

ARTIFACTS

Vol. VIII No. 1 Autumn 1979

The American Indian Archaeological Institute

WASHINGTON, CONNECTICUT: NAMED 1779, FIRST SETTLED 8,000 B. C.

Editors' Note: 6LF21: A Paleo-Indian Site in Western Connecticut is a major, book-length site report being written by Dr. Roger W. Moeller, Director of Research, on the earliest carbon-14 dated site in Connecticut. Washington, Connecticut may have been named in 1779, but the excavations conducted in 1977 by the AIAI show that it was first settled more than 10,000 years ago. In this article Dr. Moeller will mention briefly some of the most important findings from his two years of analyzing artifacts and other data from this site. The book is expected to be published during the winter of 1979-80 and will be available in the AIAI Museum Shop.

During a 12-week period in the summer of 1977, the Research Department of the AIAI conducted a series of field schools which located and excavated the only known *in situ* Paleo-Indian campsite in Connecticut. Because much of the Paleo-Indian portion of the site was buried by more than five feet of dirt from periodic flooding in the Shepaug Valley over the past 10,000 years, it was totally undisturbed by construction, plowing, previous excavation and pothunting. The very fine-grained sand in which the artifacts were found shows that natural factors including floods, erosion and burrowing animals have not caused significant disturbance either. The dearth of disturbance is a nearly unprecedented occurrence among Paleo-Indian sites in the eastern United States.

The years of analysis were very rewarding. Not only did we receive a carbon-14 date of 10,190 years ago, which is within the correct range for Paleo-Indian, but the error factor of only 300 years indicated very little contamination of the dated charcoal.

With such a low error factor, coupled with the near absence of disturbance, an unthinkable hypothesis was generated.

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OUT OF THE EARTH I SING: THE STORY OF CORN

These reflections on corn, its meaning and related ceremonies and in terms of looking at the world are from a Native American perspective.

Walking in harmony with the cycles of the seasons was a vital concept evolving from a specific way of life amongst Native American peoples of North America. They believed that they were a part of the universe and all living things were their relatives. They believed that it was important to maintain the balance of nature and to not upset the natural order of things. To them sustaining that balance meant survival. Holding special ceremonies at specific times was one way of ensuring that harmony. Not only did ceremonies reflect respect but they were part of the annual cycle. The ceremonies, songs and dances were an integral part of the seasonal changes and assisted in keeping the balance of those life-giving forces.

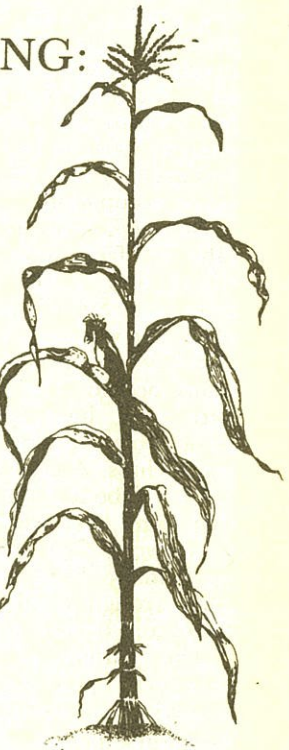
Soon we will all experience the time of change again. The leaves will change and fall, animal life and plant life will prepare for winter. To the Indians of southern New England it is now *Micheenee Kesos*, the month of the ripening of corn. To the Iroquois, it is the time of *Ah dake wa-o.*, time of the Green Corn Ceremony.

For thousands of years corn was the center of the economic cycle of many tribal groups, particularly in the East. In fact corn was a greater source of nourishment than all of the other cultivated food plants combined. For those tribes who included the cultivation of plants in their subsistence patterns, corn dominated their food-getting activities as well as their ceremonies. They utilized and celebrated corn in a variety of ways. To all of these people it was seen as a gift from the Creator to be respected and honored, for it was believed that this sacred plant nourished the spirit as well as the body.

The origin and age of corn remain a scholarly debate, although many scholars agree that it was probably domesticated in southern Mexico about 4000 B.C. The pollen of wild maize goes back to 80,000 B.C.¹ When cross-pollination occurred with a Mexican grass, teosinte, it greatly improved corn in size, taste and hardiness—for the first corn was less than three inches long.² Among the many varieties which the early peoples of Mexico had cultivated, about five major ones found their way East: flint, dent, sweet, flour and pop corn.

When Columbus arrived in Haiti, he mistakenly called corn, "panic grass" (*panizo*). Spanish explorers thought it was Turkish wheat. And by the middle of the 18th century, when botany had emerged as an accepted science, it was identified as *Zea mays*. The term maize comes from the Arawak word, *mahiz*. (The Arawak people were located in the Carribean.)

Unburdened by scientific terminology and cultural nearsightedness, Native American peoples developed this marvelous, prolific plant, sometimes in the



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Could this have been a single occupation site with only one group of Paleo-Indian people who camped here and departed? This would mean that whatever they left behind would have been left undisturbed by subsequent Paleo-Indian groups. We would have been able to sort any non-Paleo-Indian groups by the vast differences in their diagnostic artifacts, but we could not have separated two groups which had the same tool manufacturing techniques and made nearly the same kind of artifacts. With all of the hints that this was one of the few undisturbed Paleo-Indian sites, the analysis took on increasing significance and urgency to determine if it was also a single occupation.

Although only 42.75 square meters (460 sq. feet) were excavated, 75 artifacts and 7,358 waste chips were recovered. Since it is believed that 90% of the site was excavated, this small area could not have been a camp for very many people. The people who did live here must have been manufacturing stone tools, judging by the quantity of waste chips. A close examination of the 2.3 kg. (about 5 lbs.) of chips revealed that some tools were being made from water-worn flint cobbles, while others were made from previously prepared cores (rough blanks), discarded waste flakes and broken artifacts.

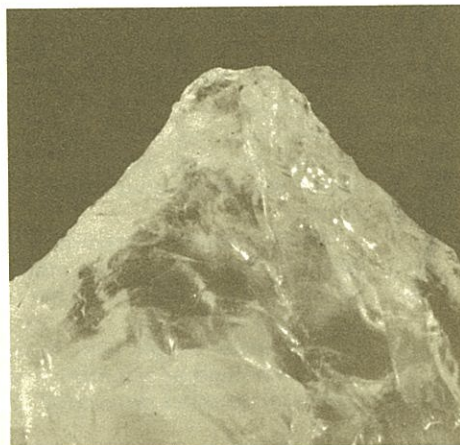
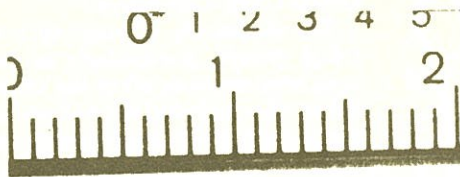
The variety of tool types found (gravers, graving spurs, knives, spokeshaves, fluted projectile point, miniature points, drill, hammerstone and scrapers) and the paucity of each individual type suggests not only a diversity of tasks being performed, but also a very small tool kit. Although wear marks typical of tool manufacturing, hide working, bone working, butchering, wood working and plant processing functions can be seen microscopically on different artifacts, there are so few of each different kind of tool that an occupation of the site by more than one group is almost out of the question. Each different group would have had to have known the activities undertaken by the previous occupants and then undertaken different ones to have left this diverse, but sparse assemblage.

Another line of evidence investigated in the analysis was the distribution of stone chips. Most of the chippage was concentrated in the central portion of the site and decreased in frequency to the edges of the excavation. Within each of the .05m levels of each 1.5m square the amount of chippage gradually increased with depth until a maximum was reached, at which point the frequency declined. A chart combining the amount of chippage in each level for all squares showed the same distribution

for the entire site. An examination of the alternatives revealed this was possible only if there had been a single occupation.

If more than one group had camped there, they would have had to have centered their toolmaking in the same place for the relative amounts of chippage to have stayed the same. While the exact campsite might have been selected by two groups at different times, how would the second group have known how much toolmaking occurred in each part of the camp and that they could do slightly less or more to make the archaeologist's charts look good? Possibly there were many groups which coincidentally and accidentally rearranged one another's debris to make the distribution found.

Using the scientific rules of parsimony and sufficiency, I have interpreted the distribution in the way requiring no coincidences or fortuitous accidents, but merely natural causes. The people camped on a very sandy part of the floodplain. Because this was a geologically stable surface, the artifacts merely settled into the sand after their departure. Since most of the movement in the soil is vertical, areas evidencing more chips had been the locus for more toolmaking in the past. Since thousands of years had elapsed before the next occupation or the next major flooding, the Paleo-Indian camp's artifacts were not subjected to major disturbances or admixture from other group's activities. While all of the artifacts from Archaic camps on the same section of floodplain were also settling into the soil just above the Paleo-Indian camp, these artifacts had been in the soil only 4,000 years and did not have time to intrude into the deeper levels.



The hypothesis of a single occupation site cannot be proved beyond a shadow of a doubt, but it is more strongly suggested at this site than any other undisturbed Paleo-Indian site having a similar array of specimens. If you accept the single occupation hypothesis, then the potential for analyzing the undisturbed remains of a single group occupying the Shepaug Valley 10,000 years ago is limitless. Certainly this will stimulate further analyses and comparisons at the other Paleo-Indian sites. Now we can observe the variety of tool manufacturing techniques being used at a point in time. We can see how many of each tool were used with respect to each other type. The minute characteristics of each different tool type can be studied for possibly chronological significance.

Once a single occupation has been studied it clears up the mysteries or mistakes created by drawing conclusions from a repeatedly occupied site. Repeated occupations do not reinforce the typical nature of a given culture; they create a mosaic composed of an unknown number of shared traits which overlap with those of other cultures mixed with the unique traits of each not shared with the others. This causes a mixture or differences which may actually have been temporal, functional, or even idiosyncratic: cultural evolution, different purposes for different tools, or simply different-appearing tools for accomplishing the same task. A single occupation site can be a guide to a refined understanding of previously excavated multiple occupation sites, a guide to future excavations, but never a panacea. One single occupation site will never suffice even for a single culture.

