ARTIFACTS

Vol. V No. 4 June 1977 The American Indian Archaeological Institute

Mastodon Update

On Tuesday, May 24, the skull and mandible of the Hillstead mastodon were moved from the Peabody Museum of New Haven to the Institute Center in Washington. With the delivery of the left femur and one remaining vertebra, presently at Wesleyan University, the skeleton, in its entirety—at least all of it that was found in Farmington in 1913—will be in our hands.

Jane French, who for months has been assisting Sharon Wirt in the endless task of cataloguing, has also been a participant in the Mastodon project. Her special responsibilities now are cataloguing the bones with Peabody numbers, and looking after their proper maintenance and preservation.

Ellis Settle is taking detailed metric measurements of principal specimens and Weymouth Somerset is preparing scale models in clay. Both projects will lead, before fall, to a polished, finished, professionally designed exhibit. Meanwhile, preliminary efforts are being made by the staff to display this great new acquisition in a temporary exhibit which should be open to visitors before the end of June.

As this elephant project draws closer and closer to a conclusion, we want to acknowledge, with warm thanks, the indispensable help of three people who are not staff and not volunteers.

Sidney Quarrier, Supervisory Geologist with the Natural Resource Center of the Connecticut State Department of Environmental Protection, has shepherded the negotiations for the loan. His sympathetic response to our persistent inquiries and requests was the essential ingredient to start the machinery and keep it going.

Mary Ann Turner, Curatorial Associate in the department of vertebrate paleontology at the Peabody Museum of Natural History, New Haven, assumed immediate responsibility for the transfer of the bones from storage at the Peabody to display at AIAI. She gave advice and encouragement, and vital information, with infinite patience and good humor even in response to such questions as how much did mastodons eat, what did they sound like, what did they smell like? That takes *patience* and *good humor*.

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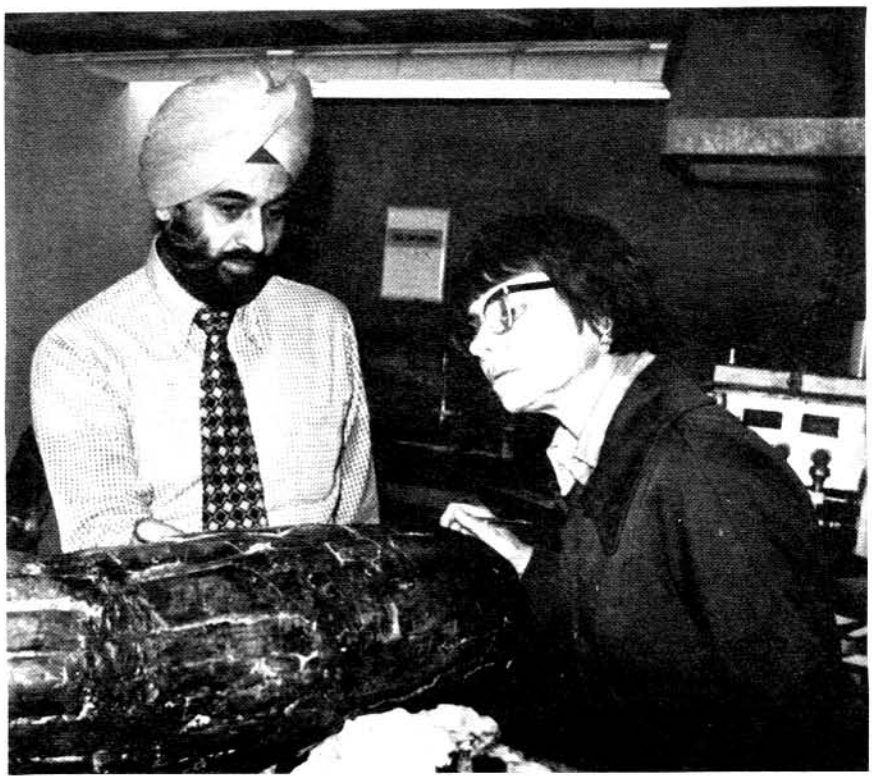
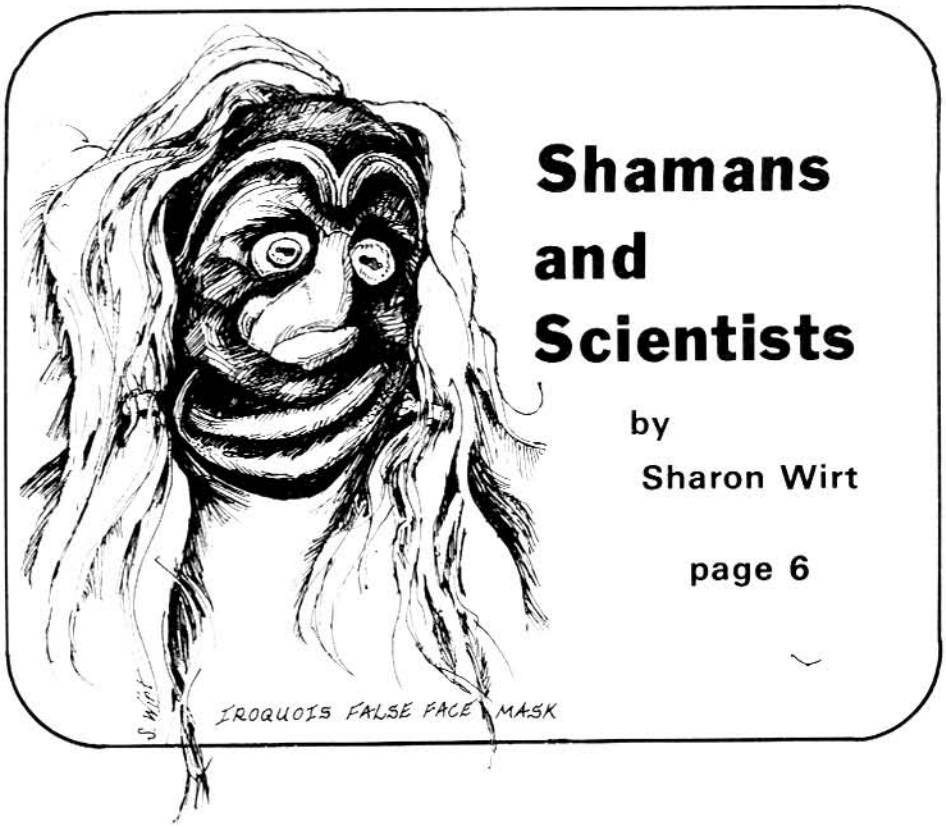


Photo by Nancy Watson

"PJ" and Jane French inspect Mastodon tusk.



