



NEW JERSEY'S ARCHEOLOGICAL RESOURCES



*A Review of Research Problems and
Survey Priorities:
The Paleo-Indian Period to Present*

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Edited by Olga Chesler

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O.C.

INTRODUCTION

by

OLGA CHESLER

Background

Since 1966, there has been a proliferation of federal and state legislation designed to afford protection to sites, districts, structures, buildings, and objects that have archeological, historic, architectural, and cultural significance. These historic preservation laws require federal and, in some instances, state agencies to consider cultural resources during the earliest stages of project planning, and to design public undertakings so as to avoid or minimize adverse effects to those properties that meet the criteria for inclusion in the National Register of Historic Places.

In order to locate, identify, and evaluate cultural resources, federal and state agencies often rely upon information submitted to them in the form of survey reports prepared by qualified professionals. Since 1975, more than 500 reports have been received by the New Jersey State Historic Preservation Officer (SHPO). Although these surveys have been conducted in accordance with federal laws and procedures, many of the reports have not generated information of scientific value for archeological research. The majority of surveys have been performed for small-scale projects such as construction of sewer treatment plants or trunk lines, highway widening or bridge replacements, local public works projects, senior citizens housing, community development block grants, and development or improvement of parklands. With the exception of some large scale Corps of Engineers' flood control projects and those highway or sewer projects that cross several municipalities and/or counties, contract surveys in New Jersey have been limited in geographic scope.

Small-scale surveys can make important contributions to archeology if they are conducted within some regional framework. The project that resulted in the following papers was an attempt to develop a basis for assessing significance of sites in terms of statewide research designs.

Another argument for developing a statewide archeological research design involves the federal mandate to each SHPO to conduct comprehensive surveys that will identify sites eligible for inclusion in the National Register. It is unrealistic, however, to expect or insist that the SHPO examine every acre of land within the state. Such a survey would be prohibitively expensive and would take years to complete. As a result, the emphasis of the federal historic preservation program has shifted away from compiling statewide inventories and towards long-term planning for the protection of archeological resources.

Several states, including New Jersey, have attempted to develop State Plans for Archeology. These attempts have been encouraged by the Division of State Plans and Grants, Office of Archeology and Historic Preservation, National Park Service, U.S. Department of the Interior. In brief, the purpose of the federal Resource Protection Planning Process (referred to as RP3), is "...to develop a comprehensive historic resource management process which identifies and organizes information about a State's historic, archeological, architectural, and cultural resources into a form that is readily useable for producing high reliability decisions, recommendations, and/or advice about the identification, evaluation, and protection of these resources" (Draft: Resource, Protection, Planning" by the Division of State Plans and Grants, 2/28/81). Although the approaches may differ, the objectives of RP3 and New Jersey's planning process are the same.

New Jersey's Archeological Planning Process

On October 27, 1978, the New Jersey SHPO sponsored the first Conference on Archeology and Historic Preservation. At that meeting, the SHPO staff asked for volunteers to form a committee to discuss the development of a statewide archeological planning process.

On November 28, twenty-three people attended the first working session of the State Plan Study Group. Participants decided that, as a first step towards developing such a plan, the state should be divided into cultural historic periods (Paleo-Indian through Historic). The archeologists agreed to meet in small informal groups to discuss each period in terms of research priorities, spatial distribution of remains, and management needs. Each group was asked to prepare an outline and map, if possible, and to have this information ready for distribution at the next group planning session.

In order to ensure maximum input into the planning process, phone calls were made by SHPO staff to archeologists working throughout New Jersey. The response was optimistic and approximately sixty people (mostly professional archeologists but also some cultural geographers, historians, and graduates of American Civilization programs) agreed to join at least one of the groups. Most groups met in December.

The second working session of the State Plan Study Group was held on January 19, 1979. Forty-four people attended. Outlines and maps from each group, and in some cases, from individuals, were distributed and discussed. Suggestions were made concerning what next steps should be taken. The following week, this writer met with Lorraine Williams of the State Museum to discuss an appropriate format for the development of a State Plan for Archeology.

On March 1, 1979, a proposal was submitted by this author to the New Jersey SHPO as part of the application process for a survey and planning grant. On July 20, the Office of Environmental Review (now part of the Office of Cultural and Environmental Services), Department of Environmental Protection, received an historic preservation grant of \$7,000 from the U.S. Department of the Interior, matched by \$7,000 from the State of New Jersey, to develop the archeological component of the State Plan. The project began on August 17.

As a first step, the prehistoric periods were subdivided spatially to reflect distributions of sites and specific research problems. While the Paleo-Indian study group members concluded that there was insufficient information for them to divide the state into meaningful subareas, the Archaic, Early/Middle Woodland, and Late Woodland groups concluded that New Jersey could be divided into northern and southern subareas and that different sets of research questions could be addressed to each subarea.

