



Annual Report of the State Archaeologist

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Introduction

The following report outlines the major activities of the state archaeologist, summarizes the activities of others, and finally offers some specific comments and suggestions on the unresolved problems of salvage archaeology that face us.

The year was one of some significance in the area of interpretation of excavation results to both the interested public and to the archaeological profession. A publication series on the prehistoric archaeology of Minnesota has been established by the Minnesota Historical Society and includes both technical and general interpretative works. Reception of the series has been favorable, in large part due to the excellent job done by the publications department of the Minnesota Historical Society, and particularly its editor, Mrs. June Holmquist. Interpretation for the public through museum and site interpretation within state parks and state historic sites has moved forward rapidly, perhaps best exemplified by the completion of an interpretation structure at Big Stone Lake State Park, the near-completion of a novel outdoor site interpretation unit at Mille Lacs-Kathio State Park, and the reconstruction of the Connor post near Pine City. It is in this area of archaeological interpretation that Minnesota may well become a leader among midwestern states.

The Council for Minnesota Archaeology, an informal organization of professional archaeologists located in various state teaching institutions and agencies met in October to report on research activities and to welcome two new archaeologists to Minnesota. These are Professor Alan Brew, Bemidji State College, and Professor Richard Lane, St. Cloud State College. Both have become welcome participants in local archaeological research. The Council also met with the Minnesota Archaeological Society to volunteer any assistance and to encourage the Society to expand to encompass the numbers of individuals in the state who have keen interest. The Society is also engaged in upgrading its journal, the oldest continuous archaeological publication in Minnesota, and a desirable outlet for short research and interpretative articles.

At the invitation of the State Archaeologist, Dr. Jacek Miskiewicz, Curator of Bronze Age Archaeology, National Archaeology Museum, Warsaw, Poland, joined University field crews for two months during the summer season. Dr. Miskiewicz was a most welcome addition and contributed much to the success of the field parties. I would like to thank him and to welcome him back at any time.

I should like to thank Dennis Dickinson, University of Minnesota, who served admirably as Acting State Archaeologist during my sabbatical leave absence during the previous year. Dennis fulfilled these duties while completing his final year in residence in the Graduate School, working on a part-time basis with support funds generously provided by the University Graduate School Research Fund.

Archaeological Permits

One archaeological permit was issued during the past year to Professor John Steinbring, University of Winnipeg, for testing and excavation in the Fish Lake reservoir area of St. Louis County. Steinbring completed excavations in the summer of 1969, locating two significant sites of Plano and Boreal Archaic affinities. The sites had been seriously disturbed at the time of dam construction but some data were salvaged, which, when analyzed with the extensive local surface collections of Mrs. R. C. Redepenning, provide some suggestive leads on what may have been a significant preceramic occupation in northeastern Minnesota. Fortunately, Steinbring is continuing this research, and will be in residence at the University next year to work on the problem as a part of his Ph.D. dissertation. Steinbring submitted a completed report on his Fish Lake work in compliance with the permit requirements.

Field excavation and analysis

1. Minnesota Resources Commission Program in Prehistoric Archaeology

Excavations in this program were conducted in Maplewood State Park, Ottertail County, and in Mille Lacs-Kathio State Park, Mille Lacs County.

The Mille Lacs County excavations completed the intensive research on the Cooper Site in the State Park, excavated two additional burial mounds adjacent to the village site, and continued the intensive site survey. A complete house floor was excavated at Cooper, the northeast corner of the palisade excavated, and the stripping of the center section of the site completed. With the help of the Division of Parks and Recreation, the site was then completely backfilled, levelled, and seeded to grass. Large areas of the site remain undisturbed and unexcavated. Two burial mounds adjacent to the one excavated in 1967 provided information on an earlier horizon characterized by dentate stamped pottery (two complete vessels were recovered) associated with shallow primary pit burials. These mounds precede the protohistoric Dakota mound, worked in 1967, and the main occupation of the village site by at least 500 years. Two very large mounds remain in the group and future excavation of these may well provide a stratified situation which would be of considerable importance to understanding the Mille Lacs sequence. The two 1969 mounds were rebuilt and seeded after the excavations were completed.

