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EDITOR’S NOTES

I am pleased to share this special double issue of the Bulletin of the Massachusetts Archaeological Society with you. This is my first issue as editor and regular readers will note a few changes. Hopefully the glossy white cover with graphics will attract some attention and invite readers to explore further. Table of the contents is handy on the back cover and inside, figures and tables are integrated into each article for easy reference, and a few other formatting changes are designed to make each article stand out.

This is a special issue for several reasons. First, you will see that this is volume 80! Yes, the first volume of the Bulletin appeared in April 1939 with Douglas S. Byers as editor. Interestingly Doug Byers was the director of the Department of Archaeology at Phillips Academy—the institution now called the Robert S. Peabody Institute of Archaeology where I am now director. I’m sure if Doug was with us he would be happy to see that the Massachusetts Archaeological Society was still very much a collaborative effort between professional and avocational archaeologists.

The issue itself is dedicated to research on Martha’s Vineyard. The first article by Jim Richardson explains his role in bringing famed New York archaeologist Bill Ritchie to the island and highlights the careers of the notable field crew that worked for him between 1965 and 1967. Jim has an important part in the next two articles by recent Ph.D. Jessica Watson, who analyzed faunal remains from the Hornblower II and Frisby-Butler sites. He and the late James Petersen excavated these sites in the early 1980s. They produced outstanding documentation and began analysis, but never published final report. Jim was looking for a home for the collections and we accessioned them at the Robert S. Peabody Institute in 2012. Not long after that, the Conference on New England Archaeology was the venue that connected Jessica with the Peabody. Jessica was looking for legacy collections for her dissertation on environmental change in coastal New England and the well-documented materials from the Vineyard were a great choice. The Peabody’s Linda S. Cordell Award provided support for Jessica’s faunal analysis of these important legacy collections. In the final article Drew Stanzeski revisits his time on the Vineyard and salvage excavations that he made at the McDermott site in the early 1970s, contributing significantly to the chronology of sites in the Major’s Cove area and adding an interesting thunderbird motif to the corpus of such designs from the island.

You also may have noticed that this issue was a bit tardy arriving in your mailbox. That is largely due to a limited number of submissions in 2019. I hope that our spiffy new format encourages more submissions in 2020. Our Bulletin is only as good as the articles that we can publish. That is where you come in—please consider writing up your research and encourage your friends and colleagues to do the same. If you would like to discuss an idea with me, I am happy to be in touch.

Ryan J. Wheeler
HOW BILL RITCHIE GOT TO MARTHA’S VINEYARD AND THE CREW MEMBERS WHO JOINED HIM

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Bill Ritchie on Martha’s Vineyard

The island explorations began with a brief preliminary reconnaissance in September, 1962, by the writer and James B. Richardson III, to whom I am indebted for attracting my attention to Martha’s Vineyard as an area of study by his report of amateur activities there (Ritchie 1969:vi).

After graduating from Saint Lawrence University in 1960, I was accepted into the Ph.D. program in Anthropology at Syracuse University. In 1961 I wrote to Dr. William A. Ritchie, the State Archaeologist of New York, asking for a position as a crew member on one of his excavations. By this time, I had field experience at Fort William Henry, Lake George, New York in 1954; on the crews of Warren D. Caldwell at the Black Partizan site, an earth-lodge village; and with G. Hubert Smith at historic sites as part of the Smithsonian Missouri River Basin Surveys on the lower Brule Sioux Reservation, South Dakota in 1957 (Figure 1). The River Basin Surveys were an “incubator” for many crew members who became professional archaeologists, including William A. Haviland whose tent mate at the Black Partizan site in 1958 was Kent V. Flannery (Haviland, personal communication 2019). In 1959 I was on the excavations at Johnson Hall, the home of Sir William Johnson, superintendent of British Indian affairs in Johnstown, NY, led by Dr. Paul Ducey, my advisor at Saint Lawrence University. I soon heard back from Bill Ritchie who offered me a crew position on the excavations at Lamoka Lake in Western New York in 1962 (Figure 2). Bill made Lamoka Lake famou-

Figure 1: Jim Richardson in Smithsonian camp on Medicine Creek, South Dakota, 1957.
Figure 2: Bill Ritchie at the Lamoka Lake site, western New York, 1962.
William Ritchie on Martha’s Vineyard