The last point to be discussed from the book will be finding Paleo-Indian sites. Paleo-Indian sites such as 6LF21 are where you find them. A summary of Paleo-Indian site locations published in 1970 would have led the archaeologist only to those Paleo-Indian sites which were disturbed by plowing, erosion, or construction. That is because people were looking for them in the easy places or were simply stumbling upon them in places with little flood deposition: on tops of hills, in caves, or along eroded riverbanks. The good sites are deeply buried on floodplains where 10,000 years of disturbance has not affected them.

Close-up of Paleo-Indian drill.

Note alternate beveling on either side of the base of broken tip. This beveling is characteristic of drills.

Photo by Myron Mack, Fairfield, Ct.

The book will cover these and other topics in detail. How the site was found, how it avoided major disturbance despite major flooding, pictures of the artifacts, photographs of the microscopic wear from use, comparisons to other Paleo-Indian sites, tables and figures showing the distribution of artifacts, as well as the detailed steps in the excavation, analysis and interpretation of the artifacts. The book has been organized to interest and inform the general public, individuals with some archaeological background, as well as professional archaeologists.

—Roger Moeller



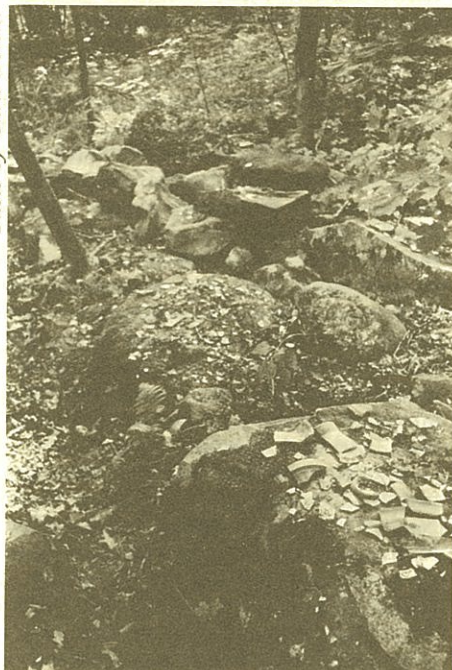
SIDE NOTES

RESEARCH DEPARTMENT TO LEAD TOUR OF LITCHFIELD COUNTY

On October 13, 1979, at the height of the autumnal display, the Research Department will conduct a tour of significant archaeological, historical, architectural and geological sites in Litchfield County, Connecticut. A chartered bus will leave the Institute at 10:00 a.m. and return by 4:30 p.m., visiting a variety of localities which are currently being studied by members of the Research Department. Russell G. Handsman will lead the tour and plans to discuss a number of topics including the prehistoric occupation of the Housatonic and Shepaug Rivers, the glacial and post-glacial fluvial geology of the Housatonic and Shepaug Rivers, the architectural and social history of Congregational Churches, the settlement history of 18th- and 19th-century towns and the technology and culture of historic industrial sites. If you've been wondering what the Research Department is doing, why not plan to join us... For those who like to travel through time and space simultaneously, it's an experience not to be missed! The tour is being offered to the Institute's members only, for \$10.00. Bring your own picnic lunch. To make a reservation (by

THE ARCHAEOLOGICAL RESOURCES PROTECTION ACT OR THE ABSENCE OF THINGS PAST

Photo by Chris Borstel



Vandalized site in Connecticut. Holes were haphazardly dug by a pothunter looking for old bottles; potsberds were strewn on rock.

Wednesday, October 3) and obtain further information, phone the Institute. Space is limited so don't hesitate.



Samples of charcoal from the 6LF21 Paleo-Indian site excavated by AIAI were submitted to the Department of Forestry and Wildlife Management, Wood Science and Technology, University of Massachusetts. The samples were identified by Karen Saunders, a student of Dr. Bruce Hoadly. One was identified as *Quercus* spp., a member of the red oak group; the other was possibly *Juniperus* spp. (Juniper) or *Thuja occidentalis* (White Cedar). Although these trees are found in cold climates, they are not found in glacial or periglacial econiches. This should help to dispel the myth of the Paleo-Indian big game hunter stalking game across the trackless wastes of the treeless tundra. A more complete interpretation of these extraordinary findings will be published in a forthcoming issue of *Artifacts*. (See related article, "Washington, Connecticut: Named 1779, First Settled 8,000 B.C.," this issue.)

At long last there is federal legislation in the making to protect archaeological sites in which both Native American and Euro-American history are inearthed. Backed by archaeologists, museums and concerned private citizens, the Archaeological Resources Protection Act (ARPA) was introduced into the Senate in February, 1979, and is already out of Senate and House Committees. This bill, if made law, would prohibit picking and digging up "material remains of past human life or activities which are at least fifty years of age and which are of archaeological interest" on Native American and federal lands (land owned or controlled by the U.S. Government). The bill also prohibits the sale, purchase, exchange, transport, receipt, possession of "any archaeological resource excavated, removed, sold, purchased, exchanged, transported, received, or possessed in violation" of the ARPA. The act would not only penalize those individuals who illegally pick or dig up archaeological resources, such as (but not limited to) pottery, tools, projectile points ("arrowheads") rock paintings, materials, house structures, charcoal specimens and animal or plant remains (of archaeological interest) but also those who accept or buy objects obtained illegally. Controlled (systematic, scientific) excavations may be carried out on federal lands, after obtaining a permit, by any qualified individuals whose excavation "is undertaken for the purpose of furthering archaeological knowledge." The same guidelines are set forth for excavations on Native American lands except that permission must be obtained from the Native American(s) who own the land. The data, records and resources deriving from the excavation are, where appropriate, to "be preserved for a satisfactory period of time by a suitable university, museum, or other scientific or educational institution." In short the bill is designed to protect and preserve Native American and Euro-American heritages.

The ARPA, while timely, comes none too soon. "Pot hunters" (people who collect artifacts not for their research value but for the artifacts themselves or their monetary value) and unknowing tourists have damaged 23,000 of 31,000 recorded prehistoric sites in Colorado. Arizona reports a loss of 50% of their recorded sites on forest lands alone due to vandalism. And, major sites which would have shed new light on

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Southwestern Indian art, technology, and so on, have been ruthlessly dug for souvenirs or sale items to the point where they have no cultural or scientific value left. Navaho men in Arizona have begun to assist the area police in guarding archaeological sites in an effort to preserve what is left of their culture's buried patrimony.

The vandalism of sites has occurred all over the U.S. Connecticut is no exception! There are many destroyed and looted sites which might have filled in information gaps had they been excavated in a systematic, scientific way. Where vandalism or site disturbance has occurred, it is as though whole cultures have been ripped from the pages of rare books - irretrievably lost from the record of human history.

Many people remove or disturb objects in sites not realizing that in doing this they are destroying important *associations*. An association is the way a human cultural remain relates to soil features and other human cultural remains in space (within or on the ground). It is this pattern of objects in space--their arrangement, their number, their depth and distance from one another, geological features, etc. that gives us clues. Clues to the lifeways and processes of Native American and early Euro-American cultures. The information we can get from a piece after it has been taken from its context in or on the ground is virtually worthless unless we know its association, its provenience.

The various kinds of measurements, soil samples and analyses, maps, frequency charts, dating, microscopic inspection of specimens, statistical tests, all go together in providing us with information about an artifact. Further, that artifact is only one of many jigsaw pieces whose *pattern* holds the key to understanding the site. This then is the reason a site must be excavated carefully and scientifically by trained, experienced individuals. (It takes, incidentally, an archaeologist about five years to acquire adequate training.) Not having all the accompanying data with an artifact is a little like a 40th-century archaeologist trying to learn the identity and function of a long defunct, out-of-context copper toilet bowl float.

Because our and Native American heritage in the earth is finite (only so much has been preserved!) and because the commercial traffic in artifacts and historic materials has increased, the ARPA provides for stiff penalties for violation of its provisions. Both the House and Senate bills specify fines up to \$100,000 or imprisonment, depen-

ding on the nature of the violation. Also, any vehicles and equipment used in connection with a violation of the act could be confiscated. If Native American lands are involved, the fines obtained would be transferred to the Native American owner(s).

One problem with the bill is the definition of "Indian lands" and of "Indian tribe." Some Native American groups are not legally recognized by the U.S. Government; therefore, their lands would not be protected by the ARPA. Land which Native Americans have occupied for hundreds of years *should* be covered by the proposed law. However, there are thorny questions which need to be addressed in the ARPA. For example, is land occupied by a Native American for 50 years yet off of ancestral territory to be considered Indian land and therefore protected?

Another problem which is not completely addressed in the ARPA is that of Native American burial sites. Many Native Americans permit the careful excavation of burials as long as a member(s) of the concerned Native American group is (are) present and/or Native Americans give the deceased individual(s) a proper reburial. While the Senate version of the act provides that,

In the case of any permits for the excavation or removal of any archaeological resource located on Indian lands, the permit may be granted only after obtaining the consent of the Indian or Indian tribe owning such lands. The permit shall include such terms and conditions as may be requested by such Indian or Indian tribe,

procedures should be spelled out more clearly with regard to burial and other sacred sites.

Ideally, these procedures should apply to *all* public and private lands, although legislation is not possible for the latter. One can understand the strong feelings Native Americans have about the sacrosanctity of their ancestors' graves by considering the sentiments about one's own family's graves. It must be remembered, too, that, on the whole, Native Americans have stronger and more distant family ties than Euro-Americans and thus stronger sentiments about burial sites. Their cultural beliefs and practices should be respected, just as Euro-Americans would expect respect for theirs.

In light of our diminishing heritage this bill is *needed immediately* as law. Strong pressure is being applied from the private sector by way of mail to either modify it (so that it becomes virutally lame) or to defer action on it.