Shamans and Scientists

by Sharon Wirt

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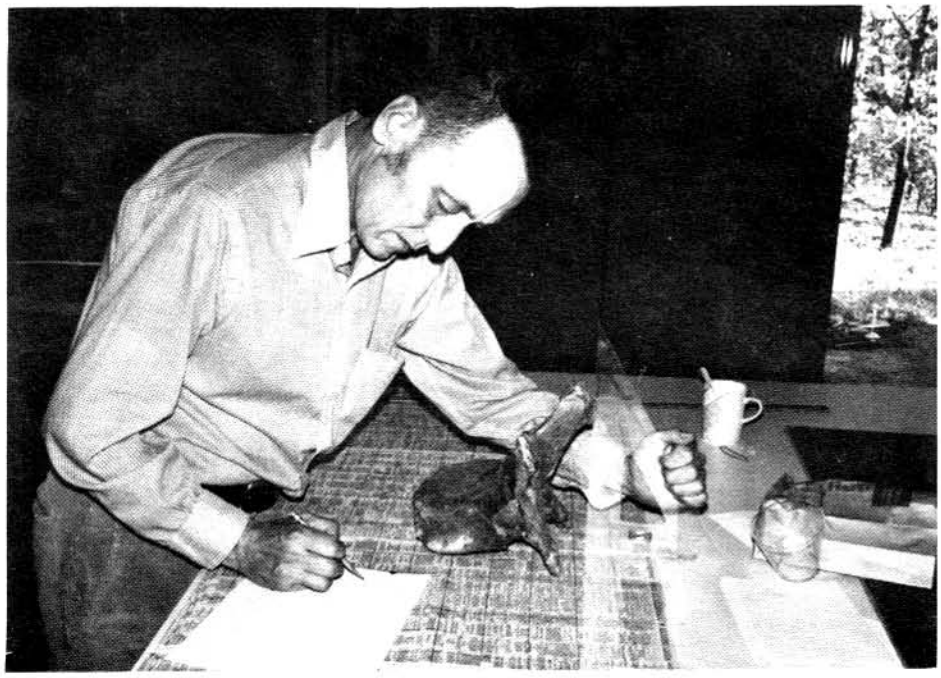
Prithijit Chatrath ("PJ"), Senior Preparator, the Peabody Museum of Natural History, New Haven, began immediately after the "go ahead" was given on the elephant remains to restore and prepare it for exhibit. Working in his spare time and on weekends for us, "PJ" tried as best he could to explain "Egyptian Glue," plastic reinforcements and how to wrap a 45-inch wide, 15-yard long piece of fabric around his head. He did this and more with kindness and a willingness to educate us novices.

We, who have had the benefit of meeting and learning from these three people—especially "PJ" and Mary Ann—won't forget how good they were to us and how they came to our assistance. We will miss seeing them and hope they will come to see us, if only to note if we retained any of the knowledge they tried to impart!

Mary Ann Turner, Curatorial Associate, Vertebrate Paleontology, The Peabody Museum of Natural History, New Haven.



Ellis Settle, at work on scale drawings of mastodon bones.

In Memoriam

Joanne Patricia Warner Deutschmann
November 8, 1939—March 12, 1977

On March 12, a tragic accident took the life of Joanne Warner Deutschmann of Washington, Connecticut.

Joanne was a generous and ardent supporter of our cause since the very inception of our idea for an Archaeological Institute. She served on our Board of Directors from the time we were incorporated until her two-term appointment expired in 1976. She retired off the Board "to give others a chance to serve."

Joanne was a woman of many talents and abilities. The whole idea of discovering human history, and the implications of what we were discovering, always touched and intrigued her. She took part in excavations at Kirby Brook and helped to unearth the first dwelling plans tentatively dated to 1000 B.C. She was a talented artist and served as the Institute's first Chairman of the Museum Exhibits Committee.

One of her early exhibits of the way an archaeological dig was conducted, had a very effective background of one of her oil paintings, which she did especially for us.

A talented, enthusiastic and dedicated friend and benefactor, Joanne has bestowed upon the Institute these rare qualities during the creation and fruition of the Dream we have shared together.

Mr. Duncan Graves
January 3, 1900—April 13, 1977

Mr. Duncan Graves, a long-time resident of the town of Washington, passed away April 13, 1977 after a long illness.

Duncan became deeply interested in our cause from the moment he first heard about our Dream to build the Institute.

He was excited by our discoveries and fascinated by our search and what it might mean to modern man. His contribution to the Institute was a strong, but quiet, one. His faith and trust in our goals and leadership, his moral and financial support of our projects, and his readiness at all times to sit down in a moment of crisis or indecision to guide and advise us was a rare and precious gift.

We profited greatly from the wisdom of his rich and varied experiences.

Annual Meeting

The dancing at the Inn on Lake Waramaug on May 5 was not your basic Arthur Murray. Over 120 members, their families and their guests observed or took part in the activities offered by the Jimerson family of Salamanca, New York. The program for the Annual Meeting was one of music and dance of the Seneca people, westernmost of the Iroquois Confederacy.

Mr. and Mrs. Avery Jimerson, their son Dan, Mrs. Alvina Cooper, and Mr. Herbert Dowdy are recognized by leading ethnomusicologists for the purity and authenticity of their work. They delighted everyone with their dancing and, especially with Mrs. Jimerson's wise, gently humorous commentary on the meaning of each dance and its special relationship to the natural world.

The program was both diverting and instructional. Dinner was good, and so was the company, but the memorable part of the occasion was President Ned Swigart's recognition of Marie Sheehy and her immeasurable services to the Institute. Marie retired on May 1 from active duty at the Center where she has served so loyally in so very many ways since before the official opening of the building. As longtime members know, Marie's irreplaceable service to this organization long antedates the building and even our present name. She has been guiding its daily affairs since the establishment of the first office in Washington Depot.

She was a founding trustee of the Shepaug Valley Archaeological Society and will return to her Board membership in retirement. She will also continue her officership as Secretary, a position she has held throughout.

Photo by Jack Muckstadt

The Jimerson Family - Native American Woodland Dances

Wanted: Plants for Nature Trail

The Indians of the Northeast had a use for everything in their environment. Some plants that they used may or may not have been in the hills of Connecticut when they came here or the plants could have been brought by Indians in dried form. No matter how they got here we know people used certain plants for medicinal and ceremonial purposes. Some plants were used simply as seasonings.

We are now in the process of trying to gather as many of those plants as we can so that Bea Hessell can put them on our Nature Trail. Some plants are easy to find and she has made great strides in her planting. She has asked, however, for some help—not with the work but with procuring plants. There are a few plants she has found in her research that definitely belong on the Trail. Do you have any? Can you let us know where we can get them for the spring planting season? Would you be willing to donate slips, cuttings or plants? These are what we need:

Cinnamon Fern
SpikanardYellow Lady Slipper
Showy Lady's Slipper
Hepatica
Philadelph or Canada Lillies
Ginseng
Labrador tea
New Jersey tea
Bunchberries
Yellow Lady's Slipper
Philadelphia or Canada Lillies

We would appreciate very much your help in the work on our Nature Trail.

Needed: Teachers

Since the early fall months a small, steady, determined group of teaching assistants has been meeting, guiding and instructing school groups. As interest in our educational programs expanded to school systems throughout the State, the number of school visits has proliferated beyond the capacities of even this devoted group.

We need help; only a few more hands—and hearts—would make all the difference between excessive haste and pressure on one hand and the pleasure of being ablt to give to each group the time, attention and creative energy each deserves. Teaching assistants need not be experienced teachers; most present ones are not. Nobody is asked to teach a group—or take any active role—until he or she feels ready. Plenty of general and specific help is given to new "trainees." A modest honorarium is awarded for each class actually taught.

If you think you might be interested, or would like to know more, please call the Center, 868-0518, or Mrs. John Payne, 868-2128. We would like to have you come for a visit when a school group is here. You can see for yourself why our teaching assistants enjoy this work so much.

