Island Areas	10
Prehistoric Settlement Patterns: Coastal Lowlands and Plain	11
Prehistoric Settlement Patterns: Central Coastal Maine	13
Prehistoric Settlement Patterns: Upland Alluvial Settings	14
Prehistoric Settlement Patterns: Upland Interior	15
Historic Wharves and Landfills	16
Archaeology of Historic Landscapes	17
Other Current Research by State	18
Meetings	20
Publications and New Reports	21

Vol. 8, No. 1 January 1989

MEETING ANNOUNCEMENT - CNEA 1989

The Annual Meeting of the Conference on New England Archaeology will be held on May 20, 1989 at the Conference Center Meeting Hall, Old Sturbridge Village, Sturbridge, Massachusetts from 9:00AM to 6:00PM. The topic of the meeting will be **Human Burials**. In the program, issues to be discussed will include the negotiation of preservation treatments of Euro-American and Native American marked and unmarked burial sites, techniques of locating burials and definition of burial ground boundaries, cultural, legal and political implications, contributions from data recovery and physical analysis.

Several 20-minute presentations are planned as well as several short current research papers. Papers will continue into the early part of the afternoon, and will then be followed by workshops. A position paper will be published in the next newsletter.

There are limited additional spaces available and anyone interested in presenting a paper is asked to contact Barbara Luedtke, Department of Anthropology, University of Massachusetts, Harbor Campus, Boston MA 02125 or call (617) 929-8150.

SUMMARY OF CNEA WORKSHOP ON MODELING, APRIL 1988

John R. Cross and Michael S. Nassaney

Department of Anthropology,
University of Massachusetts, Amherst

The workshop on modeling was well attended and generated some lively discussion. Many of the issues raised by the morning speakers were pursued in the afternoon session. Most notable were the concept of core-periphery and the role of amateurs in the discipline.

The merits of the core-periphery concept (or core-fringe as used in the Massachusetts State Plan) as a heuristic management device was apparently of interest to everyone. Most of the participants saw the main contribution of the core-periphery model

in the spatial domain, as a means by which archaeologists may understand variable land use patterns, the friction of distance in exchange and transportation, and the creative role of the landscape in human interactions. The challenge seems to be in demonstrating how this archaeo-geographical perspective can help us interpret the past and manage archaeological resources.

The discussion of core-periphery as a part of state plans raised pros and cons about its effectiveness as an organizing concept for guiding field work. A number of workshop participants expressed the concern that they would be forced to interpret their data according to a particular (and not universally shared) paradigm. In practice, however, the Massachusetts State Plan encourages the collection of data which could address questions of core-periphery relations; it does not mandate a particular interpretation or set of conclusions. Questions of core and periphery are necessarily integrative and relational in nature. They specify the social, political, economic, and geographic contexts within which a single site exists. Several participants pointed out that the emphasis on core-periphery relations did not preclude the examination of other issues. Core-periphery models therefore provide one of several ways in which survey and excavation data may be understood on a regional level (i.e., as more than simply an aggregation of individual sites).

A second area of concern was the applicability of a model which expresses political and economic dominance to the prehistory of New England. Core-periphery interactions (e.g., the extraction of surplus labor or goods) are more frequently the domain of historical archaeologists or those who are dealing with complex chiefdoms or state-level societies. There were some reservations about equating "core" and "periphery" with "base camp" and "extractive location". Opinion was divided over whether the core-periphery model was best applied to a regional scale or whether it could be used to describe patterns of seasonal aggregation/dispersal or division of labor within a group.

In the course of the discussion, several points were raised which eventually may help New England archaeologists arrive at a consensus on this issue. For instance, archaeologists have been treating "core" and "periphery" as fixed geographical points (sites), whereas cultural anthropologists view "core" and "periphery" as social/political/economic relations between individuals, institutions, and polities. These may or may not correspond to a particular geographic location through time. In the case of small-scale societies, characterized by fluid group membership and residential mobility, the traditional archaeological approach probably oversimplifies the situation by equating "place" with "polity".

An unstated implication of the discussion is that New England archaeologists need to consider formulating a regional research plan to supplement state plans, since the kinds of processes implied by the core-periphery model are not confined by state boundaries. For example, the dependence of the Pilgrims on fish obtained from European settlers in Maine (and traded against projected corn yields) means that the full economic picture for either settlement cannot be understood in isolation. Preservation plans and research agendas should reflect the regional scope of the issues faced by archaeologists. Perhaps the topic of a regional plan could be discussed further at a future CNEA workshop.

Needless to say, no clear consensus resulted from the discussion. Much work needs to be done before a unified framework for investigating the prehistoric and historic past can emerge in New England. However, using theory to guide data collection on a state wide or regional scale will encourage the development of one or more clearly articulated explanatory frameworks.

The subject of amateur participation in archaeology was also raised in the discussion. Although tangential to the focus of the workshop, the topic exposed the sharply divergent views held by those attending the workshop over the role of non-professionals in the discipline. The several different attitudes expressed in the discussion derive from the variable experiences of archaeologists working with (and occasionally against) avocational archaeologists in different areas of New England. We might consider examining the conditions under which positive relationships have been formed. The state amateur program in Arkansas is one model which New England states may explore and wish to emulate. The point was made that the stewardship of the past is far too great a responsibility for professional archaeologists alone, given our limited numbers and resources.

