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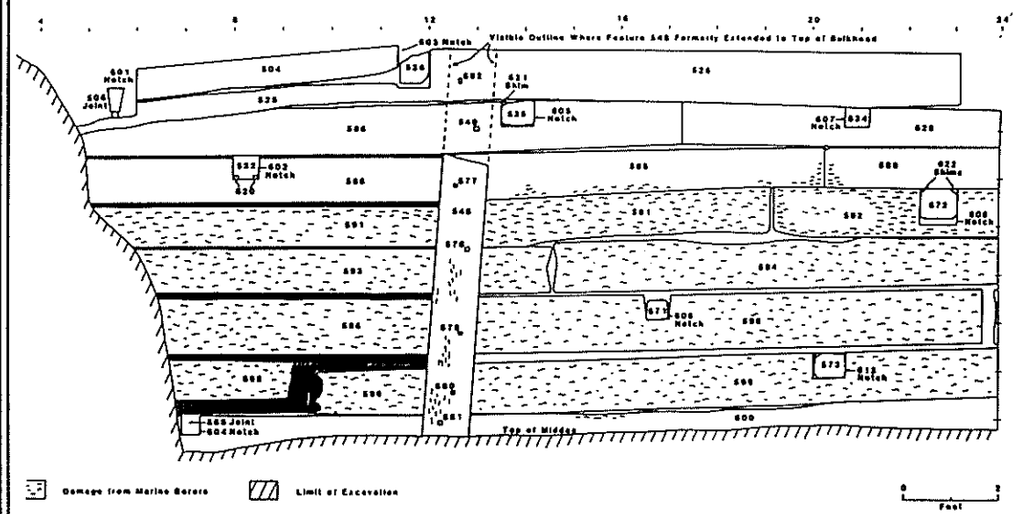
CNEA

Conference on New England Archaeology

NEWSLETTER

Volume 13 April 1994



COVER:
Profile of exterior face of 1762-1771 bulkhead Derby Wharf, Salem, MA
Illustration by Maureen Manning-Bernatzky

CNEA Conference on New England Archaeology NEWSLETTER

Volume 13 April 1994

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A PLACE FOR ARCHAEOLOGY, AN ARCHAEOLOGY OF PLACE

by Russell G. Handsman
University of Rhode Island

Faith Harrington
University of Southern Maine

"If you don't know where you are, you don't know who you are." PLACE matters. Now perhaps more than ever, the ideas of place and placelessness have become a focus for commentary, concern, and critique. Essayists like Wallace Stegner (1992:16) talk of the lifelong search for a place, what it is like to be on the move, to always feel like an outsider: someone without a place who "grows up entirely without history." His voice comes to us from the vast, open landscapes of the American West. Yet it echoes even here in New England. We too worry about PLACE: having a place, making a place for ourselves, losing places that we sense are somehow important (see Paul Buhle's 1991 photographic essay on "Vanishing New England"). Increasingly we want to share memories of "special places" and find ways to preserve both those memories and the places remembered (Root 1993). Clearly places matter in New England and they probably always have. Thus it is appropriate that this year's CNEA conference explores PLACE and Places as well as the place these constructs have and should have in archaeology.

Place and No Place in New England Archaeology

Place obviously now matters a lot to scholars: place-centered analyses are being conducted by anthropologists, archaeologists, and historians, as well as by geographers (Meining 1979). This work is variously concerned with the assignation of meanings, the power of place (Hayden 1988), with human needs and emotional responses (Entikin 1991, Relph 1976), or with social production and representation (Davis 1990). In much of the literature, three ideas figure prominently which can be used to build connections between archaeology and PLACE and to challenge how archaeological practice often hides or redefines the significance of some places.

First, places are where we belong to. They might consist, for example, of meaning-filled attachments to localities, street corners, sites, neighborhoods, or village centers. They are representative as well of the long-term histories of people living and working together, sometimes with common goals or, just as often, with very different, conflicting visions. Places are central to such human experiences and are created through them. They can be important keys to understanding the histories of social identities and the survival of cultural traditions (Parker and King 1992).

Second, each specific place, when viewed by different people, actually consists of many different places. Place is always plural; the history of a place is one of multiple histories, some of which are forgotten, misunderstood, or hidden because of how history is normally written and memorialized (Handsman 1991a,b). No matter how small (Kincaid 1988), the history (and "prehistory") of places, and the representation of those histories, usually involve power, politics, resistance, and ideology. These domains and relations have their "own histories" which should always be an integral part of the stories we tell about places (Cronon 1992).

Third, places are actively constructed and reconstructed, used and abandoned, reoccupied, transformed, appropriated, sanctified, and buried. There is a material record of all of the overlapping and contradictory histories of places; therefore an archaeology of places is possible (Bradley 1993). Further, archaeological studies of places can illuminate some of these histories in ways that other disciplines and records of evidence cannot (see the studies of Lowell by Beaudry, Cook, and Mrozowski 1991 and of the Lighthouse site by Feder 1994).

Despite these possibilities, however, the Archaeology of Place in New England seems underdeveloped and often wrong headed. The ways we model land use and settlement, for example, "discipline us" to talk about logistics, scheduling, seasonality, processes of site formation, and measures of site and assemblage variability [Part IV of Binford's (1983) Working at Archaeology]. In turn this conceptual vocabulary of space provides an organizational framework for modeling prehistory which can impede our ability to recognize and illuminate the long-term histories of places.

Consider the case of Native American homelands in New England which, according to many, are less than 1000 years old (McBride and Dewar 1987). The origins of homelands are normally tied to the development of corn horticulture, or to ecologically rich coastal zones, or the advent of fur trading. It is assumed that homelands cannot be linked to the archaeological histories of earlier hunter-gatherers who organized production and used resources in ways supposedly very different from agriculturalists. But in New England, there is growing archaeological evidence that hunter-gatherer peoples began to settle into and use some places more intensively and permanently beginning about 3000 years ago (Bernstein 1990, Handsman 1991b, McManamon and Bradley 1986). Often located at the sites of traditional meeting grounds, these living places were also marked symbolically and spiritually, generation after generation. Such early special places become in time integral parts of the core areas of ancestral homelands whose power is still remembered and celebrated in the oral traditions and memories of Native peoples (Bragdon 1992, Crosby 1988).

Working through a model of place therefore extends the time depth of ancestral homelands and encourages archaeologists to study long-term cultural and social continuities. Such studies can then provide a different narrative frame for evaluating repatriation requests and for exploring the long-term histories of

indigenous resistance and survival (Handsman and Lamb Richmond 1992). At the same time, a place-centered and homeland model will compel us to rethink the varieties of archaeological histories which might be associated with entrepots in the 16th and 17th centuries. Clearly some of these early centers for colonialization were located outside homeland cores while others were knowingly situated within them. The historical consequences of such diverse strategies can be illuminated through archaeologies of place as can the histories of textual misrepresentations used to appropriate and remap homelands (Bowden 1992, Cronon 1983, Merchant 1989).

Archaeologies of more obviously historic places in New England seem to possess a similar potential. Yet they too are problematic. Too often we model the region's last 300 years of history as an inevitable, unilineal sequence of progressive and supposedly democratic growth. The range of class, gender, and cultural differences which existed in <u>every place</u> are scarcely acknowledged nor have we explored the histories of those differences - how they were constructed, maintained, transformed, resisted, and contained (see noteworthy examples in McGuire and Paynter 1991, as well as the suggestive work of Piersen 1988 and Prude 1985). In many ways, the historical archaeology of New England's places accepts history as it is conventionally written and represented. Only rarely do we challenge history's silences or wonder about using archaeology to recover the alternative histories of each place (see Potter's 1994 critical overview).

<u>Reconstructing the Archaeology of Place in New England</u>

How might we use archaeology to learn more about the communities and places we work and live in? What should an archaeology of New England places look like? To begin, an archaeology of place must focus on local communities, the special places within them that are commonly recognized and celebrated, and the excluded peoples whose places and histories are so much a part of every community. An archaeology of place must also consist of active collaborations between prehistoric and historic archaeologists. Each sub-discipline's work can contribute to the writing of long-term histories of place even as the models and methods of each are challenged by the findings and perspectives of the other. Lastly an archaeology of place assumes that the history of places, as remembered and taken for granted, is always partial and selective. These (mis)representations also have histories which can be explored and confronted through archaeology. Given these premises, an archaeology of PLACE might proceed as follows:

<u>Step One</u>: Confronting History

- Read later 19th-century and early 20th-century community histories to identify their silences: what do they say, for example, about Native peoples, their homelands, and traditions?

- Study the histories of these histories: who is writing them, when, and why. What kinds of political struggles and ideological debates are occurring in the community, region, and nation at that time (see Saxton 1990 for useful hints)?

<u>Step Two</u>: Exploring Counterfactual Histories

- Develop models concerning the origins and long-term histories of ancestral homelands in the local communities being studied: conceptualize how lands were used and settled in each homeland's core and periphery; focus on understanding communal relations of production (Upham 1990).

- What happens as the 17th century begins: focus on strategies of resistance and survival.

- What then happens in communities, homelands, and regions as agrarian and industrial capitalism grow in size and scale: how can we write archaeological histories of the relevant processes of class, social, and gender separations and struggles?

- Study how these histories of capitalist transformation might have enabled the survival of Native peoples: what kinds of resistant accommodations were built by them acting alone or in cooperation with African Americans and other disenfranchised peoples?

<u>Step Three</u>: Building Archaeological Histories of Whiteness

- Illuminate the class and ideological processes through which racial separations reconstructed and legitimized in later 19th-century New England: how is material culture used to represent whiteness and marginalize people of different cultural traditions (see hints in McWhiney 1988 and Praetzellis et. al. 1988).

- Explore the connections between these processes and the systematizing of history's silences in New England communities: these histories are interconnected parts of the same story.

- The critical period for exploring these histories in New England is the 50 years between 1830 and 1880. The long-

standing cultural diversity of New England's communities continued and intensified then, even as the representation and histories of those places became whiter.

Afterwards

Now is the time to build long-term, cross regional, collaborative research projects in both problem-oriented and public archaeology contexts, in order to confront continuing silences and recover the multiple histories of each place. As we go forward with this initiative, it will be necessary to represent these new histories in public settings. Otherwise there will be no challenge to New England history, no way for many of us to co to reknow the places where we still are. No way really for us to know who we are.

References Cited

Beaudry, Mary C. et al.
1991 Artifacts and Active Voices: Material Culture as Social Discourse. In The Archaeology of Inequality, edited by R. H. McGuire and R. Paynter, pp. 150-191. Basil Blackwell, Inc., Cambridge, Massachusetts.

Bernstein, David J.
1990 Prehistoric Seasonality Studies in Coastal Southern New England. American Anthropologist 92(1):96-115.

Binford, Lewis R.
1983 Working at Archaeology. Academic Press, New York.

Bowden, Martyn J.
1992 Invented Tradition and Academic Convention in Geographical Thought about New England. GeoJournal 26(2):187-194.

