S.C.A.A. Annual Meeting, Friday, June 15
Hoyt Farm Park
New Highway, Commack
6:00 PM - Potluck Dinner
7:30 PM - Business Meeting
   Election of Officers:
     President - Douglas DeRenz0
     V-President - David Thompson
     V-President - Elena Eritta
     Rec. Sec. - Gaynell Stone, Ph.D.
     Corr. Sec. - Laurie Billadello
     Treasurer - Randi Vogt
     (Proposed Slate)
8:00 PM - Speaker --
   Allison Manfra McGovern, ABD
   The Graduate Center, CUNY
   “The Betsy Prince Site, A Free Black
   Woman of Mt. Sinai, NY”

S.C.A.A. Director Receives the Alice P. Kenney Award

Gaynell Stone, Ph.D. was selected to receive the 2012 Alice P. Kenney Award by the New Netherland Institute at its 25th Annual Meeting in Albany on Saturday, May 19th. The Award is a certificate and $1,000., in recognition of Dr. Stone’s contribution to the understanding of the significance of the Dutch colonial experience in North America. The New Netherland Institute’s new Research Center is housed in the New York State Library in Albany.

Alice P. Kenney was a long time scholar of the Dutch in Albany and the New World and a major contributor to getting this information to the public. Dr. Stone was sensitized to the multi-cultural nature of 17th century Long Island through her dissertation research photographing over 4,300 colonial Long Island gravestones, of which over 15% were “Dutch” – all who were not English. She has taught this new view of Long Island’s history in courses at Stony Brook University, SCOPE, and S.C. Community College, as well as being a Speaker in the Humanities on “Evidence of Dutch Culture in Coastal New York.” A major contributor to the award nomination was her direction of the documentary film, The Sugar Connection: Holland, Barbados, Shelter Island, which shows for the first time Long Island’s important role in 17th century global trade through its Manors, especially Sylvester Manor on Shelter Island. The Kenney Award will be contributed toward the cost of the sequel film, The Manors of Long Island, which shows the role of the other six manors of Suffolk County in the Caribbean sugar and other world trade. The Kenney Trust has purchased 20 copies to be distributed to all schools and museums in the Albany region.


The N.Y. State Museum Department of Historical Archaeology and the New Netherland Institute are offering an Institute in Albany which will explore the history of the Dutch colonization of North America, New York, and the Capitol District. For those teachers accepted, it will offer 30 professional development credit hours as well as free books, resource packets, meals, and parking.

Teachers will meet from 9:00 AM to 4:30 PM Monday through Thursday, and to 2:30 PM on Friday. Designed to help educators implement the Common Core Learning Standards, scholars and educators will deliver lectures on the history of New Netherland, facilitate workshops on textual analysis and lesson development, and lead field trips to local historic sites, including an active archaeological ‘dig.’

See Stable Isotope Analysis of Shelter Island burials inside!
Based on what they have learned, participating teachers will work in small groups to develop lessons aligned with the Common Core Learning Standards. These will be edited for publication on the New Netherland Institute website. Email Ann Pfau, apfau@mail.nysed.gov or Maryann Kelly mkelley@mail.nysed.gov before June 5 for application forms.

Stable Isotope Analysis of Native American Remains from Shelter Island, N.Y. – Vincent Stefan, Ph.D., Anthropology Department, Lehman College, CUNY

Introduction

Significant effort has been given to the task of identifying the intensity level of maize utilization in coastal New England and New York, as well as the Northeastern United States in general, during the Late Woodland period (about cal A.D. 1000 to 1600) (Chilton 2002; 2006; Little and Schoeninger 1995; Petersen and Cowie 2002). The major effort has been in the search for archaeological evidence of the presence and cultivation of maize in the Northeast (Hart 1999a; Little 2002).

The scarcity of evidence of maize presence is reflected by Little (2002) when she reports that in only 47 New England archeological sites excavated between 1940 and 2000 have maize kernels and/or cob fragments been recovered, and that the majority of those (33) yielded maize during the last ten years of that period due to the utilization of fine-meshed screen and flotation techniques. Little’s analysis of accelerator mass spectrometry (AMS) dating results taken directly from maize kernels, not on associated matter, indicated an intensification of the visibility of maize in New England between the period of cal A.D. 1250 – 1450 (Little 2002). Whether this “increased” visibility correlates with “increased” maize consumption and reliance is a critical question, one that can only be answered through the stable isotope analysis of human skeletal remains.

