Stephen E. Post Joins Staff

Steve Post, who has been associated with the activities of the Institute off and on for six years, and was a fulltime field supervisor this summer, has become a regular member of the staff. In retrospect his interests and experience seem almost to have been leading him inevitably to his present position.

Studied Anthropology and History

As a Gunner student, 1968-72, Steve became involved with Ned Swigart as a field assistant at Kirby Brook and at Lovers' Leap. He majored in Anthropology and Archaeology at New England College, Henniker, N.H., and in two years exhausted all their course offerings in those fields. During a semester in England he took courses, under the auspices of the British Museum, in prehistory and old world archaeology. At the University of Connecticut for junior and senior years, 1974-76, he continued to major in anthropology, added a heavy concentration in history, and timed the completion of his studies, as though by some master plan, to correspond with the first major summer program of field schools undertaken by the Institute.

The grant also provides for funding to publish a brochure of typical artifacts from Connecticut. Each selected artifact will be drawn by Ms. Wirt, and a text prepared discussing how old it is, where it is likely to be found, how it was manufactured, and what it was used for. These brochures will be available to school groups and at the sales desk.

The NEA funds, like those received from the National Endowment for the Humanities and the Connecticut Commission on the Arts, must be matched dollar-for-dollar. However, in addition to the obvious financial advantages of such grants, we derive the additional benefits of recognition and approval from these public agencies for the encouragement of the arts and education.
A GRANT FROM THE CONNECTICUT COMMISSION ON THE ARTS: SUPPORT FOR CRAFTS INSTRUCTION

The American Indian Archaeological Institute has received a matching grant of approximately two thousand dollars from the Connecticut Commission on the Arts (CCA). This grant is partial funding for a two-phase program of instruction in native American handicrafts. Phase I, which began October first, is now almost complete. It comprises the construction and furnishing of an Indian dwelling of the late Woodland/Early White Contact period in our new instructional wing. The processes of construction and furnishing were executed by students of Shepaug Valley Middle School, Washington; and Schoharie Middle School, New Milford, under the general direction of Adelphina Logan assisted by John Pawloski and Steve Post. Many children have been involved in the work, but the major contribution was from the group of approximately six young men from New Milford who averaged close to six hours of work per week at the Center through October and November.

Miss Logan spent four days getting the group started in the first week of October, returned for five days early in November to carry the work crews through the next steps, and will conclude her direction of Phase I on December 2 and 3, when she will also be a National Endowment for the Humanities consultant discussing archaeological characteristics of the early period of Indian/White contact. The emphasis in Phase I of the CCA project has been on learning about the materials used in constructing a Northeast Woodland dwelling and the techniques of preparing and using these materials.

As shown in the accompanying illustrations, students had experience in the use of prehistoric cutting tools and rawhide strips for binding wood joints (see article, this issue, on experimental archaeology). Miss Logan also brought furs and hides of many kinds with which to equip the house, as well as replicas of cooking implements and other household furnishings which have served and will continue to serve, through the winter months, as models for young and older crafts-people to copy. There is a particular need for the weaving of cornhusk mats to serve as temporary covering for the dwelling until usable bark becomes available. This task will receive special

The longhouse reconstruction nearing completion.

The longhouse reconstruction, detail.

John Payne with Del Logan.
Above: All teachers should have such devoted pupils. Below: All pupils should have such a teacher!
emphasis in the volunteer programs of the winter months.

Phase II of the project is scheduled to take place in April and May. During one weekend of each month Miss Logan will be at the Institute Center to conduct adult classes in Indian crafts. The exact dates and other details of the spring crafts project will be published in the March issue of Artifacts. Members are encouraged to watch for and enquire about this extraordinary opportunity.

Miss Logan is skilled in virtually all handicrafts, ranging in variety from cornhusk doll making to blacksmithing. Based on early requests, she is already preparing to give instruction, during her spring visits, in porcupine quillwork and basket weaving. If any of our readers have special interests and think they may be able to attend some part of the sessions in late April and early May, they might call or write their suggestions to the Center, 886-0518. We look forward to heavy participation, and want to prepare for it by ensuring an adequate supply of necessary materials.

We are pleased to be able to offer this rare opportunity to our members. Some of the skills Miss Logan is prepared to teach are little known to our time and place in history. To participate in these spring classes will provide not only a glimpse of an almost forgotten past but also a chance to help in preserving one small part of it.

Post Joins Staff

continued from page 1

AIAI in June 1976, under the direction of Dr. Roger Moeller. In this program Steve played a key role.

His appointment to the regular staff, which began in the last week of September, carries responsibilities in both research and education. Part of his time is spent assisting the curator in the endless task of cleaning, identifying, and sorting artifacts. Another part is devoted to presenting programs of instruction and explanation for school groups who visit the Center. In addition he has played a major part in the reconstruction of both the simulated site and the longhouse.