Bradley, Richard
1993 Altering the Earth. Society of Antiquaries of Scotland Monograph Series No. 8. Edinburgh.

Bragdon, Kathleen J.
1992 Language, Folk History, and Indian Identity on Martha's Vineyard. In The Art and Mystery of Historical Archaeology: Essays in Honor of James Deetz, edited by A. E. Yentsch and M. C. Beaudry, pp. 331-342. CRC Press, Boca Raton, Florida.

Buhle, Paul M.
1991 Vanishing Rhode Island. Rhode Island History 49(3-4):66-126.

Cronon, William
1983 Changes in the Land: Indians, Colonists, and the Ecology of New England. Hill and Wang, New York.

1992 A Place for Stories: Nature, History, and Narrative. Journal of American History 78(4):1347-1376.

Crosby, Constance A.
1988 From Myth to History, or Why King Philip's Ghost Walks Abroad. In The Recovery of Meaning: Historical Archaeology in the Eastern United States, edited by M. P. Leone and P. B. Potter, pp. 183-209. Smithsonian Institution, Washington.

Davis, Mike
1990 City of Quartz: Excavating the Future in Los Angeles. The Haymarket Series, Verso, New York.

Entikin, J. Nicholas
1991 The Betweenness of Place: Towards A Geography of Modernity. Johns Hopkins University Press, Baltimore.

Feder, Kenneth L.
1994 A Village of Outcasts: Historical Archaeology and Documentary Research at the Lighthouse Site. Mayfield, Mountain View, California.

Handsman, Russell G.
1991a Illuminating History's Silences in the "Pioneer Valley." Artifacts 19(2):14-25. American Indian Archaeological Institute, Washington, Connecticut.

1991b What Happened to the Heritage of the Weantinock People. Artifacts 19(1):3-9. American Indian Archaeological Institute, Washington, Connecticut.

Handsman, Russell G. and Trudie Lamb Richmond
1992 Confronting Colonialism: The Mahican and Schaghticoke Peoples and Us. Essay prepared for "Making Alternative Histories," an Advanced Seminar at the School of American Research, Santa Fe, New Mexico, April 1992.

Hayden, Dolores
1988 The Power of Place: A Proposal for Los Angeles. The Public Historian 10(3):5-18.

Kincaid, Jamaica
1989 A Small Place. Plume Books, Penguin, New York.

McBride, Kevin A. and Robert E. Dewar
1987 Agriculture and Cultural Evolution: Causes and Effects in the Lower Connecticut River Valley. In Emergent Horticultural Economies of the Eastern Woodlands, edited by W. F. Keegan, pp. 305-328. Center for Archaeological Investigations, Southern Illinois University, Occasional Paper No. 7. Carbondale, Illinois.

McGuire, Randall H. and Robert Paynter, eds.
1991 The Archaeology of Inequality. Basil Blackwell, Cambridge, Massachusetts.

McManamon, Francis P. and James W. Bradley
1986 The Indian Neck Ossuary and Late Woodland Prehistory in Southern New England. In The Indian Neck Ossuary. Chapters in the Archaeology of Cape Cod, V. Cultural Resources Management Study No. 17. Division of Cultural Resources, North Atlantic Regional Office, National Park Service, Boston, Massachusetts.

McWhiney, Grady
1988 Cracker Culture: Celtic Ways in the Old South. University of Alabama Press, Tuscaloosa.

Meining, D. W., editor
1979 The Interpretation of Ordinary Landscapes: Geographical Essays. Oxford University Press, New York.

Merchant, Carolyn
1989 Ecological Revolutions: Nature, Gender, and Science in New England. University of North Carolina Press, Chapel Hill.

Parker, Patricia L. and Thomas F. King
1992 Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin No. 38. Interagency Resources Division, National Park Service. Washington, D.C.

Piersen, William D.
1988 Black Yankees: The Development of an Afro-American Subculture in Eighteenth-Century New England. University of Massachusetts Press, Amherst.

Potter, Parker B.
1994 Postprocessual Approaches and Public Archaeology: Putting Critical Archaeology to Work for the Public. In Cultural Resource Management: Archaeological Research, Preservation Planning, and Public Education in the Northeastern United States, edited by J. E. Kerber, pp. 65-85. Bergin and Garvey, Westport, Connecticut.

Praetzellis, Mary et al.
1988 What happened to the Silent Majority? Research strategies for studying dominant group material culture in late nineteenth-century California. In Documentary Archaeology in the New World, edited by M.C. Beaudry, pp. 192-202. Cambridge University Press, Cambridge.

Prude, Jonathan
1985 Town-Factory Conflicts in Antebellum Rural Massachusetts. In The Countryside in the Age of Capitalist Transformation, edited by S. Hahn and J. Prude, pp. 71-102. University of North Carolina Press, Chapel Hill.

Relph, Edward
1976 Place and Placelessness. Pion, London.

Root, Dolores
1993 Special Places. Massachusetts Foundation for the Humanities, South Hadley, Massachusetts.

Saxton, Alexander
1990 The Rise and Fall of the White Republic: Class Politics and Mass Culture in Nineteenth-Century America. The Haymarket Series, Verso, London.

Stegner, Wallace
1992 Finding the Place: A Migrant Childhood. In Where the Bluebird Sings to the Lemonade Springs, W. Stegner, pp. 3-21. Penguin, New York.

Upham, Steadman, editor
1990 The Evolution of Political Systems: Sociopolitics in Small-scale Sedentary Societies. Cambridge University Press and The School for American Research, Advanced Seminar Series, Cambridge.

CONFERENCE ON NEW ENGLAND ARCHAEOLOGY
1994 ANNUAL MEETING

MAY 21, 1993

PERSPECTIVES ON PLACE

The 1993 annual meeting of the
Conference on New England Archaeology
will be held at the Fuller Conference Center
Old Sturbridge Village
Sturbridge, Massachusetts

This year's annual meeting marks
CNEA's 13th Anniversary

Registration, Coffee, and Socializing
8:30 - 9:30 Saturday morning

The complete program of speakers
is outlined on the following pages

PROGRAM SCHEDULE

.....MORNING SESSION.....

INTERPRETATIONS OF PLACE
IN NATIVE AMERICAN ARCHAEOLOGY AND HISTORY

8:30-9:30	**Coffee and Registration**
9:30-9:45	**Opening Remarks** Parker Potter New Hampshire Division of Historical Resources
9:45-10:15	**Mohegans Examine Shantup and the Sandy Desert: Archaeologists in "Collaboration" with Whom?** Melissa Fawcett Tribal Historian, Mohegan Tribal Nation
10:15-10:45	**Crafting a Native American Program Within the Federal Government: The United States Department of Defense, A Case Study** Michael Roberts Timelines, Inc.
10:45-11:00	**Break**
11:00-11:30	**The Archaeology of Place: Methods and Examples from Prehistoric Archaeology** David Bernstein Department of Anthropology SUNY Stony Brook
11:30-12:30	**Discussion** Robert Preucel Department of Anthropology Harvard University
12:30-2:00	**Lunch** (on your own)

PROGRAM SCHEDULE

.....AFTERNOON SESSION.....

2:00-2:15 **CNEA Business Meeting**

2:15-2:45 **Changing Places: Social and Ecological Transformations in Seventeenth-Century New England**
Faith Harrington and Matthew Bampton University of Southern Maine

2:45-3:15 **Must Be the Place: The Lighthouse as Village, Legend, Archaeological Site, and Metaphor**
Ken Feder
Central Connecticut State University

3:15-3:30 **Break**

3:30-4:30 **Discussion**
Parker Potter
New Hampshire Division of Historical Resources

4:00 **Post-Conference Discussion and Socializing** at a local tavern

NOTE: Each paper will be between 20 and 25 minutes in length, followed by five minutes of questions and/or discussion.

CURRENT RESEARCH

RHODE ISLAND

The University of Rhode Island's Program in Public Archaeology

contributed by Susan A. Johnston and Russell G. Handsman

The University of Rhode Island's new program in public archaeology was formally initiated in late May, 1993, with the signing of an interagency Cooperative Agreement between URI and the Rhode Island Department of Transportation. The purposes of this program are to:

1. Conduct intensive field studies to identify, explore, and evaluate archaeological resources in areas where RIDOT plans to undertake transportation improvements.

2. Use the resulting information to develop plans to minimize construction impacts on archaeological resources, thereby helping to preserve Rhode Island's rich cultural heritage.

3. Contribute to the growing knowledge of Rhode Island's archaeological past by developing innovative approaches to fieldwork and interpretation.

4. Develop active and ongoing collaborations with the Narragansett Indian Nation and Tribal Council.

5. Offer URI's undergraduates the opportunity to participate in archaeological research and gain invaluable training and job experience.

The program is affiliated with the Sociology and Anthropology Department in the Chafee Building on URI's Kingston Campus. Two offices, and one lab facility in nearby Ranger Hall, have been organized and a computer system (two IBM machines, with software) acquired. In addition, the program has access to the University's extensive Geographic Information System (GIS) which will be used to provide background information and thematic maps on ecological resources, land uses, and the regional distribution of archaeological sites. Knowledgeable faculty are available to serve as project consultants including scholars experienced in the study of Rhode Island's archaeological past and community histories, and in the geomorphology and ecology of Narragansett Bay and the coastal region.

To date, the program has completed the fieldwork portions of three and a half projects. Two studies, both Phase I highway

surveys, took place during the summer and fall in the towns of East and West Greenwich and Glocester. These studies produced data primarily concerning the historic uses of these areas. A third study focussed on Walmsley Lane in North Kingstown, the site of an historic African American farmstead which may also have been used for a considerably longer period. The fourth project, along Phenix Avenue in Cranston, is a Phase II investigation of a prehistoric site identified by Rhode Island College in early 1993. Although this site was closed due to this winter's weather extremes, evidence collected so far indicates its use by Native Americans, perhaps in the context of the nearby Oaklawn soapstone quarry.

We are currently in the process of planning this year's field season, with several projects in the works. The Phenix Avenue study will be completed, and a number of historic area Phase I's and II's are also being planned. The Archaeology Program is run by Russell Handsman and Susan Johnston, in the Department of Sociology & Anthropology, Chafee Building, University of Rhode Island, Kingston, RI, 02881. Tel: 401-792-2587.

The Peckham Farm Site, Sakonnet River Pipeline and Pumpstation Phase III Investigations

contributed by Burr Harrison

An intact shell deposit from the Peckham Farm Site in Little Compton, Rhode Island was excavated with a phase III archaeological investigation associated with the installation of the Sakonnet River water pipeline. The deposit yielded well preserved faunal and some floral remains in an internally complex context. Excavation methods were designed to preserve the associations within the feature's separate zones, which were distinguished on the basis of soil color, texture, and shell content. It is hoped that this excavation strategy, inspired by the work of Leslie Shaw and others, can overcome some of the limitations inherent in excavation by arbitrary levels.