The workshop provided a forum for the exchange of many ideas, not all of which related strictly to archaeological models. Perhaps more important than the selected topic was the opportunity for people in a growing profession to be able to exchange ideas in a non-combative setting on issues of immediate interest. Surely, this was the original intent of CNEA, and its goals were modestly fulfilled on a Saturday afternoon last spring.

WORKSHOP ON FIELD SAMPLING METHODS AND MODELING, CNEA ANNUAL MEETING, APRIL 9, 1988, STURBRIDGE, MASSACHUSETTS

by Robert Hasenstab

**Chaired by: Kevin McBride, UConn/Storrs
Robert Hasenstab, UMass/Amherst**

The session involved a discussion of several problems on sampling for archaeological sites especially in sponsored projects and their limitations on archaeological research interests. Discussed were the need for improved sampling techniques in

both archaeological site locational surveys and in site excavation so that archaeological research issues could be effectively addressed. Also discussed was the need to expand our use of the information that is being collected from surveys. The following is a summary of discussions during the workshop and those that followed.

Improving sampling techniques

The workshop was opened by critique of shovel test pit sampling by Robert Hasenstab of the University of Massachusetts, Amherst. He argued that with low probabilities of encountering features or diagnostic artifacts on single component sites, shovel test surveys continue to add to an unending inventory of apparent "lithic scatters," making a limited contribution to our knowledge of prehistory. He urged that we adopt methods that will yield more diagnostic artifacts and features, so that State Historic Preservation Officers (SHPOs) will have better justification for recommending site impact mitigation. It was argued that whereas shovel test pits on most archaeological surveys are effective in detecting sites, they are not effective in further site evaluation -- viz., in the detection of features and diagnostics within a site. Rather than simply increasing the intensity of shovel test pit excavation -- an option limited by budgetary constraints--other exploratory methods could be used which are both efficient and effective. Hasenstab suggested that there are many sites that have been previously plowed and recommended that surveys consider plowing sites followed by surface collections when appropriate. This is a much more effective strategy than excavating limited numbers of shovel test pits.

Peter Mills (Massachusetts Historical Commission) cautioned that this may do more harm than good if the site has never been deep-plowed. Mills also added that plowed sites will generally be more detectable by shovel test pitting since artifact clusters have been spread out over larger areas. Curtiss Hoffman (Bridgewater State College) reported on a survey where he successfully located features by using a close-interval (one-meter) soil core survey along systematic transects through a project area. A brief discussion of testing intervals resulted in an agreement that too often intervals between test units were too wide to find sites effectively. Testing intervals should be determined on a project-by-project basis and should be based on the types and sizes of sites expected to be located within the study area. Hasenstab argued more use of "high-tech" equipment such as electrical resistivity, proton magnetometry, and careful excavation with backhoes to detect features and diagnostic artifacts. This suggestion was countered by Barbara Calogero (UConn/Storrs) who argued that heavy equipment use is limited on many project areas because of access problems, and that magnetometer survey is confounded by the presence of rocks. Certainly not all techniques are appropriate in all situations but then neither are shovel test pits (e.g., in glacial till). Most participants agreed that more creativity needs to be exercised in planning survey methods for particular project areas. While arguments were lively, most participants agreed that improvement of our sampling techniques was in order.

Regarding diagnostic artifacts, both Mills and Hoffman suggested using other artifact classes in addition to projectile points as diagnostic indicators; they brought up

the example of a pressure-flaked notch flake of jasper being diagnostic of a Jack's Reef Corner notched point (i.e., Middle-Late Woodland). Hasenstab urged caution because in the past, this approach was used erroneously to associate quartz debitage with Late Archaic sites. Several people commented that evidence is mounting that small-stemmed quartz points span a period from Late Archaic into Late Woodland.

Hasenstab suggested we need to find more features and float their contents to recover information on site seasonality and settlement systems. McBride replied that feature flotation will only inform us of summer and fall occupations, as these are the only seasons during which plants were collected. It seems that new methods for inferring seasonality are in order. Regarding flotation, the problem was raised of the difficulty of accomplishing laboratory analyses given limited project budgets. Suggestions were made to use the volunteer labor of students and amateurs. This was countered by Deborah Cox (Public Archaeology Lab) who claimed we must maintain our professional image and quality of research by restricting our labor to professionals. She added that clients who fund archaeological projects take us less seriously if they know that part of the work is being done by volunteers.

Data Management and Synthesis of Site Data

The question was raised about analyzing site information beyond the scale of the individual site, namely, about synthesizing site information over a region. Hasenstab mentioned that archaeologists will soon have access to the National Archaeological Data Base (NADB) which is a computer inventory of all the contract survey reports east of (and including) Michigan, and north of (and including) Virginia. Hasenstab also noted that several surveys sponsored by Survey and Planning grants in the New England states have already synthesized regional site information. It was then argued that Survey and Planning grants should not be the only means of synthesizing archaeological information. D.Richard Gumaer (University of Massachusetts, Amherst) suggested that we build into contract budgets a surcharge for processing site and survey information into the state site files, and that a fund be set up to finance the synthesis of these data. The idea was positively received and was discussed further.