The fact is that Steve has participated in virtually all aspects of Institute activity in the last two months and has made himself indispensable in each. This is no mean achievement when one considers that he serves also as a member of the Gunner School staff with both dormitory and coaching responsibilities and the myriad boarding school duties which lie between.

Institute President Serves
New York Museum

During October and November, this fall, Edmund K. Swigart, President of the Board of Trustees of the American Indian Archaeological Institute, served on the Executive Committee of the Task Force of the Museum of the American Indian. The purpose of the Executive Committee was to encourage creative thinking about the basic issues of the Museum of the American Indian's future. It was the intent of the Committee to develop a general concept of that future for presentation to the Board of the Museum for its approval.

The strategy then called for the work of the Advisory Committee of the Task Force, consisting of specialists in the various disciplines, which was to concentrate on developing a plan of action to achieve the museum's objectives.

The Executive Committee has ended its deliberations. One hopes a major step has been accomplished in the great task of reorganization which the AIAI Board has undertaken. The editors of Artifacts and the AIAI staff would like to urge all members who live within reasonable range of New York City to visit the Museum of the American Indian if they have not yet done so. Once you have discovered the awe-inspiring collections of that extraordinary museum, you will need no further urging to return again and again for repeated visits.

The Museum of the American Indian, Heye Foundation, is on Broadway at 155th Street. It is closed on Monday but open other days from 1 P.M. to 5 P.M. Admission is free, but a contribution is requested.

Silas W. Merrill, 1941-1976
In Memoriam

Silas Merrill died on July 2, 1976. The officers and staff and his friends among the members of this organization will cherish the memory of this man, grieve with his family in his tragic, untimely, passing, and acknowledge the loss it has meant for Connecticut archaeology. With his wife, Ginny, and friend, Bruce Lamb, Silas Merrill, was one of the early investigators of the Woodruff site, and the material he excavated there will eventually be exhibited and stored at the Institute Center.

Mrs. Merrill has said of him, "Silas was, among many other things, a teacher. It was through him that I learned the fun and mystery of searching for Indian relics .... Some of the happiest moments I and I spent together were in fields looking for points and at the Woodruff site digging and carefully sifting the many wondrous gifts of the past there."

Peter Minich, a friend, wrote of him in an eulogy.

"Silas was a good man, honest and natural. He found meaning in simple things: wood and fire, an arrow point found in a cornfield, a perfect cast to a rising trout. In these things he discovered his wisdom, a Wisdom that let him accept life as it came."

Contributions which have been sent to the American Indian Archaeological Institute in memory of Silas Merrill will be used for the installation of exhibit cases in the new wing of the Center.

Steve Post with class from Shapang Valley School shucking corn.
WANTED

Volunteers with typing skills - or, lacking the skills, at least a willingness to try! We almost always have a backlog of work which involves the typing of lists, letters, or copy. Often this is low-priority work which can be done in spare time at home. Occasionally we are pressed to meet a high-priority deadline. We will gladly accept whatever kinds of help we are offered in this specialized line of work.

We are always deeply grateful to all our volunteers, with or without typing skills. We could not, in fact, function very well for very long without them. It is reassuring, beyond measure, to know that on certain days in almost any week one or more people will arrive, ready to try whatever job seems at the time most urgently to require attention.

We can never have too much of such help. And so - typing skills aside - if any readers could join us at the Center for a half-day, or even an hour, once a week, please be assured of a warm welcome. You regular visits lighten our burden and brighten our lives - we value your company almost as much as we appreciate your help.

Site Reconstruction:
A New Exhibit

The Institute has added a life-size simulated site to its exhibits. At the end of the nature trail near the building an area was selected which might have been a likely place for Indian occupation. A grid system consisting of four 1.5 meter squares was laid out, and the area was cleared to the surface of the subsoil. A different feature, similar to one which is likely to be encountered in a real excavation, has been placed in each square.

In the first square a hearth was made by digging a shallow pit, lining it with rocks, and starting a fire. As the fire burned, we put in acorns, corn, and squash seeds and animal, bird, and fish bones. This is one example of experimental archaeology (see article in this issue on experimental archaeology).

The second square shows how pits, postmolds, and piles of debitage are mapped after they are first uncovered in the excavation. A mapping frame is a device placed over the entire square which enables the archaeologist to make, quickly and accurately, a scale drawing of the position of everything in that square.

The third square has a cross-sectioned feature with associated postmolds. The profile of the feature shows the different colors and textures of soil likely to be seen. Different stratigraphic units have resulted from different functions being undertaken in the features: refuse disposal; storage; or a fire for heat, light, cooking, and food drying.

The fourth square contains a cross-section of a postmold and of a root mold to show the differences. There is also a deep test pit excavated by 6 cm levels.

An accompanying brochure has been prepared to give the visitor a brief, but detailed explanation of how the archaeologist lays out a site, excavates and maps the finds, and what some of the typical features and artifacts look like.