Charles R. Watrall excavated at Maplewood State Park with a student crew. The Maplewood site had previously been tested and Watrall's work was concerned with determining the position of Maplewood in the late prehistoric range of sites lying within the maple-basswood covered moraine of central Ottertail County. In this context he located and tested a series of archaeological sites within the region surrounding

Maplewood.

The Saari Site, discovered in 1967 by the U. S. Forest Service on Gold Island in Knife Lake, was visited and tested by a University crew led by Professors Martin Q. Peterson and Richard E. W. Adams in September. The site had produced parts of three human skulls eroding from a gravel bank and it was decided to test the island area in an attempt to locate additional skeletal material and artifacts which might give some cultural context for the human remains. The work was facilitated by personnel of the Superior National Forest who closed the island to camping to protect the site and who also provided air transportation to the site for the field crew. The brief excavations did locate the remnants of the original burial pit which still contained some human bone, but no artifact materials were located. An excavation permit issued by the U. S. Forest Service allows us to continue the research through the border lakes area, a project which will continue for some time.

Professor James B. Stoltman, who tested the Grand Mound or Laurel site area for habitation evidence in 1967, had located a series of prismatic core blades in a private collection. He, Dr. Jacek Miskiewicz, and I visited the Rainy River in July to attempt to locate more of the blades and the site from which they had come. A total of nine of these blades were finally traced, measured, and photographed, and the locus of the find documented. Tests at the site did not locate any concentration of materials, but an additional blade fragment was located on the surface. Stoltman will direct the University field session crews on the Rainy River in 1970 and plans additional work at this important site.

2. Northern States Power Company-Prairie Island Excavations

The final season of excavations at the series of sites on Prairie Island, Goodhue County, financed by a grant from the Northern States Power Company concentrated on the Bartron Site. This is a large Mississippian village probably occupied in the period of 1100 to 1300 A.D. (radiocarbon samples have been submitted for age determination). A student crew under my direction worked five weeks at the Bartron Site, stripping a large area of storage pits and excavating a semi-subterranean house floor. Quantities of habitation debris were obtained from the site. The remaining burial mounds in two adjacent sites were trenched extensively, though like the Birch Lake mound group excavated earlier, little material was recovered.

The Bartron Site data, together with that from the nearby Mississippian sites of Bryan, Silvernale, and Sheffield, are now being analyzed and will provide a developmental sequence for these far northern Mississippian agriculturalists.

The Bartron site is quite extensive and only a small portion has been excavated. We are asking the Northern States Power Company to

preserve the site and allow the University and Hamline University to use it as a field training site for students over the next several years. Professor Vernon Helmen, Hamline University, conducted such a training session in the fall of 1969, and plans to continue with a similar program each year.

The generous cooperation of the Northern States Power Company in allowing work at the site and in providing funds to support the research is greatly appreciated. The Minnesota Historical Society administered the grant, and their willingness to do this facilitated the work immensely.

3. Gull Lake Excavations

Excavations for the U. S. Army Corps of Engineers, St. Paul District, were conducted during the summer of 1969 by a University crew. The field crew was directed by Alan Kutchera, University of Wisconsin. The work was initiated on the request of the Corps in an area adjacent to their Gull Lake Dam where construction of a camping-recreation area had been planned. The work was done under contract administered by the Minnesota Historical Society.

Excavations at the site, which consisted of a series of circular and elongate burial mounds and an associated village site, produced information on a prehistoric complex previously unknown in Minnesota. The two component site consisted of an initial village habitation associated with the Malmo focus, probably dating about 200-500 B.C., followed after an interval by the newly discovered component. The latter is dominated by dentate stamped pottery with a strong element of net impressed pottery, side notched projectile points, and burials of both secondary and primary form interred on the original ground surface or in subsoil pits. The mounds constructed over these burials had no burials in the fill though all contained habitation site refuse.