Stable isotope analyses of human remains from other sites in eastern North America have documented the shift in diet, one dependent on maize horticulture by ca. A.D. 1000 or earlier (e.g., Hart 1999b; Hutchinson, Larsen, Schoeninger, and Norr 1998; Katzenberg, Schwarck, Knyf, and Melbye 1995; Sciuilli 1995). However, a search of the scientific literature has revealed very few published reports of stable isotope analysis of Northeastern prehistoric Native American skeletal remains (Bourque and Kreuger 1994; Bridges 1994; Vogel and van der Merwe 1977; Yesner 1988). Little and Schoeninger’s analysis of stable carbon and nitrogen isotopes of Late Woodland human skeletal remains from Nantucket Island provided a “firm base for future studies of human diets on the East Coast” (1995).

The inadvertent discovery of prehistoric Native American skeletal remains on Shelter Island, New York provided a rare opportunity for dietary reconstruction using carbon and nitrogen stable isotope analyses.

Background

The Remains. On October 7, 2003, homeowners excavating a trench in order to pour foundations for a new barn uncovered evidence of human skeletal remains at 17 Osprey Road, Shelter Island, New York. Several isolated bones were observed in the removed dirt and bucket of the backhoe and continued digging revealed several skulls, as well as partial and complete skeletons, approximately 2-3 feet below ground level. On the afternoon of October 8, 2003, a cursory examination of the skeletal remains collected by the Shelter Island Police was conducted, after which the scene was visited for a more comprehensive examination. At the grave site additional minimal excavation was conducted in order to expose the crania, mandibles, maxillae, and postcrania of the remains left in situ in an effort to determine the minimum number of individuals present in the grave and for biological affinity assessments. A total of five complete or partial crania were exposed.

Three of the crania represented individuals whose postcranial skeletons were still present, but completely covered by the original soil over-burden. The postcranial skeletons of the other two crania were absent. Based on examination of scene photos taken by the Shelter Island Police and direct examination of the grave, it was determined that all of the individuals buried in the grave were buried in a “flexed” position, with the knees drawn into the chest and the arms folded in front of the chest, and placed on either their right or left side. The individuals’ heads were toward the west, and their bodies were placed in close association with one another. The burial appears to have been careful and deliberate, with the internment of all the individuals having occurred at or nearly the same time.

Due to their fragile condition, none of the crania could be removed for analysis and measurement; however, some mandibular and maxillary fragments with dentition could be removed for analysis. Several morphological traits of the dentition (shoveled incisors, enamel extensions of molars) were observed that indicated a Native American Indian biological affinity. The physical condition of the bone and the context of the grave indicated that this scene represented a prehistoric, Native American Indian multiple burial. Given that the burial was located on private property and the site had not been previously recorded as a “grave” or “burial site” with the State of New York, these remains and/or their disposition did not fall under the auspices of the New York State Office of Parks, Recreation and Historic Preservation.

Once these determinations were made, a representative of the Shinnecock Historical and Cultural Center was contacted to inquire as to whether the Shinnecock Indians had any interest in the site and remains (Stefan 2003). Shortly thereafter, the skeletal remains which had been recovered by the Shelter Island police were repatriated to the Shinnecock Indians for reburial following their examination and analysis; however, excavation of the remains still in situ was not pursued. During this period, the Shinnecock Indians were in the process of petitioning for “Sovereign Nation” status and were therefore interested in having the remains tested and potentially using the results in support of their application. As a result, the Shinnecock Indians approved and paid for the radiocarbon and stable isotope analyses of only one sample (approximately 200 grams of skeletal fragments), which was performed by Beta Analytic Inc., Miami, Florida.

Materials and Methods

As mentioned above, 200 grams of skeletal fragments were sent to Beta Analytic Inc., Miami, Florida for radiocarbon dating, and stable carbon and nitrogen isotope
analyses. A standard radiometric technique was utilized following bone collagen extraction with alkali, providing a conventional radiocarbon age as well as a calibrated radiocarbon age (Stuiver, Reimer, Bard, Burr, Hughen, Kromer, McCormac, v.d. Plicht, and Spurk 1998). A full discussion of the methodologies utilized in the analysis can be found in Stefan (2011).

Results

The conventional radiocarbon age obtained on bone collagen from the Shelter Island human skeletal remains was 420±60 BP (Beta-184998), with a calibrated age range of AD 1430-1500 (1 sigma, 68% probability) and AD 1410-1640 (2 sigma, 95% probability) (Stuiver et al. 1998). The intercept of the radiocarbon age with the calibration curve was AD 1450. These age ranges clearly indicate these skeletal remains were from an individual who lived and died during the Late Woodland or Final Woodland period (Little and Schoeninger 1995; Wittek 1990).