Evaluating models in archaeology

The workshop shifted to a discussion of cores and peripheries in prehistoric New England. Kevin McBride of the University of Connecticut addressed the problem of excavation technique, namely, once sites are identified, how are they to be excavated to obtain the kinds of information needed to investigate problems such as "cores and peripheries" (the theme of the CNEA conference), or any other archaeological problem? Much of the discussion then revolved around the use of the terms "cores" and "peripheries", and the lack of scale definition in most discussions of the subject. Mitchell Mulholland (University of Massachusetts, Amherst) suggested that the core/periphery model may be used effectively at many scales as long as it is defined properly. Cores could be major population areas such as the Hudson and Connecticut River valleys, or smaller population centers such as the central Connecticut River

Valley, or the central upland Nipmuck country of Massachusetts. It is the relationship of sites in the peripheral areas to the core areas which shed light on settlement distributions, territoriality, and subsistence patterns. An example would be the relationship between lithic quarry sites in the uplands and basecamps at fishing stations on the major rivers.

It was argued by some that since New England has not yielded evidence of large prehistoric centers, it probably did not have cores. Mulholland then suggested that we simply may not be recognizing centers because of our limited sampling designs. If we are to deal with the problem archaeologically we need to think about the kinds of data required to link peripheral sites to their associated cores. For prehistoric sites a more rigorous evaluation of stylistic variation (especially sub-regional variation within artifact types), lithic and ceramic manufacturing techniques, use of raw materials and their distribution should provide data that will allow us to recognize relationships between cores and their peripheries. Techniques such as neutron activation analysis of lithic sources, or cord-mark pattern identification on ceramics, could be used more widely to track the movement of artifacts, and presumably people, over the landscape.

Hoffman argued that until the Late Woodland period, prehistoric societies in New England were generally egalitarian. He cited his study which tracked settlement expanding up stream drainages through time, and claimed this reflects group fissioning associated with population growth. Group aggregation, on the other hand, would have been necessary to lead to social complexity. It was then suggested that perhaps cores and peripheries were manifested as the seasonal rounds of local populations. Hasenstab cited models developed by Peter Thomas (University of Vermont) for the Housatonic and Hoosic Valleys of Massachusetts and Vermont. Thomas claims the Housatonic was a seasonal periphery of the Connecticut Valley, and that the Hoosic was a periphery of the Hudson Valley. Hasenstab noted that the settlement pattern documented in the historic record was the result of Native Americans procuring beaver pelts in the Berkshire hills and selling them at trading posts in the valleys and could not necessarily be used to elucidate prehistoric patterns. We cannot assume that prehistoric sites found in the uplands fit into such a model, since we don't know the nature of prehistoric settlement systems. This led to the final, unresolved question raised at the workshop: what were the spatial scales of aboriginal seasonal rounds and territories, i.e., how can these be determined archaeologically?

AN APPROACH TO STRATIFYING SIGNIFICANT DATA

by
Michael Roberts

Timelines, Inc.

Historic Preservation consultants are regularly required to evaluate resources in the course of compliance studies. To put it another way, we are asked to determine whether anyone should spend time and/or money recovering data from the resource. Toward that end, archaeologists and others have spent thousands of hours discussing the nature of "significance" of cultural resources. The literature abounds with articles regarding the nature of significance and proposing official guidelines, historic preservation plans and other controlling or guiding devices to help us in this decision-making process. It is clear to all, however, that in the final analysis significance is in the eye of the beholder. In other words, the concept and its application are as much dependent on the values of the evaluator as they are with predefined concepts established by theorists or regulators.

I recently had occasion to try to explain the concept of significance to a developer who wanted to do the proper thing by the cultural resources that might be impacted by his project, but also wanted to understand why the expected resources should be important to anybody. In thinking about this notion, I concluded that most nonspecialists do not understand the term "significance" in the same way a professional archaeologist does. True, we have the currently accepted levels of significance, i.e. world, national, regional, and local, and these levels are established within easily defined evaluative frameworks such as state plans. In these cases the resource is either significant or not based on an individual's values and on established criteria. It occurred to me that it might be possible to stratify significance data in such a way as to make them more objective, and thus more accessible to the nonspecialist, and at the same time more useful to professionals. Significant data can be stratified so that they have implications not only for site evaluation but for intensive survey. The strata that were developed include New, Corroborative and Comparative data and the way they are applied in decision-making were explained to the developer as follows:

New Data

New data contradict currently accepted predictive models of human land use ("We didn't expect it here") and as a result may drastically modify current thinking and have a high priority for further study. The acquisition of new data requires relatively small samples of material. These data, if they exist, can generally be expected to be

thinly scattered and easily subjected to loss of integrity through disturbance. The discovery of such material would be extremely significant.

Corroborative Data

Corroborative data reinforce predictive models and complement current interpretations. The acquisition of corroborative data requires a notion of the nature and distribution of resources within the site. Data may still be gathered even if the resources are truncated or otherwise modified. While not quite as earthshaking as new data, "corroborative data" are especially essential in geographic areas or for time periods that have been little studied. This is due to the current inadequacy of data in many areas. In these cases, adding to the data base to help us to evaluate the effectiveness of our models is thus a high priority.