Although analysis and interpretation is ongoing, information about the habits of the recovered species is being examined to address seasonal scheduling and labor allocation for anadromous fish runs and other activities such as spring planting. The prerequisites and implications of the adoption of horticulture, and resource processing sites associated with Middle Woodland "villages" are being examined as well. Gender in the archaeological record is being approached with a review of ethnographic accounts of geographically relevant Native American societies and worldwide ethnographic surveys. In addition to the contributions of these contextual sources, it is necessary to construct a general approach to gender. Although numerous writers have made some valid cross-cultural generalizations about the different work rhythms of men and women, the causal factors attributed to these

patterns usually reveal an androcentric bias. The newly constructed gender approach is based on default assumptions tied to a broad range of biological and cultural considerations. The approach was designed to avoid implicit value judgements, unexamined assumptions, and androcentric biases. Despite the dangers involved with gender assumptions, a responsible theoretical framework for considering gender is necessary for a realistic understanding of prehistoric cultures.

Gender is being linked to the material record with a task-differentiation framework comparable to the early work of Janet Spector. The general default assumptions about gender and the ethnohistoric information are being integrated and applied to the known habits of each species represented in the midden. Each species is being classified as likely to have been procured by females, likely to have been procured by males, or likely to have been procured by either. This information is contributing to enriched interpretations of seasonal resource procurement, and how the geographical and labor scheduling requirements for a variety of tasks including horticulture would have complimented and/or competed with each other.

Survey of the Jonathan Freeborn Farmstead (RI 2053) Portsmouth, Rhode Island

contributed by Jim Garman

An interdisciplinary project in Rhode Island, directed by James C. Garman (The Public Archaeology Laboratory, Inc.), Evelyn A. Sterne (Duke), and Charlotte Taylor (Brown) has been surveying sites associated with African-Americans in the state's East Bay. The project, funded through the Rhode Island Historic Preservation Commission, has combined archival research and archaeology to document extant cultural landscapes associated with both enslaved and free African-Americans. The Freeborn Farm site (RI 2053), the subject of a five-week program of subsurface testing in the summer of 1993, has proved to be an important case study for considering relations of production on seventeenth and eighteenth-century East Bay farms. The farm, active from the 1750s through the 1880s, was organized along plantation lines with sheep pasturage, orchards, a water-driven grist mill, and nine African-American slaves. Fieldwork last summer documented both the Freeborn Farm and similar sites across the East Bay and provided an entry point into discussions concerning historic race relations in the region. The report from the project will be available in May, 1994.

Site Examination at the Lower South Stream Site (RI-1699), East Greenwich, Rhode Island

contributed by Kerrylynn Boire

The Public Archaeology Laboratory, Inc., under the direction of Deborah Cox and the supervision of Mary Lynne Rainey and Kerrylynn Boire, recently conducted a site examination within the Joseph Fry Farm of the Fry's Hamlet Historic District in East Greenwich, Rhode Island. A prehistoric site is situated along the Lower South Stream, a tributary of the Hunt River in central Rhode Island. The site was originally investigated by PAL, Inc. during a Phase I survey in the spring of 1993. The site was described as having the potential to contain valuable information which could address the nature of prehistoric land use in the near interior region of the Hunt River drainage basin. A site examination was conducted to determine the site's significance according to the National Register of Historic Places Criteria.

The site examination investigations determined the extent of the site to be approximately 1335 square meters with two concentrations of cultural material and features. The Lower South Stream Site is comprised of multi-temporal/cultural components, the earliest of which has been dated to the Middle Archaic Period. The Late Archaic, Transitional Archaic, and Middle Woodland periods are also represented in the artifact assemblage. One of the three hearth features has been radiocarbon dated to 3,300±70 B.P. (Beta 70126). Additional features include pits and shell concentrations.

The PAL, Inc. will be conducting a data recovery of the Lower South Stream Site concentrating on the two activity loci in the spring of 1994. Deborah Cox (Principal Investigator) and Kerrylynn Boire (Project Archaeologist) will head the data recovery excavation team.

Supplemental Data Recovery of the Joyner Prehistoric Site, Conanicut (Jamestown), RI

contributed by Alan Leveillee

The Public Archaeology Laboratory, Inc., has completed the fieldwork portion of a data recovery project at the Joyner Prehistoric Site in Conanicut, Rhode Island under the direction of Alan Leveillee. A final report is anticipated in April, 1994. Woodland occupation of the Joyner Site is evidenced by radiocarbon dated features, diagnostic artifacts, and low densities of aboriginal ceramics recovered across the site. The archaeological record here supports the observation that the characteristics which collectively mark the period including ceramic manufacturing, shellfish exploitation, horticulture, and the sequence of abandonment of Archaic projectile points in favor of

new forms was non-synchronic and variable in a generalized transition during large scale coastal adaptation. Ceramic vessels appeared within the Orient phase of the Transitional Archaic, for example, but their universal utilization is recognized as a Woodland hallmark. Conversely, the Small Stemmed lithic tradition which proliferated throughout the Archaic persisted, yet attenuated, into the Early Woodland. The result of these oscillating characteristics is a blurred scale of temporal resolution and a lack of definitive Woodland "signposts". This non-synchronic transition of lithic traditions, technologies, and ideologies, as reflected in changing mortuary practice, indicates indigenous dynamics, as opposed to population migration into southern New England, following the Transitional Archaic Period.

In the Woodland Period, with a coastal cognitive landscape replacing an inland one, exploitation strategies changed in those environments with wider ranges of resources enabling larger groups to congregate in more sedentary settlements. The result was fewer sites across the landscape but not necessarily fewer people. These Woodland sites are characterized by a complexity of features resulting from the wider range of activities carried out within these residential bases. A pattern of residential clusters is in evidence for Woodland Period occupation of Joyner and within the Narragansett Bay region.

Joyner radiocarbon dated features including storage pits (3160±100), hearth pits (3060±80), and fire pits (2730±100, 2770±130), result from larger scale processing in support of sizable groups and long term occupation. Small Stemmed points continue to be manufactured and ceramic vessels are utilized across the site. The recovery of a chert Meadowood projectile point indicates that trading ties to source areas to the north and west which appear to have broken down during the Orient phase of the Terminal Archaic were reestablished during the Early Woodland. Similarly a fragment of a blocked-end tubular pipe represents Adena artifacts being incorporated through trade networks to the west.

The range of activities and the nature of site use during the Late Woodland appears similar, if more intense, than that of the Early Woodland, with larger groups occupying the site for long periods. Residential and processing structures are indicated by postmolds. The pattern of features and activity areas reflects that the site served as a residential area for an extended family group, perhaps on a seasonal basis. While the site served as an area of habitation and related activity the patterns of density and distribution of features and artifacts are not those which would be expected within a large population center.

The nature of Joyner Site use changed dramatically during the Contact Period. The artifactual assemblage attributable to a Contact presence is limited to 2 trade beads, possibly flaked bottle glass, and a crudely flaked slate hoe. No radiocarbon dated features can be assigned to this occupation. It appears that any significant residential settlement ceased at the site

either just prior to or following European contact. The relative abandonment of Joyner is curious in that the West Ferry burial ground was utilized during this period. If the burial ground served a village or nucleated Contact Period community, that community was not situated within proximity to the Joyner Site.

There is a consensus among Narragansett Bay researchers of a need to develop an indigenous model to account for the variability of data relative to Woodland settlement. Central to the issue has been the question: where were the villages?

The data which have resulted from excavations across the Joyner Site indicate that Late Woodland Period settlement was dominated by non-nucleated habitations which included residential areas with associated processing and storage locations in close proximity. Small-scale processing of lithics and foods took place in support of relatively few occupants, suggesting family units rather than extended communities. Subsistence was based towards meeting the needs of the immediate habitation group as opposed to a larger centralized population. It is probable that the wetlands in proximity to the Joyner Site were the focal point of numerous habitation locations which were occupied variously over time, during all seasons the year. During seasons of high biomass productivity the area would support multiple families and take on a "village" appearance, with habitation clusters in proximity to one another. During seasons of low biomass productivity habitation would be more sporadic, short term, and dispersed. The result would be clusters of habitations occupied by relatively independent family units rather than a centrally based collective with communal logistical activity. There is no evidence to support a hypothesis that nucleated Late Woodland villages, of multiple, mutually dependant dwellings with centralized activity areas, existed within the study area.

The Narragansett Bay area of the Late Woodland Period was a highly productive environment with an abundance of predictable resources. Environmental and social pressures which motivated other regional populations to adopt communally based horticulture may not have been exerted upon those peoples occupying the Narragansett Basin. While the Native population was more concentrated than that of earlier epochs, Woodland and early Contact settlement did not take the form of the large villages characteristic of surrounding regions. This generally dispersed settlement system of clustered habitations and a broad based exploitation strategy might have accounted, in part, for the less severe losses suffered by the Narragansetts during the European-introduced epidemics of 1617-1619 which devastated neighboring peoples.

Research associated with the Joyner data recovery has resulted in the discovery of RI 2102, the Roundhouse Argillite Source area. This lithic outcrop, located along the southeastern coast of Conanicut, is believed to be the source for high quality argillite artifacts found within many Narragansett Basin prehistoric site assemblages.

Current Research in Upper Narragansett Bay

contributed by Mary Lynne Rainey

PAL, Inc. is currently undertaking a data recovery program in East Providence, Rhode Island, on two prehistoric sites situated along the eastern shoreline of the Seekonk River. The fieldwork completed at the Walker Point Bluff site in 1993 (about 50%) resulted in the recovery of cultural materials indicative of a substantial span of occupation extending as far back as the Middle Archaic Period. In association with the Middle Archaic Neville component is a small and unusual assemblage of ulu preforms. In addition, there is a strong Late/Transitional Archaic Small Stemmed component, and intermittent Woodland diagnostics. Lithic workshops, large hearths or roasting platforms, and storage features have all been identified at the Bluff site, in association with various components. However, the expected Woodland Period shell midden features, found elsewhere in upper Narragansett Bay, have yet to be discovered and in general the evidence for Woodland Period occupation is less than was anticipated. Work is expected to resume in the Spring of 1994 under the direction of Duncan Ritchie.

MASSACHUSETTS

Site Examination Investigations - Old Colony Railroad Roundhouse, Whitman, Massachusetts

contributed by Suzanne Glover

Archaeological survey and site examination, directed by Suzanne Glover and Kerrylynn Boire of The Public Archaeology Laboratory, Inc., have identified a nineteenth-century Old Colony railroad roundhouse in Whitman, Massachusetts. Whitman Station was an important junction on the Old Colony Railroad Company's first rail line in Massachusetts, a 38 mile piece of track built from Boston to Plymouth in 1845. Documentary research places the construction date of the 4-stall roundhouse/enginehouse and associated turntable circa 1880-81 at the time of land purchase by the Old Colony Railroad Company. The establishment of a terminal facility at this location in Whitman coincided with increased commuter and summer resort traffic between Boston and points south, particularly Bridgewater and Brockton. The terminal facility handled locomotives traveling on both the main line from Boston to Plymouth and the East Bridgewater Branch from Boston to Middleborough and south to Fall River. It was needed to service the locomotives, which included cleaning, inspecting, making light repairs, and refueling for the next trip.