Although the simulated site will be closed for the winter, it will reopen as soon as the weather permits in the spring. It has immediately proved to be one of the most interesting and important aspects of a group visit to the Center. Young children and adults are equally responsive to the lessons of this simulated site, prepared with such attention to accuracy and realism that one must deliberately try to remember that it is a reconstruction.

I would like to give special thanks to Sharon Wirt, our cataloguer, and three volunteers, Betty and Jed Synnestvedt, and Dave Pokrywka for their help in “excavating” and setting up the displays.

Dr. Roger W. Moeller
Curator

NEEDED

A four-wheel-drive vehicle with (approximately) seven-passenger capacity. If this sounds like a strange and presumptuous request, we hasten to explain that we have become increasingly aware that the next essential steps in our research program are now almost totally dependent on such transportation.

One of our major responsibilities is to conduct surveys for sites and to follow leads on suspected sites reported to us frequently from all over western Connecticut. An ordinary passenger vehicle is insufficient to carry crew and equipment and often cannot approach the area closely enough. See picture.

We must therefore appeal to our friends and members for help in two respects. Please be aware of our need, and if you hear of a bargain, call the Center, 868-0518. Even better, if you are sympathetic to our plight and recognize the problems involved in quickly raising the necessary funds for such a purchase, perhaps you might help us make a start by sending a contribution.

Roger Moeller and Sharon Wirt "Work" the site reconstruction. Sharon is screening soil in the background. The mapping frame is visible at lower right.

Equipment: "Tools of the Trade"
AIAI Staff Attends Regional Meeting

The 43rd annual meeting of the Eastern States Archaeological Federation was recently held in Richmond, Virginia. Dr. Roger Moeller, curator, Mr. Edmund K. Swigart, president, and Mr. Stephen Post attended the sessions. Dr. Moeller and Mr. Swigart gave papers concerning the work of the American Indian Archaeological Institute in Connecticut archaeology. Portions of these papers are scheduled for publication in the March issue of Artifacts.

Three very important decisions were reached by the Federation's Executive Committee and ratified by the membership. The 44th annual meeting will be held in Hartford, Connecticut, on November 3, 4, 5, and 6, 1977, at the Hartford Hilton. Roger Moeller is the chairman of the local arrangements committee. Further information on this will be in future issues of Artifacts. Secondly, ESAF now offers a membership to individuals. They will be entitled to the new quarterly newsletter and to the federation's annual major publication. This year the publication is An Anthropological Bibliography of the Eastern Seaboard, Volume 3. This brings us to the third decision: the AIAI and ESAF will jointly publish this book, which is being compiled by Dr. Roger Moeller and John Reid of the University of Toronto. It will include approximately 15,000 references pertaining to the prehistoric archaeology of Eastern North America. These references will be organized alphabetically by author under many subject headings. Publication is expected by November, 1977.

MUSEUM SHOP EXPANDS

We are pleased to announce that the little shop at the Institute Center has added a selection of sterling silver, turquoise and coral jewelry. Each ring, bracelet, and pair of earrings is handcrafted by Navajo, Hopi, and Zuni artisans and was carefully selected from a wide variety of unique objects. This southwestern jewelry of fine quality and while prices reflect this quality, the selection has been made with a view to ensuring maximum appeal.

During the course of winter new sale items will be added including contemporary necklaces and pendants of stone, shell, and deer antler segments made to resemble traditional ornaments. Other, low cost objects such as cornhusk dolls will be offered for young visitors. Most of these will be made by volunteers, and once again we send out our appeal for volunteer help. We shall provide the instruction; if any readers can give the time and have the crafts inclination we would appreciate hearing from them.

Of course, our shop continues to feature the beautiful pewter jewelry of Mr. Arcularius — birdstone and projectile point replicas — the enameled copper disc pendants designed by Mrs. Arcularius, and the glass work of Miss Priscilla Manning Porter. In addition, the shop offers a careful selection of books, postcards with pen and ink illustrations of our artifacts by Sharon Wirt, and maps showing tribal lands of Connecticut Indians in the mid 17th century. An improved color version of the popular map, on heavier paper has just been acquired.

Our shop will continue to add appropriate items as they can be made available. We shall also continue to make our selections with discrimination, relating them whenever possible to the purposes and orientation of the work of the Institute.

Southwestern Indian handmade jewelry at AIAI Center shop.

Pewter Pendants by Charles Arcularius.
EXPERIMENTAL ARCHAEOLOGY: A Dynamic Approach to Reconstructing the Past

by Dr. Stephen C. Saraydar

The author, a resident of Weston, Connecticut, is a graduate of Cornell University and completed his doctoral studies there in January, 1976. He served in Arizona on the staff of the Southwest Archaeological Expedition of the Field Museum of Chicago. He was assistant to the late Dr. Paul S. Martin. His paper "Experimental Archaeology: A New Outlook", written with Jumpei Shimada, appeared in American Antiquity, Vol. 38, Number 3, July, 1973.