As a teenager, my mother and I had participated in the excavations at the Norton site at the head of Lagoon Pond in Vineyard Haven, Martha’s Vineyard, under investigation by E. Gale Huntington of the Dukes County Historical Society (now Martha’s Vineyard Museum; Huntington 1957; 1959). When my parents, from Longmeadow, Massachusetts, visited the Lamoka excavations, I asked them to bring the artifacts that my mother and I had dug up and showed to Bill, who exclaimed that many were types of projectile points well known from New York State. He then asked about coming to the Vineyard to conduct a survey and one of his questions was, how was the fishing and I responded, Bill, it’s an island surrounded by water, plenty of fish. In 1964 when digging at the Chamberlain site on Lagoon Pond, a school of bluefish came near the excavations and he had Frank Schambach rush back to East Chop to get his fishing rods, but of course by the time he came back they had disappeared (Figure 3). Thereafter we always kept his fishing rods in the field vehicle. In September of 1962 Bill, my mother Miriam, and I went to the Vineyard where we had a cottage to conduct a brief survey and speak with E. Gale Huntington who told him about the Hornblower II and Vincent sites (Ritchie 1965:vii) (Figure 4).

Since Bill was employed by the New York State Museum, the state wouldn’t fund archaeological research out of state. He also had to take vacation time, since the museum wouldn’t pay his salary either (David Wilcox, personal communication 2019). Bill applied for a five year National Science Foundation grant to research maritime adaptations and cultural ecology on the Vineyard and coastal southern New England. He gathered a crew to work on the Vineyard in 1964, many of which had been with Bill in New York State at the Lamoka Lake and O’Neil sites in 1962, Kipp Island in 1963, Roundtop in 1964 and then in 1964 on to the Vineyard to excavate Hornblower II. The story on Hornblower II, as Bill relayed to me, is that when Henry (Harry) Hornblower II and his bride came to the Rochester Museum and Science Center, he gave them a tour. Later Harry wrote thanking him and saying to let him know if he could be of service in the future. Bill contacted...
him and Harry gladly gave permission to excavate with Bill naming the site after him. Harry Hornblower had participated in the excavations of Hornblower I at the Squibnocket Bathing Beach in Chilmark in 1936 on land that Ralph Hornblower Jr. owned. These excavations were directed by Douglas S. Byers and Frederick Johnson of the Robert S. Peabody Foundation for Archaeology (now Robert S. Peabody Institute of Archaeology, Byers and Johnson 1940; Richardson and Adovasio 2018). Hornblower was a graduate of Phillips Academy in Andover where he frequently visited the Peabody Museum becoming interested in archaeology. He was the founder of Plimoth Plantation, a living history museum in Plymouth, hiring Jim Deetz as the director of archaeology. I got to know Jim Deetz in South Dakota when I was on the Smithsonian crew of G. Hubert Smith with Jim as crew chief. At that time, he was gathering data for his dissertation at Harvard, later becoming one of the founders of the discipline of historical archaeology (Deetz 1965).

Ritchie excavated six sites on Martha’s Vineyard with small crews, mainly graduate students. In addition to Bill, were Jim Richardson (Illinois), Frank Schambach (Harvard), and Jim Tuck (Syracuse) in 1964 at Hornblower II, Pratt, and Cunningham sites; Mike Moseley (Harvard), Jim Tuck, and Frank Schambach further excavations at the Cunningham site in 1965; Bruce Bourque (Harvard), Bert Salwen (Assistant Professor, New York University) and Frank Schambach at the Vincent site in 1966; and Bruce Bourque, Jim Richardson, Frank Schambach, and David Wilcox (New York State Museum and Science Service) at the Howland and Petersen sites in 1967 (Ritchie 1969: 11, 88, 127, 164). The New York and Vineyard archaeological experience on Ritchie crews solidified our resolve to pursue careers in archaeology. Ritchie’s research on the Vineyard resulted in his 1969 book, The Archaeology of Martha’s Vineyard: A Framework for the Prehistory of Southern New England, A Study in Coastal Ecology and Adaptation (Figure 5).