The field investigations resulted in the identification and assessment of structural remains associated with the roundhouse, turntable, water tank, and former rail bridge abutments. The roundhouse foundation is constructed of large cut granite blocks, bricks, and fieldstones. At least one brick-lined inspection pit with a fieldstone flooring is present within the roundhouse foundation. The turntable pit is constructed of a cut granite circular side wall and has an intact center pivot foundation. The turntable bridge itself and machinery parts appear to have been removed. The roundhouse, which stored and serviced engines, was dismantled by the railroad company after sustaining damage during the 1938 hurricane.

The archaeological and documentary data collected during the investigations were used to evaluate the National Register eligibility of the roundhouse site. It was determined that the identified structural remains possess a very good to excellent physical integrity and represent perhaps one of the few surviving intact archaeological examples of a nineteenth century terminal facility built by the Old Colony Railroad in southeast Massachusetts. The Old Colony Railroad Company was a decisive socioeconomic force in the region and a pioneer of railroad engineering techniques and construction methods. For these reasons, along with the scant documentary record for the site and probability of additional related features and elements, the roundhouse site is recommended as being eligible for listing on the State and National Registers of Historic Places.

Nantucket Site Examinations

contributed by Mary Lynne Rainey

During the summer of 1993, the Public Archaeology Laboratory Inc. conducted site examinations at five prehistoric sites and one historic site along the proposed 8.1 mile Polpis Road Bicycle Path project area in Nantucket, Massachusetts. The archaeological work was a consequence of the 1988 Polpis Road intensive survey during which the sites were identified and considered potentially significant resources. Polpis Road winds through the interior eastern region of Nantucket Island, south of the main harbor, crosscutting moraine and outwash features as well as extensive salt marsh and estuarine environmental zones. Based on the combined data generated during both intensive and site examinations, four of the six sites were recommended as eligible for listing on the National and State Registers of Historic Places.

Site 19-NT-68 contains a substantial Middle to Late Woodland Period stratified midden feature which represents the focal point of the site. Marine and terrestrial species have been identified from the site, and carbon dating of shell samples indicate repeated use of the midden during the course of approximately 1000

years. The Folger's Marsh Site (19-NT-180) contained small concentrations of prehistoric lithic materials and diagnostic tools indicating Middle and Late Woodland Period occupations. In addition, a portion of the site contains an historic component which could represent the location of a former dwelling or structure. A shell strata from this area was radiocarbon dated to the eighteenth century. The Roadkill Site (19-NT-166) contains an intact lithic workshop area which has a high degree of integrity and is considered to be associated with Late Woodland Period activity based on the recovery of a diagnostic projectile point. Site 19-NT-50 is a large, complex multicomponent site which contains evidence for a range of activities and multiple occupations spanning the Woodland Period. A shell sample from a midden feature at this site was radiocarbon dated to the late Middle Woodland Period.

Because these four sites could contribute to a better understanding of the prehistory of Nantucket, PAL, Inc. is recommending that they be considered eligible for listing on the National Register of Historic Places.

Archaeological Investigations at the Area 1 Site (19-PL-749), Hanover, Massachusetts

contributed by Bill Begley

The Public Archaeology Laboratory, Inc., under the direction of Suzanne Glover and supervision of Bill Begley, recently conducted site examination and data recovery investigations at the Area 1 Site in Hanover, Massachusetts. This prehistoric site is situated along Iron Mine Brook within proximity to the confluence of the Indian Head and North Rivers. The archaeological data recovered at the site prior to the data recovery program suggested a complex and dense Late Archaic component. Two radiocarbon-dated feature contexts, 3290±80 (Beta 55004) and 3540±80 B.P. (Beta 55006), along with an associated Small Stemmed projectile point assemblage and high density/variety of lithic debitage were believed to represent a recurrent use of this optimal site location during the Late Archaic Period.

The data recovery program conducted by PAL, Inc. focused on two high density lithic/feature and stone tool concentration areas in the southeastern portion of the Area 1 Site, designated the Northeast Quadrant Concentration and the S5W10 Concentration. A previously unknown Early Archaic component was identified on the basis of three diagnostic bifurcate-base projectile points recovered from the central excavated portion of the Northeast Quadrant Concentration. A charcoal sample taken from the immediate area of these three projectile points and submitted for radiocarbon-dating did not provide a C-14 date. A second charcoal sample taken from this area provided a Late Archaic date of 3510±90 B.P. (Beta 67934).

Middle Archaic Period deposits were found in both concentration areas, as evidenced by the diagnostic Stark and Neville projectile point assemblage. The Middle Archaic component in the S5W10 Concentration is represented by a Neville projectile point and perforator/drill recovered from a fire pit feature radiocarbon dated to 7740±150 B.P. (Beta 60199). Associated artifacts include an atlatl weight, a discoidal cobble tool, an arkose biface and a slate knife fragment.

The most complex and dense occupation of the Area 1 Site occurred during the Late/Transitional Archaic periods as evidenced by lithic artifacts recovered from both concentration areas. A radiocarbon date of 4600±90 B.P. (Beta 63082) was obtained from an exceptionally large, deep pit feature that also yielded Small Stemmed projectile points, bifaces, high densities of chipping debris as well as charcoal, calcined bone and fire-cracked rocks. Flotation analysis of soil samples from this feature also yielded small amounts of red ocher. In addition to the C-14 date and associated Small Stemmed projectile points, the Northeast Quadrant Concentration produced projectile point assemblages diagnostic of the Late Archaic Laurentian (Brewerton) Tradition and Squibnocket Complex as well as of the Transitional Archaic Atlantic, Susquehanna and Orient Phases. Over 25,000 pieces of chipping debris and 325 chipped stone tools were recovered during data recovery excavations at the Area 1 Site.

Only one Woodland Period artifact, a Jack's Reef projectile point, was recovered during the data recovery program. The paucity of Woodland Period deposits, most notably an absence of ceramic assemblages, suggests a sharp decline in local land use and settlement patterns. Site utilization appears to have shifted to a more short-term, task specific resource exploitation. Ongoing data analyses and research will examine the Area 1 Site evidence for changes in Archaic to Woodland period settlement patterns within the context of the surrounding paleoenvironment.

Analysis of Middle Connecticut Valley Ceramics

contributed by Elizabeth Chilton

Elizabeth Chilton, a PhD candidate at UMass-Amherst, is currently conducting research for her dissertation, "Ceramic Complexity and Its Implications for Late Woodland Cultural Dynamics in the Middle Connecticut River Valley." Ceramics collections from the Guida Farm site (Westfield, MA) and the Pine Hill site have been analyzed using a detailed attribute analysis. The collection from Guida Farm was excavated by William Young in the 1960s, and the materials from the Pine Hill site were excavated over the last five years by the UMass Archaeological Field School, which was co-directed in 1993 by Elizabeth Chilton and Arthur S. Keene. The ceramic attribute analysis focuses on variation in technological attributes (such as temper selection

and firing conditions), which in some cases may be much more indicative of social dynamics than are decorative attributes. The results from three Connecticut Valley sites will be compared to a Late Woodland site from the Mohawk Valley, in order to test hypotheses concerning differences between Iroquoian and Algonquian scales of ceramic production, and the meaning of certain decorative attributes of ceramics during the Late Woodland Period.

Data Recovery Excavations at the Riverside 2 and 3 Sites, Lakeville, Massachusetts

Contributed by Ann Davin

The Public Archaeology Laboratory, Inc., under the direction of Ann Davin and Bill Begley, recently completed data recovery excavations at the Riverside 2 (19-PL-703) and Riverside 3 (19-PL-702) prehistoric sites in Lakeville, Massachusetts. These sites are part of the Riverside Archaeological District which consists of nine sites located along the Nemasket River, a major tributary of the Taunton River. The data recovery excavations at the Riverside 2 Site found that the site was most intensively occupied during the Late and Transitional Archaic periods. Three large and exceptionally deep pit features, found in the southwestern portion of the site, yielded Small Stemmed, Squibnocket Triangles, Susquehanna Broad, and Orient Fishtail projectile points, chipping debris, charred seeds and small amounts of charcoal and calcined bone. The largest of the pit features measured more than three meters in diameter and over 2 meters deep. The Riverside 2 Site contained a second activity area where several fire pits were located around a relatively large lithic workshop with grey felsite and Attleboro red felsite the primary materials. The recovery of Susquehanna Broad and Wayland Notched projectile points helped date this area of the site.

The Riverside 3 Site was occupied during the entire Archaic Period. A previously unsuspected Early Archaic component was identified on the basis of two bifurcate-base projectile points. A substantial Middle Archaic component with Stark and Neville projectile points may be associated with a deep storage/refuse pit feature similar to those located in the Riverside 2 Site. Squibnocket and Small Stemmed projectile points appear to be part of the last significant occupation of the site. Evidence of Woodland Period activity was restricted to the recovery of a Levanna projectile point along the periphery of the site and a small deposit of ceramics.

UMass-Amherst 1993 Summer Archaeological Field School: Pine Hill Site

contributed by Claire Carlson

The UMass-Amherst 1993 Summer Archaeological Field School was held at the Pine Hill site in Deerfield, Massachusetts. This summer's excavation strategy was based on two previous seasons of work at the site (1989 and 1991) and the current threat to the site by extensive looting. The long-term goals of the project are to construct a regional culture history that contributes to a non-Eurocentric history of Native peoples in New England, to enrich and complement scanty documentary records, and to minimize impacts to cultural resources in the middle Connecticut River Valley. The short term goals of the 1993 field school were to: 1) evaluate the site's integrity and disturbance, research potential and significance, 2) determine site boundaries, 3) assess site function(s), 4) describe spatial arrangements of features and artifacts, and 6) determine site chronology.

Our primary goals for the 1993 summer field season were to recover feature distribution information and determine site boundaries. The recovery of this information was vital due to the threats to the site from extensive looting. Our excavation strategy was to remove a shallow plowzone (c. 10 cm) by shovel scraping and troweling. This strategy allowed us to identify and map the surfaces of the pit features and looter's pits. These pit features (see Pine Hill Soil Micromorphology Project, below) were identified, mapped, sampled, and photographed. Flotation samples were taken from the lenses of several features and are being analyzed in the lab. Transects of 1 x 1 m shovel test pits were excavated to the south of the main portion of the site to determine site boundaries. Test pits were also excavated along the north and east slopes to identify a possible slope midden.

Analysis of the 1993 summer's field work is presently under way. The mapping project has recorded up to 20 looter's pits and several new pit features. Several field school students are working on flotation analysis of several of the features, and lithic analysis. Ceramic vessel lot analysis is being conducted by Elizabeth Chilton. In addition, the site's boundaries and topographic contours were mapped, and analysis of historic period artifacts recovered from the test pits is being conducted. The slope testing revealed no evidence of a midden on the north and west slopes of the hill. It did reveal a series of varved clays near the top of the slope, which increases our understanding of the geomorphology of the Pine Hill landform.