Mea Culpa

Readers of *ARTIFACTS* are asked to note and forgive an error in the March issue. On page 7 the caption erroneously labels the individual on the rock as the author, Dr. James L. Swauger. The editor apologizes to Dr. Swauger, the readers of *ARTIFACTS* for March, 1977, and the unidentified petroglyph hunter in the dashing hat.

New Staff Members

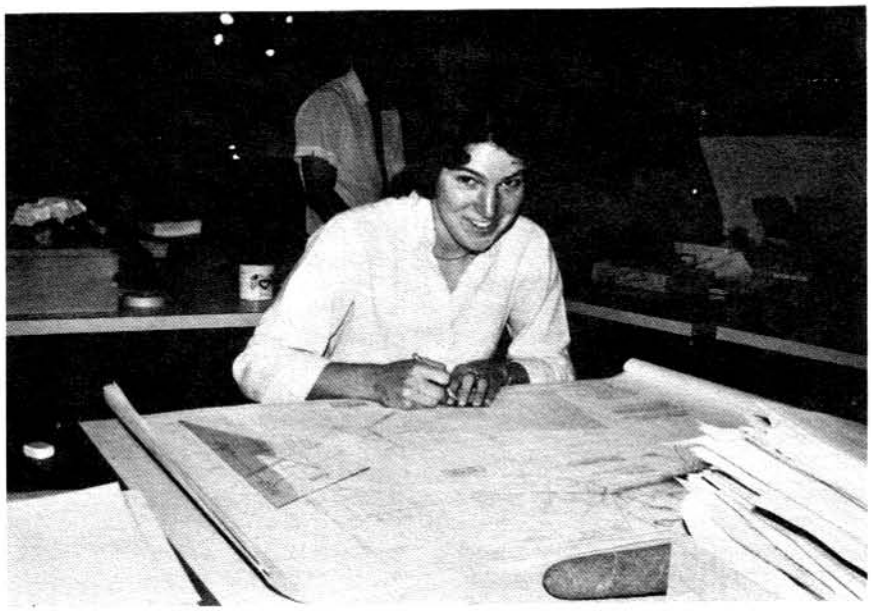
There are some new faces at the Center. We would like to take some space and say a few words about them.

Mrs. Robert H. Mouat of Wilton, Scotland and New Milford, is filling the chair vacated by Marie Sheehy. "Pam" lives in New Milford with her husband. She has two sons, both grown. One lives in Redding with his wife and son and the other is studying architecture at the University of Michigan. In Wilton, Pam was secretary to the editor of Year, Inc., and then Technical Library Assistant (cataloguer) for the Wilton Library Association. While in Scotland, she served as secretary to the Honourable Donald Blades in Edinburgh. Pam is adjusting very rapidly to life at the Center and is ably fulfilling her job. We are all pleased to have her here and wish her all the best in her new position.

Jean Pruchnik comes to us from Bridgewater. She is here to assist our Anthropologist, Sharon Wirt, in the cataloguing of our artifacts. Cataloguing artifacts is very exacting work. It involves the meticulous recreation on paper of a 3 dimensional object. Every line, crack, and indentation must be shown. It is not simply "drawing" a projectile point. Sharon's and Jean's job is one that is an important part of our research work. In order that we become accredited by the American Association of Museums, most of our artifacts must be catalogued.

Jean has a B.A. degree from Maryland Institute, College of Art, Baltimore, Maryland. She found out about our need for an assistant through her introduction to the Center by way of a course she took under Sharon Wirt last spring. She has been in our research room for a while now, drawing maps and diagrams for Roger Moeller's contract surveys. Starting June 1st she will begin work with Sharon on the cataloguing job. A hearty welcome is extended to Jean in the hope that she enjoys her work and profits from her time here as much as we do by having her with us.

Pamela Mouat, new staff member



Jean Pruchnik, new laboratory assistant.

Academic Program 1977-78

Beginning in September, 1977, the AIAI will offer regular, semester-length courses in archaeology and anthropology at the graduate level for Fairfield University. Courses in the fall will be taught by Ms Sharon Wirt and Dr. Russell G. Handsman, our new archaeologist, who will join the staff in June. Course titles and descriptions have not yet been selected by Fairfield University from among those offered by the staff. Interested readers are asked to keep in touch with us, watch local papers, or call the Connecticut Center for Continuing Education at Fairfield University 255-5411.

Area teachers should be aware that the AIAI Visitor Center will also be the site for classes in other subjects offered by other faculty from Fairfield University. It will be possible for holders of the AB degree to fulfill residency requirements in pursuit of a graduate degree by taking courses at the Center in Washington. Details may be obtained later in the summer by calling 868-0518 or the Fairfield University number listed above.

Archaeological Bibliography

Dr. Roger Moeller and John Reid together have written and compiled a bibliography entitled AN ARCHAEOLOGICAL BIBLIOGRAPHY FOR EASTERN NORTH AMERICA. It is a joint publication of Eastern States Archaeological Federation and the American Indian Archaeological Institute. The bibliography will be available the first of November, 1977. The work contains over nine thousand listings under seven different subject headings. It will be an invaluable aid to individuals as a research tool.

The regular price of the book will be $7.00; pre-publication price will be $6.00 if ordered prior to October 1, 1977. The book will be on sale in our museum store at the Center or by mail.

The Role of Museums in Cultural Resource Management

by Dr. Roger Moeller

Dr. Roger Moeller has been, for several months, deeply involved in contracts with state and local governments and private engineering firms, conducting archaeological surveys. Such surveys are an outgrowth of federal determination to preserve, or at least document, the nation's cultural resources. Archaeological evidence of both the historic and pre historic past of the United States is considered one such cultural resource. In the last week of April, Roger delivered the following paper in New Orleans at the annual meeting of the Society for American Archaeology.

The purpose of this paper is not to discuss specific field, laboratory, or library research techniques employed by various groups doing cultural resource management (CRM), but to examine the future and responsibilities of these groups.

The initial flurry of maldirected, unmanaged activity and current plethora of non-institutionally affiliated individuals in CRM is abating. In time they will and should be replaced by professional consulting firms having museum affiliations. This paper will discuss how the regional resource center concept suggested by Charles McGimsey is the logical solution to the inherent problems of responsible cultural resource management.

The acceptance and enforcement of the guidelines proposed by Gary Everhardt in "Recovery of scientific, prehistoric, historic, and archaeological data: methods standards, and reporting requirements" (Federal Register 1977:42 (19):5374-83) will effectively bar the individual, nonprofessional, freelancing, environmental consultant from contract work on all but the smallest scale.

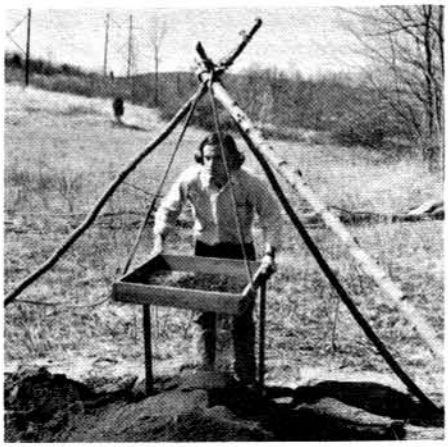
A secondary impact will be to bar the individual professional already affiliated with a university, college, or museum from doing these projects on a continuing basis (other than summers or other vacations). This is not to say they have to be excluded entirely. They can join a team of specialists directed by a fulltime individual. This is, in essence, an environmental engineering firm.