We urge you to write your Senators, Congresspeople and the bill's Senate sponsors in support of the Senate's version of the bill, perhaps mentioning the two problem areas we've outlined briefly in this article. We cannot learn much *about* the past by excavating a vandalized site, and if vandalism continues to increase, we will not be able to learn *from* our past!

The sponsors and their addresses: Senators Peter Domenici (2317 Dirkson Senate Office Building, Washington DC 20510), Barry Goldwater (427 Russell Senate Office Building, same ZIP), Harrison Schmidt (248 Russell...) and Dennis De Concini (4104 Dirkson...).

—Sharon Wirt

Announcing New Exhibits of Old Cultures

OPEN HOUSE
For Members and Guests
Saturday, September 29, 1979
10 a.m. - 4:30 p.m.

*In celebration of
AIAI's 10th Anniversary
and the newly designed exhibits*

HISTORY DAY

On Saturday, July 21, as part of the Washington Bicentennial celebration, AIAI co-sponsored a Washington History Day along with the Gunn Memorial Historical Museum and Library, the Armoury, the Wykeham Rise School and the Washington Bicentennial Committee. The day began at 10:00 a.m. with Open Houses at AIAI and the Gunn Historical Museum featuring special exhibits on Washington Indian and early colonial history. At 11 a.m. a revolutionary war encampment was opened to the visiting public. Soldiers from the Tory Regiment, DeLancey's Brigade, the British

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THE NEW EXHIBITS

Since October, 1977, the Institute has been developing new exhibits with the support of the National Endowment for the Humanities. This project comes to a close with the exhibits' grand opening on September 29, 1979.

The term "grand opening" is misleading, as any visitor to the Institute during the past year can testify. The exhibits have been open to the public throughout their development and the visitors themselves have participated in the exhibit design process.

Like many small museums, the Institute is faced with the difficulty of trying to satisfy a wide variety of visitor interests and needs in a relatively small space. Accordingly, the exhibit staff experimented with the delivery of entertainment and information on different levels and through different media. Although no one expects that every visitor will come in contact with all objects or information, the final system is designed to allow every visitor to make an informed choice among all available options, seeing or learning as much as s/he wishes. These options include interpretative exhibits on five prehistoric time periods, a brief slide orientation, pamphlets, a small visitor library (non-circulating) and artifacts displayed along the outer walls of the main exhibit area. The Institute's classrooms remain open to the public and contain a reconstructed longhouse as well as special, changing exhibits.

The interpretative exhibits were the subjects of the most intensive evaluation. These exhibits focus on five prehistoric time periods (Paleo-Indian through Contact). Visitors are given the opportunity to learn about prehistoric life by examining archaeological evidence and comparing their conclusions with those of archaeologists. The exhibits are not intended to merely tell a story about prehistory. Rather, by allowing visitors to follow the decision-making process, it is hoped that visitors will better understand the interaction between the evidence and how archaeologists work that produces a particular view of the past.

Each exhibit began as a "content script" written by the exhibit staff (Patty McNamara and Anne Sherburn) and several subject matter experts, including Drs. Roger Moeller, Russell Handman, Stuart Struever, Dena Dincauze and Fred Kinsey. At the same time, the exhibit's objectives or goals were established: how should visitors be affected by the exhibit? For example, one objective of the Paleo-Indian exhibit was

that visitors be able to pick out a fluted projectile point and recognize that only Paleo-Indians used fluted points. This script was then translated into labels and pictures by the exhibit staff and the project's consultant on exhibit design and evaluation, Dr. Chandler Screven. Finally, a graphic designer, Ms. Susan Martin, arranged these elements into a visually appealing format.

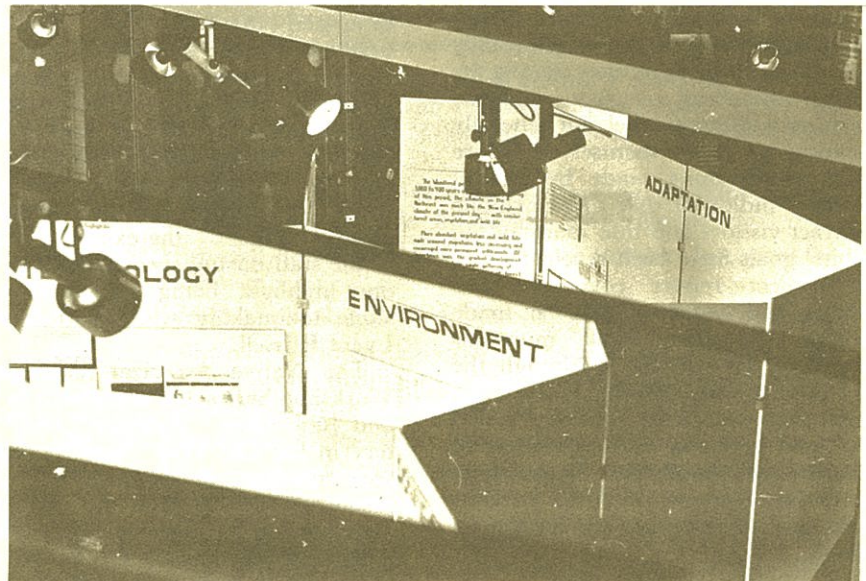
Initially, an exhibit was constructed so that it could be quickly assembled and easily changed. Early construction materials included poster board, staples, tape and rubber cement. Labels were hand lettered or typed. These "mock-up" exhibits were designed to be as much like the final, permanent versions as possible, and yet allow the exhibit staff to make changes easily if the exhibit's goals were not met.

The exhibit staff measured an exhibit's success by observing visitors as they interacted with the exhibit, and later interviewing them. Observers noted whether and in what order labels were read, whether pictures were studied, whether artifact reproductions in the exhibit were handled and examined, whether visitors discussed the exhibit with each other as they looked at it, and so on. In post-exhibit interviews visitor

first interpretive exhibit (Paleo-Indian) and the lessons learned from that experience were applied to the remaining exhibits. The Archaic, Woodland, Transitional and Contact Period exhibits thus required fewer modifications.

Although the exhibit staff was most interested in developing interpretive exhibits designed specifically for the Institute and its visitors, they also experimented with ways of increasing exhibit effectiveness which could be used by other museums. At least three exhibit features were particularly successful: artifact reproductions mounted in the exhibits so that they could be handled; questions used to encourage more attention to exhibit content; and "flip" labels, or hinged labels, which could be lifted to reveal more information. All of these served to increase appropriate visitor interactions with the exhibit, and increases in interaction are often accompanied by increases in visitor enjoyment and learning.

Both artifact reproductions and questions were used to encourage visitors to examine prehistoric remains from the viewpoint of an archaeologist. The questions were especially designed to focus attention on important points. Two types of questions appear in the exhibits.



recall of exhibit content was tested, and visitor reaction to the exhibit was solicited.

The mock-up exhibits were changed until they attracted visitor attention, directed that attention appropriately and conveyed that information considered important by the subject matter experts. Other factors were also considered, and parts of exhibits were moved or changed to eliminate shadows, make labels easier to read, or to improve traffic patterns. Considerable time was spent evaluating and re-constructing the

Teaching questions, as their name implies, are used to present new information. Supporting labels supply sufficient information to answer the question, although the visitor may have to integrate that information on his/her own to reach the intended conclusion. Test questions allow visitors to test their recall or understanding of an exhibit which they've already viewed. Both types of questions attracted considerable visitor interest and participation and often stimulated discussion among families or other groups of visitors touring

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ing the exhibit together.

The "flip" labels were used to answer questions: each of the possible answers was printed on a hinged label, and the visitor could lift the label to check whether that answer was "correct," i.e., one that archaeologists would choose. The real advantage of the hinged labels, however, was that they allowed presentation of considerable information in a relatively small space with little information immediately visible. One complaint that visitors made about early mock-up exhibits was that there were too many labels. Using the flip system, only the most basic and important information is printed on the top, most visible, label. More detailed or technical information is printed on the "hidden" labels. Although most flip labels involved only two layers of information, some include as many as four. The exhibit staff expected that only the most interested visitors would read the second or third layer information. A surprising outcome of the layering, however, was that most visitors read more labels when some of them were hidden than when those same labels were all visible.

The products of this two-year process can now be seen at the Institute. Much of the project's success can be informally observed, as visitors circulate among the exhibits, touching artifact replicas, discussing a question label and generally appearing to enjoy themselves. More formal observations made by exhibit staff have indicated that these exhibits do attract visitors and that many of the exhibits' goals have been reached.

A project report covering both methods and outcome will be made available to other small museums throughout the country. Although the AIAI project was federally funded, the design and evaluation strategy tested here could be easily used elsewhere to produce effective exhibits. Several low-cost design features of AIAI exhibits should also interest other low-budget institutions.

Project staff and consultants:

Dr. Stuart Struever/ Chief Archaeology Consultant, is chairman of the Department of Anthropology, Northwestern University, and is well-known for his direction of the Koster site excavations.

Dr. Chandler Screven/ Chief Exhibit Consultant, is professor of psychology at the University of Wisconsin-Milwaukee, and has been a consultant on visitor behavior, exhibit evaluation and instructional technology to many institutions, including the Smithsonian Institution, the Ford Foundation and the Association of Science-Technology Centers.

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"OUT - REACH"

How many yellow school buses bumped down Curtis Road during the 1978-79 school year? There were a few months in the past fall and spring that the Education Department saw a yellow blur from one day to the next. Approximately ten thousand (yes - 10,000!) individuals participated in formal programs at AIAI. This throng of scheduled visitors represents an increase of six thousand over the 1977-78 school year.