As a result of the excavations, the Corps of Engineers have altered their construction plans, shifting the camping-recreation area, and preserving the archaeological site. The initial information on the plans of the Corps and the danger to the site came from Mr. Charles Aguar, who promptly reported the plans, and who is largely responsible for the salvage of this important site.

4. Other excavations

Richard Lane, St. Cloud State College, initiated work at a combined burial mound-village site area within the Sherburne National Wildlife Refuge, producing materials which will be significant in relating the Mille Lacs data westward to central Minnesota. Lane expects to continue his field research at the site during the summer of 1970.

The work of John Steinbring at Fish Lake, St. Louis County, has

been mentioned above. Steinbring will continue his research on the problem of Early prehistoric cultures of the Canadian shield and Quetico with work in 1970 in the Rainy Lake area of northern Minnesota.

5. Wild Rice Research Project

Continued archaeological and paleobotanical research on the impact of intensive wild rice utilization in the late prehistoric period involved the cooperation of several individuals. Dr. John McAndrews, Royal Ontario Museum, continued his analysis of the deep pollen core from Lake Ogechie, Mille Lacs County. The core was taken offshore from the Cooper site and will provide a vegetation history of the immediate area extending back in time to the early post glacial. Evidence for wild rice is present in the core and we are now attempting to correlate the archaeological and pollen evidence.

Through Professor Robert Bright, James Ford Bell Museum of Natural History, the extensive collection of plant macrofossils, primarily seeds, from the Mille Lacs and the Bartron sites is being carefully analyzed at the museum. Data from these collections will be of considerable importance in interpreting the development of subsistence patterns in the late prehistoric period.

The question of the introduction of maize or corn into Minnesota may be partially answered through the analysis of a pollen core from the now drained Great Oasis Lake in Murray County. Through Professor H. E. Wright, Jr., Limnological Research Center, a core was taken by Barbara Spross who is now analyzing the results. The core site is adjacent to the Great Oasis village, one of the earliest examples of Missouri River-Plains village culture extending into Minnesota. These people may have been the first to introduce maize into Minnesota and it is hoped that maize pollen will be located in the core and that the vegetational-climatic associations and the approximate date of this intrusion will be determined.

Considerable time was also spent in developing a research scheme for the summer of 1970 when a site survey along an east-west traverse from Grand Rapids west to the Red River will be made. The object of the survey is to locate and identify archaeologically prehistoric sites of the ceramic period and from these data to determine shifts in settlement pattern and population size. The working hypothesis correlates the apparent shifts in these variables to the intensive utilization of wild rice.

Public Interpretation and Scientific Contacts

An important part of the activities of the state archaeologist's office is in handling inquiries from the public and in speaking to groups throughout the state. In addition to the many requests by mail, individuals who telephoned or visited the laboratory, talks were given

before the Sioux Archaeological Society, the Onamia Rotary Club, the Minnesota Archaeological Society, the East Ottertail County Historical Society, and the Red Wing chapter of the AAUW. Unfortunately, lack of time or conflicts in schedule did not permit the acceptance of other requests.

Public interpretation through publications, listed below, and through on-site interpretation in state parks and state historic sites, holds great promise and is well on its way toward more intensive development. The acquisition by the Minnesota Historical Society of the Grand Mound, or Laurel, site on the Rainy River is of great importance for this is one of the most significant prehistoric sites in the state. Long range plans for interpretation at the site are now underway by the Historic Sites Division of MHS. The expansion of the historic sites acquisition program of MHS to include prehistoric sites is of great significance.