The amount of CRM work to be done has increased drastically in Connecticut from a few years ago. Environmental concerns in general receive more attention. More projects involving federal funding or licensing are being done. The State Historic Preservation Officer's staff now includes an archaeologist to supervise compliance. As a result, the demand is very great for experienced archaeologists to do cultural resource reconnaissance and mitigation of project impact.

Most of the work comes to the archaeologist from the engineering firm doing the construction. These are professionals that expect to deal with other professionals. They are currently somewhat unfamiliar with what the archaeologist is supposed to do, but they know their timetable, need for a proposal and budget, and want it yesterday.

Doing this work on a regular basis requires a full time secretary as the first staff member in the principal investigator's office. Because the proposal must address the locating of cultural remains of all types without regard to personal interests, preference, or expertise, additional specialist are required: historian, historic archaeologist, industrial archaeologist, geologist, and a graphics specialist.

Since these contracts are slow in being given out and arrive unannounced, the specialists may be called upon at odd intervals of uncertain duration. Their schedules must be flexible throughout the year, unless they are hired full-time. If hired full-time, there must be other productive work for them to do.



Despite all of the incertainties the budget has to be cost-effective and cover all of the necessary information within the alloted time. The added necessity for a completed report prior to payment cannot be overlooked.

Up to this point it would appear that the professional consulting firm is the optimum group for CRM. I will argue that they will only get the job done, while an affiliation with a regional resource center will greatly enhance the scientific knowledge gained as well as providing an outlet for informing the public of what was done and why.

The primary function of the regional resource center will be to act as a repository for data generated in archaeological investigations of which CRM excavations are only one part. This includes curation, availability for research, documentation, and exhibition. The local people will know this place as a museum dedicated to preserving, recording, displaying and interpreting local and regional history. Any affiliation of a CRM team with such an institution automatically gives them respectability.

The American Indian Archaeological Institute is becoming just such a center.

The research activities of the museum are supporting two full-time Ph.D. pre-historic archaeologists, two laboratory technicians. Additional field workers are hired as needed. The basic team is supplemented by an historian and an historic archaeologist from Wesleyan University on a consulting basis.

The full time staff are and will be utilized during non-contract periods to teach graduate, undergraduate, and continuing education courses; conduct field schools, act as consultants to the exhibit program; ride the rubber chicken circuit to tell the story of archaeology; do local surveys, study private collections and develop other educational programs.

CRM has changed for the better and will continue to change. I strongly believe the best avenue of development is to increased professionalism and specialization within the framework of the regional resource center.

REFERENCES

EVERHARDT, GARY

1977 Recovery of Scientific, prehistoric, historic, and archaeological data: methods, standards, and reporting requirements. *Federal Register* 42(19):5374-83

Independent Study

From March until the last week in May, eight young men and women, released from their regular class meetings for periods ranging from two weeks to the entire spring semester, were involved in independent study projects at the Center. Kathy Filer, a senior at Kingswood-Oxford School; Loren Smith and Andrew Read, seniors at the Taft school; Joel Varley, Tony Parra and Dave Dunn, seniors at the Gunnery; Jay Flaherty, senior at Pomperaug High School, and Doug Johnson, a freshman at Warren Wilson College, North Carolina—each participated in almost every phase of the work of AIAI.

They washed artifacts, they made stone beads, they assisted in exhibit construction, they surveyed and dug, they even moved a mastodon from New Haven to Washington. For a while they were part of our lives. It was good to have them here, and we hope others will follow.

Shamans and Scientists: Sisters and Brothers in Interptation of Man and Nature

By Sharon Wirt, Staff Anthropologist, AIAI

The editors of Artifacts *take great pride and pleasure in printing the major article which follows. It was first prepared as a talk presented by Ms. Wirt in May to a meeting of the Litchfield County College Women's Society.*

Its appearance here is an important statement of the Institute's concern for cultural anthropology and its pride in the exceptional and diverse accomplishments of its staff anthroplogist.

In an age of science and god-like technologies, the proposition that scientists are the shamans and priests of industrial cultures might seem to some people the equivalent of saying that apples are very like oranges in that they're both fruits. The latter is not a very convincing case. But let's look at some similarities and differences between pre-Columbian North American Indian shamans and priests and scientists of Western cultures to see if the former statement holds water.

What *are* shamans, priests, and scientists? From an anthropological perspective, a shaman is a specialist who, after a certain length of training and some kind of *rite de passage* (a religious experience, personality change, finding access to the supernatural), becomes an interpreter of Man, supernature, and nature; who uses a little understood jargon; and who functions in the community as an intermediary between Man, supernature, and nature—for a fee. A priest is basically the same thing though the training involved and the relationship to the supernatural are different. A scientist? A scientist is also a specialist who, after a certain length of training and some sort of *rite de passage* (usually an academic "white knuckle" examination and certificate of success), becomes an interpreter of Man and nature; who uses a little understood jargon; and who functions in the community as an intermediary between Man and nature—for a fee.

There is a slight discrepancy in definitions; we did not include "supernatural" in defining "scientist." Is it the difference between the natural and supernatural that will relegate shamans, priests and scientists to being mere distant cousins, or can this difference be kept in the family, so to speak? Let's examine the problem.

The supernatural and natural can be best understood as *attitudes* of mind and feeling. The *natural* is the expected, the familiar, explicable, mundane world, which is more or less taken for granted; while the *supernatural* is the realm of the unusual, inexplicable, awesomely extraordinary, not to be taken casually.

The terms themselves are products of European rationalism and were and are used as analytical tools for classifying phenomena. Not everyone classifies this way, however. Many pre-Columbian North American cultures made no sharp distinction between nature and supernature—they were almost one, as in Zen. Furthermore, nothing is *intrinsically* one or the other. The supernatural can later be conceived of as the natural. For example, the 18th century Europeans referred to stone (Neolithic) axes found about as "elves' spittle" or "Jove's Thunderbolts," which is of course a supernatural classification. Later the axes were incorporated into the natural world as artifacts (made by man).

A final point before we move on: whether a people lean more heavily towards supernature or nature in the playing out of their daily lives is *NOT* a sign of cultural superiority or inferiority. It simply represents an adaptation to a particular econiche and cultural history. The supernatural was axial to the pre-Columbian Indian's adaptation, in contrast to contemporary America's stress on the natural.

So far we've established that while shamans and scientists perform similar functions in their respective cultures, shamans do not take the world as casually as scientists. Now we need to look more closely at just what kinds of activities and behaviors surround their roles in order to ascertain how akin they are.

In making up a sort of laundry list we find that shamans and priests are men or women who diagnose and cure illness; find lost objects or people; preduct the future; read and control weather; locate the enemy and aid in overcoming him; help in finding or attracting game animals or influencing the weather for successful food production. In short, they understand and influence events in nature, supernature, and Man. Likewise, scientists are men and women who diagnose and cure illness; read and control weather; are employed in the arena of fighting; help devise programs and devices for successful food production; observe and experiment in order to formulate predictive models (in other words, predict the future) in order to understand and influence nature and Man. The only difference apparent here is that scientists engage in more experimentation.

