



Annual Report of the State Archaeologist

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Introduction

The past year has seen what is hoped will be a major step forward in the development of Minnesota archaeology. In May, 1971, the Council for Minnesota Archaeology was incorporated under the State of Minnesota non-profit corporation laws. The Council has met informally over the past several years at the invitation of the state archaeologist with the emphasis at these meetings placed on developing cooperation in Minnesota research and interpretation.

These general aims are incorporated in the charter of the Council which states that "The purpose of the Council for Minnesota Archaeology, Inc., shall be to promote archaeological research and interpretation within the State of Minnesota through 1) stimulation, encouragement and support of scientific archaeological field research, 2) the initiation of responsible action to conserve and preserve archaeological resources, 3) engaging in and supporting others in the interpretation of the results of scientific archaeological research, and 4) providing a corporate entity representing the community of scholars who conduct archaeological research within the State of Minnesota."

The individuals who worked to develop the Council and who are charter members of the organization include:

Alan Brew, Bemidji State College
Leland R. Cooper, Science Museum of Minnesota
Timothy Fiske, Science Museum of Minnesota
Warren Gladisch, Minnesota Archaeological Society
Christina Harrison, Carlton College
Vernon Helmen, Hamline University
Elden Johnson, University of Minnesota
Richard Lane, St. Cloud State College
David Nystuen, Minnesota Historical Society
Jan Streiff, University of Minnesota
Charles Watrall, Macalaster College
Robert Wheeler, Minnesota Historical Society
Lloyd A. Wilford, University of Minnesota
Alan Woolworth, Minnesota Historical Society

Membership in the Council is limited to professional archaeologists concerned with Minnesota archaeology who normally reside within the state or are employed by an institution located within the state. Research associate membership will be offered to outside professional archaeologists engaged in archaeological research within the state and to resident professionals in allied fields whose research interests bear on the problems of Minnesota archaeology. Thus the Council is an organization limited to professionals and is not intended to become a large organization of interested laymen and professionals. The important groups of laymen that already exist in Minnesota form organizations that the Council members wish to encourage and expand. To assure cooperation with the state-wide group, the Minnesota Archaeological Society, the charter of the Council designates the current president of that organization as a member of the Council. It is hoped that this provision will continue to provide the communication and the mutual cooperation so important to archaeological research

and interpretation. The members of the Council further suggest that regional organizations of interested laymen, such as the Sioux Archaeological Society of southwestern Minnesota and the Alexandria Gem and Mineral Club of west-central Minnesota, affiliate as regional units of the Minnesota Archaeological Society.

Meetings of the Council during this past year included a one day November meeting held at the University of Minnesota where presentations of results of 1970 summer field activities were given to an audience of over 50 people. A spring field meeting was hosted by the University and held at the University Biology Station in Itasca State Park over a May weekend. Over 100 persons attended this meeting which featured a presentation by C. T. Shay, University of Manitoba, who discussed his work at the Itasca bison site. The enthusiasm of those who attended the meeting was such that a second field meeting will be held in May, 1972, in southwestern Minnesota with the Sioux Archaeological Society acting as hosts.

The first business meeting of the Council after its incorporation was also held at Itasca in May. The primary concern was the election of officers who are:

President, Elden Johnson, University of Minnesota
Vice President, Alan Woolworth, Minnesota Historical Society
Secretary-Treasurer, Vernon Helmen, Hamline University
Editor, Timothy Fiske, Science Museum of Minnesota
Director, Alan Brew, Bemidji State College

The Council is now in its developmental stage and the members will meet again in the fall to work on preliminary plans for Council programs. With the vast amount of archaeological research to be done in Minnesota, the Council has the potential to develop important cooperative programs.

Archaeological Permits

A permit was issued to Professor John Steinbring, University of Winnipeg, for work at the Houska Point Site on Rainy Lake (Koochiching County) during the 1970 and 1971 field seasons. The site is a late Archaic complex that includes native copper artifacts in an undisturbed context. Steinbring's crew of University of Winnipeg students worked the site for several weeks in 1970 and another group of students is at the site at this date. The preliminary results will give a solid base for interpretation of the preceramic horizon of extreme northern and northwestern Minnesota.

A second permit was issued to William Mason III, St. Paul, for the use of a metal detector, underwater exploration, and recovery of artifacts at the Redwood Ferry Site on the Minnesota River in Renville and Redwood Counties during 1971. No information on the results of these activities is yet available.

Field Excavation and Analysis

1. Minnesota Resources Commission Program in Prehistoric Archaeology

Excavations under this program were conducted in Koochiching County and an extensive site survey was conducted through portions of Itasca, Cass, Hubbard, Clearwater, Mahnommen, and Norman counties.