The stable isotope analyses provided the following values: δ¹³C = -9.7‰ and δ¹⁵N = 11.7‰. Utilizing the offsets of Little and Schoeninger (1995), the new stable isotope values for the Shelter Island skeletal remains are δ¹³C = -15.7‰ and δ¹⁵N = 8.7‰.

Little and Schoeninger utilized both standard algebraic and linear programming models to calculate the estimated percentage contribution (minimum & maximum) of each dietary source to the Nantucket Island population diet, methods which indicate that marine sources (oceanic carnivores) contributed 38-71%, terrestrial sources (deer & freshwater fish) contributed 1-12% and the “X” group (a combination of nearshore omnivores, nearshore herbivores, nearshore carnivores and maize) contributed 29-50% of their diet (Little and Schoeninger 1995). These percentages correspond with the graphical position of the Nantucket Island skeletal remain’s stable isotope values in Figure 1. Little and Schoeninger (1995) were unable to estimate how much of the Late Woodland Nantucket Island diet was comprised of C₄ plants such as maize because of the fact that oceanic and nearshore fauna possess similar δ¹³C and δ¹⁵N values as those of maize (Chisholm, Nelson, and Schwarzc 1982). Bridges (1994) states:

"Populations relying extensively on marine resources, then, may show the same isotopic signature as groups having a mixed economy based partly on maize. As a result, the interpretation of stable carbon isotope ratios in coastal environments is complex."

Due to the paucity of archaeological evidence (modest recovery of maize kernels and cobs, lack of evidence for land clearing, etc.), Little and Schoeninger (1995) concluded that maize did not likely comprise a significant portion of prehistoric Nantucket Islander diet.

Comparison of the stable isotope values of the Shelter Island remains with those of the Nantucket Island remains clearly exhibit a similar δ¹³C value of the Shelter Island remains to those of the Nantucket Island remains, yet exhibits a significantly lower δ¹⁵N value. The low δ¹⁵N value may reflect an even greater reliance and consumption of nearshore omnivores and herbivores (bivalves, fish, crabs, gastropods, Canadian goose, etc.) than that seen on Nantucket Island. Linear programming

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Table 1. Stable isotope values for Shelter Island skeletal remains, Nantucket Island skeletal remains, and various food sources.

<table>
<thead>
<tr>
<th>ID</th>
<th>δ¹³C</th>
<th>δ¹⁵N</th>
<th>Adj δ¹³C</th>
<th>Adj δ¹⁵N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelter Island</td>
<td>-9.7</td>
<td>11.7</td>
<td>-15.7</td>
<td>8.7</td>
</tr>
<tr>
<td>19NT-154</td>
<td>-10.3</td>
<td>15.3</td>
<td>-16.3</td>
<td>12.3</td>
</tr>
<tr>
<td>19NT-108</td>
<td>-10.4</td>
<td>15.5</td>
<td>-16.4</td>
<td>12.5</td>
</tr>
<tr>
<td>19NT-130</td>
<td>-10.6</td>
<td>15.1</td>
<td>-16.6</td>
<td>12.1</td>
</tr>
<tr>
<td>19NT-134-3</td>
<td>-10.4</td>
<td>16.7</td>
<td>-16.4</td>
<td>13.7</td>
</tr>
<tr>
<td>19NT-153</td>
<td>-11.0</td>
<td>14.1</td>
<td>-17.0</td>
<td>11.1</td>
</tr>
<tr>
<td>19NT-134-1</td>
<td>-9.6</td>
<td>15.3</td>
<td>-15.6</td>
<td>12.3</td>
</tr>
<tr>
<td>Marine</td>
<td>-18.0</td>
<td>15.5</td>
<td>-18.0</td>
<td>15.5</td>
</tr>
<tr>
<td>Terrestrial</td>
<td>-24.0</td>
<td>7.3</td>
<td>-24.0</td>
<td>7.3</td>
</tr>
<tr>
<td>X</td>
<td>-13.5</td>
<td>9.8</td>
<td>-13.5</td>
<td>9.8</td>
</tr>
<tr>
<td>Nearshore</td>
<td>-15.25</td>
<td>7.35</td>
<td>-15.25</td>
<td>7.35</td>
</tr>
<tr>
<td>Lobsters &amp; Eels</td>
<td>-13.5</td>
<td>10.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maize</td>
<td>-10.7</td>
<td>8.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
was conducted to estimate the relative contributions of various food sources to the Shelter Island populations [see (Little and Schoeninger 1995) and (Little and Little 1997) for a detailed discussion on linear programming]. Because no documentation could be found describing how Little and Schoeninger calculated the δ^13C, δ^15N and P_1 (protein) values for their “X” group, a seven variable linear program was run utilizing C_3 plants (Group 1), deer and freshwater fish (Group 2), oceanic carnivores (Group 3: seal, bluefish, etc.), nearshore marine fauna (Group 4: bivalves, fish, crabs, gastropods), nearshore herbivores (Group 5: Canada goose), nearshore carnivores (Group 6: lobster, cunner, eel) and C_4 plants (Group 7: maize) as potential food sources. The estimated percent contributions to the Shelter Island diet were as follows – Group 1: 0-38%; Group 2: 0-16%; Group 3: 0-33%; Group 4: 0-50%; Group 5: 0-63%; Group 6: 0-64%; Group 7: 0-83%. Whether all seven of these food sources were consumed by the Late Woodland inhabitants of Shelter Island and the relative contribution of each group to their diet is unknown. Yet the relatively high estimated maximum percent contribution for Group 4-7 indicate that one or more of those groups may have been a major food source. Though the linear programming model has an equifinality issue inherent in its methodology, the method was utilized to highlight potential “patterns” in dietary consumption of food sources.