Comparative Data

Comparative data reinforce regional and national models and contribute to theoretical synthesis at the regional and national levels. The acquisition of comparative data requires significant numbers of intact resources in a relatively pristine condition. Comparative data generally exist only when they occur in high enough volume and are thus available for comparing or contrasting with data bases in other regions. When such data are discovered, they have a high priority for recovery and analysis.

Recommended approach to applying this scheme

The implications of this scheme for testing are obvious: clearly, it now becomes important to dig more holes where you don't expect to find anything, because new data which will change our models are scarce (There...I said it). However, applying this notion is not possible in the current context of compliance surveys. It is extremely difficult to convince regulators that project proponents should pay to look hard where no one expects to find anything, and not so hard where we think the sites should be. This is especially true when planning the level of testing in a compliance setting. However, using this scheme, it will not be difficult to convince the regulators that the scruffy little site that was found where it wasn't supposed to be deserves as much consideration for recovery and analysis as the large camp site that was found exactly where it was supposed to be.

There is one place where the application of the scheme described above is especially appropriate, and that is in academia. The academic community is in an ideal position to examine this notion. Field schools and other academic projects can implement survey programs that do look harder where they don't expect to find anything. Then, if unexpected sites are discovered, the resulting scholarly articles can be used by those providing historic preservation services to justify the expenditure of time and money in examining unfavorable areas as well as those that are favorable. To my knowledge, few studies along these lines have been conducted. I would be in-

cialists Peter Rosen of Northeastern University (coastal geology and sedimentology), Paige Newby of Brown University (palynology), Robin Rice of the University of Rhode Island (diatom analysis), Larry Kaplan of UMass Boston (wood speciation), and Catherine Carlson of UMass Amherst (faunal material). Several radiocarbon dates have also been obtained, and although these are not ready for publication in detail, they do confirm a Late Archaic date for the site.

Prof. Dincauze's final report, which may not appear until a brief second-phase excavation has been conducted in the fall of 1988, is expected to deal with some highly interesting questions raised by the work conducted thus far. For example, there may be a possibility that the Shawmut Peninsula during the period of use of the fish weir was not a peninsula at all, but an island and a tombolo. Likewise, the layout of the remains examined thus far seems to imply that the fish weir was not one structure but many smaller ones, constructed over a considerable period of time.

PREHISTORIC SETTLEMENT PATTERNS: COASTAL LOWLANDS AND PLAIN

Numerous surveys have been conducted by PAL Inc. staff in the seaboard lowlands and coastal plain areas in eastern Massachusetts. Interior riverine and coastal locales within these physiographic zones have been traditionally characterized as areas where economic and social activities were concentrated. Previous settlement pattern studies by PAL Inc. staff located numerous prehistoric loci, dating from the Middle Archaic to Late Woodland Periods (6,000 - 450 B.P.). Surveys in Middleborough, Andover, Mashpee, Bourne, Plymouth, West Bridgewater and Kingston yielded a diversity of site types, reflecting both limited activity and residential occupations.

Intensive level survey of the South Bend site, in Andover, by Alan Leveillee and Duncan Ritchie of PAL Inc. located several prehistoric loci extending over about 10,000 square meters at the confluence of a wetland cove and the Merrimack River. Testing of the South Bend site led to the recovery of several, low-density lithic scatters which included chipping debris, retouched tools, ceramics, calcined mammal bone and shell, indicating tool-making and resource-procurement tasks. Projectile point types consisted of Stark variants and small-stemmed point varieties. Leveillee and Ritchie suggest that this locale was occupied during the Middle Archaic and Woodland Periods. In close proximity to the South Bend site is a large riverine base camp (Shattuck Farm), the site of Middle Archaic to Late Woodland occupation. Perhaps South Bend served as a procurement area, from which different prehistoric populations processed resources, prior to returning to large residential camps such as Shattuck Farm.

Several other surveys by Ann Davin, E. Holstein, Denise Mowchan and Peter Pagoulatos of PAL Inc. in the coastal and lowland zones of eastern Massachusetts have yielded low-density occupations, similar to those identified at South Bend. For example, intensive level surveys in Middleborough and West Bridgewater have yielded nu-

merous low-density sites, which are situated near well-documented base camps in the Taunton River Basin. Perhaps these small, low density sites also served as procurement and resource processing loci, associated with larger residential prehistoric sites.

In 1987, several surveys were undertaken by PAL Inc. staff in the Narragansett Bay region including Providence, Bristol, Washington and Newport Counties. Intensive level survey of the Johannis Property project area, in Barrington, by Denise Mowchan (1987) led to the discovery of the Johannis Peninsula site (RI - 1716). The Johannis Peninsula site is situated on a terrace overlooking a salt-marsh, near the Palmer River. Testing of this site yielded chipping debris, retouched tools, calcined bone, burnt rock, a hearth, and thick, coarse grit-tempered Vinette I ceramics, reflecting a resource processing area dating to the Early Woodland Period.