For two weeks in May, AIAI was host to 15 high school students from Packer Collegiate Institute, Brooklyn, New York, for an "intensive term" in field archaeology. Under the direction of Steve Post and Roberta Hampton, the students dug at two sites in the Shepaug River Valley. Great excitement was generated at one site when a firepit was uncovered; a carbon sample has been sent away for C-14 dating analysis. It is estimated that the date should be verified at more than 7,000 years ago. During this residential archaeology program, the participants and their teacher-chaperones, Liz Glazer and Warren Swenson, boarded at the Mayflower Inn and the Trinity Camp in West Cornwall. Throughout the two weeks the group "sampled" the expertise of most of the staff during special sessions, with one highlight being an afternoon of stone toolmaking with guest lecturer, Lyent Russell.

The Native American Craftspeople Workshop Series was completed in May and June when "Basketry" and "Pottery in the Old Way" were presented. (See summary article page 10). As a result of its success the Education Department is developing a Native American Traditional Crafts Program to be offered in August, 1980. This program will include four-day intensive workshops, an ethnobotany workshop in which field walks, herbarium instruction, demonstrations of plant uses and a "taste of nature" feast will occur, slide-narratives, small exhibits of various Native American crafts and a craft film series. The Native American Traditional Crafts Program will offer participants the special privilege of learning from traditional Native American craftspeople, as the "old way" of creating baskets, pottery, moccasins, headbands, or cornbread, etc. is demonstrated, taught and shared.

Details will be announced. In the meantime, contact the Education Department if you are interested.

The Experimental Archaeology Program under the direction of John Pawloski took place in and around the Institute from July 9 - August 3. A productive "gang" of budding scientists participated in varied replication projects from flintknapping to bowmaking, to the creation of a full-size dugout canoe.

Campers and summer recreation program students filled the AIAI summer calendar. All sorts of educational opportunities were available on a spur-of-the-moment basis. Rainy days found the phone requests increasing, followed by the arrival of many relieved camp counselors and an eager and energetic entourage of campers. The gas shortage did not seem to discourage such visitors, with many coming from as far away as Boston.

Work on the Indian Encampment has actually begun and it has been very exciting to witness the daily changes taking place. The initial clearing and removal of underbrush had been tedious, exhausting spring work; but thanks to volunteers, especially Don Ethier, it went quickly. Now the efforts of everyone's labor are clearly visible. Planned and directed by Mohawk Teacher-Craftsperson, Dave Richmond, the framework for the first dwelling, a bark-covered longhouse, is nearly completed. When finished it will be 15' by 36' and stand nine feet high - large enough to hold an average class of thirty-five students. Covering the longhouse with bark will be a major and separate task next spring, when it will be appropriate to gather bark.

The Indian Garden about 75' by 75' was cleared with the help of some Wykeham Rise students. The clearing involved the select cutting of trees and the removal of thicket underbrush, tree stumps, roots and a deep carpet of leaves with a minimum usage of modern tools. The planting of flint, white and pop corn took place in harmony with the light of the new moon in May. The development of both the garden and encampment progressed throughout the summer, again with the dedicated help of volunteers - in particular, Nancy Klein and her daughter, Leah, who appeared twice a week, willing to tackle



"Experimental Archaeologists"
dugout canoe

any task.

The Education Department is pleased to announce that its fall Teacher's Workshop, "The First Peoples of Connecticut: the American Indians," has been granted two inservice credits by the Joint Teacher Education Committee of the Connecticut State Department of Education. Co-sponsored by RESCUE, this seminar to enrich the social studies curriculum in all grades will be offered on Wednesdays, September 26 - November 14, 1979, from 3:30 - 5:30 p.m. at the AIAI Visitor Center (Tuition: \$40/members; \$45/non-members).

Many teaching friends have already scheduled return field trips for the coming year, and many civic groups have scheduled as far in advance as spring 1980! In addition to welcoming our returning "regulars", we indeed look forward to sharing the resources of AIAI with many newcomers.

The calendar indicates that the path to AIAI (scheduled to be paved by fall) and the discovery of New England's natural and cultural heritage will continue to be a yellow blur of buses, hopefully a smooth-flowing blur! We will also come to you *wherever you are located*. Call 868-0518 to plan and schedule a 90-minute field trip in the science of archaeology, ethnobotany (the use of native plants by cultures, in our case by the American Indians), the lifeways of the Eastern Woodland Indians, a mini-craft experience or a series of consecutive programs in any of these areas; we are ready to design a field trip and/or course to your specifications.

—Susan F. Payne

OUT OF THE EARTH I SING

from page 1

the most difficult of environments. With "primitive" digging sticks, they planted, crossbred, improved, developed numerous varieties, cared for and gave thanks to a food plant they simply called "Our Life Supporter." And truly it was. Once harvested it offered many ways in which it could be prepared and eaten. It was enjoyed fresh from the field, boiled, roasted, parched, dried and ground into meal, mixed with dried nuts, berries or meat. It could be stored for long periods of time without spoiling. The husks were braided into mats for sleeping or used for insulation or coverings for their houses. The cobs were used as scrubbers.

Legends varied among the tribes about how corn became a part of their lives. To the Algonquians of southern New England it was said to have been

continued on page 13

TEACHERS' WORKSHOP

at AIAI Visitor Center

co-sponsored by RESCUE and AIAI

September 26 - November 14, 1979 Wednesdays, 3:30 - 5:30 p.m.

"The First Peoples of Connecticut: the American Indians"

Program Outline: (Materials presented applicable at all grade levels)

- Sept. 26: Ethnobotany: the adaption of nature's seasonal floral resources by the American Indian peoples, illustrated by the Quinnetukut Habitats Trail and AIAI's Ethnobotanical Herbarium.
- Oct. 3: Prehistoric Lifeways of eastern American Indians: Social Structure, Family Life, Education, Government, etc.
- Oct. 10: Historic Lifeways of eastern American Indians: Impact of the Colonists.
- Oct. 17: World View: Religion - Myths - Legends - Oral Tradition.
- Oct. 24: Connecticut Indian Lifeways Today plus *More Than Bows and Arrows*, a film highlighting the cultural achievements of the American Indians throughout the United States.
- Oct. 31: Prehistoric Archaeology: Methodology and Fieldwork.
- Nov. 7: Historic Archaeology: Methodology and Fieldwork, Experimental Archaeology.
- Nov. 14: Application: Design a Curriculum Component for Your Age Level. Group critique. (5 p.m. - 9 p.m. special session with Potluck Supper)

These seminars will have required reading. They will include lecture and discussion. The last session will be an open workshop in which curriculum components for elementary, middle and secondary school levels will be presented by the participants for evaluation.

TWO INSERVICE CREDITS will be granted upon satisfactory completion of this eight-week teachers' workshop as approved by the Joint Teacher Education Committee of the Conn. State Department of Education. Tuition: \$40/members; \$45/non-members. Contact the Education Department of AIAI, 203-868-0518, to register. Enrollment limited.

FOUNDERS' DAY 1979

Again this year Founders' Day dawned dry and hot, and in this our tenth anniversary year we celebrated with more members and guests than ever before. Well over four hundred people drifted in and around the Institute between 10 a.m. and 4 p.m. Saturday, July 28, 1979.

Trustee Marie Sheehy was stationed at the main doorway to greet all visitors and to distribute the day's program. This year's Founders' Day was a day of memorials. As always, Founders' Day is held in memory of Joan Hardee; in addition this year, it was dedicated to Adelphena Logan, Sidney Hessel, Duncan Graves, Silas Merrill, Joanne Patricia Warner, Ralph Lasbury, Edward H. Rogers and Althea Russell.

At 11:30 a.m. AIAI President Ned Swigart invited all present to gather in the Indian Dwelling Classroom. There we all shared in a moving dedication of the classroom to Adelphena Logan, respected teacher and Trustee who passed away last summer. It is only fitting that the room that Del created for our visitors and students, to teach them of the lifeways of Woodland Indian peoples, should bear her name.

Mohawk Donald Richmond, member of the St. Regis Reservation Longhouse, spoke eloquently to the traditions of his and Del's people, members of the Iroquois Nation. The six Nations of the Iroquois Confederacy lived together in peace for hundreds of years before the Europeans arrived. The roots of democracy were established in the organization of the Iroquois Confederacy long before there was any consideration among the colonists to set up their own form of government in the Northeast. (In fact, part of the U.S. Constitution is based on Iroquoian government.)

Throughout her lifetime Del worked to preserve, to abide by and to continue the traditional ways of her people; she was a living example of the "old way." Wherever Del went she left the imprint of her beliefs to be learned from and understood. Not only is the Indian Dwelling Classroom a tribute to her, but the Native American Studies Program—which conducts research among today's native peoples, provides programs, courses, craft workshops and publications—also strengthens and expands the purpose of Del's work at AIAI.

The essence of what Del means to all who were privileged to know her is

beautifully stated in Ned Swigart's personal dedication in *Memories of Sweetgrass*, her personal craft chronicle published posthumously by AIAI:

Dearest friend and wise counselor of my family
 Matriarch to our Institute
 Majestic in her strength, the epitome of Iroquois womanhood
 Her roots deep in her mother earth straight and solid as the taproot of the oak
 Her spirit strong as the hickory, mighty in her sense of outrage at injustice, infinite in her love
 Her hands supple as the willow, always creating something of pleasure, of meaning and of inspiration for the children of the world and all those who truly wished to learn
 Eloquent spokeswoman for her race and her beliefs
 A prophet from the past, to guide the present, to preserve the future
 A voice to whom modern man must stop and listen
 My teacher

Ned Swigart
 —A Cabin in the wilderness
 August 12, 1978

The educational work of AIAI is dedicated to continuing the interpretation of traditional Indian lifeways, to correct the many misconceptions that still abound today and to nurture a better understanding of our cultural heritage.

After the dedication of the Indian Dwelling Classroom, the subdued audience slowly filtered back into the main exhibit room to enjoy the new exhibits and then moved gradually outdoors where a "Taste of Nature" had been created for all, courtesy of the cornucopia of the countryside - and the willing work of numerous volunteers.