There are still more characteristics of shamans and scientists to consider, however:

(1) There are all kinds of specialists in *science*, from bone to cardiac doctors, from

zooarchaeologists to palynologists, from exobiologists to social behaviorists, and so on *ad infinitum.*

Some shamans and priests are specialists: among the Iroquois in New York were female pharmacists who made medicine; the Huron Indians in the Northeast had four types of male and female shaman specialists (those who found lost things, those who healed the sick—with a witchcraft specialist whose forte was extraction spells, those who foretold the future, and those who read and controlled weather).

(2) A concomitant of a scientist's role is the creation of confidence in the face of uncertainty. Our epidemiologists (who study potential epidemics like Legionnaire's Disease), geologists (who try to predict earthquakes), and so forth, fulfill this psychological need to feel more secure in an environment—physical and cultural—which poses threats to our well-being.

So too do shamans and priests fill this need. Mayan priests, who were the curators of accurate calendars, figured out for their people which were good luck and bad luck days for agricultural and religious activities and drew up horoscopes, among other duties.

(3) Again from an anthropological viewpoint, scientists serve as social regulators, who see that certain rules of conduct—especially those associated with technology or subsistence—are followed, as these affect the welfare of the group. For example, criminologists have strong influence on what the penal codes will be. Other kinds of scientists like agronomists and chemists help set health and production standards for the growing of our food.

Shamans too were social regulators. If an Eskimo hunter began bragging extensively about all the game he'd brought down, he stood good chance of becoming the victim of sorcery at the hands of another group—perhaps even a shaman—as his behavior violated the Eskimo code of cooperation, sharing, and egalitarianism. In this case, a shaman had to be hired at some expense to perform counter-sorcery, which was an emotional ordeal. A shaman could also be hired to investigate why a group was experiencing bad luck at hunting. Usually it was determined that a taboo had been violated, and the shaman obtained a confession from the violator. There was healthy respect for shamans, who possessed supernatural power.

(4) Scientists are important members of the community with *political* and *economic* power, because of their abilities to keep men and nature on an even keel. To wit, many scientists are employed by the government—those in HEW, the Department of the Interior, and the Secretary of State (who happens to be a political scientist)to instance some in this culture. And certainly, not many could wink at the salaries paid to scientists, especially those at the Hudson Think Tank!

This is true for shamans and priests who enjoyed not only political power, varying in degree from equal status with headmen among many peoples to the theocracy of the Zuni in the Southwest where a civil priest and a war priest headed the political organization. And shamans and priests everywhere were rewarded economically for their services with food, clothing, art work, and so on.

(5) Scientists seem to play a dualistic role of savior and scapegoat in societies. Like Dr. Jekyll-and-Mr. Hyde, a scientist is at once good and evil in the eyes of societal members. Those geneticists now working on creating new forms of life by recombining genetic matter are regarded by some as potential disaster makers, sacrilegious, and worse; whereas others see them as Nobel Peace Prize candidates who may save the day for us.

Shamans too were, because of their "collusion" with the supernatural, people to be awed and respected as well as feared and sometimes suspected of being witches or sorcerers.

As Samuel Coleridge put it in his poem, "Xanadu":

> Beware! Beware!
> His flashing eyes, his floating hair!
> Weave a circle round him thrice,
> And shut thine eyes in holy dread,
> For he on honey dew hath fed,
> And drunk the milk of paradise." *1*

Finally, in determining the kin closeness of shamans and scientists, we need to examine the conceptual relationships between them and nature, supernature, and Man. It's an anthropological contention that shamans and priests and scientists alike deal both on the so-called scientific plane and on the magico-religious plane, albeit in varying degrees.

All North American Indians before European contact held *animistic* beliefs—-animism being a belief in souls or spirits in animals, plants, people and in some instances places. The Huron Indians believed that one of a person's souls stayed with the body after death unless it was reborn in a child—which was why a child sometimes resembled a relative like a grandparent. In the early years of the study of reproduction, *viz.* that within the sperm, they believed, was a tiny replica of a human being who grew like Topsy, as it were,and it wasn't until the invention of the microscope that this theory was disproved! Now we talk in terms of genes. Well, one Huron's soul is another man's genes.... They both work as explanations.

Also, many Indian peoples endowed certain things with a supernatural, impersonal power which had the potential to get out of control but could be leashed by way of magic or supernatural assistance. For example, the Fox Indians of the Plains referred to a thunderstorm as having a *Manitu.* We call it electricity and leash it via science.

Shamans, priests, and scientists, however differentially, nonetheless still employ magic, religion, and science in interpreting the world. Magic and religion are almost always synergistically intermixed, in varying proportions depending on the culture, yet there is a definitional difference between them. Religion calls on supernatural powers and beings by way of appealing to their vanities, ethics, or sympathies; propitiating; or revering. Magic, on the other hand, is more like science in that the belief is that one can cause an effect by following a step-by-step procedure (ritual) which automatically brings about the expected result.

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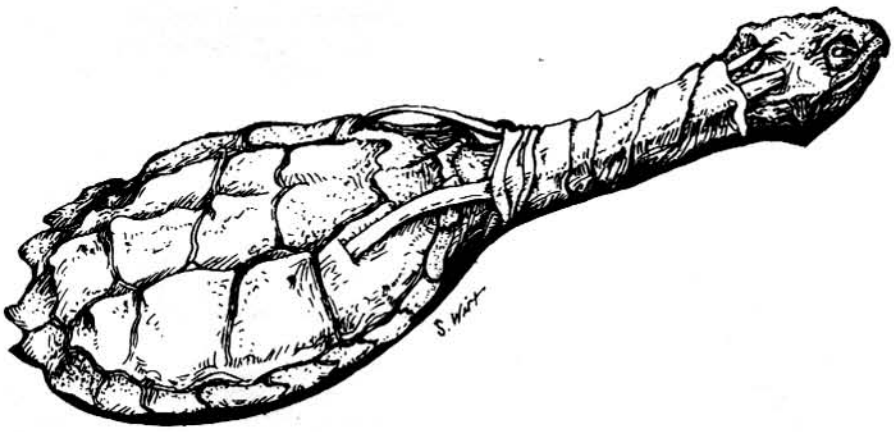

Snapping turtle rattle used in sacred Onandagan ceremony

Some attendants or types of magic are magic numbers and imitative magic. 2

Mayan magic numbers are 4, 9 and 13. The Maya divided up their world according to these numbers: 4 corners of the earth; 9 underworld levels; and 13 levels of heaven. In this culture, 3 is a magic number. We tend to group things in threes and feel that something is ideally complete if done thusly. Many of our scientific formulas have three parts or elements:for example, $E = M C^2$(Einstein's theory of relativity), or $KE = \frac{1}{2}M V$ (Kinetic Energy = ½ Mass x Velocity^2), and so on ad nauseam.

The Navaho of the Southwest didn't touch the dead and feared dreaming of death; they felt this would cause illness. This is the type of thinking associated with imitative magic. Certainly there is some kind of imitative magic behind our former use of white in hospitals; we associate cleanliness with the color white. Therefore, if everything (uniforms, walls, etc.) is white, it follows (magically) that sterile conditions will result. By the way, doesn't it also take a certain amount of magic to extrapolate from lab rats to humans with regard to saccharine and cancer?!