The goals of the 1993 field school were met in several instances. The site's integrity holds enormous research potential and significance for contributing to our understanding of the Late Woodland period in the middle Connecticut River Valley. The function and meanings of the pit features are currently being determined through soil micromorphology, vessel lot, lithic, and

flotation analysis. The site's preservation, however, is severely threatened by extensive and destructive looting. The site's Late Woodland boundaries are limited to the northern end of the hill. The spatial arrangements of features were identified and mapped, and the site's chronology has been established as having Late Archaic, Late Woodland, and possible Contact period components.

Pine Hill Soil Micromorphology Project

contributed by Michael Volmar

The UMass-Amherst Summer Archaeological Field School has conducted excavations at Pine Hill in 1981, 1989, 1991 and 1993. In 1991 we discovered over 12 subsoil features approximately 1 meter deep and 1 meter in diameter. Our first interpretation was that they were pit features. The Pine Hill Micromorphology Project was begun in 1992 to answer many questions about these pits, including pit history and original use; were they dug for food storage? food processing? etc. In 1993 I took 42 soil block sections of "undisturbed" soil, reddened soil, post molds, and pit feature lenses for a micromorphological analysis. These samples, as well as others for floral, pH, phosphate, opal phytolith, and particle size analysis, should answer questions about pit formation processes and the original use of these features. Preliminary results to date include some of archaeology's first microscopic views of archaeological features. One confirms our original assumption that there is a relatively intact fire-reddened soil at Pine Hill that dates to the Late Archaic. There is also one activity area at the site, dating to the Late Woodland, which exhibits evidence of a pre-contact rainstorm preserved in the soil.

Cape Cod Canal Archaeological Reconnaissance Survey/Inventory, Bourne and Sandwich, Massachusetts

Contributed by Ann Davin

An archaeological reconnaissance survey/inventory was conducted by PAL, Inc., under the direction of Ann Davin and Holly Herbster, of the 982 acres that comprise the Cape Cod Canal and associated property. The canal connects Cape Cod Bay to Buzzards Bay and stretches for a total of 17.4 miles through the towns of Bourne and Sandwich. The canal was completed by a private company in 1921 and subsequently taken over by the US government following World War II, when the Army Corps of Engineers did extensive widening and upgrading of the canal facilities. Evidence of prehistoric and historic period occupation was found along the former banks of the Monument River, which was one of two rivers existing in this area prior to canal construction. The

archaeological survey identified four prehistoric sites with occupations dating from the Middle Archaic through the Late Woodland periods. In addition, remnants of the historic Bourne Village, consisting of late nineteenth- and early twentieth-century depositions, were found in disturbed contexts along the canal.

Data Recovery at the Neponset/Wamsutta Site, Canton, Massachusetts

contributed by Duncan Ritchie

The Public Archaeology Laboratory, Inc. has completed a data recovery program on a section of the Neponset/Wamsutta site in Canton, Massachusetts containing a small Paleo-Indian component. This data recovery program was conducted for the Massachusetts Water Resources Authority under the direction of Duncan Ritchie (Principal Investigator) and Holly Herbster (Supervisory Archaeologist). Locus D was one of four loci of Paleo-Indian occupation identified on the Neponset/Wamsutta site by Frederick Carty in the 1970s (Carty and Speiss 1992). This locus was preserved in a narrow strip of land between a sewer easement and Route I-95. The Paleo-Indian component was situated on a terrace of sandy glacial outwash bordering the extensive wetlands in the Fowl Meadow section of the Neponset River drainage.

The assemblage recovered from Locus D includes an unfluted triangular projectile point, channel flakes, several flake tools, and bifaces. The debitage and artifacts from Locus D are primarily of the "Neponset rhyolite," a distinctive material of unknown source, but possibly derived from one of the major volcanic rock complexes in the Boston Basin area. This material has been reported from several other Paleo-Indian sites in Massachusetts (Bull Brook) and Maine (Michaud) and geochemical and petrographic analysis is being conducted to determine its source. Initial sampling of wetland sediments near the site to collect information for reconstructing the environmental setting of the Paleo-Indian occupation has been conducted by Paige Newby (Department of Geological Sciences, Brown University).

Reference

Carty, Frederick and Arthur Speiss
1992 The Neponset PaleoIndian Site in Massachusetts. Archaeology of Eastern North America 20:19-37.

Data Recovery at the Astra-3 Site, Westborough

contributed by Alan Smith and Curtiss Hoffman

In 1993, members of the W. Elmer Ekblaw Chapter of the Massachusetts Archaeological Society and students enrolled in the Bridgewater State College Archaeology Field School conducted a data recovery program at the Astra-3 site in Westborough, Massachusetts, under the direction of Dr. Curtiss Hoffman. At the time of excavation, the Astra Pharmaceutical Corporation planned to construct an industrial building on the site in the very near future. The site had been discovered during an intensive survey in 1992; it is adjacent to the Hoccomonco #3 site excavated by the Ekblaw Chapter in 1975-77. Stratigraphy consisted of a thin (5-12 cm) forest loam covering a layer of fine, wind-blown sand (normally 25-40 cm thick) which overlies a gravel dating from post-glacial times. Except where pits were dug into the underlying layers, the prehistoric material was mostly confined to the fine sandy layer.

We have now excavated over 100 sq m out of a Total of 1200 in the undisturbed area. In 1993 we recovered 425 stone tools and 8 sherds of pottery, along with 3166 flakes from the site, and substantial quantities of charcoal, nutshell, and charred faunal remains. The chipped stone tools recovered this season include 20 points, 58 scrapers, 15 bifaces interpreted as knives, 12 biface fragments, 150 utilized flakes, 22 wedges, 11 cores, 10 preforms, 6 gravers, 6 spokeshaves, 2 perforators, a chopper, and a flake burin. Other stone tools include 39 hammerstones, 10 pounding/nutting stones, 4 anvils, 2 digging tools, 2 pestles, 5 pecked fragments, 4 ground stone fragments, and 2 quartz crystals (possibly magic stones). The projectiles included 5 Small Stemmed points, 4 Squibnocket Triangles, 2 Beekman Triangles and a Levanna.

With the exception of the Levanna and two of the Small Stemmed points, all of the points (and over half of the debitage) were recovered from an area of about 10 sq m in the center of the site which contained a complex group of features. One of these extended to a depth of 150 cm below surface into the glacial gravel; the gravel from the bottom of the pit had been scooped out and deposited in adjacent areas, as a mix of gravel and sandy soils bordered the pit. This pattern of redeposition was noted in two other features at the site. A digging tool, a core, and two knife midsections were found deep in the pit. Charcoal samples from adjacent features yielded radiocarbon dates of 4050±70 (Beta-63428) and 1420±70 (Beta-66798) B.P.; the latter was from a feature in direct association with Squibnocket and Beekman triangles. In another area of the site, a dense scatter of quartz, quartzite, and Attleboro felsite debitage was associated with a radiocarbon date of 7850±90 B.P. (Beta-61373). This evidence indicates that Astra-3 is a rich, multicomponent site. Analysis of organic materials is incomplete, but features have so

far yielded turtle bone, hazelnut shell, acorn, and hickory nut shell. Massive quantities of soil samples have yet to be wet-screened, but once this material is analyzed we should be able to draw significant conclusions from this undisturbed locus.

In July we learned that Astra Pharmaceutical had changed its plans and now intends to construct the industrial facility on a locus known as Astra-10, in a plowed field. It now appears that the Astra-3 site will not be subjected to destruction for the forseeable future. Consequently, we have shifted our operations to Astra-10, where we performed another close-interval coring grid. We opened four 1 x 1 m units in the Fall of 1993 and recovered several cultural features, 9 hammerstones, a flake knife, and four pottery sherds. The 1994 field season will concentrate on Astra-10 because construction is scheduled here by the end of 1994.

Data Recovery of the Millbury III Cremation Complex, Millbury, Massachusetts

contributed by Alan Leveillee

The Public Archaeology Laboratory, Inc., has completed the fieldwork portion of a data recovery project at the Millbury III Cremation Complex in the Blackstone River drainage of Massachusetts under the direction of Alan Leveillee. A final report is anticipated in April, 1994.

The features which constitute the Millbury III cremation complex were constructed within parameters dictated by social and cultural criteria. Spanning over 950 radiocarbon years they reflect a continuity of ideology which was transferred and reinforced through ceremonialism. The Millbury III Site was a perceived sacred place for multiple generations and, during the Transitional Archaic, appears to have been used exclusively for secondary burial of cremated human remains and related grave goods. These grave goods included animal bones, nuts, seeds, and artifacts which probably included possessions of both the deceased and of living members of the group, as well as artifacts retrieved from earlier cremations. Variability in amounts of bone recovered indicates that partial reburials following cremation took place. Elements of past cremations, or burials, were recognized in ceremonies in that artifacts from earlier deposits were apparently reburied. Some artifacts appear water worn and were either retrieved from water sources following cremation nearby, or were curated and transported for long periods and/or over long distances resulting in uniform wear and smoothness. Evidence of multiple burning episodes for some bone is also noted. Grave offerings, some in fabric bundles, were included as elements of the secondary burial process and as post burial deposits. Breakage of artifacts took place during cooling of cremation fires, and by deliberate percussion blows. While breakage to

release spirits routinely took place, complete tools were also often included as grave goods.

On the social system level ceremonialism was an important element in maintaining Susquehanna cultural continuity and reinforcing ideology. The feature assemblages within the Millbury III complex are generally uniform, with utilitarian materials and broad ceremonial blades predominating as grave goods. Post depositional offerings and incorporation of older artifacts and bone indicate a recognized obligation to the past, extending beyond the recently deceased, to include preceding generations. The limited data available regarding gender and age suggest that neither was a factor in selective inclusion or exclusivity regarding cremation and secondary burial within the perceived sacred place. A relative lack of funerary objects which would denote wealth and\or status supports egalitarianism within the represented population.

Within the Susquehanna world view people, animals, and inanimate objects including tools, contained metaphysical entities; spirits which empowered their vehicles, and which, when released from those worldly vehicles, maintained their particular identities and powers. Cremation of human skeletal remains and associated offerings released these spirits, enabling the deceased to continue existence in the afterworld, accompanied by the spirits of those things of use or familiar to them in life. Unbroken artifacts, as well as post depositional offerings, were included by mourners to show respect and/or as a display of affectionate regard.

While burning bones and artifacts during the cremation process released spirits, allowing them to exit their hosts, perhaps via the smoke, secondary burial and associated ceremonialism marked the obligation of the living to alter the spiritual condition of the deceased, insuring successful passage of the spirits to the afterworld. The fulfillment of that obligation marked the ceremonialism of Susquehanna mortuary practices. Examination of lithic manufacturing techniques indicates craft specialization in the production of ceremonial blades. Diversities of lithics and processed ocher indicate sophisticated trade networks which required scheduling, and possibly regulation, of commodities within the Susquehanna culture. The cremation complex at Millbury III reflects mortuary practice conforming to well defined parameters of body treatment, cremation, re-burial, and information exchange necessary to insure successful entry into the spirit world. Insuring that logistical and ideological obligations were met would have been facilitated by a centralization of responsibility (and consequently power) within a shamanistic order.