The historic period (ca. A.D. 1600 to the present) was divided temporally. The first subperiod extended from 1660, the date of the first permanent settlement in New Jersey, to 1810 when a new wave of immigrants began to arrive in the state. The second subperiod extended from 1800 to 1865 during which time New Jersey changed from a predominantly rural landscape to one that more closely resembles the modern cultural map. The third period extended from 1865 to the present, and addressed those changes that occurred as a result of increasingly complex technological manipulation of New Jersey's resources. The contact period (ca. A.D. 1600-1800) was treated separately as a lead-in to the historic period.

Since 1978, it has been the intent of the SHPO to involve as many people as possible in the development of the archeological component of the State Plan. For this project, however, it was necessary to select those individuals who would best represent and express the ideas discussed in the small study groups. For each subarea or subperiod, an individual was asked to prepare a paper that would address the following questions:

1. range, distribution, and sequence of human activities;
2. discussion of types of archeological remains that would be representative of each period;
3. specific research questions;
4. list of preservation priorities based upon threats of destruction by natural forces or human actions;
5. recommendations for surveys and management of the data base; and
6. discussions of the validity of the geographical subareas and suggestions for more refined units of study.

Contact Period.....Lorraine Williams
and Susan Kardas

reviewers.....Marshall Becker
Ives Goddard
Barry Kent
Melburn Thurman

Historic Period: 1660-1810.....Peter Wacker
1800-1865.....Edward Larrabee
1865-present.....Edward Rutsch

reviewers.....Michael Gimigliano
Constance Greiff
Paul Huey
Leedom Lefferts
Robert Schuyler
Stephanie Toothman

In addition to the above, Joel Grossman and John Cavallo were asked to prepare a paper on the value, reliability, and effectiveness of models for predicting the distribution of archeological sites.

Objectives of the State Plan for Archeology

As stated previously, the project had several objectives. At this point, these objectives will be discussed in terms of whether or not they were met successfully.

One of the most important purposes of this project was to obtain input from the professional community in the formulation and development of a State Plan for Archeology. This objective was achieved by involving nine archeologists and one cultural geographer as the primary consultants, and eighteen archeologists, one architectural historian, one historian, one cultural anthropologist, and one linguist as project reviewers. The final report reflects the concerns of these individuals with regard to the management and preservation of New Jersey's archeological resources.

Another objective was to consolidate existing data on New Jersey's archeological remains. The last statewide survey of prehistoric sites is described in Dorothy Cross' (1941) Archeology of New Jersey: Volume I. Since the 1940's, a variety of articles and books have been written on New Jersey's prehistoric as well as historic and industrial resources. In addition, many sites have been located as a result of archeological investigations undertaken during the past decade in accordance with federal historic preservation laws and procedures. The SHPO project was an attempt to synthesize information scattered among various publications and survey reports. The final papers do discuss the cultural historic periods in light of data that has surfaced since Cross' earlier study. This second objective has been met.

A third goal of the project was to identify research problems and survey priorities for each of the prehistoric and historic periods. It is interesting (although not surprising) to note the similarities among the recommendations made for the Paleo-Indian through Woodland Periods. Most of the consultants identified the following general research problems and survey priorities as being the most critical:

1. the need to reconstruct the paleoenvironment from an interdisciplinary perspective;
2. the need to study extant collections in private and public ownership;
3. the need to survey a cross-section of microenvironmental zones;
4. the need to excavate representative sites;
5. the need to establish local and regional chronological frameworks through analyses of datable organic materials;
6. the need to identify local and exotic sources of lithic materials;
7. the need to develop and test models to predict site distributions, subsistence/settlement systems, and social organization; and
8. the need to study the relationship between cultural complexes in New Jersey and similar, related complexes in the rest of the Mid-Atlantic region.

For the historic period, Wacker, Larrabee and Rutsch emphasized two general recommendations: 1) the need for additional research of documentary records; and 2) the need for systematic field surveys.

A few examples of more specific recommendations made by the various consultants include the following:

1. the need to study the Outer Continental Shelf for information related to early prehistoric utilization via analyses of extant pollen cores, reconstruction of terrestrial and marine climates, identification of offshore features such as lagoonal and grassy sediments, buried river/stream channels, buried subareal surfaces, and magnetic anomalies;
2. the need to study the relationship between Late Archaic mortuary ceremonialism and patterns of economic development, class differentiation, transportation, communication, and exchange;
3. the need to study the origin and distribution of ceramics in New Jersey;
4. the need to study the development that led from the Early/Middle Woodland regional interaction sphere to the regional variants of the Late Woodland Period;
5. the need to study the relationship between Late Woodland groups in northern and southern New Jersey;

6. the need to study the effects of European contact on Late Woodland life;
7. the need to study the effects of contact between aboriginal populations and different European groups (e.g. Dutch, English, Swedes) and to determine if any variations are manifested in the archeological record;
8. the need to study the spatial and functional organization of the farmstead including variations between regions, use of log, frame, brick, or stone construction techniques, and identification of European influences on the material culture;
9. the need to document local and commercial ceramic and glass ware used in New Jersey during the 19th century, and to analyze nails and other structural hardware; and
10. the need to examine the effects of the industrial revolution on the cultural landscape of the state.