In 1968 Bill decided to carry the last year of his grant to Maine where Bruce Bourque was Bill’s crew chief, using the excavations as the basis for his dissertation at Harvard. On June 17th, Ritchie, Bruce, David Wilcox, and another graduate student arrived in Stonington and tested a
series of sites to investigate. Bill left on June 27 to join Jim Tuck in his excavations at Port au Choix, Newfoundland, after which Bruce directed the excavations. Three sites were excavated: Eaton and Wiesenthal on Deer Isle, and Hunneman in Sargentville. The assemblages from these sites were sent to the New York State Museum where Bill and David Wilcox processed and analyzed the data, sending their report to Bruce to include as part of his dissertation (Bourque 1992; letter from Ritchie to Snow December 12, 1968; Tuck 1976:x). These site collections were later transferred to the Maine State Museum.

William A. Ritchie

William Augustus Ritchie (1903-1995) excavated over 100 sites and published 184 books, monographs and articles on Northeastern archaeology (Funk 1977; Hayes 1977). At 21 he joined the Rochester Municipal Museum (now Rochester Museum and Science Center), earning his Ph.D. in 1944 at Columbia University. In 1949 he left the Rochester Museum for the New York State Museum and Science Service in Albany where he was the State Archaeologist until his retirement in 1971. At Rochester, the director from 1924 to 1945 was Arthur C. Parker (1881-1955), of Seneca heritage, who was Ritchie’s mentor, allowing Bill ample research time and support for his excavations. Parker’s great uncle Ely Parker was a Lt. Colonel in the Civil War and was secretary to Ulysses S. Grant, writing the final draft of the surrender document that ended the war at Appomattox (Parker 2005). Later he was the first Native American Commissioner of Indian Affairs. Arthur Parker was the first archaeologist at the state museum and in 1935 the first President of the Society for American Archaeology and one of the founders of the New York State Archaeological Association (Colwell-Chanthaphonh 2009). Bill, probably at the behest of Parker, was appointed an Assistant Editor of American Antiquity and was a signatory of the Constitution of the Society for American Archaeology. Bill not only conducted research throughout New York State, but in Ontario, New Jersey, Vermont, and Maine, thus his excavations on the Vineyard were part of his overall research strategy to develop comparative cultural sequences throughout the northeast (Figure 6). Bill’s foray, as the New York State Archaeologist to Martha’s Vineyard, aroused the ire of Douglas S. Byers and Frederick Johnson of the Robert S. Peabody Museum of Archaeology. As pointed out by Katharine Kirakosian (2014:233-245), they viewed Bill as an interloper not qualified to conduct research in Massachusetts. Bill was President of the Society for American Archaeology, President of the Eastern States Archaeological Federation, President of The New York Archaeological Association and recipient of many awards for his contributions to North American archaeology. His New York State Archaeology (1965, revised 1969), Martha’s Vineyard Archaeology (1969) and A Typology and Nomenclature for New York Projectile Points (1961, revised 1971) remain valuable resources on the establishment of the framework for the cultural record in Northeastern North America.
Ritchie’s Vineyard Field Crew

Bruce Bourque received his Ph.D. from Harvard and is an Emeritus Chief Archaeologist and Curator of Ethnography at the Maine State Museum in Augusta and Senior Lecturer Emeritus in Anthropology at Bates College. He crewed in 1966 at the Vincent site and 1967 at the Howland and Petersen sites and is well known for his research at the Turner Farm and other Maine sites. He has published numerous articles and books on Maine archaeology, including *The Swordfish Hunters* (2012). He also developed major exhibits on Maine archaeology during his tenure at the museum.

Richard L. Burt is a well-known Vineyard archaeologist who advised Ritchie on site locations as well as showing him his surface collection and introducing him to Daniel Manter who also had a major Island collection (Ritchie 1969:vii). He impressed Bill with his Woodland period vessel, the only complete Wampanoag pot from the Vineyard (Petersen and Burt 1985) (Figure 7). In 1966 he joined Frank Schambach from October 24 to November 4, testing 28 sites, two of which—Howland and Petersen—were selected for excavation in 1967. He was offered a crew position by Ritchie for the 1967 season, but due to work responsibilities he declined (Burt, personal communication 2019). He and Jill Bouck conducted an extensive analysis of Vineyard artifacts made by local collectors revealing settlement pattern distributions as well as updating the Massachusetts Historical Commission site files (Bouck et al. 1983). In the 1980s he was involved in the excavation of several sites that he discovered including the Frisby-Butler site and a colonial house site in Chilmark. He proved through his research in the Dukes County Courthouse that the house site was the home of John and Experience Mayhew, famous missionaries to the Wampanoag from 1672 to 1758 (Richardson and Burt ms.). In 2015 he and Jim Tuck excavated around the 1790s Hancock-Mitchell house in Chilmark (Burt and Tuck 2015) (Figure 8). He is the “go to” person for many researchers, sharing with them his vast knowledge of the archaeology of pre-contact Wampanoag and colonial sites on the Vineyard.