The Quiddessett Neck site, in North Kingston, excavated by E. Holstein and Louis Sardelli has led to the identification and recovery of small-stemmed points, calcined mammal bone, ceramics and shell deposits, indicating occupation assigned to the Woodland Period. Intensive level surveys in Burrillville by Denise Mowchan and Louis Sardelli and in Portsmouth by Renee Van Couyghen and Alan Leveillee, have both yielded low-density prehistoric loci of unknown cultural affiliation.

The Kettle Point project survey in East Providence by Peter Pagoulatos and Duncan Ritchie in 1987 has yielded pertinent information regarding Late Archaic and Late Woodland Period land use patterns in the Seekonk River Drainage. Preliminary reconnaissance survey by Ritchie led to the identification of two prehistoric sites. Subsequently, a Phase II site examination level program was initiated by Pagoulatos at both sites (Bedrock Point, Kettle Point). Both the Bedrock Point and Kettle Point sites are situated on glacial kame terraces, overlooking Watchemoket Cove, near the Providence River. Material recovered from the Bedrock Point site (RI - 1730) includes chipping debris, calcined mammal bone and the base of an Orient Fishtail point, assigning this site to the Susquehanna Tradition of the Late Archaic Period (3,600 to 2,500 B.P.).

The Kettle Point site (RI - 1731) is about 500 square meters in size. This site has yielded a variety of artifact classes, including felsite, argillite, flint and quartz chipping debris, resharpening flakes, retouched tools, burnt rock, as well as Levanna points and side-notched point varieties. Cultural features consist of hearths and deep pit features. Ceramic remains included both plain, grit-tempered and finely made incised sherds. Preserved organic remains include shells, plant remains and mammal bone. Shellfish varieties include oyster, quahog, moonshell, mussel and whelk. Charred botanical remains consist of hickory, smartweed and waterlily. Calcined bone included those from unidentifiable medium and large mammal. Radiocarbon dates from features range from A.D. 1430 to 1550: 520 +/- 80 B.P. (Beta #22589); 450 +/- 80 B.P. (Beta #22590) and 400 +/- 70 B.P. (Beta #22591).

Spatial analyses of material remains from Kettle Point suggest the presence of activity areas where resources were processed, cooked, eaten and dumped. Pagoulatos and Ritchie suggest that Kettle Point was primarily occupied during the Late Woodland Period and possibly Contact Period (520 - 400 B.P.). However, the presence of felsite lithic workshop areas across the site may also reflect Late Archaic occupation, assigned to the Susquehanna Tradition (3600 - 2500 B.P.).

Pagoulatos is preparing a National Register Nomination for the Kettle Point site, as this cultural resource has the potential to provide data necessary to address important research questions which include: 1) paleoenvironmental reconstruction of estuarine environments and its impact upon Late Archaic and Late Woodland Period human land use, 2) reconstruction of Late Archaic/Late Woodland prehistoric technologies and economic systems, and 3) possibly the relationship between Native American groups and sixteenth century European traders/explorers in the Narragansett Bay region and vicinity.

PREHISTORIC SETTLEMENT PATTERNS: CENTRAL COASTAL MAINE

Archaeological survey and testing concentrating on the St. George River estuary in central coastal Maine has generated a large body of data primarily dating to the middle to late Ceramic periods up to the Contact period. Initial survey in the drainage above the contemporary head of tide has produced materials that date from Early to Late Archaic periods as well. Fieldwork consisted of collection analysis, site location through shoreline survey, testing, and subsequent excavation of selected larger sites (conducted between 1980-1985). The majority of sites in the estuary are shell middens, interspersed with living floors, activity areas and hearths. Lithic, ceramic and bone artifacts are presently being analyzed and described by Stuart A. Eldridge of the University of Pennsylvania and Northfield-Mount Hermon School, and the data will aid in establishing a framework for a doctoral dissertation. Faunal material is under analysis by Arthur Spleess of the Maine Historic Preservation Commission.

It is desired that this research will provide a basis for a clearer understanding of maritime hunter-gatherer settlement and subsistence patterning on the Maine coast during the Ceramic period. Key sub-topics include shell midden excavation methodology and interpretation, and the organizational and technical parameters of ceramic production in a mobile society. Subsequent survey will complete the estuary and off-shore portions of the St. George River and especially continue survey in the middle to upper sections of the drainage. The long-term goal of the research is to gain as comprehensive a picture of St. George basin prehistory as a small-scale survey will allow. Funding for the research was provided from matching grants from the Maine Historic Preservation Commission in Augusta, the Northfield-Mount Hermon School, Northfield, Massachusetts, and a pre-dissertation research grant from the University of Pennsylvania. The principal investigator is presently employed at Northfield-Mount Hermon as the instructor in anthropology.

PREHISTORIC SETTLEMENT PATTERNS: UPLAND ALLUVIAL SETTINGS

Maine Historic Preservation Commission (MHPC) crews under the direction of Arthur Spleess worked in the Waterville/Winslow area this summer. Waterville and Winslow are the location of the junction of two large tributary streams with the main stem of the Kennebec River about 10 miles upstream above the head of (at Augusta). The Kennebec Valley at this point contains a complex series of river terraces, some erosional and some with deep alluvium, cut-off meanders with associated fine sediments, and massive sandy point bars. These features extend up the sides of the valley to elevations of 50 to 70 feet above the current river level. At least the highest features are of Terminal Pleistocene age.