One of our scientific luminaries, Albert Einstein, was speaking of the supernatural when he said:

> *"The most beautiful thing we can experience is the* mysterious. *It is the source of all true art and science."*
> (emphasis mine)

Speaking of medicine, shamans and priests treated successfully many real and psychosomatic ills, and many, like the Iroquois, practiced sophisticated psychiatry. The Iroquois believed that people harbored deep, dark soul wishes which were not revealed to a person during waking hours but most often in dreams. Therefore, a shaman was called in to interpret an ailing person's dreams. The cure essentially consisted of having the patient "act out" his or her soul wish. Iroquois shamans had diagnosed and treated repression and suppression long before Freud came into the picture! And, shamans made house calls....

Finally, many shamans and priests were not only excellent weathermen but shrewd, finely-tuned observers of nature. An Eskimo shaman was not paid and lost credulity if he or she kept reading the weather incorrectly (would that we could do so with our meteorologists!). Mayan priests developed a lunar calendar that was off by only a few 100/1000's of a fraction of a day. The Mayans also worked out a highly accurate 365-day calendar superior to that developed by Pope Gregory XIII 1,500 years later in Europe. We are greatly indebted to the Indians as well for the domestication of maize, beans and squash, to name only three (there's our magic number again!) foods; and, at one time over 200 medicinal drugs—which included some from South America—were listed in the 1820 *U.S.Pharmacopoeia*, though most have been replaced with synthetic drugs.

Shamanism: Divination by Firegazing

At this point we will leave it to the reader to decide whether shamans and scientists are indeed brothers and sisters in the interpretation of Man and nature.

NOTES

1 In Wallace, Anthony, *Religion: an anthropological view.* Random House, New York.

2 A definition and examples of contagious magic have been omitted to conserve space.

3 Einstein, Albert, "What I believe," *Forum,* October, 1930.

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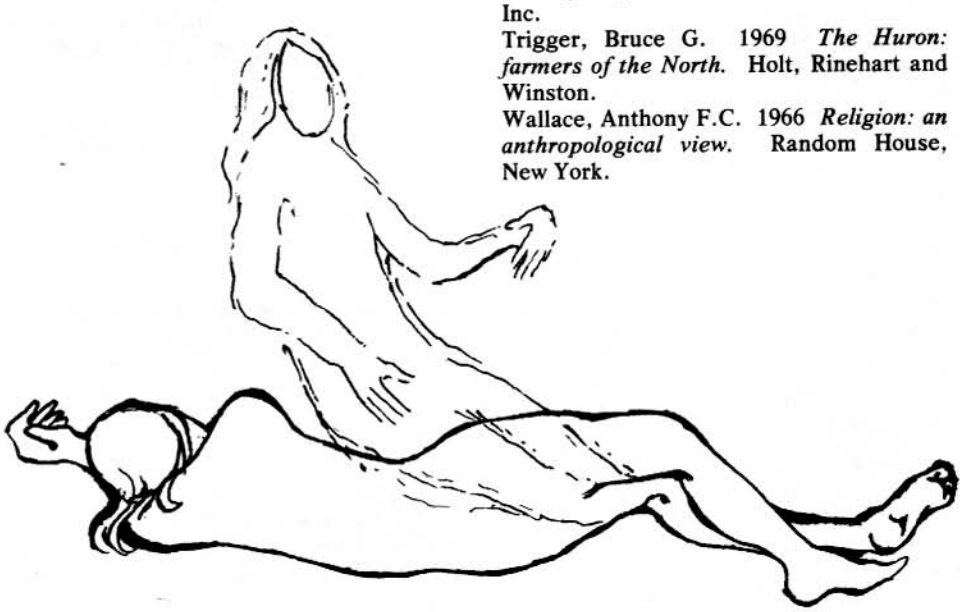

Shamanism: Soul Flight

Petroglyphs of the Northeast

By Edward J. Lenck

Mr. Lenik is a specialist in petroglyphs of the Northeast. He is the author of a number of articles, some of which have appeared in The Bulletin *of the New York State Archaeological Society, and in* Pennsylvania Archaeologist, *Bulletin of the Society for Pennsylvania Archaeology, Inc. The article which follows was prepared specifically for this issue of* Artifacts *and was prompted by Dr. James Swauger's article, titled "Petroglyph and Pictograph" which appeared in the March issue of the newsletter.*

Out of the prehistoric past have come various carvings on rock that speak of ancient observations and craftsmanship. When we view the carved stones, our minds race with many questions: What did the carver have in mind when he set his flint graver or stone pick to the rock? What were his motives behind his artwork? As we ponder these questions, we begin to speculate further as to who carved the symbols and how long ago? Although the carved stone before us is silent, it bears an ancient message. It tells us of the presence of early man who may have said: "I am here, I have put my mark upon the world."

Scholarly interest in aboriginal rock art began in the late 19th century when Garrick Mallery published a work entitled *Picture Writing of the American Indians.* In his book, Mallery recorded petroglyph sites and symbols throughout the United States, but only a few were mentioned in the Northeast. For example, Mallery briefly describes but one petroglyph in each of the states of Maine, Massachusetts and Connecticut; two petroglyphs in Rhode Island; and none in the states of New Hampshire, Vermont and New Jersey. Following Mallery's initial work, little was done to continue recording petroglyphs in the Northeast. As late as 1967, the petroglyphs in the northeastern United States remained largely unknown and unreported. In fact, Cambell Grant in his book *Rock Art of the American Indian* devotes an entire chapter to petroglyphs in "The Eastern Woodlands," but again none are described or listed in New England and New Jersey.

As a result of this paucity of information, I decided a few years ago to spearhead a cultural documentation program on Indian petroglyphs in the northeast. The focus of my program will be to discover and compile an inventory of rock art for each New England state and New Jersey. Ultimately, an interpretive or diagnostic analysis will be made for each petroglyph along with a record of its location as well as cultural comparison within the geographic framework of the study. The study will record the usual rock art sites: those carved on huge boulders and ledges. In addition, the documentation program will include "portable" petroglyphs—this is, items such as pendants, atlatl weights, and other small objects that bear carved designs or symbols. This latter area of aboriginal rock art has been largely ignored.

To date, my study has turned up dozens of petroglyphs in all the New England states as well as New Jersey, including both permanent and portable types. In Massachusetts, for example, several interesting petroglyphs have been found and recorded along the shores of Assawompset Lake, including such design motifs as the hand and foot and the thunderbird. Another major site recently reported and recorded is Emden, Maine — the Indian Rock Petroglyphs. This site is along the banks of the Kennebec River and literally hundreds of designs or symbols have been pecked into the rocky ledge.