Michael E. Moseley joined Ritchie’s crew at the Nahrwold site near Middleburg, New York and in the same 1965 season excavated on the Vineyard at the Cunningham site (Ritchie 1969:88; Ritchie and Funk 1973:276) (Figure 9). He conducted research in Peru on Preceramic sites for his dissertation at Harvard and his first position was curator at the Field Museum of Natural History in Chicago, prior to taking a position at the Universi-
ty of Florida, Gainesville, where he is an Emeritus Professor. He conducted extensive fieldwork on the irrigation based societies at a pyramid center of the Moche State and Chan Chan, the capital of the Chimu Empire, in the Moche Valley of the north coast of Peru and on the south coast, in the Moquegua region of southern Peru. He has done extensive paleoclimate research on El Niño flood and drought catastrophes and the collapse of Peruvian civilizations and is well known for his “Maritime Origins of Peruvian Civilization” theory that is counter to all the origins of world’s civilizations that were based on an agriculture economy. Among his many honors is his election to the National Academy of Sciences (Moseley 2001; Richardson 2009).

James B. Richardson III. I completed a master’s degree at Syracuse with Bill Ritchie as a member of my committee, who signed the paper, “With pleasant memories and best wishes, William A. Ritchie” (Richardson 1963). I stayed in touch with Bill throughout his retirement and he asked me to accept his Lifetime Achievement Award from the Society for American Archaeological Society conference in Toronto in 1987. I continued involvement in Vineyard archaeology after fieldwork in the 1960s, conducting further excavations at Hornblower II, the Frisby-Butler site, and at the Mayhew house site, the latter two discovered by Dick Burt (Richardson and Burt ms.; Watson 2019)

Figure 9: Mike Moseley on Cerro Baul, Moquegua Valley, Peru, 1983

Figure 10: Archaeological sites on Martha’s Vineyard: a) Hornblower II site, Aquinnah. Jill Bouck (left) and Jim Richardson (center), others unknown; b) Frisby-Butler site, Chilmark 1981, left to right, Jill Bouck, Tom Chase, and Dick Burt (bending over), and Sam Carroll, girl unknown; c) Jim Richardson at the John and Experience Mayhew House cellarhole 1672-1758, Chilmark, 1985.
(Figure 10). I have been involved with the Dukes County Historical Society and its transformation into the Martha’s Vineyard Museum since the late 1940s. After Syracuse I went to the University of Illinois to continue my studies in northeastern North American archaeology with John C. McGregor, a Midwest and Southwest archaeologist, but one day Don Lathrap called out of his office to me, “Jim do you want to go to Peru” and I said, “yes, as long as you are paying for it.” That began my research on maritime adaptations along the Peruvian coast, an interest generated by my time with Huntington and Ritchie on the Vineyard. I left in 1965 for Talara, returning to crew for Bill in 1967.

My Peru research focuses on the rise of Peruvian civilization, climate and oceanic current change and the origins of El Niño, the flood and drought catastrophes (Richardson 1969, 1994; Richardson and Sandweiss 2008) (Figure 11). Another facet of my maritime research is Pre-Columbian contact between the Central Andes and Polynesia, stimulated by my association with Thor Heyerdahl of Kon Tiki fame (Richardson and Heyerdhal

Figure 11: Jim Richardson at the 10,500 BP Ring site, Ilo, Peru, 1983.