Various surveys are under way in cooperation with the Department of Parks and Recreation and the Maine Department of Transportation. One excavation is taking place at the former site of the Fort Halifax blockhouse, which had been perched on the inland limits of a large sandy point bar in Winslow until April, 1987 when a massive flood washed it away. Approximately half of the original timbers have been recovered, and the Department of Parks will reconstruct the blockhouse, this time on a secure foundation. Last fall test excavations for the foundation uncovered a stratified series of prehistoric occupations extending from the base of the fort-associated eighteenth century levels at least 2 meters into the ground. Stratigraphy is superb with clear separation of buried A horizons often containing fire-cracked rocks, intact hearths, charcoal and calcined bone concentrations separated from each other by sterile sand up to 20 centimeters thick. One level from approximately 1.5 meters depth has yielded a radiocarbon date of 3,200 years B.P. Testing will be conducted as deeply as money and safety factors allow. The excavation requires some shoring of upper walls.

Through an agreement with the Maine Department of Transportation, MHPC crews have been doing Phase I testing for a right-of-way for a new feeder road and bridge south of Waterville/Winslow. Phase I testing is nearly complete and has resulted in the location of four prehistoric sites. These include two deeply buried stratified sites in silty fine sand extending to a confirmed depth of greater than 2 meters and to a possible depth of 4 or 5 meters. Confirmed cultural units present include Middle Woodland, Susquehanna, and some sort of a Laurentian-related group. Buried soil surfaces are numerous, charcoal preservation is excellent, and pollen preservation has been confirmed both for feature contents and buried non-cultural A horizon soils.

The other two sites that were found are lithic scatters in B horizon sandy soils perched on Terminal Pleistocene/Early Holocene landforms at elevations of 50 or more feet on the valley sides. The larger collection consists of a few pieces of fire-cracked rock, a dozen pieces of debitage including a felsite or rhyolite, and the base of an argillite lanceolate point which has been broken by impact fracture. The point

base is approximately 2 centimeters broad, thin in cross-section, very well-flaked, exhibiting very slight notches several centimeters above the base where the hafting modification terminated. The point is broken just distal to the hafting modification marks. In Maine argillite is a marker for Late Paleoindian, with approximately half of our Late Paleoindian points made of this material. It was used very rarely at any other time. The nearest morphological analogue found thus far in the literature for this piece is the Plainview Point of the High Plains Late Paleoindian sequence.

Art Spiess comments: "I can recall the days nearly a decade ago when a senior Maine archaeologist instructed me that there 'aren't any deeply stratified sites in Maine', and that really early occupations were only represented by a scattering of fluted points. Well, a lot of dirt has been moved since then".

During the fall of 1988, David Bernstein of UMASS Archaeological Services conducted a site examination and data recovery project at the Turners Falls Anadromous Fish Research Facility in Turners Falls, Massachusetts. Earlier studies reported by Ronald Johnson and Alan McArdle (1986-7) had identified four prehistoric sites in the path of the project. While mitigating the impacts to the site from the proposed project, information from the sites is expected to shed light on prehistoric lifeways along the Connecticut River for a 4,000 year period. Prehistoric materials occur in dense concentrations and were encountered in 80 percent of the test units. Analysis of the materials recovered is in progress, and preliminary indications are that the area witnessed multiple occupations beginning as early as the Late Archaic. Two prehistoric hearths were found. Charcoal from the first is radiocarbon-dated (C13 adjusted) to 730 +/- 190 BP (Beta #28531). The adjusted date for the second feature is 3870 +/- 100 BP (Beta #28532).

PREHISTORIC SETTLEMENT PATTERNS: INTERIOR

Until recently, the interior uplands of central Massachusetts were reconsidered as seasonal land use zones, where prehistoric populations gathered resources during the winter months. However, recent work by PAL, Inc. suggests that this model of interior land use is over-simplified.

Although field surveys by Alan Leveillee, Duncan Ritchie, Peter Pagoulatos and Denise Mowchan have yielded primarily small, low density sites, where specialized resource extraction activities took place, larger, multicomponent occupations have also been identified, reflecting a wide range of activities and site reuse.

For example, Ritchie's reconnaissance studies of the Quinnebaug Reservoir, under

contract with the U.S. Army Corps of Engineers, in the townships of Uxbridge, Holland, Brimfield, Southbridge and Sturbridge, have provided valuable information concerning patterns of prehistoric land use in the interior uplands. Numerous sites have been found during this preliminary survey, ranging from small, task-specific locations to larger, multi-activity campsites, dating from Late Archaic to Late Woodland times (4,500 - 450 B.P.). In addition, the reconnaissance survey indicates intense occupation and site reuse of interior wetland, stream and marsh areas.