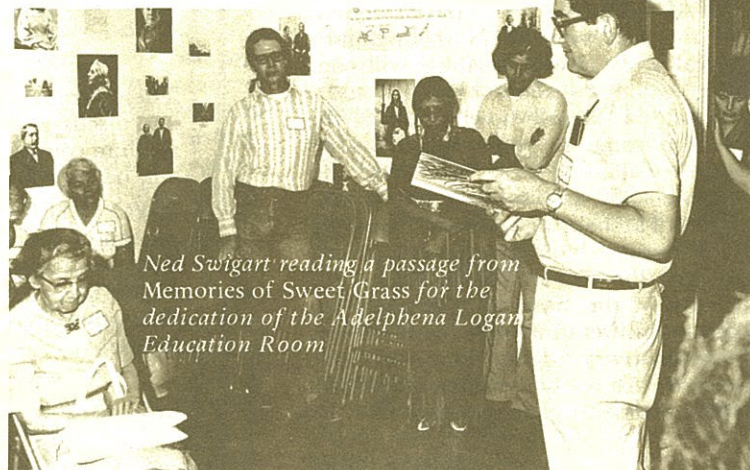
This year's "Taste of Nature" again reflected the ongoing research of *Native Harvests: the Recipes and Botanicals of the American Indian's* author, Barrie Kavasch. Part of the menu included traditional and adapted recipes using native foods. The Menu:



A display of cornbusk doll and quillwork by their accomplished creators, Karen Webster and Susan Thomas, respectively



All photos by Fritz Clymer



Ned Swigart reading a passage from *Memories of Sweetgrass* for the dedication of the Adelphena Logan Education Room

- Corn Chowder
- Woodland Lake Trout baked over
Open Pit Fire
- Corn-on-the-Cob
- Salad of Wild Greens
tossed with Purslane and
Milkweed Buds and Blossoms
- Sliced Tomatoes with Wild Leeks
- Squash Bread
- Cranberry Walnut Bread
- Blue Vervain Seed Bread
- Sunflower and Pumpkin Seeds
- Dried Currants
- Popcorn with Peanuts
- Sea Dulse
- Sunflower Seed Butter
- Blueberry Butter
- Black Walnut-Maple Cookies
- Pumpkin Cookies
- Sliced Watermelon
- Black Birch Bark Tea
- Sweet Fern and Sassafras Teas

As our guests participated in the day's activities, they returned again and again to taste *another* morsel of lake trout or another pumpkin cookie...

In addition to the dedication of the Adelphena Logan Education Room, seven more memorials were established in honor of the previously mentioned AIAI friends and benefactors. The Reverend Lee Neuhaus gave the invocation outdoors in the shimmering, hazy sunlight. Ned Swigart spoke briefly about each memorial and then introduced Lyent Russell, a man who encouraged Ned in his interest in American Indian prehistory and heritage years before Washington, Connecticut and the Kirby Brook site. Lyent Russell has established an educational exhibit memorial to his wife, Althea Russell. But Lyent's eulogy was really directed toward Ned and Debbie Swigart, and Ned's vision of an archaeological institute 25 years ago while a graduate student in ecology at Yale. Lyent Russell brought the appropriate focus to AIAI's tenth anniversary and Founders' Day when he recounted the tale of his friendship with the Swigarts and the actual birth of AIAI. The day was truly one of recognition of AIAI's president, benefactors, staff, members and visitors.

There were craft demonstrations by

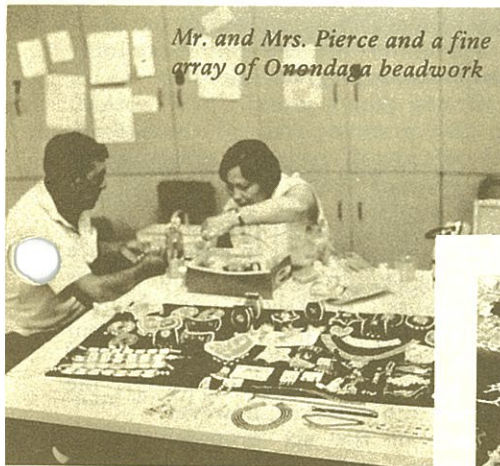
close Onondaga friends of Del. Karen Webster worked expertly fashioning cornhusk dolls; Mrs. Kenneth Pierce created many pairs of colorfully beaded earrings, while Susan Thomas demonstrated the fine craftsmanship necessary to work with porcupine quills. And while our Onondaga guests "worked," visitors could pause to admire and to become acquainted - and to gain a small sense of the continuation of "old ways" and the beauty of native crafts.

To cool off, visitors were invited inside to view the film, "More Than Bows and Arrows," an outstanding and enlightening compilation of the cultural achievements of Native Americans throughout the United States over thousands of years. This film, the visiting Onondaga delegation, AIAI's own Native American staff, the presence of Mohawk Donald Richmond, our exhibits of 10,000 years of Native American prehistory and history, the bounty of field, forest and waterway, all blended harmoniously in celebration of Del and of AIAI's innumerable friends and supporters.

The Institute thanks all who attended. (Watch for the announcement of next year's date.) And the Institute thanks all those devoted volunteers, especially Debbie Swigart, and staff who made Founders' Day possible:

The gatherers, bakers, and cooks - Olta Potts, Tina Romei, Nancy Craig, Bea Hessel, David Stoughton, Jan Mitchell, Kay Schaller, Debbie Swigart, Susan Payne, Carol and Joy Fyfield, Marie Sheehy, Barrie Kavasch, Johnny Payne, Mary Jane Southouse, Linda Potter, Jean Massimi, Diane Ledbetter, Vivian Wainwright, Joe Ghering, Naomi Colmery, Elsa Jennings, Raelene Gold, Jenny Tyrwhitt and Jean Pruchnik; the fisherman - Ned and Paul Swigart; the overall "preparators," servers and greeters - many of the above plus Elizabeth Jensen, Penny and Griff Bowie, Steve and Nia Post, Don Ethier, Herb Witthoft, Ted Swigart, Hank Garvey, Gary Carlson, Chris Kavasch, Sharon Wirt, Patty McNamara, Anne Sherburn, Kathy Taylor, Loyce McMillan, Weymouth Somerset, Nancy Lee Tucker Klein, Marcia and Sarah Cooley, Jim Lynch, Dave Richmond and Trudie Lamb; and our shopkeepers - Joan Cannon, Lucie Swigart, Karen Cooper and Martha Witthoft. (Our apologies to anyone we may have omitted.)

AIAI is a family affair from within and without. You, the AIAI members, make the family complete.



Mr. and Mrs. Pierce and a fine array of Onondaga beadwork



"A few words" by Lyent Russell

Dedication of the Adelphena Logan Education Room by Donald Richmond, Mohawk





Native American Craftspeople Weekend Workshop Series



This spring concluded the Visiting Native American Craftspeople Weekend Workshop Series, funded in part by the Connecticut Commission on the Arts. Three very special Native American friends traveled to AIAI to lead the last two workshops, "Basketry" and "Pottery in the Old Way."

Mohawks Irene Richmond and Sara Ransome from the St. Regis Reservation in Upstate New York instructed over 40 participants in the art of splint basketry on May 19 and 20. One group was so skillful in creating their baskets that they had the opportunity of also learning how to make splint-and-sweet grass bookmarks. Irene and Sara's baskets are on view and available in AIAI's Museum Shop.

On June 2 and 3, Catawba Chief Red Thundercloud known to all as "Tez", shaped a unique pottery workshop. Not only was much Native American heritage shared as Tez talked about traditional Indians and described lifeways in the Southeast, but also the rhythmic pace of handling clay (part of Mother Earth), shaping clay, decorating the creation, drying it and preparing an open pit firing were learned. An added bonus for all was frequent mention of native plants and their uses by native peoples; Tez is a walking ethnobotanical encyclopedia, a true practitioner of the oral tradition and his Catawba heritage.

The previous four workshops drew together a range of crafts and personalities. In October we were privileged to have the septuagenarian



Sara Ransome, Irene's sister, with splint basket in progress

Mohawk Ray Fadden of the Six Nations Indian Museum, Onchiata, New York, present a lecture from his own "Wampum Belts and Beaded Story Belts." Later in October a Washingtonian adopted by the Indians, Dick Haag, assisted by Hopi-Cree Orlaine Hartman, conducted an outdoor workshop in the "Techniques of Tanning." November brought a return visit of good friends Ella and Eric Thomas/Sekatau of the Narragansett Nation who led a lively two days of fingerweaving and netmak-

ing, woven with much humor and information about the coastal peoples. AIAI's resident craftsperson, Mohawk Dave Richmond, had an eager audience of young campfire girls and adults in his "Beadwork Workshop" in March. Halfway through the series, enrollment in the participating workshops was full. We were always able to welcome the listener and observer, however.

Each of the six proposed Native American craft weekend workshops presented a different craft tradition through narrative demonstration, instruction and participation. The *purpose* was to increase the participants' sensitive understanding of the cultural heritage of Connecticut's native peoples through a concrete learning experience in which s/he had the opportunity to learn an ancient and traditional craft. By inviting skilled Native American craftspeople to share these ancient and vanishing techniques with the participants, we hoped to create a learning experience of the highest quality in which there was a tangible result - an acquired craft, and an intangible result - cultural interaction, exchange and awareness.

The Institute thanks all participants for *their* role in making this craft series a truly sharing and learning experience beyond the development of a specific skill. Because of its success, the AIAI will offer a two-to-three week Native American Traditional Crafts Program in August of 1980. Details will be announced in Winter *Artifacts*.