Scientific contacts which lead to discussions of problems common to archaeologists are very important. Regional societies frequently provide the best opportunity for such discussions, and Minnesota, lying partially within the Upper Mississippi, the Plains, and the northern Canadian shield regions, has interests in each of the associated regional societies. The Midwest Archaeological Conference met at the University of Illinois, Chicago Circle, where a report on the Mille Lacs excavations was delivered. Unfortunately, the Plains Conference and the Canadian Conference fell at times conflicting with academic duties and could not be attended. The national meeting of the Society for American Archaeology was held in Mexico City where a day was devoted to papers on midwestern archaeology. Finally, I participated in a symposium at the Iowa Academy of Sciences annual meeting reading a paper titled "The Northern Margins of the Prairie Peninsula." The general topic of the symposium dealt with the relationships of the origins of the Middle Missouri tradition and the prehistory of the prairie peninsula.

Publications, theses, and manuscripts prepared

Caine, Christy A. H.

- 1969 "The Archaeology of the Snake River Valley." M. A. thesis, University of Minnesota.

Johnson, Elden

- 1969a "Archaeological evidence for the prehistoric utilization of wild rice." Science, 163:276-277.

- 1969b "Great Oasis Decorative Motifs." Plains Anthropologist, 14:46, 272-276.

- 1969c "Preliminary Notes on the prehistoric use of wild rice." Minnesota Archaeologist, 30:2, 31-43.

- 1970a The Prehistoric Peoples of Minnesota. Prehistoric Archaeology Series, Minnesota Historical Society.

- 1970b "The Northern Margins of the Prairie Peninsula." Paper read at Iowa Academy of Sciences, accepted for publication, Plains Anthropologist.

- 1970c "The Gull Lake Mound Group." Report of excavations submitted to the U. S. Army Corps of Engineers. Mss.

Johnson, Elden, Martin Q. Peterson, and Jan Streiff

- 1969 "The Birch Lake mound group." Journal of the Minnesota Academy of Science, 36:1, 3-8.

Shay, Creighton Thomas

- 1970 "The Itasca Site: an early post glacial bison kill site in northwestern Minnesota." Ph.D. dissertation, University of Minnesota.

Wilford, Lloyd A.

- 1970 Burial Mounds of the Red River Headwaters. Prehistoric Archaeology Series, Minnesota Historical Society.

Wilford, Lloyd A., Elden Johnson, and Joan Vicinus

- 1969 Burial Mounds of Central Minnesota. Prehistoric Archaeology Series, Minnesota Historical Society.

Salvage Archaeology, Interpretation, and Urgent Needs

The continued, and continuously accelerating, destruction of archaeological sites in Minnesota is a major problem. Some aspects of this problem have been partially alleviated in the past two or three years. A strong program of highway survey is operated by the Minnesota Historical Society in cooperation with the Minnesota Highway Department. Under this program, projected right-of-way on highways of certain classes are examined carefully for archaeological sites and the planning section of the highway department is notified when such sites are located. Frequently the right-of-way can be shifted to avoid destruction of the site. Major gaps in this program exist, however, for no provision is made for salvage excavation at a threatened site when right-of-way change is impossible, and many state-aid highways are excluded from the program. It is vital that the program be expanded to include provision for excavation paid for out of highway matching funds and that all classes of state aid roads be included under the survey-salvage provisions. Too much secondary road construction in Minnesota continues to destroy archaeological sites. I would strongly urge expansion of the program, continuing the relationship with the Minnesota Historical Society as the agency responsible for implementation of the program, but adding a trained archaeologist to the Minnesota Highway Department. This individual, working with advance highway planners, could then work effectively with the Minnesota Historical Society in what would be a comprehensive survey-salvage program.