The recent Franklin Farms survey directed by Pagoulatos and Leveillee in the interior uplands of Franklin, Massachusetts has also contributed to a better understanding of prehistoric land utilization. Six prehistoric sites were identified during the intensive level archaeological survey of the project area. Subsequently, a site examination research program was initiated at two of these sites (Franklin Farms, Maple Knoll). Four of the six sites ranged from 25 to 50 square meters in size and yielded lithic chipping debris and retouched tools. These sites most likely represented task-specific locations. The Maple Knoll and Franklin Farms sites appear to represent "field stations". These sites range from 500 to 750 square meters in size. Both the Maple Knoll and Franklin Farms sites yielded a variety of artifact classes, including chipping debris, resharpening flakes, bifaces, unifaces and burnt rock, reflecting stone tool manufacturing and maintenance, and domestic-related tasks. Recovered projectile point types from these sites include untyped broad-stemmed, Meadowood, and small-stemmed varieties, dating from 4,500 to 450 years ago, indicating episodes of site reuse. These sites were situated near wetland areas, from which resources were seasonally extracted and processed by organized task groups.

George P. Nicholas of the University of Massachusetts at Amherst and the American Indian Archaeological Institute is continuing his research on long-term wetland ecology and prehistoric land use behaviors. The study focuses on Litchfield county in northwestern Connecticut but incorporates data from across the Northeast. Nicholas requests data on prehistoric sites associated with wetlands from anywhere in New England.

HISTORIC WHARVES AND LANDFILLS

Michael Roberts of Timelines, Inc., and Timelines consultant historian Beth Bower have recently completed documentary research, site monitoring, and limited artifact recovery for the 75 State Street Block in the heart of Boston's financial district. The site's developers, the Beacon Companies, were intrigued to learn that their block was situated on Boston's original waterfront and adjacent to the foot of the famous Long

Wharf, the pride of Boston's eighteenth-century commerce.

Documentary research uncovered a history of mixed commercial and residential use extending from the days of Governor Winthrop to the end of the Revolution. Taverns, homes, tenements, warehouses, and workshops related to ships and sailing had occupied the site almost from the beginning. One property in particular, known as Oliver's Dock, had a long and continuous association with the Oliver family, who emerged as prominent and controversial Tories in the period just prior to the Revolution. In 1765, an angry crowd of patriots, fresh from burning Stamp Officer and Lieutenant Governor Andrew Oliver in effigy, had actually stormed onto the dockside and destroyed a small brick building belonging to the Olivers merely because it was rumored to be the spot from which the hated Stamp Act was to be administered.

Evidence concerning past fires and disturbance suggested that this was one of the few areas on the block where significant remains might still be found. Site monitoring during construction did indeed identify and recover a collection of timbers from Oliver's Dock. Analysis of these by wharfing specialist Timothy Kennedy indicated they displayed construction techniques that differed little from those of British Medieval times. Tree-ring analysis by the Lamont-Doherty Geophysical Observatory of Columbia University in Palisades, New York demonstrated that the sample timbers had been cut in the late eighteenth century from seventeenth-century trees, as old as the colony itself.

ARCHAEOLOGY OF HISTORIC LANDSCAPES

The University of Massachusetts, Amherst archaeological field school conducted excavations in Old Deerfield for the fifth summer season. The study was carried out in cooperation with Historic Deerfield and the Deerfield Academy. The overall goal of the research is to document the past landscapes of this rural village, and to better understand the processes which have continuously changed them. The documentary portion of the study was conducted by Kevin Sweeney, Amelia Miller and Susan McGowan (all of Historic Deerfield). This year's investigation, directed by Robert Paynter, Rita Reinke and Edward Hood, focused on the south lawn of the Nims House where a foundation with fill dating to the mid- to early-eighteenth century which had been located the previous year during a survey of Deerfield's archaeological resources. Twelve contiguous one-meter square units were excavated at the site of the foundation. The goal was to place the structure in time and to determine if it had been a cellar of a residence or some form of out-building. The current house on the property (approximately 20 meters north of the foundation) dates to between 1710 and the 1740s. This, in combination with documentary evidence suggests that the foundation remains may be associated with one of the houses which previously stood on the property. Two were constructed during the late seventeenth century, and

both were burned, one in the 1704 attack by the French.

Excavation revealed the northwest corner of a fairly substantial and well-built stone foundation, with its exterior walls butting against a sterile B-zone. This foundation begins at about one meter below the surface and extends down approximately another meter, with a sandstone slab flooring at the bottom which was broken up and incomplete in places. The northern part of the foundation contained fill with artifacts dating mainly from the early- to mid-eighteenth century, with some possible seventeenth century artifacts. The latter included buff-bodied combed slipware sherds. There was much rubble in the fill, including scorched rock and what appears to be a very low fired brick/tile. There was also a very thick, clean clay deposit covering much of the fill in the foundation. The southern part of the foundation seems to have been re-excavated during the mid- to late-eighteenth century and a different structure erected, which included a brick fireplace. The fireplace was largely destroyed in situ, but still contained a wall of bricks which were mortared together with clay. The flagstone floor of the hearth and a broken lintel stone were also found in association. This secondary use of the earlier foundation was then apparently covered with midden debris, including a lot of faunal material, creamware and pearlware sherds. The midden was of an overall rich organic nature, indicating a probable kitchen dump.

Analysis of the excavated materials is currently being conducted. It is hoped that excavation can be continued at this site, which contains interesting evidence on the highly complex and continuous uses of historical landscapes. The Nims site provides evidence that even rural sites such as Deerfield can contain highly complex patterns of usage.