2000) and Polynesia. In August of 1967 I left Illinois for the University of Pittsburgh Department of Anthropology, retiring in 2009. In 1978 I took a half time position as Chief Curator in the Section of Anthropology, Carnegie Museum of Natural History and to my delight Bill Ritchie was a Research Associate of the Section. I worked in the Pittsburgh region, mainly on historic sites and directed the development of a series of anthropology halls at the museum, Polar World on the Inuit, American Indian Hall, and Needle to the North on the Carnegie’s research in the Arctic, retiring in 2006, but maintaining my office and laboratory. I received the award as Distinguished Andeanist from the Northeast Conference on Andean Archaeology and Ethnohistory in 2007 and the J. Alden Mason Award in 1985 from the Society for Pennsylvania Archaeology for contributions to Pennsylvania archaeology.

Bert Salwen (1920-1988) received his Ph.D. from Columbia University and joined the faculty of New York University where he became Professor. He spent one season on the Vineyard at the Vincent site in 1966. He created a joint interdisciplinary program in history and historical archaeology and was one of the first to conduct urban archaeology in New York City. His research on prehistoric and historic contact period sites included Fort Shantock in Connecticut, famous as the center for Mohegan tribal affairs where meetings were held between the English and Sachem Uncas. He was the President of the Society for Historical Archaeology and received the prestigious Harrington Service Award for his contributions to the discipline (Dincauze 1993; Rothschild 1990). In 1959, prior to receiving his Ph.D., he was the crew chief on a Smithsonian River Basin Survey project in South Dakota, as was I. He was one of the contributors to a volume honoring Bill Ritchie, as was Jim Tuck and I (Funk and Hayes 1977).

Frank F. Schambach volunteered, as an undergraduate at Bard College, at Bob Funk’s excavations at the Mohawk site of Garoga in 1962 (Ritchie and Funk 1973:313) (Figure 12). After Ritchie’s retire-
In 1963 Frank joined Ritchie at the Kipp Island site where he first met him. He became Ritchie’s crew chief, serving in this capacity at the Roundtop site in New York and at all of the Vineyard sites. He was also in charge of the field vehicle, which was a green Volkswagen van he had recently purchased that Bill used for his excavation gear and his luggage, including his fishing rods and TV set (Schambach, personal communication 2019). The use of a private vehicle was due to Bill not being allowed to take a New York State field vehicle out of state. He and Dick Burt completed a survey in 1966 and identified the two sites, Howland and Petersen, that Ritchie would excavate the following summer. For his dissertation at Harvard he conducted archaeological research on the Pre-Caddoan cultures in Arkansas. This led to his appointment as the first regional archaeologist of the newly founded Southern Arkansas University Research Station of the Arkansas Archaeological Survey in 1968 where he served for 38 years, retiring in 2006 as Professor Emeritus of Anthropology at the University. He made major contributions to our understanding of Caddo culture and ceremonial life through his research at numerous sites resulting in extensive publications and conference papers. For those who are bedeviled by Osage Oranges falling off their trees, the wood from them provided superior bows, that were part of a trade network focusing on prestige goods spanning parts of the Southwest, Southeast, and the Southern Plains, centered on the major site of Spiro in eastern Oklahoma (Schambach 1999a). He also researched the route of Hernando DeSoto through Arkansas (Schambach 1999b). Frank is noted for his relationship with avocational archaeologists and volunteers who formed part of the crews on his excavations.

James A. Tuck (1940-2019) was a summer visitor as a boy in Vineyard Haven where his uncle and aunt resided (Figure 13). His aunt was a Daggett, a well-known Vineyard family. His undergraduate degree was from Syracuse University where...
he majored in botany and archaeology and was captain of the swim team. I was teaching assistant at the time and had him in a class, taking him and others to test the nearby Kelso site in 1962 (Ritchie and Funk 1973:253). In 1963 he accepted a position as a 7th and 8th grade teacher in the Oak Bluffs school in 1963-1964 purchasing a house on Lagoon Pond (Lovewell 2009). He discovered the Pratt and Cunningham sites near his home, informing Ritchie, who excavated these sites in 1964 with Jim on the crew at Pratt, Hornblower II, and Cunningham sites and in 1965 at Cunningham. He crewed at the Roundtop site in 1964 and the Nahrwold Site 1965 and 1966 in upstate New York (Ritchie and Funk 1973:179, 276). He accepted a position at Memorial University of Newfoundland in 1967 where he founded the archaeology department, completing his Ph.D. on the Onondaga at Syracuse University in 1968 (Tuck 1970). He revolutionized our knowledge of cultural development in the Canadian province of Newfoundland and Labrador from his research at over 100 sites that include his discovery of North America’s earliest burial mound, L’Anse Amour; research at the Port Au Choix site, where he formulated the Maritime Archaic horizon stretching from Labrador to Maine (Richardson 2006:88); excavations of sixteenth century Basques whalers at Red Bay, the Atlantic whaling capital and 25 years of excavations at Ferryland in the Colony of Avalon, founded by George Calvert, the first Lord of Baltimore in 1621, resulting in 2 million artifacts and a site museum. Jim was awarded the Order of Newfoundland and Labrador in 2004 by the Governor at his retirement symposium (Rankin and Ramsden 2006). Jim received the Smith-Wintemberg Award from the Canadian Archaeological Association in 2009 for outstanding contributions to Canadian archaeology whose presenter said, “What we know of the fascinating archaeology and early history of Newfoundland and Labrador is due more to the efforts of Jim Tuck than to any other single individual.” (Brink 2009).