Discussion and Conclusions

The question of whether the prehistoric/historic inhabitants of Shelter Island, New York had a “recognizable” level of maize consumption and reliance requires the researcher to evaluate both the evidence for the cultivation and/or availability of maize to the Shelter Island Native American population, as well as the physiological/biochemical evidence that documents their consumption of maize.

During the summers of 1983 and 1984, Lightfoot and colleagues conducted the most thorough survey and excavations of prehistoric Native American sites on Shelter Island, within the Mashomack Preserve Lightfoot, Kalin, and Moore 1987). The archaeological remains recovered indicated that the sites ranged in function, representing residential bases, bulk faunal procurement sites (soft clam middens), lithic procurement sites, lithic workshops, plant procurement sites, and generalized foraging areas, but no horticultural sites. The archaeological record also suggested that the Late Woodland people of Shelter Island people “subsisted on deer, waterfowl, fish, various kinds of shellfish (soft clam, hard clam, scallop, oyster), and plant resources such as acorns, hickory nuts, wild cherries, sedge-polygonum, wild grapes, raspberries, sumac, chenopodiaceae, elderberries, and mustard. There is no evidence of agriculture being practiced by the prehistoric Mashomack people” (Lightfoot, Kalin, and Moore 1987). One thing is fairly certain, no archaeological evidence has been found indicating maize cultivation on Late Woodland period Shelter Island (Bernstein 1999).

An examination of the archaeological evidence for Shelter Island, similar to that conducted for Nantucket Island, may provide evidence indicating which of the potential food source groups the Late Woodland Shelter Island natives were consuming. As noted previously, the linear programming results indicate that the δ^13C and δ^15N isotope values of the Shelter Island skeletal remains reflect a potentially high consumption of one or more of the following food sources: nearshore marine fauna (Group 4), nearshore herbivores (Group 5), nearshore carnivores (Group 6) and C_4 plants (Group 7). When comparing the list of faunal species from Nantucket provided by Little and Schoeninger (1995) and the species identified by Lightfoot et al. (1987) from Shelter Island, several species are represented in both assemblages. Soft clams (Mya arenaria) and hard clams (Mercenaria mercenaria, quahog) were the most abundant of any fauna recovered from Mashomack Preserve sites, with soft clams being the predominant shellfish identified. Scallops (Argopecten irradians) and oysters (Crassostrea virginica) were also identified at noticeable percentages. All of these species are representative of Little and Schoeninger’s Group 4, nearshore marine fauna, which have mixed C_3, C_4 marine, terrestrial diets.

Several faunal species from Little and Schoeninger’s (1995) faunal assemblage list are notably absent from the species recovered and identified from the sampling conducted at the Mashomack Preserve sites. Remains of Canadian geese, Branta canadensis (Group 5: nearshore herbivore) were not recovered and/or identified, however the remains of Mallard ducks, Anas platyrhynchos, were recovered. Mallards exploit both fresh and salt water marsh environments, similar in behavior and foraging as Canadian geese. Also absent were remains of fauna from Group 6, nearshore carnivores (lobster, cunner, eel, etc.). However, there is evidence that species from these groups were potentially consumed by the native inhabitants of Shelter Island. In his report on the excavation of the Smith Site, Latham (1978) provides a basic list of miscellaneous faunal remains recovered from the site, and that list included remains from: birds – merganser, sea ducks, etc.; fish – eel, bluefish, etc.; and crustacean – lobster, blue crab, horsefoot crab. Though exact amounts or percentage contribution of these various groups to the diet of the ancient Shelter Island inhabitants cannot be determined, there is sufficient evidence to indicate that species from nearshore marine fauna (Group 4), nearshore herbivore (Group 5), as well as nearshore carnivores (Group 6) served as staple food sources for these people. Little and Schoeninger (1995) made a statement regarding the diet of the Late Woodland Nantucket islanders:

“Since maize, lobsters, and eels (and anything else in the eelgrass food web) have like δ values, we cannot, with only δ^13C and δ^15N measurements, determine the relative importance of maize compared with the fauna of seagrass meadows in the diet.”

A similar statement can be made regarding the diet of the prehistoric inhabitants of Shelter Island. The research of Fry and Sherr (1984) indicated that plants found within salt marsh and seagrass meadows possess similar δ^13C values to those as maize, and as a result, any population exploiting inshore/nearshore marine faunal resources from salt marsh and seagrass meadows will display carbon and nitrogen isotope levels indistinguishable from those exploiting maize. Though it cannot entirely be ruled out that maize contributed to the diet of the prehistoric Shelter Island inhabitants, the archaeological evidence, or lack thereof, does not indicate that maize horticulture was practiced at a significant level, if at all, on Shelter Island or...
the Northeast coast (Demeritt 1991; Lightfoot, Kalin, and Moore 1987).

The results of this study support the work of others, indicating the significant importance of marine food resources to the diets of coastal Northeastern American populations and the potentially limited role of maize in the diet. However, the successful outcome of the challenge noted by Little and Schoeninger (1995), “we see the next challenge as the discovery of some means of distinguishing between maize and marine resources of salt marsh and seagrass meadows in the coastal diets.”, has yet to be realized.

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Dr. Christopher Matthews to Monmouth State College, New Jersey

Christopher Matthews, Ph.D., who has had a very productive time on Long Island as a professor of archaeology at Hofstra University, has been hired as a full
professor in the Anthropology Department at Monmouth State College, and will also be on the staff of the College’s Institute for Heritage and Culture.

Chris has led archaeological excavations at the Rufus King Manor in Jamaica, Queens County, at the slave quarters of the Joseph Lloyd Manor in Lloyd Neck, at the site of the original Col. William Tangier Smith homestead on Strong’s Neck, and at the King house in Hampton Bays.

Dr. Matthews founded the Hofstra University Center for Public Archaeology, which managed the several on-going excavations. Volunteers were welcome to participate in his ‘digs,’ which made this experience possible for many who otherwise would not have had the pleasure to do so.

He is currently directing excavation at the home site of the Native/African American Hart family in Setauket for the next few years, in conjunction with the Christian Avenue Laurel Hill Historic District. This project is being supported by grants from the N.Y. Council for the Humanities and the Monmouth University Institute for Heritage and Culture.

Chris was recently presented with S.C.A.A.’s Golden Trowel Award for his major role in unearthing unknown aspects of Long Island’s history. He will be greatly missed.

The Wikun Gathering Place & Living History Village, part of the Shinnecock Nation Cultural Center & Museum, has received a Federal grant to develop a living culture site of the Shinnecock, similar to the one at Plimoth Plantation, and will be one of only a handful of living culture sites in the U.S. It is planned to open in Spring 2013, interpreting Shinnecock history from 1640 to 1770. It will be located in a wooded tract just west of the current log cabin Museum.

The Wikun Village will be composed of a nature walk leading to the village, wigwams and other traditional structures, an organic garden, and a food preparation and cooking arbor. As a “living culture” reconstruction, trained tribal members will re-enact daily life. Traditional skills will be practiced throughout the site, such as dugout canoe building; mat, basket, pottery and clothing making; tool construction; hide tanning; and gardening. Village programming will include guided village and boat tours, nature walks, art workshops, good sampling, and dance exhibitions.

Traditional Skill Building Workshops are being held June 5, 6, and 7 from 9:00 AM to 5:00 PM; registration is $20. Call 631-287-4923 or email wiku_nvillage@gmail.com to see if there are available slots for community participants.

Contact the Museum for guided tours of exhibitions, videos about Native American history and culture, Native American dance workshops, and bead necklace workshops. Also contact the Museum if you wish to receive the e-newsletter, Wikun Village News, which will be reporting on the progress of the village.

The Montauk Indian Museum will have a Montauk Lighthouse fundraiser on July 21, 7:30 to 10:30; tickets are $100., and there will be an auction, “Art for Archaeology.”