Archaeological and Paleoenvironmental Research at Kampoosa Bog, Stockbridge

contributed by Eric Johnson

UMass Archaeological Services is completing analysis of archaeological and palynological data collected from the area of Kampoosa Bog in Stockbridge, MA. Archaeological data recovery from two large sites and extraction of two sediment cores from the bog took place during 1993. Preliminary results indicate human use of the area beginning in the sixth millennium B.P. and continuing into the late prehistoric or protohistoric period. Activity areas excavated include a large lithic workshop area associated with the production of Snook-Kill blades. Other projectile point varieties found in abundance at the sites include Normanskill and Lamoka points. Also recovered were a variety of edge tools for scraping, piercing and both heavy and fine cutting. Lithic materials consist almost entirely of Hudson Valley cherts.

Although feature preservation was generally poor owing to intensive bioturbation, we were able to identify one Late Woodland hearth feature (radiocarbon dates of 470±60 [Beta-69967] and 610±60 [Beta-69968] B.P.) associated with several post molds and thin-walled, fine tempered incised ceramics. Botanical, faunal and ceramic analyses are still in progress.

Preliminary correlation of the data from the archaeological sites and the bog sediment suggests that the area was first utilized when the Bog first began its transition from a body of open water to its present form. Charcoal deposits in the bog as well as evidence of fire at the sites in the form of heated lithic debitage suggest a period of increased local burning during the fourth millennium B.P., the time of the area's most intensive use.

The Sand Bank Site, Greenfield, Massachusetts

contributed by Chris Edens

In 1993, Timelines undertook a site examination at the Sand Bank site (19-FR-12), which forms part of the Riverside Archaeological District, but which has been heavily disturbed by commercial sanding operations and by artifact collectors. The site extends along a basalt ridge and over a high glacial outwash terrace overlooking the Connecticut River. The information available from a survey done for the District nomination and from collectors indicated that the site contained Middle Archaic through Woodland components, and possibly a Paleoindian component as well. A reconnaissance survey in 1990 identified undisturbed portions of the site area, including a large section of the glacial outwash terrace. The site examination addressed several less disturbed areas along the ridge, recovering a Neville point and a little pottery.

The outwash terrace was the focus of systematic testing, which encountered 29 distinct clusters of artifacts and a cluster of 15 pit features. Chipped stone debitage defined the artifact clusters, which differed strongly in their proportions of lithic raw material. The chipped stone inventory included a wide variety of temporally specific projectile points, including a probable unfluted Paleoindian point, a large quartz stemmed blade that most resembles Snyders points of the Hopewell tradition, and Early Archaic through Late Woodland point types, as well as other tools. The pottery exhibited a variety of decorative techniques and for the most part may be assigned a Middle Woodland date.

The clustered pits contained variable amounts of charcoal, fire-cracked rock, and seeds (mostly blackberry); despite the evidence for fire, the soil at the pit bottoms was not reddened, suggesting that they were storage pits recycled as trash pits. The artifacts included several broken projectile points and ceramic sherds, a large stone rod, and a fragment of a tubular copper bead. Radiocarbon determinations from two features dated them to 2040±70 (GX-19229) and 1965±70 B.P. (GX-19228).

The site structure and contents indicate repeated occupation of the terrace. These occupations were brief episodes through the Late Archaic, but became more intensive during the Woodland. The Snyder-like blade, the copper bead, and the high proportions of chert reveal strong interregional connections during the Middle Woodland, reflecting the site's location at the intersection of north-south and east-west rivers and trails.

Data Recovery at the Spectacle Island Shell Midden Site (19-SU-38), Boston, Massachusetts

contributed by Chris Edens

Timelines, Inc. and John Milner Associates, Inc. (West Chester, PA) have completed a data recovery program at the shell midden site on Spectacle Island in inner Boston Harbor. This site was first detected in 1989 during an intensive survey of a low terrace along the island's southern drumlin. The intensive survey observed that soft-shell clam was the midden's principal constituent, suggesting that the site dates to late phases of the Woodland period; a Neville Variant point recovered from the base of the midden suggested possible earlier components as well.

The data recovery excavation opened 100 m^2, revealing two distinct middens (four meters apart) and sampling a shell-free zone outside the middens. Each midden in turn contained several extremely dense concentrations of shell (up to 350 kg/m_3) and abundant non-molluscan fauna (total sample around 6500 specimens). Soft shell clam (90%) and blue mussel (9%) were the principal molluscan species. Cod, deer, and dog (in that order) dominated the bone assemblage. The prehistoric plant remains were limited to charred hickory nut shells. The artifact assemblages were

small. The chipped stone included single examples of Small Stemmed, Meadowood, Madison, and an untyped eared large triangle. Most of the pottery was shell-tempered and undecorated; several examples of cord-marking and of grit tempering also occurred. The worked bone included examples of unilateral single-barbed and multiple-barbed harpoons, simple points, awls, and manufacturing debris. Only three features, all shallow pits, were identified. A suite of nine radiocarbon dates (B.P., uncalibrated) on charcoal (1415±110, GX-18221; 1220±80 Beta-57203; 1040±110, GX-18220; 900±130, Beta-57202; 720±50, Beta-57200; 490±100, Beta-57201; 439±80, Beta-58716) and shell (750±60, Beta-61449; 360±60, Beta-61450) confirm the Middle-Late Woodland period of midden formation, despite the wider chronological implications of the chipped stone diagnostics. The radiocarbon dates indicate that one midden formed during the Middle and early Late Woodland period, and the other during the later Late Woodland period.

The rich fauna and the relatively small artifact inventory in the middens reflects specialized procurement and processing of soft shell clam and cod. The seasonality indicators point to fall and early winter as the principal time of these two activities. Contrasts between the middens suggest that the collection focus narrowed through time, and the later midden differs strongly in character from the Calf Island site, which was formed by residential groups rather than by specialized work parties. In addition to the two middens, the data recovery program identified other locations of Woodland activity, including two intersecting pits filled with soft shell clam (two radiocarbon dates of 1400±110, GX-18285; 590±120, Beta-60188) and a disturbed zone of soft shell clam. The intensive survey of 1989 also encountered a thin scatter of chipped stone, including a Small Stemmed point elsewhere on the terrace. This evidence indicates that the terrace was a long-term locality of specialized foraging activities, of which the midden formations represented only one aspect.

VERMONT

Current Research in Vermont

contributed by Peter Thomas

The Consulting Archaeology Program at the University of Vermont undertook a number of projects throughout western Vermont during the past field season. Site identification surveys were undertaken in Poultney on the Poultney River, in Cambridge at the confluence of the Lamoille and Brewster Rivers, in Brandon adjacent to Otter Creek, and in Richmond near the confluence of

the Winooski and Huntington Rivers. Prehistoric sites were identified during each project.

In Poultney, VT-RU-268 was identified just downstream from a small tributary. Artifacts, including cores, bifaces, chert and quartzite flakes, utilized flakes and fragments of groundstone tools, were recovered from 25 test units and through limited surface collection. Given the large area of artifact distribution, multiple occupations are undoubtedly represented. Further study will be undertaken to define the site's age and other characteristics.

In Cambridge, VT-LA-1 was found to contain a Late Woodland component in the upper 70 cm. Unlike most sites of this period near Lake Champlain where chert and quartzite are the dominant raw materials, quartz derived from river cobbles makes up over 90% of the assemblage. A more deeply buried component was found at a depth of 120 cm. While a roughly 700 m^2 core of the site remains intact, massive flood scouring during the past two centuries has destroyed much of the site.

In Brandon, VT-RU-281 was identified on a bedrock knoll on the west side of Otter Creek. Dense clay soils made excavation difficult and the limited sample to date precludes any further definition of the site. A second prehistoric site, VT-RU-280, was located on the east side of Otter Creek. Preliminary results indicate that at least two Middle-Late Woodland period occupations are represented, as stone tools, debitage and cultural features were encountered at different depths. Burned seeds, a fragment of nut shell and mammal bone were recovered from two cooking hearths. With only limited testing to date, the identification of two hearths suggests a fairly intensive occupation.

Prior to conducting the archaeological survey on the Otter Creek floodplain, a 37 m-long backhoe trench was excavated perpendicular to the creek bank to record the underlying stratigraphy. A radiocarbon date of 4150±60 B.P. (Beta-68516) was obtained from wood samples recovered from channel deposits at the base of the stratigraphic sequence, indicating that the entire floodplain is late Holocene in age. Two distinct alluvial units were encountered. The lower unit is approximately 1.25 m thick and consists of very fine sandy loam at the base and silt loam at the top. This pattern of fining upwards is typical of fairly stable river systems. The upper unit is also approximately 1.25 m thick, but sediments are somewhat coarser, ranging from loamy fine sand to fine sandy loam. This sequence is broken by several 5-10 cm thick beds of fine sand. Thus, while the general alluvial sequence in the upper unit was produced by a slow accumulation of fine sediments, the presence of the sand beds indicates that high magnitude floods carrying coarser sediments occurred periodically.

The distinct textural differences between the upper and lower alluvial units appear to reflect major changes in the region's climate during the past 4,200 years. The lower unit represents a floodplain which sat only 1.5-2 m above Otter Creek, yet the sediments consist predominantly of silt. This suggests that the

floodplain developed during a dry climatic episode when substantial flooding did not occur. The upper unit sits higher above Otter Creek, yet the sediments are sandier and 10-cm thick beds of fine sand periodically punctuate the sequence. This pattern seems to represent a wetter climatic period when Otter Creek carried increased amounts of runoff and during which periodic high magnitude floods occurred.

These inferences, in conjunction with the 4150±60 B.P. date from the base of the sequence, correlate very well with what has been inferred about regional climatic changes at this time. The period dating between approximately 5250 and 2850 B.P. during which the lower floodplain unit formed is marked by a climatic shift to drier conditions. The lack of substantial alluvial deposits dating to this period within the floodplains studied along the Missisquoi River in northern Vermont seems to mirror this episode of limited flooding and channel entrenchment along the Otter Creek. A significant decrease in precipitation at this time is further suggested by a substantial drop in the water table of Shelburne Pond, located about 40 miles north of Brandon. Since roughly 2850 B.P., regional pollen records indicate that there have been a series of warmer to cooler and wetter to drier episodes. It is inferred that the upper stratigraphic unit began to develop at the start of this period, as cooler and wetter conditions prevailed, and that the visible beds of fine sand which punctuate the sequence correlate with other periods of increased precipitation.

The stratigraphic sequence exposed at VT-RU-280 has substantial archaeological implications. Much of the record of pre-Woodland period activity along this and similar stretches of Otter Creek, which drains 10% of Vermont, is likely to be buried at depths of a meter or more. Therefore, current site files, which are based primarily on the results of surface collections, may be totally inadequate for predicting Archaic and Early Woodland period site distributions and settlement patterns along western Vermont's longest navigable river.