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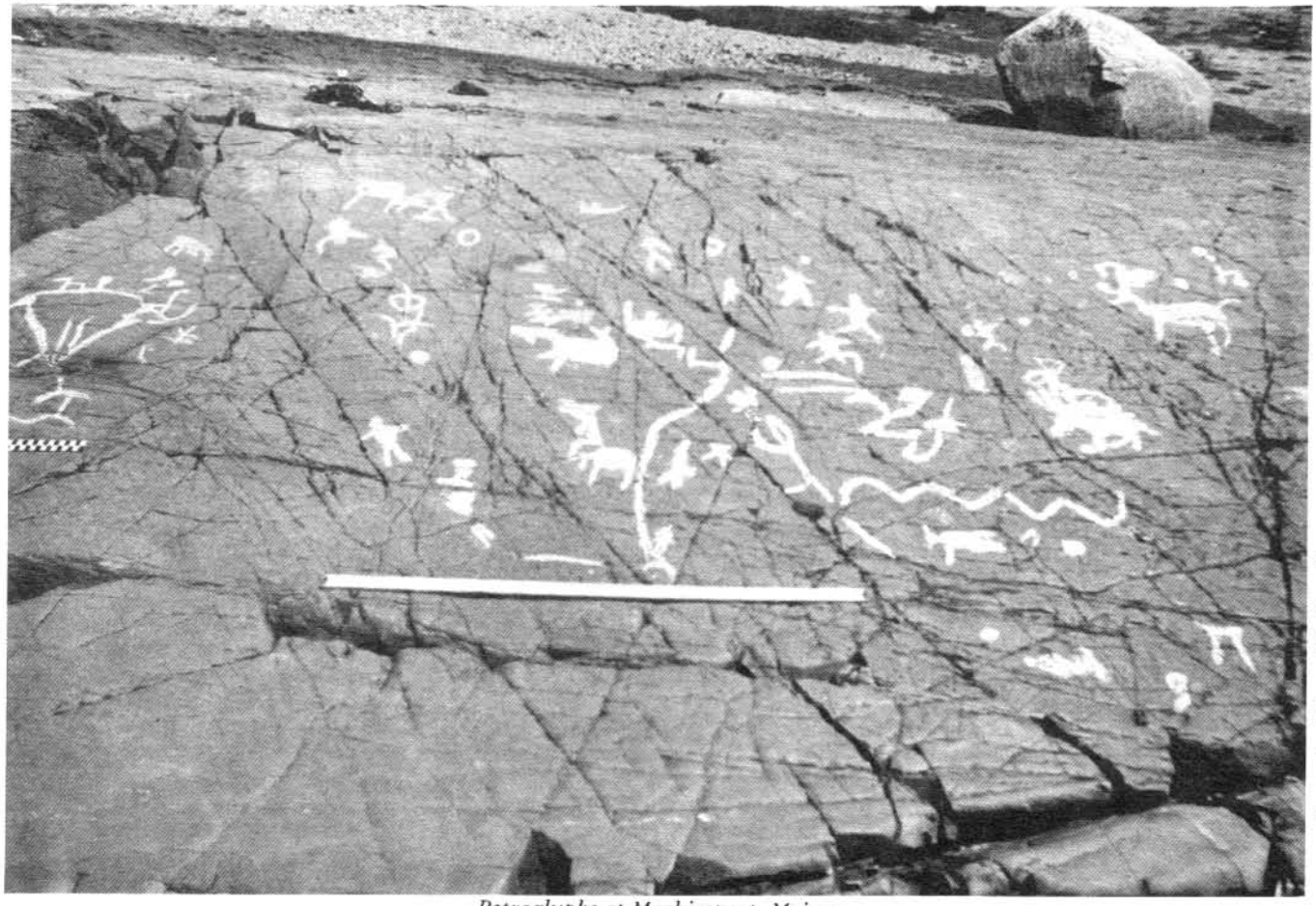

Photo by Edward J. Lenck

Petroglyphs at Machiasport, Maine

A survey of early literature and documents has also turned up some interesting petroglyph sites. In Vermont, for example, two petroglyph sites have been found, one along the Connecticut River at Bellows Falls, and another along the White River at Brattleboro. The first contains carvings of "human" faces and the second depicts several thunderbirds.

Another fascinating site has recently been rediscovered by this writer on Pinnacle Mountain near New Preston, Connecticut. This site is not an aboriginal one but dates to the historic period instead (c. 1760). It consists of four Hebrew inscriptions which were cut or incised into the rock on top of the mountain. Originally reported by Dr. Ezra Stiles in 1789, the Hebrew inscriptions have been translated to mean Adam, Isaac, Abraham and Sarah.

In studying and recording the petroglyphs of the Northeast, several general conclusions and observations can be made. First of all, petroglyphs are illustrations, not writing, and since they are not writing they cannot be read. At best, the most we can do is to try to identify the symbols but even this is a hazardous undertaking. Secondly, in general we are unable to date most petroglyphs. However, from an anthropological point of view we have been able to gain some insight into cultural-historical relationships among them, and with other aspects of prehistoric cultures based upon studies of content, distribution, style and technical analysis.

On the question of dating, some petroglyphs can be roughly dated by their subject matter. For example, designs of houses, and Christian Crosses, (such as those found at the Indian Rock Site in Emden, Maine) can date them to the historic period. Furthermore, the degree of erosion of a rock surface and its general appearance can give us some clues as to relative age, but precise dating by this method is impossible.

The study of changing art styles on the other hand could be useful in dating petroglyphs. In particular this can be done by using portable petroglyphs or carved objects that have been dated from their provenience in stratigraphic levels of known age. Finally, superposition of later carvings over earlier ones is useful in establishing relative dating.

The third item to keep in mind is the stone itself. Stone is a difficult, laborious, artistic medium and thus much time and effort went into carving each line and figure. Considerable care was taken in selecting the particular rock face on which to work. It is strange to note that while one face may be covered with designs another nearby is bare. The meaning or significance of this feature is not clear at this time.

Finally, we find that petroglyphs in the Northeast have been executed in a variety of techniques: namely pecking, pecking and rubbing, incising and excising. Most of the permanent petroglyphs are found along the shores of lakes and rivers, and along the Atlantic Coast, while portable ones have been found at various locations.

Pop-eyed bird stone - part of AIAI collection (Edward Rogers Collection), note engraving.

As I study the various petroglyphs, I feel that I am taking a "journey through time." *As we record these sites,* our feet press the earth where the carver once stood and we feel the air on our face as he did. As we stand in front of the carved stones, we begin to know something of prehistoric man's involvement in nature and his world view, from which the image on the stone has emerged.

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Volunteer Digs

Institute President Ned Swigart will direct the volunteer digs again this summer. From June 29 through August 6, four days per week, Wednesdays through Saturdays, the serious amateur or the totally inexperienced novice will have the opportunity to learn field procedures under supervision on an actual site. In addition to providing members with the opportunity to dig, this project is designed to obtain artifactual information for research purposes.

All AIAI members are entitled to participate in the volunteer digs, but those who wish to enjoy the fullest appreciation of the problems and promises of archaeology are urged to enroll in the training sessions or, if possible, a two-week field school. The background thus acquired ensures greater satisfactions in the volunteer experience.

Volunteers should meet at 8:45 a.m. in front of the Congregational Church on Washington Green.

Membership Opportunity

All members of the American Indian Archaeological Institute are also by virtue of that membership institutional members of the Eastern States Archaeological Federation (E.S.A.F.). This is not, however, the same as having an individual membership. E.S.A.F. has recently asked that we convey to our members an invitation to join the regional organization and an explanation of the advantages of individual membership. We are pleased to reprint, below, E.S.A.F.'s invitation to membership. The next annual meeting will be held in nearby Hartford, on November 3-6, 1977.

"You can now obtain an individual membership in the Eastern States Archaeological Federation. This membership entitles you to receive an issue of the annual bulletin

continued on next page

(contains membership society reports and abstracts of papers presented at the annual meeting), a newsletter (published quarterly), membership card and a volume of the monograph series: *Archaeology of Eastern North America.* You will also receive notices of other E.S.A.F. occasional publications that will be available from time to time. The annual membership is $10. Address all inquiries to E.S.A.F. Business Office, c/o Island Field Museum, R.D.No.2, Box 126, Milford, DE 19963. E.S.A.F. is a non-profit organization.