Irene Richmond demonstrating splint basketry

Memories of Sweet Grass



As a measure of our regard, respect and deep affection for the late Del Logan, former Onondaga Board member, friend and teacher of and at AIAI, we offer a posthumous publication of her personal craft chronicle, *Memories of Sweet Grass*. This book represents a select part of the accumulated craft knowledge of an Onondaga woman who grew up in two cultures, Iroquois and Euro-American, but retained her Onondaga Iroquois roots. For her own reasons Del chose to include drums, corn, cornhusk doll, broom, pipes, bark crafts, rattles, cradleboard, costumes, basket cap and masks in this work. She wrote the chapters and did most of the craft illustrations herself but did not live to see the book realized.

In an effort to keep this *her* book, minimal editing was done on the part of AIAI staff members, Susan Payne, Sharon Wirt, Trudie Lamb and Dave Richmond. The few photos of Del, the Schaghticoke "Indian Prayer for Del Logan" with its strong imagery and AIAI President Ned Swigart's warm tribute to Del in his dedication and introduction create something of a portrait of Del. Jean Pruchnik, staff cataloguer, had been asked by Del to help her with some of the illustrations, and Jean did so, trying to keep her drawings consonant with Del's own drawings. But Jean

expressed her own style in creating the book's cover, one that evokes "dusty" memories of drums and sweet grass and their promising interface with the present and future. Barrie Kavasch, staff ethnobotany teacher, contributed two drawings in her own elegantly naturalistic style we believe Del would have appreciated. Trudie Lamb, director of Native American studies, wrote a moving piece on "The Power of the Word - the Oral Tradition." And, finally, Reader's Digest generously underwrote the cost of publishing this craft chronicle, a limited hardbound edition.

The following is excerpted from *Memories of Sweet Grass* (which is available in the Museum Shop), page 17.

A drum reminds us of our lives. My drum is old and full of memories, memories of things learned long ago, of my ancestors and of the ideas and accomplishments of my people and myself. Memories of sweet grass, the closeness of nature, the ancient and beautiful things of the woods. My drum is full of voices...of paddlers and their canoes...of lone people going through the trackless wilderness...of the far, far voices of singers...of dancers—their feathers keeping time with the beat. My drum speaks of olden times, for it is a diary of my people. It tells of brave and solemn chiefs seated around council fires; of powerful bodies representing strength, endurance, stamina; of lofty spirits full of dreams, dreams of childhood and of the future. My drum is a mingling of past, present, future. A treasured diary of my people is measured in the beat of my drum.

NATIVE AMERICAN ADVISORY COMMITTEE



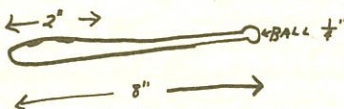
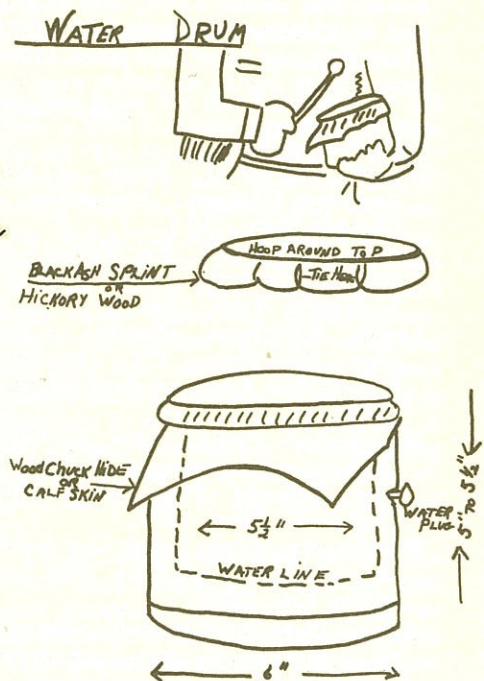
The Native American Advisory Committee was determined to meet for its May 19th meeting despite the gas scarcity problem which was beginning to emerge. Although the group is relatively new, having met only four times, there is a good feeling of cohesiveness and mutuality among the members. Each member is bringing his or her own special experience and knowledge to be shared in the group.

It was determined at the May meeting that the committee should be comprised of no more than 10 members. Two new native peoples participated for the first time: Jane Fawcett, Mohegan, from Uncasville and Chester "Butch" Chatfield, Schaghticoke, from New Haven. Ken Minter, Oneida, from Claverack, N.Y., was recommended to be the tenth member of the Native American Advisory Committee and will attend the fall meeting.

The committee was particularly pleased with the report of the Crafts Workshop series which had proved to be an overwhelming success, with each class filled to capacity and traditional native people sharing a variety of their crafts and skills. The committee felt very enthusiastic and supports repeating these endeavors next year in greater depth.

The next meeting has been scheduled for the early fall, Saturday, September 29th, at 11 a.m.

—Trudie Ray Lamb



DEL



The small illustrations by Jean Pruchnik and Sharon Wirt were drawn from several sources: pictographs and petroglyphs from all over the U.S., Iroquois beadwork, an Algonquian basket and an Eskimo Ivory engraving.

HERBARIA

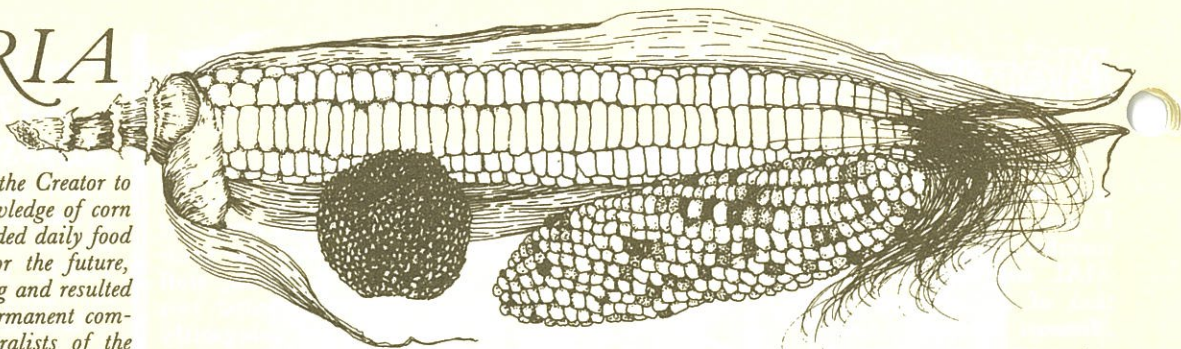
Corn was the greatest gift of the Creator to the American Indian. The knowledge of corn as a crop, which not only provided daily food but could also be stockpiled for the future, meant independence from hunting and resulted in the establishment of more permanent communities. Among the agriculturalists of the Eastern Woodland Indians corn became, in life and legend, *THE life sustainer* (Logan, *Memories of Sweet Grass*, 1979, pg. 23).

Corn is our most unique grain and certainly the most familiar of the grasses. It has no close counterpart in the plant kingdom. After approximately 7,000 years of cultivation from its tiny pod corn beginnings, it exists only in association with man. Corn can only survive and prosper as a result of this symbiotic relationship. The history of corn (maize) is uniquely and thoroughly interwoven with the history of the ancestral Amerindians.

Fossil maize pollen was recovered from a depth of more than 200 feet below the level of Mexico City in the early 1950's. Paleobotanists dated this pollen at about 80,000 years old (Manglesdorf, 1974, pg. 183). Archaeologist Richard S. MacNeish recovered numerous small ears of prehistoric corn (considered to be wild maize or possibly maize in the initial stages of domestication) from the Tehuacán caves in Mexico, which date at about 5200 B.C. These earliest small ears of prehistoric wild corn measure about 3 cm. in cob length, bearing about 50 kernels, and were enclosed in husks. (Corn was domesticated sometime between 5,000 and 4,000 B.C.)

In all of its essential botanical characteristics, the wild and early cultivated corn of Tehuacán was identical with modern corn but was smaller in all of its parts. Indeed, the wild corn with its tiny ears must initially have been less useful as a food plant than the wild squashes...despite the spectacular increase in size and productiveness (of corn) under domestication, which helped make corn the basic food plant of the pre-Columbian cultures and civilizations of America. There has been no substantial change in 7,000 years in the fundamental botanical characteristics of the corn plant (Manglesdorf, 1974, pg. 180).

Corn is a grass, like all other cereals. Most grasses have "perfect" flowers:



the stamens and pistils are within the same flower. But other grasses are "monoecious": producing the female organs, the pistils, and the male organs, the stamens, in separate flowers on the same plant. This latter form is a particular characteristic in corn.

The corn stalk is topped with the tassel which is the male flower spikelets. Each spikelet contains two flowers, each of which has three pollen sacs, or anthers, full of pollen grains. It has been estimated that the total number of pollen grains produced per plant is 18 million. An overwhelming ratio of 9,000 pollen grains per each potential seed. Such prodigious amounts of pollen are easily dispersed by the wind, insuring natural cross-pollination.

Each female flower has a single ovary ending in a long style, the "silk". The silk is covered with fine hairs designed to capture wind-blown pollen. Each silk represents a potential kernel awaiting pollination to develop. The entire process is quite fascinating and intricately detailed in Manglesdorf (1974) and Weatherwax (1954).

Following fertilization the kernels soon begin to swell. In 18 to 21 days the kernels reach the "green corn" or roasting ear stage. Depending on the variety, it takes another six to eight weeks to full maturity. The ear of corn is unique because of its encasement in its husks; this structure completely limits the dispersal of its seeds. Therefore, corn cannot reproduce itself without human assistance. "There was no avoiding the conclusion that...the Indian was a good corn breeder" (Weatherwax, 1954, pg.183).

The corn seed can retain viability for three to five years, and under good storage conditions, up to 10 years. Much beyond this, however, the embryo loses all ability to germinate, though the grains, as a food resource, remain good.

With such mutual dependence upon one another this rich food resource has grown, prospered and traveled from antiquity into countless directions and forms. "An important proof of the cultivation of maize in America before the Columbian epoch is the fact that the

Eastern varieties of Zea mays, L.: Iroquois white flint corn, strawberry popcorn, Indian corn

kernels and cobs in a charred state have been found in ancient pits and refuse heaps all over Eastern North America" (Parker, 1968, pg. 72).