David Wilcox, after completing his undergraduate degree at Beloit in 1966, obtained a position as Laboratory Assistant to Bill Ritchie from Fall 1966 to early 1969 (Figure 14). David worked at sites in New York, on the Vineyard in 1967 and in Maine in 1968. He writes “…my time with Ritchie and Funk…was foundational to my subsequent career – as was my time in Saskatchewan working for Tom and Alice Kehoe before that.” (personal communication 2019). His Saskatchewan work was in 1964 and 1965 as an undergraduate at Beloit College. He received his Ph.D. from the University of Arizona in 1977 on the architecture of the famous Great House of the Casa Grande Ruins National Monument, Arizona. This and his experience as the dig foreman at the University of Arizona Field School at Grasshopper site, directed by Bill Longacre, led to his distinguished career in Southwestern archaeology, where he was head of the Department of Anthropology, 1988-2006, and then a Senior Research Archaeologist at the Museum of Northern Arizona, retiring in 2010, maintaining his position as Adjunct Professor of Anthropology at Northern Arizona University, and once again is a Research Associate, Arizona State Museum, University of Arizona. He is author, co-author, and co-editor of numerous books, monographs and articles on Southwestern archaeology, including *The Mesoamerican...*
Ballgame (1991), Zuni Origins, Toward a New Synthesis of Southwestern Archaeology (2007), and Coming of Age in Chicago: The 1893 World’s Columbian Exposition and the Coalescence of American Anthropology (2016) and continues his research and publication on a variety of subjects relating to Southwestern Archaeology.

It’s been 54 years since Bill stuck a shovel into the Hornblower II site and 50 years since his publication of The Archaeology of Martha’s Vineyard. In 1969, the archaeological record on the Vineyard only went back to the Late Archaic, some 5,000 years ago. In the last 50 years there has been extensive archaeological projects on the Vineyard, much of the excavations Cultural Resource Management projects, conducted mainly by the Public Archaeology Laboratory of Rhode Island in consultation with the Wampanoag Tribe of Gay Head (Herbster and Cherau 2006; McBride and Cherau 1966). Other projects include Burt and Tuck (2015) at the colonial period Hancock-Mitchell House, that of Chilton at Lucy Vincent Beach (Chilton and Doucette 2002), Moody (2008) on discoveries of early Paleoindian projectile points, Richardson at Frisby-Butler and Hornblower II (Richardson 1985; Watson 2019; Watson this issue), Ryerson (1975) at the Crocker’s Point shell midden and Stachiw (1978) at the colonial period Vincent House. David Foster, in his A Meeting of Land and Sea: Nature and the Future of Martha’s Vineyard (2017:79-104), consulting with archaeologists (eg. Duranleau 2009), provides a marvelous synthesis of the major developments in the interpretation of the Vineyard archaeological record of the Wampanoag and their ancestors within the context of coastal southern New England since 1969. Although Ritchie’s book has ecology in the title, little was known at the time about landscape and vegetation changes through time on the Vineyard except a few papers he cites by Clifford Kaye and J. Gordon Ogden III. Foster and his colleagues at Harvard Forest, present in-depth research on vegetation changes from the pollen core records, landscape and sea-level changes.