The Eastern States Archaeological Federation is an organization representing over 12,000 professional and avocational archaeologists from 25 states, provinces, and territories of the eastern part of the U.S. and Canada. During its 45 years of existence, it has fostered the advancement of both prehistoric and historic archaeology throughout eastern North America. E.S.A.F. holds its annual meetings in which the most recent archaeological discoveries are discussed and illustrated by professional and amateur archaeologists. The annual meetings are rotated throughout the area of its membership and are open to the general public. We invite you to join and participate in E.S.A.F. activities.

Seldom Seen Treasures

We at AIAI have some treasures that usually don't show up in our display cases—they are, however, in many ways as valuable to us as our projectile points, trade axes and native American crafts. These "treasures" are our volunteers.

We have a core of people who come on a regular weekly basis and help. Sometimes for one reason or another they are unable to be here and so we miss them. When time permits they return and we are grateful. Not one of them is afraid of tedious work or work that involves getting their hands dirty or their backs weary. They are here to help and in any way they can.

Obviously to try to name each and every person who has donated hours and hours of time to us would fill this issue of *ARTIFACTS* and then some—you people know who you are and we have not forgotten you—and by the way, we do miss you!

Volunteer work at the Center ranges from stuffing envelopes to measuring Mastodon bones—we are lucky in the

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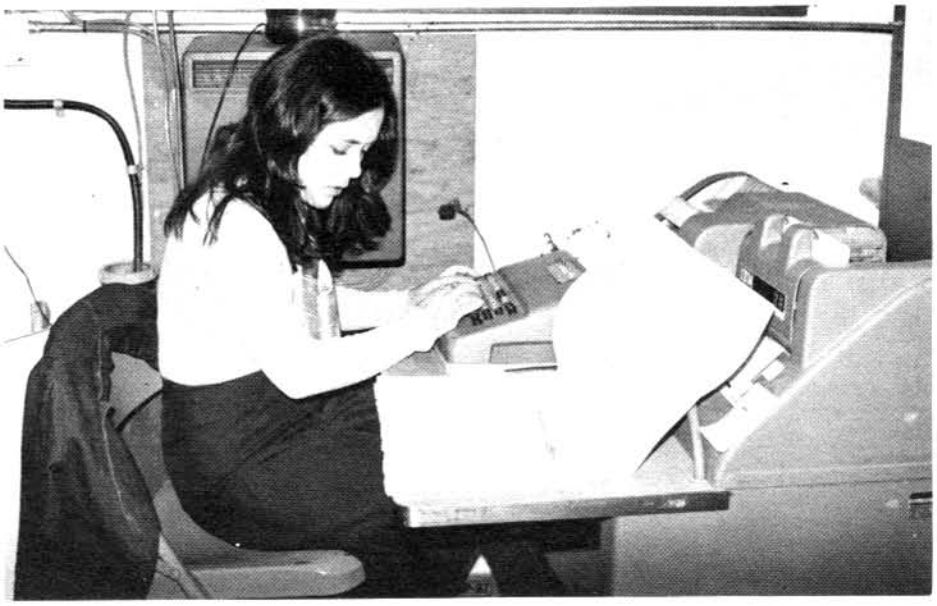


photo by Nancy Watson

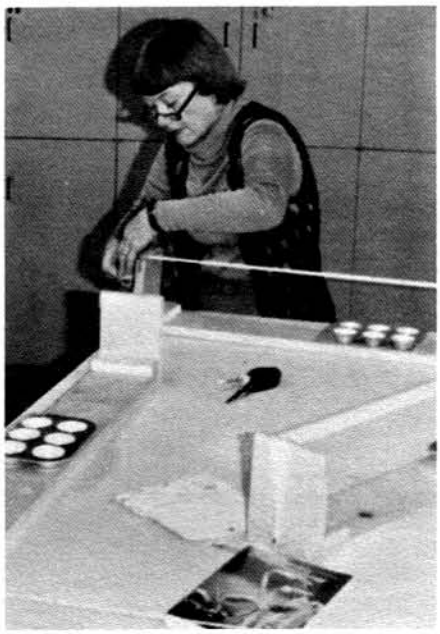
Top: Donna Vargo "Key Punching" Dr. Moeller's bibliography; center: Cynthia Sturdevant, one of our long-term volunteers; right: Kay Schaller, catalogue volunteer.

quality of volunteers we attract for they are willing to do both and know that what they are doing is important—regardless.

Many of our projects at the Center require people with special experience. Somehow they seem to come to us when the need arises. Donna Vargo from Danbury stopped in one Sunday..."Just wanted to know if you needed any typing done...I can take things home with me and I'd be glad to help." Donna will probably be typing this article for this issue of *ARTIFACTS!* Donna also happened to mention that she'd done "a little work" on a keypunch machine. Dr. Moeller snapped her up for help in keypunching his bibliography. Betty Synnestvedt corrects Donna's keypunched cards with the same vigor she uses to work on a dig site!

Jane French found that she and her husband were moving to the area and immediately sought us out. "Can you use me? I've done some cataloguing and..." Say no more: Jane has been scratching tiny numbers on artifacts ever since. From tiny numbers Jane moved on to bigger things—the Mastodon. Jane will see to the "care and feeding" of the big guy to see that he maintains his good health. But Kay Schaller will be continuing in the scratching of tiny numbers business for Jane. Ellis Settle likes to get things organized, so he set the membership cards in order and did such a good job that he seemed to be the natural choice for "the person to measure the Mastodon bones." Tom Mahoney is our expert artifact washer—of course when his dishpan hands get the best of him we let him rest by doing research on pipe exhibits and tobacco.

If all of this seems terribly confusing and not quite "right" it's that our volunteers' talents are as many and diverse as they can be! We would be lost without them and need them all. So if you want to see some *real* treasures (we hesitate to use the word *artifacts*) check out our Research Room. And if you're on the Nature Trail and run into a lady mumbling about where the Bloodroot REALLY should go—that's just Bea Hessel fixing things they way they should be. Her dog *Moxie* who sometimes comes to help does not bite.



Weymouth Sommerset artist volunteer

House Hunting

Dr. Russell G. Handsman, his wife, two children, two cats and a dog are looking for a place to live in the Washington area. Their need for housing comes from the fact that Dr. Handsman will be joining the staff at AIAI. If you know of a place large enough—three bedrooms, please—to fit them that is available for rent, please contact the Center and let us know. He will be arriving in mid-June, so you can see we would like to hear from you soon! We will let you know more about Dr. Handsman, his job duties, background and family in the September issue of Artifacts. Right now, we'll say we are pleased he is joining our staff and hope this appeal will be of help to him.

Changes

On June 17, Richard W. Davis will leave his position as Institute director to become headmeaster of Renbrook School in West Hartford. Dick became first director of AIAI on July 1, 1975. He had, for most of his career, been a teacher and school administrator. In returning to school work he is also returning to the Hartford area, from which he came to the Institute, and to the school from which two of his children graduated.

President of the Institute Ned Swigart will also serve as chief executive officer after June 17.

ARTIFACTS

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