A similar late Holocene sequence was encountered in a 70 m-long backhoe trench excavated on a floodplain at the junction of the Huntington and Winooski Rivers in Richmond. The oldest alluvial terrace consists predominantly of silt loam-fine sandy loam. Bedding is indistinct and a weathered soil is present in the upper 40 cm. Given the extent of weathering, this terrace is probably more than 3,000 years old. A younger terrace is characterized by beds of sandy loam sandwiched between coarser beds of sand, which seem to represent major flood events. At least six of the finer beds represent floodplain surfaces which were stable enough for incipient soils to develop. Both organically rich A horizons and thin B horizons are visible. A chert biface was found in a weathered soil horizon near the bottom of this sequence at a depth of 2 m below surface. Radiocarbon dates are pending for VT-CH-623. Two additional terraces are

present within 150 feet of the river. These terraces consist totally of historic alluvium.

Data recovery was undertaken at two important sites. VT-CH-613 is located on a sandy outwash plain about 700 ft from Indian Brook in the town of Essex. Three distinct loci were identified after intensive testing. Each locus appears to represent a residential camp which was occupied by a small group for a fairly brief period. Large block samples were recovered from each locus; total sample size was 132 m^2. Projectile points and point manufacture suggest that hunting was a primary activity, but given the limited range of butchering and processing tools, success may have been limited. Hearths and floral remains were not identified and bone was limited to one locus.

An Early Archaic period bifurcate base point was found in two of the loci, which are spaced approximately 16 m apart. Associated tools include an ovoid blade made from a coarse grained quartzite, a modified flake scraper, and 15 chert flakes which exhibit minimal use wear along one or two edges. Four small angular chert cores, a hammerstone, two thinned bifaces and roughly 2,200 chert flakes are related to tool manufacture, probably projectile points. Four small angular cores were used for scraping and chopping, but may have also been used to produce flakes which could then be utilized for cutting or scraping. Artifacts were highly focused and the spatial patterning within one locus is a virtual mirror image of the other. Two lithic reduction areas measuring approximately 1.5-2.5 m in diameter were present in each locus separated by a empty space of about 1.5 m. About 98% of all other artifacts were found within or immediately adjacent to each lithic reduction area. Several flakes with potlid spalls suggest the presence of a hearth, although none were directly observed. Given the tight spatial patterning, the presence of two shelters measuring approximately 5 x 9 m is inferred.

The third locus probably dates to the Late Archaic period. It contained the base of a side notched point, a highly fragmented chert biface which broke during reduction, one utilized flake, and a tabular cobble with numerous striations of 0.5 mm or less. The latter item may have been used to sharpen bone or antler needles or awls. All stone artifacts, in addition to 21 small fragments (1.5 g) of burned bone, were recovered from a 32 m^2 area.

Data recovery was also undertaken at a Late Woodland base camp on a floodplain near the confluence of the Huntington and Winooski Rivers in Richmond (about 1,000 ft from the project mentioned above). A 74 m^2 block was excavated from VT-CH-619, which was found sealed beneath 3-4 ft of 19th-century flood deposits. Site limits have not been delimited.

Analyses of floral and faunal remains recovered from five hearths, areas of concentrated charcoal, and from one-meter interval samples taken on the site grid are currently underway. Identifiable remains include unburned and calcined bone, including a bear mandible and phalanges, carbonized wood and butternut

shell, rim and body portions of collared and uncollared ceramic vessels, triangular points, scrapers, a large quartzite cobble core, and a large quantity of quartzite debitage, a pitted stone with a small elongated stone in direct association, hammerstones, and a large quantity of stream cobbles, some of which are fire-cracked. It is expected that VT-CH-619 and other sites like it in upstream portions of the watershed acted as seasonal residential bases for people following a mixed subsistence strategy which combined agriculture with hunting, fishing and gathering. Site interpretation should be completed in the next few months.

NEW HAMPSHIRE

Archaeological Investigations in the Pennichuck Drainage

contributed by Stephen Carini

Louis Berger Associates International, Inc. recently completed a series of archaeological investigations in Merrimack, New Hampshire. Five sites, 27Hb24, 27Hb25, 27Hb28, and 27Hb160, located along the Pennichuck drainage were extensively excavated and a report filed with the New Hampshire Department of Transportation (NHDOT) and the Division of Historical Resources (DHR). Jonathan Lothrop served as Project Manager and Stephen Carini was Principal Investigator for these excavations.

Four of the Merrimack project sites produced Archaic (Early, Middle, Late and Terminal) radiocarbon dated components, while Early and Middle Woodland occupations were documented at three of the sites. Excavations yielded information relevant to four research issues pertinent to settlement patterns in the Merrimack Valley. These research issues are (1) site activities, (2) occupational duration, (3) occupant group size, and (4) residential mobility and regional interaction networks.

The earliest occupation identified during the course of LBA's field investigations was an Early Archaic component at site 27Hb160. Four occupation areas were identified, one of which produced a small hearth radiocarbon dated to 8690±80 B.P. Four other features were identified as pit structures with mottled soils, charcoal, and bone; one consisted of a milky quartz debitage cluster; and two were identified as dispersed scatters of charcoal, bone, and quartz debitage.

Analysis of the lithic assemblage has characterized most of the lithic reduction activity as quartz early stage reduction, while the recovery of a small quantity of chert bifacial reduction flakes in the debitage indicates that some tool production and maintenance activities were conducted here. The only tools found in Locus 1 are unifaces, possibly indicating that this was an expedient task area.

Results of the floral and faunal analysis suggest that subsistence activities included the collection and consumption of nuts and berries as well as hunting and processing game. Large pits were dug to cook and possibly store the dietary components. The pit and hearth features yielded fair amounts of bone. Medium and small sized mammals, as well as bird species, were butchered and cooked at the site. A large quantity of the bone is butchery waste which possibly indicates that game was field dressed at the site, but then may have been transported elsewhere, perhaps to a base camp for consumption.

Because only one Early Archaic radiocarbon date was obtained from this locus, and no diagnostic artifacts were recovered, it is uncertain whether this represents the only component. If this assemblage was left by a single group, its size would have been about 4-10 individuals who visited the site a few times for brief periods or for a few weeks during the late summer and early fall. The presence of exotic cherts suggests that this small group may have made some long-distance moves or had contact with people who had access to these materials.

Evidence of Middle Archaic occupation was recovered only at site 27Hb23. An argillite hornfels debitage concentration, quartz artifacts and calcined bone was associated with a diffuse scatter of charcoal, which was radiocarbon dated to 7470±150 B.P.

These artifacts and faunal remains can be characterized as evidence of one, or at most a few, brief visits to the site by small numbers of people at some time of year other than winter. The range of activities at 27Hb23 included hunting of medium-sized mammals and turtles, a limited amount of food preparation, and stone tool manufacture. A source of argillite hornfels is found in the Ossipee Mountains to the north. The apparent reliance on this lithic raw material by this Middle Archaic group indicates that either northern moves were part of their system of lithic procurement or that they obtained these materials from other groups who had access to them.

Four Late Archaic site components were investigated by LBA during the Merrimack Project. Although lacking Late Archaic radiocarbon dates, a quartz Small Stem II projectile point recovered from the LBA excavations supports the presence of Late Archaic occupation at site 27Hb23. Late Archaic use of this site can be characterized as ephemeral and task-specific. The lithic assemblage and subsistence remains attributed to the Late Archaic component are evidence of hunting small and medium-sized mammals, possibly hide-working activities, limited food preparation, and stone tool manufacture using primarily locally available quartz.

At site 27Hb24 two Late Archaic projectile points were recovered. Two excavated features produced radiocarbon dates of 4630±190 and 4040±110 B.P. Several stages of stone tool production and tool maintenance activities are represented by the lithic assemblage at 27Hb24. Basalt and rhyolite were the materials of choice followed by quartz and quartzite. Early stages of quartz tool production activities are indicated by the

quantity of quartz block shatter. Evidence of both early- and late-stage reduction, including biface manufacture, are indicated for basalt and rhyolite debitage. The source for the basalt and rhyolite may be in the Ossipee Mountains. The extensive use of these regionally available lithic raw materials is indicative of a fair number of northern excursions and it may therefore be assumed that these Late Archaic groups were highly mobile.

Eight features were encountered in the excavation sample. Recovered artifacts concentrated around the three distinctive feature types: FCR clusters, basins containing charcoal or carbon, and diffuse soil anomalies. Additional evidence of prehistoric subsistence activities can be inferred from the results of the faunal, floral, and blood residue analyses. Small and medium mammalian species including deer, dog and possibly bison, turtle, and nuts and berries served as food sources for site occupants. These dietary remains are suggestive of late summer through early fall site use. This assemblage and site configuration suggests that site occupation consisted of a few visits by a small group of perhaps 5 to 10 individuals.

Evidence of Late Archaic occupation was also recovered from Locus B at site 27Hb28. Two extensive hearth features were identified at this locus. One of these produced two Late Archaic radiocarbon dates: 3990±150 and 4670±90 B.P. Tool production activities included early stages of core reduction and bifacial reduction of the locally available quartz. A small sample of chert flakes provides limited evidence of access to exotic lithic materials. The absence of tools and faunal remains, estimated site size (650 m^2), and the presence of the hearths and two large pit features, suggests that Locus B was a medium-sized camp occupied by 10-15 people whose activities focused on harvesting and processing the seasonally available fruits and nuts.

At site 27Hb160 two occupational loci produced Late Archaic cultural material and radiocarbon dated features. Locus 2 yielded evidence of a wide range of activities and frequent visits. Stone tool production included every stage of the reduction process and utilized a wide range of lithic raw material types including basalt, chert, rhyolite, and quartz.

Unifaces, a mano, and a large amount of FCR are evidence of processing activities such as cooking, cracking nuts, grinding plant foods, and scraping hides. Additional details concerning Late Archaic subsistence can be inferred from the contents and morphology of the numerous features, which included FCR clusters, circular charcoal concentrations, amorphous soil stains, bone concentrations, and a large pit with 13 small interior hearths. The latter produced 5 projectile points, other tools, and radiocarbon dates ranging between 4800 and 4000 B.P. This feature may be the remains of a semi-subterranean hunting blind.

From the abundant faunal remains it appears that mammals were the primary dietary constituents, followed by bird and reptile. The results of blood residue analysis and a net sinker find indicate that fish, specifically Salmonids, comprised a portion of

the diet. Carbonized berry seeds and nutshells retrieved from many of these features may have served as snack food, while the huckleberry seeds and large quantity of hazelnuts found in single features suggests that these foods were being processed, possibly for storage and winter consumption.

These data indicate that Locus 2 was occupied repeatedly during the Late Archaic period. Small groups of perhaps 5-10 individuals hunted, fished, and collected plant foods in the surrounding area and then cooked, processed, and consumed portions of the procured food items. The presence of regional and exotic lithics could indicate that these people were either highly mobile of maintained social contacts with other groups who had access to these materials.