From early America to our contemporary world, in which almost 11 billion bushels of corn are produced annually on more than 270 million acres, "Corn has become the basic food plant of our modern American civilization. It is the most efficient plant that we Americans have for capturing the energy of the sun and converting it into food" (Manglesdorf, 1974, pg. 2). All of the five principal commercial types of corn known today are flint, sweet, flour, dent and pop. A sixth type, pod corn, believed to be the oldest form, is not significantly cultivated in the U.S. today. Any one of these types may come in a variety of colors. What remains truly significant is that these diverse types were already being grown by the Indians when America was discovered. Botanists have classified them within a single species, *Zea mays*, L. It is this maize, this Indian Corn, that cultures and civilizations have been based upon. More than any other food plant, corn is most closely tied to its Indian origins.

—Barrie Kasasch

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- Logan, Adelphena, *Memories of Sweet Grass*, Washington, CT: The American Indian Archaeological Institute, 1979.
- Manglesdorf, Paul C., *Corn: It's Origin, Evolution and Improvement*, Cambridge: The Belknap Press of Harvard University Press, 1974.
- Weatherwax, Paul, *Indian Corn in Old America*, New York City: The Macmillan Co., 1954.
- Editors' Note: AIAI has in its collections fragments of a tiny charred ear of corn recovered from a coastal Connecticut site.*

HERBARIUM HAPPENINGS

Labels are sprouting all over the Institute grounds. These small, metal rectangles identify AIAI's "living herbarium," providing every interested visitor who walks around the building or hikes the Habitats Trail with the common and botanical name of various plants. Each labeled plant will also indicate its origins - native or introduced. As such, these tags focus on the wild versus the cultivated herbs, ferns, flowers, shrubs, trees and fungi growing on AIAI's 15-acre woodland sanctuary.

Enormous progress has been made on the new "gathering ground"... thanks to the very special energies of Trudie Lamb, Dave Richmond, John Harmon, Don Ethier, Ted Swigart, Bill Bader and Barrie Kavasch. This expansive, shady clearing is a comfortable outdoor classroom. The hemlock-beech habitat of this fertile ground supports labeled examples of spicebush, elderberry, American chestnut, poke, partridge berry, wood roses, grasses and path rushes. This inviting new area suggests its Narragansett name, "yo appituck" (let us sit here).



OUT OF THE EARTH I SING

from page 7

brought from the far Southwest by the crow, a bird to which they showed great respect. The Iroquois speak of it in their Creation Story and describe how it sprang from the grave of Sky Woman, who died giving birth to the twin boys, Good-Minded and Evil-Minded. It was the milk of the corn which provided them with continued nourishment. Other Algonquian legends point out that long ago when the crops of their grandfathers' grandfathers had begun to decrease, in order to avoid famine, it was agreed that certain Thanksgiving ceremonies had to be performed to remind the people of the true source of corn.

To the Eastern Woodland peoples the Green Corn Ceremony was one of their more important ceremonies. Corn was also honored at the time of planting and at the time of harvest, but Green Corn marked the high point of the warm

season of life and it meant the first eating of new or green corn in a ceremony of Thanksgiving. The people believed it would create disharmony and famine if it were partaken without first giving thanks in this way. It was determined that the ceremony would be held five days after the full moon during the month of the ripening corn - when it was still green but edible (late August or early September). This was the time to offer celebration to the spirits who had control over the growing of things. The ceremony itself lasted four days. During these four days tobacco was burned as an offering, prayers were given, special gambling games played, songs and dances performed. But the preparation for Green Corn could take many weeks. While the women prepared the corn, pounding and grinding it, the men organized a deer hunt, as it was necessary to have venison used in the ceremonial corn soup.



For the tribes of Connecticut, two particular ceremonial foods prepared from corn were offered: *annitash* and *yokeg*. *Annitash* was made from year-old corn, which was taken and buried for several months in water and packed in mud. It was then removed and boiled with either deer meat or fish. It was considered food for the Creator! *Yokeg* was prepared from year-old yellow corn, parched in hot ashes, ground into meal and then sifted and made into cakes or mixed with water. The Schaghticoke called it *rutig* and all of the Connecticut tribes used it as a traveling food. It later became known as Johnny Cakes or journey cakes. And everyone participated in the Great Feather Dance, the special dance to the Creator. Clans were paired against one another in the ceremonial game of chance, *run-gan-ham*, using wild plum stones and a wooden tray or bowl.³ Sometimes the men played against the women. And it would continue every day of the ceremony.



But many seasons have come and gone in Connecticut since the Green Corn was honored and respected. As a young woman, Gladys Tantaquidgeon, participated in the Green Corn ceremonies conducted by her tribe for a number of years.⁴ The last Green Corn Ceremony was held in Uncasville in 1924. The ceremony which had been revived about 1860, was held during the last week of August or the first of September. However, by that time the

structure of the corn had undergone many changes in 300 years of contact, immutability. But the preparation has not. In her day, Gladys used a heavy, iron mortar to pound the corn. Several large vessels (*dukwa'ng*) kept for centuries, were used for pounding corn into the special soup. The water was poured and sifted, the particles, the dust saved and drunk. This ceremony was used by both Iroquoian peoples.



As was their custom, the men erected a special structure from chestnut and white oak in which to hold their ceremony. The corn that remained of the ceremony, the passing on of so many traditions, its revival, the complete memory not remembered; neither the names of the games. In fact, though in England, one has to travel to part in the Green Corn Ceremony in two worlds has been increasingly difficult to walk in the cycles of the seasons.

—7



NOTES:

- ¹ Harold Driver, *Indians of Connecticut*, Chicago: University of Chicago Press, 1975.
- ² Richard MacNeish excavated a number of small, prehistoric corn cobs in Mexico dating from 5000 B.C.; Paul C. Mangle, *Origin, Evolution and Domestication of Corn*, Cambridge: The Bell Company, Harvard University Press, 1964.
- ³ *Run-gan-ham* is a Mohawk word meaning "to play with their tray."
- ⁴ Gladys is a direct descendant of Tantaquidgeon, who was a chief warrior belonging to the council.



WORKSHOP ON THE HANDICAPPED

On Wednesday, June 27, 1979, the organizational efforts of Trustee Dodie Nalven culminated in a very rewarding and informative all day program. Staff and guests from around the state assembled to participate in the following:

- 10:00 a.m. Welcome by Edmund K. Swigart, AIAI President. Introductions by Susan F. Payne, AIAI Director of Education.
- 10:15 a.m. "A Different Approach" - short film loaned by the Special Education Resource Center, Hartford, Connecticut.
- 10:45 a.m. "Expectations of the Handicapped on a Museum Visit" by Stan Kosloski, Assistant Director, Office for the Protection and Advocacy for the Handicapped, State of Connecticut.
- 11:15 a.m. "Building Accessibility" by Richard and Marion Keller. Mr. Keller is counselor to handicapped students at the University of Hartford. Mr. and Mrs. Keller are both members of the Governor's Committee on Employment of the Handicapped and the Hartford Chamber of Commerce's Committee on "Architecture for Everyone."
- NOON Luncheon.
- 12:45 p.m. "Museum Programs for the Mentally Handicapped," Estella Pate, Assistant Curator of Education, Brooklyn Children's Museum.

1.15 p.m. "Use of the Senses in the Museum" by Sally Williams, Associate Curator of Education, Wadsworth Athenaeum.

An animated dialogue with the audience completed each program segment. The staff of AIAI concluded the day with the positive feeling that the existing Institute facility and programs are already accessible to most everyone.

To further fulfill our responsibilities under Section 504 of the Rehabilitation Act of 1973, Dodie Nalven is chairing a Committee on the Handicapped composed of Steve Post, Education Department, Loyce McMillan, Executive Director, Sharon Wirt, Research Department, Joan Cannon, Shopkeeper, Patty McNamara, Exhibits, Dr. Ben Hoffmeyer from the American School for the Deaf, Gary Fitzherbert from the Glenholme School, Mary Bunting of Southbury Training School and volunteers Jean Massimi and Valerie



Discussion session with Stan Kosloski

Materné. The Institute will be designating a handicap parking space and other conveniences within the building.

WHO'S WHO AT AIAI: AN UPDATE



Photo by Pete Christman, Silver Sun Studio, New Milford

Mary Jane Southouse

Ms. Mary Jane Southouse is another new face at AIAI. Mary Jane is filling a very vital need in administration as a part-time typist. A graduate of the University of Bridgeport with a B.A. in English Literature, Mary Jane's true vocation is that of singer-musician. When her typing skills are not in such demand, we hope that staff and visitors alike will be able to enjoy her beautiful voice as she interprets Northeastern Woodland Indian songs.

THE NEW EXHIBITS from page 6

Ms. Susan Krause Martin, Design Consultant, is a freelance artist and graphic designer who has worked in the exhibit departments of the Milwaukee Public Museum and the Museum of the American Indian.

Mr. Ned Swigart, Project Director, is founder and president of AIAI.

Dr. Roger Moeller, Project Archaeologist, is director of research at AIAI.

Ms. Patricia McNamara, Project Assistant, has conducted visitor behavior and evaluation research at the Milwaukee Public Museum, the Milwaukee Art Center and the Detroit Science Center.

Ms. Anne Sherburn, Project Assistant, has recently completed the Masters degree program in Museum Studies at George Washington University.

AIAI ANNUAL MEETING



John Worrell and Joanne Bowen

Another overflow crowd of members gathered at the Inn on Lake Waramaug on Thursday evening, May 3, 1979, for AIAI's annual meeting. After a delicious meal, AIAI zooarchaeologist, Joanne Bowen, introduced her former research associate from Old Sturbridge Village, Historic Archaeologist John

Worrell. John's program, "The Proof of the Pudding: Putting Archaeology and History to the Practical Test" (a living history framework in which to do experimental archaeology), vividly portrayed the research being conducted at Old Sturbridge Village as twentieth-century people attempt to rediscover the technologies developed and practiced during the 1800's.