Dr. Saraydar is engaged in research in experimental archaeology in Connecticut.

An expanding interest in experimental archaeology has resulted in widespread efforts to learn and practice the art of stone tool making. This interest has been very evident, especially among students, in visits to the AIAP Center. In the construction of our longhouse this fall, students practiced cutting rawhide with stone flakes, sharpened a stone ax and a stone adz, and used them briefly and tentatively to cut and shape saplings.

Dr. Saraydar's work is of quite a different sort, relating principally to the studies of the expenditure of energy in a variety of tasks using both modern and prehistoric tools. Along similar lines, but with variations and different emphases, are the experiments of Dr. Robert Ascher (see footnote 1) also of Cornell University. One of his most interesting is called CUES I. In this experiment he has created a site with modern bones, textiles, pottery, and leather. All of the items were carefully mapped to record their relative positions and depths. The "site" is open to the elements at all times.

The purpose of the experiment is to examine the rates of decay, flattening, compaction, and dispersion of items resulting from totally natural factors. Not surprisingly, results so far show that the items are slowly settling and decaying. (See Ascher, Robert, 1970. "CUES I: Design and construction of an experimental and archaeological structure", American Antiquity 35:215-216.) - Ed.

Quantities of trace elements in stone tools, and the age of charcoal samples, Experiments that elicit such information are routinely performed and are, theoretically, natural science experiments applied to archaeological problems. The second kind of experiment is uniquely archaeological in that it serves to test beliefs about past cultural behavior. Ascher (1) has termed this category of experiment "imitative" and has defined it as those experiments "in which matter is shaped or matter is shaped and used in a manner simulative of the past." Typically, such experiments concern the replication of methods of artifact fabrication and usage. This second kind of experiment forms the focus of this discussion.

It is difficult to summarize the subject matter of the imitative experiments that have been performed to date because they are so diverse. However, without distorting the situation too severely, it can be said that the major categories are: the manufacture and use of stone tools, the manufacture of pottery, metallurgy, the construction of houses and monuments, the construction and operation of sailing vessels, and culinary and subsistence activities. Despite this variety, it is easy to isolate the essential features shared by most imitative experiments.

When an archaeologist performs an experiment he takes a "dynamic" approach to the problem under consideration; that is, artifacts, or replicas of artifacts, are actually used in attempts to learn about prehistoric functions and methods of manufacture. This stands in contrast to the predominantly "static" approach involved in more conventional archaeological research, in which (to over-
simplify) the archaeologist makes inferences about the past largely on the basis of carefully manipulated ethnographic analogies and the various contextual relationships of artifacts within a site. Experimental archaeology is truly "action archaeology" and provides the archaeologist with a first-hand experience relating to the lives of humans remote in time which could not have been obtained by "static" analyses.

Looking more closely at the procedure involved in conducting an experiment, we recognize immediately that the first and most obvious step in the design of an imitative experiment—any experiment for that matter—is the selection of a testable hypothesis. Clearly, if no sound criteria can be established to verify or refute a hypothesis, an adequate experiment cannot be performed. For example, in a prehistoric context one could never hope to demonstrate that cave paintings were expressions of sympathetic magic because there is no way to prove the intent of the artists. On the other hand, if one hypothesized that a particular stone-working technique could be employed to produce a Scottsbluff point and then proceeded to apply that technique either successfully or unsuccessfully, that would be an experiment.

In attempting to learn about the past, a great deal of consideration must be given to the appropriateness of the materials and methods applied in the experiment. The value of the results one obtains will be increased if materials known to have been available to the people in question are used. Furthermore, several different replication procedures may be possible, making it necessary to try as many alternative sets as feasible and then make comparisons. If one were attempting to test the performance of stone axes, one would not reasonably expect to obtain useful information if the haft were based on a modern design and the axe used in the same manner as a steel axe. A rigid haft similar to those in use today will often cause the stone tool to break, and furthermore, a chopping motion suitable for a steel axe will seriously hamper the effectiveness of a stone axe. Clearly, if one were unaware of the correct technique for chopping with a stone axe, several alternative methods would have to be tried before the most suitable technique could be determined.

Many other examples involving errors both obvious and subtle could be cited, but hopefully the point has been made: it is important to replicate the prehistoric context as closely as possible and all recognized departures from such contexts (sometimes necessary) should be clearly stated and their possible effects on the experiment evaluated.

When an archaeologist hopes to answer a question by conducting an experiment, the available evidence concerning the culture in question, as well as the overall knowledge of the archaeologist about technologies at similar levels of development will (hopefully) suggest a reasonable solution to the problem at hand. If experimentation confirms the internal logic of the solution (i.e., if the hypothesized explanation of how something was made or what it could have been used for is supported), the investigator may then wish to search for corroborative evidence in the field or in museum collections. For example, an actual artifact whose manufacture was never completed might show traces of the manufacturing process which are similar to those produced during an intermediate step in the experiment. Clearly, the greater the number of parallels between the archaeological and experimental situations, the greater the confidence which may reasonably be placed in the proposed solution.