U. S. Army Corps of Engineers projects within Minnesota have continuously been monitored by the state archaeologist in close cooperation with the St. Paul District office of the Corps. Each announcement of a public hearing on any proposed construction is sent by the Corps to the state archaeologist and an opportunity given for submission of a statement. This past year, for example, notification of a major site within the proposed White Oak Point reservoir was given by the state archaeologist at a public hearing at Deer River, negative reports were filed with the Corps on proposed lower Minnesota River channel improvements and diking of the Mississippi in Winona. Through the cooperation of Timothy Fiske, archaeologist and Assistant Director of the St. Paul Science Museum, advance plans were made for survey within the proposed Blue Earth reservoir. Finally, the Gull Lake excavations, financed by the Corps, is another example of the excellent cooperation between that agency and the state archaeologist.

The Division of State Parks and Recreation has also continued its excellent record of cooperation with archaeologists and its interest in archaeological interpretation. The expansion of state park areas, the development of construction in the future, and the need for interpretation within the parks, argues for additional manpower. At the present time there has been no complete site survey within the state owned parks of Minnesota. This, despite the fact that many of them occur in situations where archaeological sites can be expected. The immediate need for a detailed survey is obvious, recognized by park officials, archaeologists, and interested institutions, but the resources of none of these institutions allow anything but concentrated work in

one or two parks or limited emergency salvage when the need arises. I would recommend that an archaeologist be added to the staff of the Division of Parks and Recreation and that he be given the resources to operate a systematic site survey within all of Minnesota's state parks. This individual could also function in interpretation planning with parks. The state archaeologist and other archaeologists within the state would continue to operate their more intensive excavation programs within state parks and would also continue to assist in interpretation programs. If the Division of Parks and Recreation budget will not allow the addition of such a person, an intensive four year survey program operated under contract or special legislative appropriation to the state archaeologist could accomplish the needed work.

Finally, the need for salvage archaeology on privately owned lands is desperate. Calls continually come into this office and to the Minnesota Historical Society, the St. Paul Science Museum, and to the Minnesota Archaeological Society describing some situation where construction is uncovering and destroying an archaeological site. The state antiquities law does not apply to private lands meaning that no attempt can be made to halt the construction activities except through appealing to the property owner. More than this, the pace of such destruction far exceeds either the time or the resources available to even visit the site. I know of no way in which this most serious problem can even be approached except through additional trained archaeological personnel armed with budgetary items allowing such activities and an expansion of the historic sites act. The addition of archaeologists to the academic staffs of St. Cloud State, Bemidji State, and, next year, Moorhead State, will certainly help, and it is hoped that the next few years will see such additional staff appointments at the other state colleges. An additional survey archaeologist on the staff of the state archaeologist and the Minnesota Historical Society, with a field expense budgetary item would be of great help. The continual efforts to inform the public of the value of archaeological data and the loss through its destruction should be intensified. The addition of a unit on archaeology in the conservation classes taught at many secondary schools in Minnesota might help accomplish this as would an improvement of the archaeological content of the basic course in Minnesota history.

Perhaps most important, however, is an expansion of the historic sites act to parallel that developed for Scientific and Natural Areas in Minnesota. I would strongly urge that the historic sites act include privately held lands, where the property owner in agreement with the Minnesota Historical Society, would agree to labeling an important site as an historic site, preserving it for scientific study and interpretation in the future. Many important archaeological sites in Minnesota are owned by interested and cooperative private citizens or corporations. Many of these individuals or corporations would be willing to allow designation of such a site as an historic site in an agreement with a state agency such as the Minnesota Historical Society, particularly if the state legislature enacted legislation removing such property from the property tax rolls for the period of the agreement. Such a modifi-

cation of the historic sites provisions would enable the state to preserve many important sites that now are beyond any real control and that cannot be purchased through the historic sites program because of the limitation of funds.

The problems facing us are not insurmountable, and certainly we have made considerable progress over the past few years, almost entirely due to the stimulus of the Minnesota Resources Commission program in archaeology. Much remains to be done, however, and the crucial problems of the moment are the addition of trained personnel, additional emphasis on public education, and the preservation of privately held archaeological sites.

Cass Lake, Minnesota
30 June 1970