Figure 14: David Wilcox (far right) at the Hohokam site of Los Hornos, Arizona, 1979.
Richardson

How Bill Ritchie Got to Martha’s Vineyard

from geological research, placing human interaction on the Vineyard within the context of the changing environment over the last 11,000 years.

Note

Identification of crews in *Archaeology of Martha’s Vineyard*: Plate 2 L-R, Schambach, Tuck and Richardson near pond; Plate 14, L-R Richardson, Schambach and Tuck; Plate 15, L-R Schambach and Richardson; Plate 16, Schambach; Plate 18, L-R Schambach and Tuck; Plate 25, L-R Schambach and Tuck; and Plate 35, L-R Salwen and Schambach. In *The Archaeology of New York State* (1965): Plate 24 Richardson; Plate 44, L-R ? and Galen Ritchie; Plate 54, Richardson; Plate 59, Ritchie; Plate 91, Schambach; and Plate 113, Ritchie.

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AN UPDATED HISTORY OF THE HORNBLOWER II SITE, MARTHA’S VINEYARD

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Abstract

Located on the southwestern corner of Martha’s Vineyard, Hornblower II is a rich shell-filled site with a deep history. First excavated by William Ritchie in 1964, the site was revisited by James B. Richardson III and James Petersen in 1982. The latter excavation utilized updated recovery techniques that yielded a much larger faunal assemblage; this assemblage was revisited by the author to update the radiocarbon record of settlement history and to clarify the subsistence patterns of the site’s residents. The combined dataset of new and re-calibrated 14C measurements from Hornblower II date to the Late Archaic (3,700-6,000 BP), Early Woodland (2,000-2,700 BP), Middle Woodland (1,200-2,000 BP), and Late Woodland (450-1,200 BP) periods. Taxonomic diversity greatly increased from the original faunal list, particularly for smaller species with more fragile bones that were better recovered once screening was adopted in the later excavations (e.g. birds, fish). Settlement was focused on gathering warm-weather foods like demersal fish and lakebirds as well as the ever-present white-tailed deer (*Odocoileus virginianus*) and shellfish. The site reflects patterns seen throughout southern New England but has one of the most diverse faunal assemblages found on the island.

Figure 1: Map of site location.
Introduction

Archaeological research on Martha’s Vineyard has a long history, ranging from amateur archaeologists and local historians to professional CRM companies and academic researchers (Byers and Johnson 1940; Chilton and Doucette 2002a, 2002b; Chilton and Herbster 2008; Duranleau 2009; Guernsey 1916; Herbster and Cherau 2006; Huntington 1959; Kirakosian 2015; Largy et al. 2002; Perlman 1977; Richardson 1985; Ritchie 1969; Speck and Dexter 1948; Waters 1967, 1969). Together, their results present a long history of the island, beginning with Paleoindians moving across the region when Martha’s Vineyard was an inland knoll and continuing to the present as an island with modern Native communities. Sites increase in size and prevalence across the island over time, likely due to increasing populations and village size as well as differential preservation. The first substantial evidence of human occupation appears during the Late Archaic period (ca. 3,700-6,000 BP), after which time we can see an almost continual presence for the next 5,000 years.

An integral site used to establish the pre-Contact history of the island is Hornblower II (19-DK-44; M49SE-28), a settlement first identified by archaeologist William Ritchie (1969) and dated to the Archaic and Woodland eras (Figure 1). The site was revisited by archaeologists James B. Richardson III and James Petersen in 1982 and site limits were expanded through shovel testing and unit excavations. Results of their work were never fully published (but see Richardson 1985). This paper derives from research into the 1982 assemblage, designed to expand the site’s chronology and to clarify the subsistence and settlement patterns as situated within a broader regional context.

Site Background

Ritchie’s Excavation in 1964

Hornblower II was originally excavated in 1964 (Ritchie 1969) and later revisited in 1982 (Richardson 1985). The site is located on the northern shore of Squibnocket Pond in a protected “amphitheater” made by the surrounding high land (Figure 2), providing shelter from the northeast winter winds and permitting the southwest winds of summer (Ritchie 1969: 10). Ritchie noted that in the past the pond intermittently may have

Figure 2: 1982 Excavations at Hornblower II, facing southeast toward Squibnocket Pond (photo by Richardson and used with permission of the Robert S. Peabody Institute of Archaeology).
Watson

**Hornblower II Site**

opened directly onto the Atlantic shore, providing easy access to fish and shellfish populations (see also Waters 1967: 62). Hornblower II is surrounded by glacial hills, ridges, and bogs and, prior to intensive colonial farming practices, was thickly forested.