OTHER CURRENT RESEARCH BY STATE

MASSACHUSETTS

Timelines, Inc., under the direction of Michael Roberts, has prepared an outline for a comprehensive Cultural Resources Management Plan for the Massachusetts State House. The final document will inventory and make management recommendations for furnishings, paintings, monuments, and sculpture, as well as the structure itself and its associated archaeological resources. Reportedly, this will be the first Comprehensive State House Cultural Resource Management Plan in the nation.

In a separate but related project, Roberts has recently been overseeing the excavation of the seven-foot-high, slab-faced stone wall encountered in the west lawn of the Massachusetts State House during backhoe operations. The wall, as indicated by documentary research and confirmed by historic-landscape specialist Peter Hornbeck, is a *glasis*, a common feature of eighteenth-century formal gardens, and once formed a portion of the impressive grounds of the John Hancock Mansion. The

Mansion itself was razed in 1863 over considerable community opposition, even its foundations being destroyed to make way for new structures.

Historic Massachusetts Inc. (HMI) is establishing within its Issues and Education Committee a subcommittee for archaeology. This subcommittee will be charged from time to time with investigating, studying and recommending action on issues that affect the Massachusetts archaeological community. HMI has already worked for support of several archaeological issues over the last few years. We believe that the creation of such a subcommittee will provide a stronger voice for archaeology within the historic preservation community, as well as strengthening our focus on archaeological issues. When this subcommittee is formed, its first issue will be that of a repository for archaeological collections within the Commonwealth. All archaeologists living or working in Massachusetts who are interested in this subcommittee or in HMI's efforts on archaeological issues are invited to contact Michael Roberts, Chair, HMI Issues and Education Committee at 51 Hollis Street, Groton, MA 01450, phone (508) 448-2585.

RHODE ISLAND

Jordan Kerber recently joined the staff at The Public Archaeology Laboratory, Inc. in Pawtucket, Rhode Island. His responsibilities include developing and implementing programs for public education and outreach in archaeology. One program which Jordan co-directed with Alan Leveillee at PAL, Inc. this summer was a field school in archaeology at a prehistoric site in Rhode Island. The field school consisted of two four-week sessions, each identical in structure and content, providing experience in background research, survey and excavation, laboratory processing and cataloging, and data analysis. Jordan is also teaching part-time at the Providence College School of Continuing Education and the Brown University Learning Community.

REGIONAL

Michael Roberts of Timelines, Inc. provides the following: A number of archaeol-

ogists have been discussing problems and issues that are particular to those of us who provide historic preservation services. Issues such as contract language, sampling and research design, wage rates, data sharing, and material repositories are but a few of those that have been discussed between individuals or in the hallways of professional meetings. I believe it is time to come out of the closet and institutionalize the discussion so we all may benefit and have input to these discussions. I would like to recommend to the CNEA steering committee that they authorize the establishment of a subcommittee composed of practicing archaeological service providers for the various New England states for the purpose of facilitating communication among those of us concerned about similar issues. If anyone is interested in establishing such a forum, please contact me at the following address: Mike Roberts, Timelines Inc., 51 Hollis Street, Groton, MA 01450.

MEETINGS

MASSACHUSETTS ARCHAEOLOGICAL SOCIETY

On April 15-16, 1989 the Massachusetts Archaeological Society will offer its 50th Anniversary program, titled *Archaeology Past, Present and Future*. The annual meeting will be held at Bridgewater State College, Bridgewater, Massachusetts, and will include speakers on New England and New York State archaeology, state archaeology societies, open air museums, contract archaeology, museums and heritage parks. Keynote speakers are James Tuck: "Basque whaling stations at Red Bay Labrador, and Robert McGhee: "Norsemen and Native Americans, or Why the Medieval Norse didn't settle in North America". For more information write to the Robbins Museum of Archaeology, 42 Union Street, Attleboro, Massachusetts 02703.

PUBLICATIONS AND NEW REPORTS WITH REFERENCES CITED IN TEXT

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 1988 Human Behavior and Holocene Ecology. In Holocene Human Ecology in Northeastern North America, edited by George P. Nicholas, pp.1-7, Plenum Press, New York.

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CONFERENCE ON NEW ENGLAND ARCHAEOLOGY CURRENT RESEARCH

Please submit a brief paragraph on your current New England Archaeological research for inclusion in the next CNEA Newsletter. Also submit any new bibliographic titles for books, articles, reports, etc. in American Antiquity format. Thank you.

Please return by March 15, 1989 to:
Mitchell Mulholland
UMASS Archaeological Services
University of Massachusetts
Blaisdell House
Amherst, MA 01003

or to your local CNEA Steering Committee representative. If possible send your contribution on a computer diskette (with paper copy) on IBM or compatible, Apple, McIntosh, or Kaypro. Please specify the computer model, word processor operating system used to create your file. Your diskette will be returned to you. Please begin with a paragraph, or at least a few sentences stating what your research topic is, and how your data are used to answer your research questions.

Name

Institution

Mailing Address

Bibliographic entry

Research
Research topic

Current research

PLEASE MAIL AS SOON AS POSSIBLE