The Koochiching County excavations were undertaken at the McKinstry Mound Site near the confluence of the Little Fork and Rainy Rivers and at the Smith Mound (Grand Mound) Site near the confluence of the Big Fork and Rainy Rivers. Professor James B. Stoltman, University of Wisconsin, directed the excavations with a crew composed of students enrolled in the University of Minnesota summer session course. The original aim of the project was to concentrate on the village habitation areas of the Smith Mound Site with a first goal of establishing a stratigraphic sequence for the Laurel and Blackduck cultures represented there. Secondly, the aim was to obtain a large assemblage of Laurel culture materials from the habitation area. Extremely high water inundating much of the Smith Mound site prevented concentration of effort at that site so the majority of time was spent in excavation of a large undisturbed portion of McKinstry Mound #1. This mound had been haphazardly trenched around the turn of the century by Bryce who gutted the center of the mound. Lloyd A. Wilford subsequently worked a small undisturbed portion of the mound in the 1930's and reported a pure Laurel component represented in the mound fill. Stoltman's work showed a three and possibly four stage sequence of mound construction with log cribbing at the base. Only Laurel materials occurred in the mound fill providing an excellent stratigraphic sequence within the Laurel complex. Preliminary radiocarbon dating of samples from the mound indicates its initial construction began sometime around the beginning of the Christian era.

Recession of the high water later in the season made it possible for a small group under Stoltman's direction to go to the Smith Mound Site to test the village area. The Laurel component seems to be concentrated at the west end of the site near the mouth of the Big Fork River where it underlies a later Blackduck component. The Laurel horizon at the site is quite rich and further work on this very important archaeological complex is needed.

The intensive site survey mentioned above was conducted to learn more about the impact of intensive wild rice use on prehistoric population and settlement pattern. The survey extended west from the White Oak Point site on the Mississippi River in Itasca County to the Red River just west of Ada. The purpose of the survey was to determine the relative density and location of Middle Woodland and Late Woodland habitation sites along this 12 mile wide transect cutting through the heart of the wild rice harvesting area and crossing several vegetation zones from mixed conifer-hardwood west to prairie. The location of this transect was selected also because it parallels the paleoecological transect analyzed by John McAndrews earlier in his study of prairie-forest boundary shifts in the post-glacial period. McAndrews' study thus provided us with a climatic-ecological control through the time period occupied by the archaeological sites.

The survey located over 50 such sites and over 80% of these sites fall into the late prehistoric period. These data support the evidence from previous work at Mille Lacs where a quantum jump in population and a significant shift in settlement pattern occurred between the Middle Woodland and Late Woodland cultures. The Mille Lacs data indicate a major shift to wild rice as an economic staple as the major variable involved.

Transect data are now being analyzed and a major excavation program is being planned for the future. One interesting by-product of the transect was the obtaining of stratigraphic data at the Leech Lake Site which substantiates

a previous "hunch" that the Sandy Lake ceramic ware replaces Blackduck during the late prehistoric period, negating the earlier theory that Blackduck persisted into the early historic period and represented the culture of the historically known Assiniboin and Yanktonai Dakota.

As in any archaeological research in Minnesota, interested local people were of great help. While it is impossible to list all of the many people who offered assistance, special thanks are due William Marshall of Grand Rapids, E. F. Creech of Cass Lake, Cliff Miller and Cleve Stilwell of Hubbard County, Robert Littlewolf and William Gagnon of Ponsford Landing, Clearwater County, and Richard Canning of Hendrum.

2. Other field excavations

Richard Lane, St. Cloud State College, continued his excavations at the Refuge Site in Sherburne County. This large site is located on the Sherburne National Wildlife Refuge and consists of a very large number of burial mounds plus habitation areas. The major component seems to be late prehistoric Woodland and Lane's results will form an important link between the Mille Lacs area to the north and the Twin City area to the south.

Vernon Helmen, Hamline University, continued his survey work on Prairie Island (Goodhue and Dakota counties) and also reported the find of a very large Middle Woodland site in Wright County. Helmen and his site informants have done some preliminary research at the site and hope to develop a larger research project for the future.

The University of Winnipeg excavations in Koochiching County were discussed in a previous section.

3. Highway Salvage Archaeology

This Minnesota Historical Society program, under the general direction of Alan Woolworth with field operations directed by David Nystuen, is fully reported in a series of monthly and an annual report issued by the Society. This important research consists of both examination of projected highway construction areas for archaeological and historic sites and in the salvage excavation of those sites deemed important and doomed to destruction by road construction activities. This latter salvage portion of the work was initiated only this year and during April, Nystuen directed work at a preceramic site located on the Campbell beach of Glacial Lake Agassiz in Roseau County. The site produced quantities of waste chert and other occupational debris plus diagnostic Eden-Scottsbluff projectile points. The Society is to be congratulated for its excellent work under the highway salvage program and it is hoped that the actual salvage excavation segment can be expanded to extract scientific data from other important sites before they are destroyed.

4. Laboratory analysis and preparation of manuscripts

The University MRC program continues with the analysis of the Mille Lacs-Kathio site data under the direction of the author. The final Arvilla burial complex report will be ready for the publisher in the fall.