As one might suspect, the interpretation of an imitative experiment is not always straightforward. The reason for this is simple: although we may ask the question, "Will this procedure produce the artifact in question?" or, "Could this artifact have been used for this particular function?", what most people really wish to know ultimately is, "Is this the procedure the prehistoric people actually used?" and "Did these people use this tool for this particular function?" Unfortunately, it is difficult to make the sought for step to certainty because it is rarely possible to obtain anything close to what passes for confirmation in natural science experiments. The plausibility of a particular explanation may be demonstrated quite convincingly, but virtual certainty regarding historical facts is difficult, if not impossible to obtain. Nonetheless, a survey of the contributions of experimental archaeology to our knowledge of the past demonstrates its effectiveness and value as
N.E.H. Report #2

In the September issue of Artifacts an announcement was made of the receipt by the American Indian Archaeological Institute of a $25,000 Planning Grant. The grant provides funds to lay the groundwork for a major revision and improvement of the Center's exhibits.

Part of the project has been an inquiry into the interests, motivations and demography of our visitors as well as a study of their response to our exhibits. Questionnaires are prepared, administered and studied by Mrs. Sharron Turner. Based upon her findings, simple modifications and improvements are made in existing exhibits while plans are made for the major changes to come.

Central to the planning is a series of conferences with scholars and specialists in the archaeology of the Northeast. In a series of two-day visits 13 consultants will, at the close of the project, have given us the benefit of their extensive knowledge of the latest studies, conclusions, and theories about the full range of the prehistory of Connecticut and adjacent land.

The combined effect of this two-part study will be to inform us of what to say to visitors with our new exhibits, and how best to say it. No archaeological exhibits depicting the Northeast will have had the benefit of such diverse and recent expert counsel. The results should place the AIAI Center in an enviable position to develop the finest available programs of education and museum interpretation in this subject.

As this issue of Artifacts goes to the printer, three conferences have taken place with three more scheduled in the next three months. Stuart Stuwever, chief consulting archaeologist for the project, spent September 14 and 15 with us discussing problems and prospects of the undertaking and helping us to plan a strategy for later conferences. As professor of anthropology at Northwestern and director of the several excavations at and near the Koster farm in western Illinois, Dr. Stuwever's wide experience and wisdom have proved helpful and provocative even beyond the immediate issues of the project.

The second conference, October 14 and 15, brought William A. Ritchie, former New York State Archaeologist and Herbert C. Kraft, director of the Archaeological Research Center at Seton Hall University, New Jersey, for discussions about the period of prehistory from approximately 2,000 B.C. to 1,000 B.C., known in the Northeast as the Transitional Period. Dr. Ritchie, an "elder statesman" in the field, whose published works are basic references, is the author of, among many books and papers, The Archaeology of New York State and The Archaeology of Martha's Vineyard. Mr. Kraft's work in New Jersey and in the upper Delaware Valley relates, because of geographical proximity and cultural similarities, as closely, perhaps, to Western Connecticut as that of any consultant. Mr. Kraft is the author of The Archaeology of the Tuck's Island Area and The Miller's Field Site and editor of A Delaware Indian Symposium.

On November 4 and 5, W. Fred Kinsey, chairman of the anthropology department at Franklin and Marshall College and James A. Tuck, director for anthropological research at Memorial University of Newfoundland, concentrated their best thinking for our benefit on the Woodland Period, spanning the years from approximately 1000 B.C. to the time of contact with White Europeans. Dr. Kinsey, who has just concluded a term as president of the Eastern States Archaeological Federation, is the author of Archaeology in the Upper Delaware Valley and The Faunce and Byram Sites: Prehistoric Chronology and Settlement in the Delaware Valley with Relationships to the Archaeology of the Northeast. Dr. Tuck's work includes a special emphasis on the Maritime Archaic. He is the author of Iroquois Cultural Development in Central New York, Onondaga Iroquois Prehistory, and a number of papers on both the Iroquois and the prehistory of Newfoundland.

Halfway through the project our hopes and expectations are being realized. Consultants are presenting us with a concentration of information, theory, and ideas which would be hard to obtain in any other way. As might be anticipated much of the benefit derives from both the conflicting and the complementary interaction of successive groups, and of individuals working together in their particular groups.

The period of Indian/White contact will be the subject of discussions on December 2 and 3. On January 13 and 14, the topic is to be the Archaic Period. Finally, on February 3 and 4, the Paleo-Indian Period will be examined. A third report in the March issue of Artifacts will carry more detail about these remaining conferences.

National Endowment for the Humanities Archaeological Consultants W. Fred Kinsey and James A. Tuck discuss the Woodland Period.

