Bulletin Of The Archaeological Society Of New Jersey

No. 37



SOUTH OFAMS

1982

NATIONAL MUSEUMS OF CANADA MUSÉES NATIONAUX DU CANADA MUSÉES NATIONAUX DU CANADA LIBRARY - BIBLIOTHEQUE

ISSN 0196-8319

THE COLLEGE FARM SITE, 28 Mi 75 by William Sandy

PP. 6-134

Abstract

The College Farm Site occupies a gently sloping field on the Cook College Campus of Rutgers University in New Brunswick, N.J. Over the last few decades, hundreds of Indian artifacts have been collected from the surface of the site. The threat of site destruction by construction projects prompted controlled surface collection and limited excavation of the site in July, 1978. Further excavation and partial stripping of the plowzone by a backhoe in December, 1979 revealed prehistoric features intact in the subsoil as well as Archaic projectile points in the plowzone. This report provides a summary of archaeological research at the site along with a general interpretation of the finds and some thoughts regarding the need for future investigation at the site.

Introduction

Archaeologists have long been puzzeled by the apparent low density of aboriginal sites in the lower Raritan River drainage (Kraft, personal comm.). The discovery of 4 sites on the property of the New Jersey Agricultural Experiment Station by Dr. Stephen Toth, Department of Soil Chemistry, Cook College, indicates that this low density may be attributed to the lack of systematic survey and to the widespread urbanization of this part of Middlesex County.

The College Farm Site is located on a gently sloping field approximately three-quarters of a mile south of the Raritan River about two miles below the natural head of tidewater. The New Brunswick City-North Brunswick Township line divides the site which is bordered on the south by the Experiment Station Dairy Farm and on the west by the Poultry Farm. Although the latter area has been stripped of its topsoil, isolated finds have been made there and further to the west, near the Squibb factory. The area to the east is grass covered; therefore, no known surface finds have been made there.

Soils and Drainage

The site soils are of the Nixon series of upland, deep, well drained, reddish loamy sands. The soil consists of loam and gravelly loam surface textures and loam, clay loam, and silty clay loam subsoils. The underlying bedrock is Triassic Brunswick Shale (Intermediate Soil Survey Report, Middlesex County, April, 1978, p. 99).

The nearest body of water is a spring which has been dammed to create the small pond, known locally as "Passion Puddle", 1200 feet to the north. Soils studies indicate a relict drainage immediately east of the site (Toth, personal communication).

Archaeological Activity

The first aboriginal artifacts known to come from College Farm were discovered by George H. Cook (1818-1889), the first director of the New Jersey Agricultural Experiment Station. Included in his finds on display at the Rutgers Geology Museum are Fox Creek Lanceolate Points (see Ritchie 1971: 50 for a description of this type).

During his four decades on the faculty of Rutgers, Dr. Stephen Toth has spent countless hours of his own time surface collecting artifacts on the plowed fields of College Farm. His personal collection consists of over three hundred Indian artifacts as well as historical materials. Dr. Toth graciously allowed a study of his collection which has yielded most of the information available regarding the periods of site occupation.

Excavations were first undertaken in July, 1978 in the area of the now completed Parking Lot #98 Extension (Fig. 2, Area A). Under the supervision of Dr. Lorraine Williams of the New Jersey State Museum, a crew from the Rutgers Archaeological Survey Office (R.A.S.O.) along with volunteers excavated 6 five-foot square test units in the relatively undisturbed western two-thirds of the new parking area. No aboriginal features were encountered although many flakes and a few tools were recovered. In the absence of distinct stratigraphy the site was excavated in arbitrary three and six inch levels.

In the eastern third of the new parking area, which had been somewhat disturbed by the construction of the original parking lot, a series of 15 test holes were drilled at fifty foot intervals by means of a gas powered auger. When the soil from these borings was sifted through ¼ inch mesh screen, 6 of the 15 holes (40%) yielded prehistoric artifacts, the majority of which were flakes.

Prior to the excavation of July, 1978, a controlled surface collection, by a R.A.S.O. field crew under the supervision of Richard Regensburg, was conducted in a cultivated portion of the site. By mapping the location of individual specimens it was possible to identify artifact concentrations. Unlike previous surface collections, which had concentrated on projectile points and large tools, the R.A.S.O. survey found that the most common artifacts were flakes, fire-altered rocks, and hammerstones; most of the debitage was of argillite.