LBA investigations at Locus 3 revealed three prehistoric features, one of which produced a radiocarbon date of 5080±70 B.P. and two Late Archaic bifaces. Bifacial reduction of chert, basalt, rhyolite, and quartzite was the focus of stone tool-making activities, while early stage quartz reduction was a secondary practice. FCR and charcoal from two features are evidence of cooking, and a bifacial scraper is indicative of hide processing. Faunal and floral remains include both reptile and mammal species as well as nuts and berries. Based on this evidence, the Late Archaic occupation at Locus 3 is probably best characterized as a single, short-term late summer/early fall camp of 2-5 individuals.

The four Late Archaic site components range from small limited activity areas to larger occupations with more diverse artifact and feature assemblages. Although none of the Merrimack sites investigated by LBA resembled base camps, site 27Hb24 and Locus B at Site 27Hb28 represent small seasonal camps; Locus 2 at site 27Hb160 is interpreted as a larger resource procurement station. Botanical remains from these three sites are indicative of late summer and early fall occupations. The Late Archaic component at site 27Hb23 comprised a small task-specific hunting camp. The quality and character of the late Archaic sites provide evidence of extensive occupation spanning 800 years in Merrimack, New Hampshire. These sites, located c. seven miles from the Merrimack River and its major tributaries, indicate that well-drained surfaces adjacent to small streams and wetlands were visited repeatedly during the Late Archaic period. Largely during the late summer and early fall, small- to medium- sized groups (perhaps 2-15 individuals) periodically left their camps along the major rivers to utilize the seasonally abundant faunal and floral resources in this area.

Excavations at site 27Hb28 identified three large Terminal Archaic loci. The Terminal Archaic assemblage at Locus A consisted almost exclusively of rhyolite tools and debitage. Much of the lithic activity centered on early-stage and biface reduction of regionally obtained rhyolite. Several possible postmolds may indicate that either a shelter or a drying rack had been constructed here. Huckleberries, recovered from a feature, provide evidence of late summer/early fall occupation. Faunal and

blood residue analysis suggest that medium and small mammals, including deer and Canidae, as well as turtle, were important dietary constituents.

The Terminal Archaic assemblage at Locus G included equal amounts of regionally and locally available rhyolite and basalt early stage and biface reduction debitage. A drill fragment and two large bifaces may indicate that hides had been worked here. A modest quantity of mammal and turtle bone are evidence of subsistence activities. Given the absence of hearth finds, however, it is impossible to say whether game was prepared nearby or these small calcined bone fragments were simply discarded here. In conclusion, it is questionable whether or not Locus G is a small residence area or a task-specific lithic workshop.

Fieldwork at Locus I documented two large artifact concentrations. A radiocarbon date of 3340±80 B.P. was associated with a concentration of quartz artifacts, and an argillite Snook Kill point was associated with a cluster of argillite debitage. Stone tool production at Locus I focused primarily on early-stage reduction of argillite and quartz. The presence of argillite suggests that some of the Terminal Archaic inhabitants were travelling north, probably to the Ossipee mountains, where sources of argillite are located. Small amounts of calcined turtle carapace and a few huckleberry seeds were the only subsistence remains recovered from Locus I.

These three loci were the largest of the loci at site 27Hb28, and exhibit the highest artifact densities and tool counts. It may be posited, therefore, that prehistoric occupation of the site peaked during this time period. A single seasonal aggregate camp of 20-30 individuals, or multiple seasonal visits by smaller groups, may be represented by these Terminal Archaic remains. The overall area encompassed by this occupation, as well as the quantity of artifacts recovered, seem to exceed expectations, given the paucity of data on other Terminal Archaic occupations in the Merrimack Valley. More research is required in the Merrimack region before subsistence and settlement models for this cultural period can be assessed.

Three Woodland Period cultural components were identified during the course of the LBA investigations in Merrimack. At site 27Hb28, Early Woodland Vinette ceramics and a small amount of associated debitage were recovered from Locus A and C. In addition, Feature 3 from Locus A was radiocarbon dated to 2640±60 B.P. Locus 4 at site 27Hb160 produced one decorated pottery sherd and a refuse feature radiocarbon dated to 2070±110 B.P. (Early/Middle Woodland). At site 27Hb26, a Middle Woodland date of 1930±70 B.P. was obtained from a hearth with a rhyolite concentration in its matrix. Each of these occupations can be characterized as small temporary camps occupied by small groups during late summer and/or early fall. The high percentage of exotic lithic materials at site 27Hb160 is suggestive of operative trade networks and/or a high degree of mobility.

GENERAL

RATS! Symposium
March 18-20, Binghamton University

contributed by Jim Garman

Like the proverbial robin, the appearance of the RATS! conference is a signal that spring (and fieldwork season) are not far away. The Radical Archaeologists' Theoretical Symposium, held on the campus of Binghamton University (BU) March 18-20, attracted some seventy participants from New England and the mid-Atlantic. Organized by graduate students in BU's Department of Anthropology, the 1994 RATS! featured a variety of short papers and panel discussions aimed at incorporating radical politics in the practice of archaeology.

In the first session, O.H. Benavides (CUNY) highlighted political trends in Latin American archaeology, pointing toward a Liberation archaeology that fuses the descendants of the interpreted with contemporary political activism. Ann B. Stahl (BU) discussed her ongoing work in Ghana, and her practical efforts to link Ghanaian researchers, strapped for funding and support, with international archaeological discourse. Finally, Ludomir Lozny (CUNY) reviewed Marxist trends in Polish archaeology over the last fifty years. Discussants Tom Patterson (Temple) and Carmen Ferraras (BU) raised some issues over this last paper, particularly the diversity of interpretations applicable to the word "Marxism".

The next papers dealt with archaeological epistemology. Louann Wurst (Syracuse) took on the method and theory debate, arguing that they should really be seen as completely separate issues in an ongoing dialectical process. Larissa Thomas (BU) compared archaeologists to pothunters, forcing many in the audience to reflect on whose interests their research truly served. In the last paper, David Conlin (Brown) deconstructed archaeology as a metaphor, arguing for a linguistic-based "perspectivist approach" in which interpretation is at least partially constrained by its constituent elements (data). In discussing the panel, Randy McGuire (BU) and Charles Cobb (BU) echoed the concerns raised in these papers, with Cobb speaking specifically to the economic basis of looting and the contradictions facing radical archaeologists trying to stop the practice.

After a lunch break, the symposium resumed with a panel concerned with gender, both in the archaeological record and in the practice of archaeology. Ilene Grossman-Bailey (Temple) argued a convincing case for the applicability of gender studies to CRM. Discussing her own research on weaving in Sumerian and Akkadian societies, Megan McCormick (CUNY) expressed frustration with her own attempts to uncover gender in the archaeological

record. JoEllen Burkholder's (BU) paper on the hostile environment faced by women in the academy sparked comments about the making of space. Discussant Susan Pollock (BU) noted that although she agreed with many of Burkholder's points, honest communication in a seminar room is not necessarily a comfortable process; Geoff McCafferty (Brown) agreed, pointing out that efforts to make room can often backfire, perpetuating sexism in the classroom.

The day's final panel featured four CRM archaeologists (John McCarthy, Lauren Cook and Rebecca Yamin, John Milner Associates, Inc.; Jim Garman, PAL, Inc.) and a state archaeologist (Paul Robinson, RIHPC) discussing "Archaeology in the 'Real World': Practice and Praxis in CRM". Using a slightly different format, panelists delivered brief position papers on the compatibility of radical agendas, client-sponsored research, the interests of government and Native American constituencies.

Forces of nature delayed the arrival of Bruce Trigger (McGill) at the conference, but fortunately for all he managed to reach Binghamton to deliver his plenary at the end of the day. Titled "Archaeology and the Integrated Circus", Trigger's paper cautioned against hyperrealist perspectives not grounded in archaeological data. While commending post-processual archaeologists who are struggling with issues of racism, sexism and classism in their interpretations, Trigger warned that hyperrealist interpretations that claim to lack subjectivity verge dangerously close to obscurantism. The fortuitous timing of Trigger's lecture at the end of the conference was beneficial, serving as an excellent summary of the day's discussions and a prospectus for the future.

The conference continued with a potluck party Saturday night and a closing brunch Sunday. Conference organizers Maria O'Donovan (BU) and Lynda Carroll (BU) are to be commended for organizing a smoothly-run and thought-provoking conference, as are the graduate students who served as panel moderators and hosts. If the day's program lacked some of the fireworks and heated discussion that have marked other RATS! sessions, it was nonetheless welcome evidence that many archaeologists--whether in CRM or in the academy--are taking on vital societal issues in the context of their own work. RATS! offers a forum in which we can discuss these efforts, and more importantly, how to apply them to our own research.

GENERAL ANNOUNCEMENTS

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NEW PUBLICATIONS

PAPERS FROM THE 1990 CONFERENCE ON NEW ENGLAND ARCHAEOLOGY

Northeast Anthropology (Formerly: Man in the Northeast) no. 46 Fall, 1993

DENA F. DINCAUZE
Centering. pp. 33-37.

KENNETH L. FEDER
The Lighthouse: History and Archaeology of an Outcast Village. pp. 39-59.

BRIAN S. ROBINSON and JAMES B. PETERSEN
Perceptions of Marginality: The Case of the Early Holocene in Northern New England. pp. 61-75.

STEPHEN A. MROZOWSKI and RICHARD A. GOULD
Ethnoarchaeology and Historical Archaeology: A Comparative Examination of Marginality an Farm Abandonment. pp. 77-97.

STEPHEN A. MROZOWSKI
Epilogue: Reflections on Marginality and New England Archaeology. pp. 99-102.

JORDAN E. KERBER, editor

Cultural Resource Management: Archaeological Research, Preservation Planning, and Public Education in the Northeastern United States. Bergin and Garvey, Westport, Connecticut, 1994.

This 284-page book contains a Foreword by Dena Dincauze, an Introduction by Jordan Kerber, and 13 chapters by 15 authors. For further information contact Greenwood Publishing Group, Inc., 88 Post Road West, P.O. Box 5007, Westport, CT 06881-5007 or call 226-3571.

ELIZABETH A. LITTLE

1992 Calibrated Radiocarbon Dates for Paired Marine and Terrestrial Materials from Archaeological Features on Cape Cod and Nantucket Island, Massachusetts. AMQA Abstracts, American Quaternary Association 12th Annual Meeting, University of California, Davis.

1992 Whales, Grass and Shellfish: Land Use Issues at Nantucket in the 17th Century. Nantucket Algonquian Study No. 14, Nantucket Historical Association, Nantucket, MA.

1990 Indian Horse Commons at Nantucket Island, 1660-1760. Nantucket Algonquian Study No. 14, Nantucket Historical Association, Nantucket, MA.

1990 Late Woodland Diet on Nantucket Island: A Study Using Stable Isotope Ratios. Bulletin of the Massachusetts Archaeological Society 51:49-60.

REQUEST FOR CURRENT RESEARCH

Please submit a brief paragraph or two describing your current New England archaeological research for inclusion in the next CNEA Newsletter. Also submit any new bibliographic titles for books, articles, reports, etc. Thank you.

Send this material to any CNEA steering committee member or directly to the Newsletter editor. If possible send your contribution on a computer diskette with paper copy. Please specify the word processor system used to create your file.