NEH Archaeological Consultants Herbert C. Kraft and William A. Ritchie discuss the Transitional Period.
"Last weekend we excavated a mastodon"

American Mastodon


The Sugar Loaf Mastodon

In May, 1972, The Orange County mucklands grudgingly yielded up another item from its storehouse of Pleistocene fauna—the virtually complete skeleton of a large, mature mastodon, the 38th to be recovered in the County since 1780.

The mucklands of the County, or the black dirt as they are known to local residents, are the vestiges of lakes impounded during the retreat of the Wisconsin glacier. During the past sixty years they have been ditched, drained and their fertile soil used to support mammoth crops of onions, celery and the like. Most of the mastodon finds have been as a result of such ditching operations or of road construction. Nicotra Farms, the area in which the Sugar Loaf mastodon was recovered, lies about eight miles west of the main concentration of black dirt that surrounds the Wallkill River. It is the northern portion of a swampy area that extends for a mile and a half to the southwest, bracketing Wiedermark lake.

The skeleton was initially located by Frank Pickul, an excavating contractor, while cutting a new drainage ditch across the field. His machine had stalled as the result of hitting a subsurface obstacle, which when finally liberated from the ooze, proved to be the skull of the mastodon.

After the IOCC (Incorporated Orange County Chapter - ed.) had been notified of the discovery, two of its members sunk an exploratory shaft to determine the orientation of the skeleton. With this information in hand, the find was announced to the membership at the regular chapter meeting, which fortunately was scheduled for Friday of the same week, and a crew organized to excavate the remains over the weekend, in as much as the farmer wished to plow during the next week.

Saturday morning arrived, and with it a torrential northeast which dumped three inches of rain on Orange County in one day—the day we dug. The crew gathered at the site at 7 A.M., slickered and hip-booted, undaunted by the looks of the field. (.... Merely walking across the field to the site was a major accomplishment, since with each step you sunk to mid-calf in the muck. To stop moving was perilous, for then you found yourself up to the knees and beyond, unable to pull your legs free without help. This situation worsened as the day progressed.)

Since the preliminary test had indicated that the skeleton lay diagonally across the drainage ditch, which was filled with four feet of water, it was necessary to bracket that section of the ditch with coffer dams, bring in mudsuckers, and pump it dry; although with the rain that kept falling and the coffer dams that kept leaking, "dry" was a euphemism!

Part of the crew sank a roughly ten foot by twenty foot excavation around the original test pit, and dug downward through the muck and peat toward the skeleton. All the soil that was removed was carefully gone through by hand in the hopes of finding aboriginal evidence, but with negative results. The remainder of the crew worked from within the ditch. Given the appalling conditions under which we worked, it was impossible to expose the total of the beast for photography before it was removed. We were compelled to uncover segments at a time, photograph them in situ, remove them and proceed to the next section. Coffer dams collapsed, nearly drowning mired excavators frantically trying to climb the muddy walls, walls caved in, pumps became clogged or temperamental, cameras got soaked, people got hopelessly stuck in the ooze, but we got the pictorial record and the skeleton.

The next day dawned bright and clear. We had agreed to restore the ditch to its original condition; therefore archeologists turned carpenters for a day building a crib to stabilize the ditch. With this completed, we were able to remove the coffer dams and call it a weekend—one in which 30 loyal members put in 500 man hours of exhausting labor to add another mastodon to the Chapter's annals.

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Experimental Archaeology
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an analytical tool. One might also note that lack of absolute certainty is a condition to which most archaeologists must accustom themselves, whether or not they perform experiments.

Although experimental archaeology has made an invaluable contribution to our understanding of the lifeways of prehistoric people, it has generally been relegated to a purely secondary role in archaeological interpretation. This is partly because the hypotheses tested by experiments have tended to be limited in scope. For the most part, experiments have served as simple aids in determining artifact uses and methods of fabrication. They have been used when more conventional methods proved to be inadequate. If an archaeologist could not explain the purpose of an artifact to his satisfaction, an experiment might be performed to investigate an hypothesized function. Experiments of this kind serve archaeology’s long standing goal of providing historical reconstructions, but this particularistic orientation does not readily lend itself to the production of an organized body of theory. With the increasing application of systems theory in archaeology and the associated interest in culture process (cf. Moeller (2)), a more systematic approach to experimentation is required.

The adoption of a systemic framework has major implications concerning the nature of anthropological research. On the theoretical level, one is led to consider problems which are more general to the human condition than was customary in the past. Models are sought which will apply to a broad range of societies, both living and extinct.