Later in the month, a surface collection was conducted by members of the State Museum staff. In

Historic Period

There is a curious and almost complete absence of European trade items in New Jersey (Kraft personal communication). A single black glass bead from College Farm dates to this period. Historical materials such as bottle glass, kaolin pipe fragments, and ceramics abound on the site.

Discussion

The analysis of the College Farm collections presents a number of interpretive problems but at the same time holds the promise of yielding at least some information about changing patterns of land use and site function through time.

The difficulty of the task of projectile point classification was compounded by the fact that the majority of the points were made of argillite. Argillite is a fine-grained mudstone that has been subjected to low grade metamorphism. Argillite artifacts deteriorate over time, especially in acid soils, which predominate in New Jersey. Hence, many diagnostic attributes, such as methods of notching and manufacture, are destroyed. Because of this deterioration, many of the points can only be classified as to general form; e.g., stemmed points. The fact that argillite weathers so severely also prohibits any type of microwear analysis.

A glance at the Artifact Inventory — Toth Collection (Table 1) shows that many types of processing and procurement tools are present. Activities and the tools representing them include:

- 1. Hunting Projectile points and atlatls
- 2. Butchering Choppers, scrapers, and knives
- 3. Woodworking Axes and celts
- 4. Toolmaking Hammerstones, anvils, and blanks
- Hide, Bone, and Woodworking Drills, generalized scrapers, blades, utilized flakes, and gravers.
- 6. Horticulture and Food Processing Hoes, mullers, and pestles.

However, since the vast majority of these artifacts came from uncontrolled surface collections, the amount of information they provide about site function and settlement patterns during any particular period is minimal. Since artifacts such as hammerstones and pestles are not diagnostic of any particular period, they are of limited value in determining site function at a multicomponent site like College Farm, unless very specific provenience data is available. In addition, the relative importance of various site activities can only be assessed by comparison with other sites in the area (Thomas

1975). This is because no one site may be expected to contain evidence of all economic activities of any cultural group.

These facts, combined with the dearth of work on settlement models in New Jersey, the widespread urbanization of this part of Middlesex County, and the lack of systematic survey in the Lower Raritan drainage make it hard to assess the function(s) of this site. It is with these limitations in mind that the site's possible roles in developing alternate settlement models is proposed. Only by obtaining more information regarding site ecology and the resources it afforded past populations, as well as how and when these resources were exploited, can the site's function be fully understood. Some ways through which these types of information could be obtained include the following: additional controlled surface collections (Talmadge and Chesler 1977); identification and additional excavation of aboriginal radiocarbon dating; and the recovery identification of small faunal and charred botanical remains through flotation (Cavallo 1980).

The sheer numbers of Archaic artifacts from the site along with the presence of features (hearth, storage pit, and postmolds) indicates that the site functioned in Middle and Late Archaic times as a permanent or semi-permanent base camp.

The site is located in well drained woodlands near poorly drained woodlands and is well suited to use as a base from which several ecological zones could be exploited. Related transient camps could have been located along the Raritan River to exploit the spring migration of anadromous fish. The Raritan would also be a source for shellfish and waterfowl.

Mounier (Mounier and Kraft n.d.) has recognized four major ecological settings for Archaic sites in southern New Jersey. The best known of these are riverine sites, which include villages up to twenty acres in size. Generally somewhat smaller sites occur in coastal settings where because of preservation variables we have good ecological information. Lacusterine sites, including relict periglacial sites are common in New Jersey. An apparently less common type of site bears no obvious relationship to landform. These sites are usually near drainage divides at stream headwaters. This is the least understood type of Archaic site, and the College Farm site appears to be of this type

The technology of the Archaic is exemplified by notched and stemmed projectile points and the use of atlatls. The Archaic has been traditionally defined as a cultural ecological adaptation to "Primary Forest Efficiency" which reflected environmental changes in in cultural adjustments to post Pleistocene times (Caldwell 1971). This implies an increased availability of and reliance on plant foods such as seeds and nuts. Identification of charred seeds recovered through