In addition to the above, many of the consultants for the prehistoric periods recommended that New Jersey be subdivided by physiographic regions or by drainage systems. Certain features of the landscape were also identified for more intensive study. Some examples include:

1. offshore areas, including the Outer Continental Shelf;
2. areas of former Glacial Lakes and marshlands such as Glacial Lake Passaic and Glacial Lake Hackensack including the Hackensack, Newark, and Elizabeth meadows;
3. river floodplains;
4. fresh water springs;
5. headwaters of small streams;
6. bogs and ponds associated with relict thermokarst basins, as well as other relict landforms and drainage patterns;
7. lower reaches of tidal estuaries and saltwater bays or coves;
8. well drained uplands near natural constrictions of streams, and upland flats at the headwaters of coastal plain streams;
9. wetland/upland interfaces; and
10. areas of known lithic outcrops.

For the historic period, Wacker, Larrabee and Rutsch identified resources that should be studied more intensively. A few examples include:

1. mill sites;
2. sites of Revolutionary War encampments;
3. early transportation networks including ferry lines, turnpikes, plank roads, canals, and railroads;
4. remains of the iron industry in the Highlands of northern New Jersey and in the Pinelands of southern New Jersey;
5. farm complexes;
6. agglomerated settlements; and
7. sites from the industrial period.

Due to the complexity of the period from 1660 to the present, the papers by Wacker, Larrabee, and Rutsch are more general in coverage. However, the consultants do identify problems and discuss the range of historic archeological resources that are likely to be encountered.

While all the areas and resources mentioned above may be recognized by most archeologists as having the potential to yield information on prehistory and history, the papers in this volume document their potential importance in terms of existing site data. Therefore, this project will help the SHPO archeologists to justify their requests to federal agencies for surveys in such areas. The papers will also enable the SHPO to offer opinions of significance based upon the research problems and survey priorities identified by the consultants. In other words, if a site has the potential to provide answers to research questions posed in these papers, then its importance is increased. The SHPO will be able to use the information prepared by the professional archeologists to substantiate the need to conduct more intensive surveys or investigations of sites, instead of having to rely upon the well-worn argument that all archeological resources are significant without explicit justification in terms of local, regional, or statewide research problems.

As a complement to the papers on the cultural historic periods, Grossman and Cavallo were asked to address sampling theory and its development. After reviewing some recent predictive surveys, these consultants discussed a project undertaken in the New Jersey Pine-lands. In brief, Grossman and Cavallo defined several problems with predictive models, including:

1. the difficulty of defining the range and distance of resources exploited by prehistoric peoples in a particular region;
2. the problem of environmental change and reconstruction;
3. the problem and usefulness of statistically valid samples;
4. the difficulty of applying sampling techniques developed in one region to another region;
5. the inadequacy of many field surveys; and
6. the utility of the site concept.

Grossman and Cavallo concluded that environmental reconstruction and flexible survey strategies are key ingredients for developing predictive models and admitted that regional sampling is not yet advanced enough to help solve all planning problems in Cultural Resource Management.

While most of the SHPO project objectives were achieved, there were also disappointments. The "settlement distribution" maps failed to provide the kind of data that had been expected. The

consultants argued that they could not produce such maps due to insufficient information. After much discussion, the maps were prepared but the information they contained ranged from a distribution of projectile points and sites, to reviews of areas that have or have not been surveyed, to identification of lithic sources, local industries, agglomerated settlements, transportation routes, ceramic distributions, and demographic zones.

Another disappointment stemmed from the consultants' consensus that there was not enough information to delineate more refined units for study. While the cultural historic periods are acceptable as initial study units, it would have been better if these gross units, subdivided in some cases into northern and southern New Jersey, could have been apportioned to smaller units within the major drainage systems or the major physiographic provinces.

Conclusion

This report represents the professional input into the development of a State Plan for Archeology and, hopefully, the beginning of a trend toward more intensive research and study of New Jersey's prehistoric and historic resources. The following papers, however, do not constitute the State Plan. As a next step, it will be necessary to combine the suggestions made by the consultants with those made by the SHPO staff. Then, all recommendations will have to be evaluated and considered in terms of short and long-term overall state planning goals. While the papers do provide a preliminary framework for evaluating significance of sites and for establishing priorities for the management of archeological resources, the information presented here will have to be updated continually as research, preservation, and planning objectives change.

In conclusion, this volume offers a synthesis of existing data on New Jersey archeology, identifies current research problems, and suggests future survey strategies. For those individuals who are interested in preserving and studying their archeological heritage, these papers should be of value. More research on specific topics and more field surveys will have to follow in order to further refine the planning process.