Two additional major monographs on University of Minnesota site data will be completed before the end of 1971. James Stoltman, University of Wisconsin, is completing a detailed monograph on the Laurel complex of northern Minnesota. Site data include those from the Smith Mounds, McKinstry Mounds, Nett Lake, Pike Bay (Lake Vermillion), and the Pearson Site (Lake Vermillion). These data include some collected by Professor Emeritus Lloyd A. Wilford and only partially reported, plus Stoltman's own work of recent years.

The second major report is that being completed by Professor Guy Gibbon, University of Illinois. Gibbon is analyzing site data from all excavated late prehistoric Oneota sites in Minnesota. Gibbon has completed a similar series of reports on Wisconsin Oneota data and kindly accepted an offer to study the Minnesota materials. The sites covered include the Bryan, Silvernale, and Bartron in Goodhue County, the Humphrey and Vosberg sites in Blue Earth County, plus a scattered series of Oneota burial mounds from southern and southeastern Minnesota. Gibbon reports that all laboratory analysis has been completed and that he will complete the written manuscript during the summer months.

Public Interpretation

Cooperation with the Division of Parks and Recreation, Department of Natural Resources, in the development of archaeological interpretation within selected state parks continued. An outdoor display unit intended to present changing small-unit displays illustrating the current archaeological research in Mille Lacs-Kathio State Park was completed and the exhibits installed this past spring. The exhibit sequence was planned and the materials selected at the University and the display design and construction completed by Ken Sanders. This unit was developed on a trial basis to determine the feasibility of small on-site display units at archaeological sites in other state parks.

The major work of designing and constructing the archaeological-natural history exhibits for the Big Stone Lake State Park interpretation center is underway. The sequence emphasizes the changing natural area from Glacial Lake Agassiz times to the present and against this background interprets systems of human land utilization through the prehistoric into the historic period.

Another major effort at designing an archaeological-natural history exhibit sequence for an interpretation center now under construction in Mille Lacs-Kathio State Park will begin at the University this fall. The exact theme has not yet been selected, but paleoecological, archaeological, and ethnographic data will be utilized. Much of the material to be displayed will be drawn from excavations conducted under the MRC program. This interpretation center will focus on the Mille Lacs region and will complement the excellent displays on the historic Chippewa in the Minnesota Historical Society Museum at Vineland.

It is hoped that similar regional archaeological interpretation centers will be developed in the future at the Grand Mound Site on the Rainy River, and at two or three additional sites in west-central and southern Minnesota. An article on this topic that suggests some possible approaches is listed in the subsequent section of this report.

Publications, Theses, and Manuscripts Prepared

Johnson, Elden. "The Gull Lake Site." Minnesota Archaeologist. Vol. 21, No. 2. (in press).

_____. "Prehistoric Archaeology and Public Interpretation: A New Approach." Minnesota History, Vol. 42, No. 3, 1970. (Reprinted in Historical Preservation in Minnesota, Donn Coddington, ed., Minnesota Historical Society, 1971.)

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Shay, C. T. "The Itasca Bison Site: A Study in Ecology." Prehistoric Archaeology Series, Minnesota Historical Society. 1970.

Steinbring, Jack. "The Littlefork Burial: New Light of Old Copper." Journal of the Minnesota Academy of Science, Vol. 37, No. 1, 1970-71.

Preservation of Archaeological Sites: Criteria and Selection

The author is the Minnesota representative of the Society for American Archaeology committee on public understanding. This committee has several functions and its current direction is toward developing federal legislation that will ensure the protection of significant archaeological sites on federal lands. The question of when a site is or is not significant then becomes crucial and the committee will develop criteria that will be used to evaluate known sites on federal lands.

The need for the development of similar criteria in Minnesota is also apparent. There are several extant programs of archaeological and historic site designation and/or purchase in Minnesota. Some of these seem to duplicate one another and some seem to operate with no well defined criteria. Archaeological sites are presently included under the Scientific and Natural Areas program of the Department of Natural Resources and the consulting committee is in the process of developing a set of criteria applicable to such sites. The Historic Sites program operated by the Minnesota Historical Society also includes archaeological sites, some already under state ownership. The Society has criteria for such selection with an emphasis on preservation and public interpretation. The State Planning Agency has apparently included numbers of archaeological sites for possible purchase or other protection under Project 80 though the criteria for selection of sites are not clear and there is frequently no consultation with an archaeologist. The federal Register of Historic Sites does not seek to acquire sites but simply to designate significant sites, archaeological sites included. Rigid criteria are applied. Finally, many units of local government from counties to villages seek to include archaeological sites within developing or proposed park and recreation areas.

All of these efforts at preservation and interpretation are to be applauded. Certainly archaeological sites are among the nation's significant non-renewable resources and every effort should be expended in preventing their destruction. At the same time, duplication of effort and lack of coordination among these many attempts is wasteful of both human energy and public funds. Specific criteria must be established and coordination of the various programs developed. One positive contribution of the Council for Minnesota Archaeology might be to serve as consultants in establishing criteria and evaluating archaeological sites for the various agencies. At the same time, communication between the agencies and coordination of effort must be established.

Pine City, Minnesota
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