In view of modern archaeology’s ambitious goals, attempts are being made to reformulate the role of experimentation in research. The key to this endeavor is the ability of experiments to recreate actions or processes and provide quantitative data. Experiments are now being used to recreate prehistoric subsistence systems and measure the flow of energy within those systems as inputs of labor and outputs of production (measured in kilocalories). Information of this kind provides us with a detailed picture of the functioning of different systems and allows us to evaluate the effects of temporal and spatial variability which are documented in the archaeological record. Other experiments are contributing data on the uses of artifacts and the precise nature of waste materials produced during their manufacture. This information is needed if we are to understand the full significance of the materials brought to light by excavation. The information provided by these and other new experiments will play a prominent role in the development of a sophisticated modern archaeology, providing data required to answer complex processual and historical questions. However, despite the increasing complexity of experimentation in archaeology, it should be kept in mind that many experiments can be performed by anyone interested in our past and that experiments are both enlightening and fun.

References:
(1) Ascher, R.
1961 Experimental archaeology.
AMERICAN ANTHROPOLOGIST 63:793-816.
(2) Moeller, R. W.
1976 Archaeology: a science to further man’s knowledge of the past, conducted carefully. ARTIFACTS 4 (3):2-3

Mastodon
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With respect to the animal itself, it became obvious as we dug that the skeleton was not fully articulated. One foreleg, part of the rib cage and the femur were in their proper location. Yet further excavation revealed the tusks and one scapula to be under the femur, the other foreleg and several ribs on the opposite side of the ditch. The beast appeared to be splayed out and doubled up. We were never able to locate one humerus and the other scapula, despite the fact that we carefully probed the entire area. We hypothesize that ice or water action were the cause of the disarrangement, for close examination of the bones showed no indication that the animal had been butchered; although the possibility cannot be ruled out entirely.

The bones were in an excellent state of preservation with the exception of the tusks, which had been badly broken by the ditching machine .... The pelvic girdle too had been sliced by the machine’s bucket. Judging from the size of the skull, the size of the femur (it measured 3’5.5” from end to end) and the wear on the teeth, the animal was quite large and fairly old. Of considerable interest was the presence of one tusk in the lower jaw, a condition unusual for the American Mastodon.

A rib portion was sent to Isotopes Inc. for radio carbon dating. A date of 9860 plus or minus 225 radio-carbon years was returned, which is closely in line with the other Orange County dates on Pleistocene mammals. The Arbordio mastodon, excavated by the chapter from a bog near Montgomery, has been dated at 10,000 plus or minus 160. The Dewey-Parr moose elk, excavated west of Florida, N.Y., yielded a date of 10950 plus or minus 150.

As yet, there has been no direct association of man and mastodon within the county, but the date of 12530 plus or minus 370 radio carbon years obtained on caribou bones found in association with a fluted point at Dutchess Quarry Cave in 1966, pre-dates both the mastodonts and the moose-elk by more than two thousand years. If such a direct association is to be found anywhere in the Northeast, Orange County is the likely spot, given the heavy concentration of mastodonts—so we keep looking.

The skeleton was donated to the chapter by the property owners and is now mounted in the Bio-Medical building at OCCC [Orange County Community College - Ed.].

Stone toolmaking (simulated), polishing a bannerstone.
Salvage Archaeology

Salvage Archaeology is the excavation of sites which are in imminent danger of destruction by construction. A few years ago a salvage excavation meant being called to a construction site at 7 am, finding a bulldozer scraping the tops off 50 refuse filled Late Woodland pits, and then being told that you had six hours to save whatever information you could before the land was taken to bedrock.

Times have changed somewhat. To reflect this change, salvage excavations are more commonly being referred to as “contract archaeology.” This is because recent federal legislation requires that any federally funded or licensed project must obtain an environmental impact statement. The contractors contact archaeologists, historians, ecologists, architects, and others to write the environmental impact statements so that they can proceed with their projects.

Now the archaeologist has more time to plan the excavations and determine the optimum method of mitigating the loss of valuable data. At the same time, the contractor is made aware of the importance of archaeological information and the need for a thorough study before construction starts. If sites are found during construction or the environmental impact statement is determined to have been misleading or insufficient, the project can be halted after construction begins. This happened in Southbury recently.

The Rochambeau bridge, which will span the Housatonic River near the junction with the Pomperaug River on Interstate 84, was well underway when Dr. Fred Warner of Central Connecticut State College and the Connecticut Archaeological Survey stopped to look around the construction site. Although an environmental impact statement had reported that there were no sites which would be endangered, he found a site. Construction was halted for several days while Dr. Warner and his crew did a survey to determine what areas of the site were still sufficiently undisturbed to warrant excavation. When he delineated such an area, the construction work resumed but not in the designated location.

Finding sites in areas where construction has already started creates difficulties for the archaeologist as well as for the contractor. Archaeologists cannot do as thorough a job if they have to hurry to complete their work by a fixed date. They do not have time to do the necessary background research, and they have to drop everything else they are doing. Archaeologists are seldom equipped to handle large scale projects which appear on short notice in the late Fall or early Spring. They are usually committed to their teaching responsibilities and their customary field crews are usually students who have returned to college.