For example, much trial and error went into one experiment in which the design and application of a field plow were being replicated. An original nineteenth-century plow from the Old Sturbridge collection served as the model; much time elapsed before the exact wear patterns were duplicated. One of the most challenging aspects of this retrieval research is overcoming present day assumptions about *how* a particular tool, task, etc. was done. A lively discussion concluded the annual meeting of AIAI's tenth anniversary year. (Next year's annual meeting will again be held at the Inn on Lake Waramaug on Thursday, May 1, 1980).

Siftings

In August an exhibit, "Eastern American Indian Basketry - A Continuing Tradition," opened at the Joseloff Gallery of the Hartford Art School, University of Hartford. For this exhibit Curator Carol Grant Hart borrowed an Algonquian incised splint basket and two Micmac curved knives from the AIAI collections in addition to a basket gauge made and used by Henry Pann Harris, great grandfather of Irving Harris, present Chief of the Schaghticoke.

One of Del Logan's willow geese decoys will be exhibited in "Three Centuries of Connecticut Folk Art" sponsored by Art Resources of Connecticut. This exhibition, spanning 300 years of Connecticut folk art, will open September 25, 1979, at the Wadsworth Atheneum, Hartford, and will then travel until July 15, 1980, to the Museum of Art, Science and Industry in Bridgeport; the Lyman Allyn Museum in New London; the New Haven Colony Historical Society; the Creative Arts Workshop in New Haven; and the Litchfield Historical Society, Litchfield.

"Beads, in Material and Symbol," a special exhibit prepared by AIAI staff members, Jean Pruchnik and Sharon Wirt, with the advice and assistance of Dave Richmond, staff teacher-craftsperson, is on display in the new classroom. The exhibit illustrates practical aspects - the variety of stitches, uses, and so on; aesthetic - the range of colors and designs; history and symbolic aspects of beadwork on pouches and bandoliers.

The acting Collections Committee recently accepted a number of gifts. Dodie Nalven, Jim Lynch, John Shrader, Trudie Lamb and Steve Boast donated books to the Research and Education Libraries; and the Sarah Riggs Humphreys Chapter of the DAR donated a large splint basket created by Molly Hatchett, a Pautatuck who lived in the Shelton, Connecticut area (on display in the exhibit room). The Institute is grateful to those contributors for their valuable donations to its collections.

The "Friends of the Institute" grow in numbers and these loyal supporters have donated many hours since the April meeting. AIAI thanks each and everyone of you and, in particular: our regular volunteer typists, Ursula O'Donnell and Jan Mitchell; our handyman, Don Ethier; our receptionists,

Grail Kearney, Jammy Burr and Helen Pennington; our shopkeepers, Martha Witthoft and Betty Carroll; our interpreters, Naomi Colmery and Gail Gradowski; our exhibit preparators, Marcia Cooley, Bob Richter, Jean McAdams and Carol Dicks; our mailers, Rachel Kirk, Dorothy Arcularius, Marcia Cooley, Naomi Colmery, Rosemarye DeVore, Dottie Griswold, Jean Massimi, Olta Potts, Marion Schindler, Vivian Wainwright; our researchers, Virginia Olmstead, Dodie Nalven, Jim Lynch, Chris Brennan, Linda Potter, Kay Schaller, Ellis Settle, Jenny Tyrwhitt, Herb Witthoft; our photographer and engineer, Frederick Clymer; and, last but by no means least, for the uncounted hours contacting "the friends" to fill volunteer needs, Debbie Swigart. Our apologies to those friends we may have missed.

Trustee Weymouth Somerset, Chairperson of AIAI's Education Committee is happy to announce that Harvey Jaecock, Director of the Brookfield Craft Center, Brookfield, Connecticut, has consented to become a member of this committee.

During the first week in June, Joan and Roger Cannon attended the Museum Stores Association annual convention in Monroeville, Pennsylvania. Over 250 museum stores were represented at the various workshops and lectures, as well as about 260 vendors (Associate Members) at the trade show. It was a most profitable experience and we hope that the knowledge gleaned will benefit AIAI members and visitors through the shop for some time to come.



SHOP TALK

Random House's handsome new editions of *Native Harvests* grace our shelves in the shop, along with the exquisite little volume, *Memories of Sweet Grass*, published by AIAI for our beloved Del. "Newcomers" include some charming Zuni fetish animal replicas (Actual Zuni fetish animals cannot be sold as they are sacred.) carved from agate, serpentine and pipestone by Edna Leekey. They retail for \$16 to \$35. As always, there is new jewelry and we now have one or two things of Northwest design and manufacture, as well as a piece or two of Eskimo carving. The welcome mat is always out at the Museum Shop.

—Joan Cannon

IN MEMORIAM

Kenyon W. G.
February 21, 1919 - A.

As a member of the founding Board of Trustees, Kenyon gave unstintingly and creatively as Chairman of the Legal Committee. Kenyon's participation in the Institute's Chartering and incorporation was a deep sadness that we sorely miss and with respect that we honor his memory for his years of dedicated service to the Institute.

Dr. Joseph H.

In this our tenth year, we wish to remember all of our members, supporters and mentors, and to mention by name one of AIAI's earliest and most devoted patrons, Dr. Joseph Hetzel of Middletown. Dr. Hetzel passed away on February 21, 1919, and he will be sorely missed by his family, friends, and the Institute.

HISTORY DAY from page 10

Troops of the Line from the 17th and 18th centuries, including Rangers and Colonial Line from the Fifth and Sixth Regiments, the Second Connecticut Regiment, and Captain Samuel Lockwood's troops were represented, as well as children of the troops. Various military drills and cooking techniques were demonstrated throughout the day. The event reached a climactic point at 5:00 p.m., when the massed troops of various nations who participated in the event numbered over 1,000 people attended this memorable, dramatic event.



CALENDAR OF EVENTS AT AIAI

- September 16, 1979, Sunday, 4 p.m. - MEMBERS' MEETING (Public Welcome) "Native Harvests and the Harvest Ceremony" by AIAI staff Barrie Kavasch, Trudie Lamb and Dave Richmond.
- September 26, 1979, Wednesdays 3:30-5:30 p.m. - Teachers' Workshop begins and continues Wednesdays through November 14, 1979. (See article, page 7.)
- September 27, 1979, Thursday, 3 p.m. - Education Committee Meeting.
- September 28, 1979, Friday, 5 p.m. - Patrons' Preview and Program by Dr. Chandler Screven, Chief Exhibit Consultant, outlining the development of the NEW EXHIBITS. Seven o'clock dinner at the Inn on Lake Waramaug followed by guest speaker, Dr. Stuart Struever, Chief Archaeology Consultant.
- September 29, 1979, Saturday - OPEN HOUSE for members and guests, 10 a.m. - 4:30 p.m., to view NEW EXHIBITS. (See article, page 5.)
- September 29, 1979, Saturday, 11 a.m. - Meeting of AIAI's Native American Advisory Committee.
- October 1, 3 & 5, 1979, Mon., Wed., & Fri., 10:30 a.m. - 2:30 p.m. - Three-day WOODLAND MOCCASIN WORKSHOP. Make and bead your own pair of deerskin moccasins, led by AIAI resident crafts person, Mohawk Dave Richmond. Contact AIAI (868-0518) for details and to enroll.
- October 6, 1979, Saturday, 9 a.m. - Semi-annual meeting of the Archaeological Society of Connecticut at the Peabody Museum, Yale University, New Haven, Connecticut.
- October 6, 1979, Saturday, 2:30 p.m. - FILM FESTIVAL begins and will continue each Saturday and Sunday until May, 1980.
- October 6, 13, 20 & 27, 1979, Saturdays, 1:30 - 3:30 p.m. - Children's Woodland Crafts taught by Barrie Kavasch. Enrollment limited to ten 8-12-year-olds. Fee \$15. Phone the Education Department to register (868-0518).
- October 7, 1979, Sunday, 4 p.m. - MEMBERS' MEETING (Public Welcome) Guest lecturer, Christina Johannsen will present a slide program, "Iroquois Arts and Identity," plus a small exhibit of Iroquois crafts.
- October 13, 1979, Saturday, 10 a.m. - Tour of archaeological, historical, architectural, and geological sites in Litchfield County conducted by Dr. Russell Handsman. (See article, page 3.)
- November 4, 1979, Sunday, 1:30-3:30 p.m. - "Gift of the American Indians: Native Harvests." Autograph party, Ethnobotanical Herbarium Exhibit and a "Taste of Nature" by Barrie Kavasch. Members and public welcome.
- November 8, 9, 10 & 11 - Eastern States Archaeological Federation Annual Meeting, Ann Arbor, Michigan.
- November 10, 1979, Saturday, 10 a.m. - 4 p.m. - BEADWORK WORKSHOP for adults. Mohawk Dave Richmond will instruct the group in the art of beaded loomwork. \$7.50/members and \$10/non-members. Looms and materials included. Contact AIAI (868-0518) to register.
- November 11, 1979, Sunday, 4 p.m. - MEMBERS' MEETING (Public Welcome) Staff Anthropology Instructor, Sharon Wirt, will present a lecture-discussion entitled, "Facts and Fantasies about Native American Women: Reading Between the Lives."
- December 8, 1979, Saturday, 11 a.m. - 3 p.m. - Christmas Collectibles Preview of the Museum Shop's Native American Crafts. A "Taste of Nature" will be served. Shop for your children, your parents, your relatives, your teacher, your best friend...!
- December 12, 1979, Wednesday, 5 p.m. - Annual Christmas Party for staff, trustees and the "Friends of the Institute."



ARTIFACTS

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Sharon L. Wirt, Susan F. Payne

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