Contractors have their deadlines also. They have planned these projects to have all of the subcontractors working at specified times for a given duration. Stopping a project or working around a group of archaeologists for several days or weeks is a great disruption. When they want to start work on a given segment of the project, a delay can cost thousands of dollars a day. Everyone will benefit from a fair environmental impact statement executed years in advance of the construction date.

Preston Norris and Dr. Roger Moeller, Curator in the field. Summer, 1976.

The usual procedure for the archaeological part of this document is for the contractor to put out a call for bids. Archaeologists may learn about it through an advertisement in the Commerce Business Daily, by being on the Interagency Archaeological Services mailing list of qualified archaeologists, or by receiving a mailing from the United States Army Corps of Engineers branch office. When the bid has been reviewed by the contracting agency and accepted, the archaeologist begins the preliminary survey.

This survey starts with a study of the published literature of the area, the unpublished maps, notes, and manuscripts of individuals who have already done some work there, and an examination of the topographical maps of the region. These steps will aid in the actual walking survey of the ground to determine where sites are likely to be found.

The next step is to receive more specific instructions as to the precise location of the project and what will be placed in each part of it. Now the archaeologist does small test pits, soil probes, or employs other techniques to find out more precisely what is there.

The third step is the mitigation of the loss of archaeological data. The archaeologist must decide which sites are important enough to warrant excavation, which ones have such confused data that no amount of work would be of help, and which sites are so important that they

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Schedule

MEETINGS OF THE AMERICAN INDIAN ARCHAEOLOGICAL INSTITUTE will be held on the first Thursday of March and May, 1977. The March 3 meeting will be held at 8 p.m. at Bryan Memorial Hall, Washington Depot.

Programs for the remainder of the season are as follows:

March 3, 1977: “In Search of the Last of the Mohicans.” Mr. Nicholas A. Shoumatoff, Professor of Ethnobotany at Fairfield University and Curator of the Trailside Museum at Pound Ridge, N.Y., will present a program based on his field work this summer with the Oklahoma Delaware, and the Canadian Munsee tribes. Accompanied by Paugussett Chief, Big Eagle, and with help of a federal grant, Mr. Shoumatoff has been researching the traditional culture, language, and plant uses of Eastern Woodland People.

May 5, 1977: The Annual Meeting. This final meeting of the year will again be a dinner meeting held at the Inn on Lake Waramaug. We are planning a special program of native American dance demonstrations. Details will be announced in the March issue of Artifacts. Members are reminded of our superb final program of last year with David McAlister as speaker and are urged to keep this May 5th date clear. We plan to offer a program as delightful and memorable as Dr. McAlister's.
Salvage Archaeology
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cannot be destroyed. A pragmatic person will realize that some sites will have to be lost. But before we throw them away, we have to be sure they do not hold the key to understanding other sites.

The archaeologist's recommendations are submitted in the form of a report. Other archaeologists will read this, as well as the contracting agency, so it is very important that the report accurately reflect the archaeological situation as he saw it. It is possible that a project will be scrapped if the archaeological aspects of the environmental impact statement show that a unique site would be destroyed.

In late spring this year the U.S. Army Corps of Engineers contracted with the AIAI to do a survey of the Park River Project area in Hartfort, Connecticut. Because Park River has frequently overflowed its banks and caused widespread destruction and death, the Corps of Engineers has been building cement conduits to confine the river to its bed. Although construction has already begun in some areas and been completed in others, archaeological surveys are still warranted in many sections. Dr. Moeller and Preston Norris, then a Gunnery Student, conducted a walking survey of the entire area, researched the early Dutch and English narratives, and dug test pits to ascertain the archaeological potential. The walking survey showed that the bed of the river is often solid rock. The sides are usually modern fill containing bricks, cinders, metal scrap, and even entire automobile bodies. In some places the course of the river underlies parking lots, buildings, or parks.

Before the fill was brought in, it was common practice to remove all of the topsoil and part of the subsoil for use in other areas. This was especially disappointing since the Dutch narratives record Indian camps all along the Park river and in the vicinity of a Dutch fort at the mouth of the Park River. Further research into more documents revealed that the fort was completely destroyed by successive flooding by the early 1800's.

With so many leads ending in dead ends we were heartened to find one area without recent fill which was reported to have had Indian occupations. In a section of the Park River project where the outlet structure will be built we dug 3 test pits. While the 1.5m deep test did not locate any artifacts, they did show that the river has been consistently depositing fine sand for a long period of time. There is no sign of fill and no sign of modern disturbance.

The early Dutch narratives suggest Indian sites in the vicinity, the area is well suited to Indian occupation, and there has been consistent soil deposition without disturbance. The conclusion is that if the Indians actually lived here at one time, their remains are probably right where they left them.

Further excavation of this likely site will be conducted as the project continues. We will be working with the Corps of Engineers in an effort to coordinate our schedules to realize our separate goals.

Dr. Roger W. Moeller
Curator

Preston Norris digs a test pit.

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