Ritchie’s original excavations tested 13 pits (Ritchie 1969:10-58, Figure 3), with faunal analysis completed by Dr. Joseph Waters from Villanova University (Waters 1967, 1969). Excavated material was not screened. Radiocarbon samples were processed by the Yale University Radiocarbon Laboratory under the director Dr. Minze Stuiver. The site was one of six that he examined throughout the 1960s and published together in his seminal work *The Archaeology of Martha’s Vineyard* (1969), the second formal presentation of archaeology on the island (after Byers and Johnson 1940). Ritchie’s work established the standard chronology of the island and has been referenced by most researchers since.

In his study, he found evidence of occupation from the past 3,650 years based on four radiocarbon dates. Stratum 1A (A.D. 1380 ± 80) and Stratum 1B (A.D. 1160 ± 80) date to the Late Woodland, while Stratum 3 (2190 B.C. ± 100) and Stratum 4 (2270 B.C. ± 160) both date to the Late Archaic era. Ritchie was unable to date Stratum 2; this stratum was dated during the current project and will be described later.

General patterns in occupation based on taxonomic seasonality data indicate that the site was settled during the autumn and winter, but several strata contained species that suggest foraging people may have been present during the late spring or summer, including Strata 1, 2, and 3. Indicative species include box turtle (*Terrapene carolina*), tautog (*Tautoga onitis*), and scup (*Stenotomus chrysops*). Ritchie (1969:52-58) concluded that these groups resided at the site either perennially or during multiple seasons per year as seen from their broad diet of deer and shellfish. This diet was augmented by diverse foods from the nearby marine littoral environment.

**1982 Excavations**

Richardson and Petersen expanded coverage of the site during their excavation, opening up 20 additional 1.5 meter square units and one 60 cm x 1.5 meter expansion unit (Figure 3). The center of each unit was excavated, leaving a 13 centimeter balk around all edges. Some of these balks were later removed, showed by hashed lines in map. All material was screened with ¼” mesh. The depth reached approximately one meter across the site. The crew also dug 33 test pits, which they used to determine placement of new units. These include the southern extension to units E25 N70 and E30 N70, where they uncovered a human burial (Feature 1). A total of 58 features were unearthed during the excavation in addition to post molds.
The 1982 excavation assemblage was catalogued and fauna were given preliminary analysis by Dr. Nathan Hamilton (University of Southern Maine) and Dr. Ellen Cowie (Northeast Archaeology Research Center, Inc.) in the late 1980s. Richardson also submitted 16 samples for radiocarbon dating and a further 8 were submitted for AMS dating by the author. Since the 1980s, no additional research has been undertaken and the collection has remained in storage. Along with the Frisby-Butler collection (also excavated by Richardson in the 1980s), the complete assemblage was donated to the R.S. Peabody Institute of Archaeology in 2014. This paper is based on my analysis of the faunal assemblage and subsequent AMS dates. All chronological information from pottery and stone tools is based on original field notes and were not re-examined during this project.

Site Stratigraphy

The stratification described by Richardson and Petersen is more complex than seen during Ritchie’s excavation and is divided into seven strata, each subdivided by arbitrary levels. Stratum 1, the sod cap, is a dark sandy loam layer with very little shell and almost no artifacts (Figure 4). The excavators noted that any shell present is likely from the underlying layer, moving up through bioturbation. Stratum 1 ended about 13 centimeters below ground surface. The discovery of historic artifacts, including a spade, nail, glass, and brass fragments, clearly support its designation as a plow zone.

Richardson and crew dug the first few units with the anticipation of finding a typical New England stratigraphic profile (seen in test pits): a relatively thin plow zone, followed by distinctive shell and midden layers before reaching sterile soil in a C Horizon. However, they quickly encountered more complicated strata, which led them to distinguish two additional strata after a few units. These are Strata 1A and 1B and encompass most of the shellfish deposits at Hornblower II.

The shell in Stratum 1A is finely crushed, with the occasional whole shell intermixed. Many of the shells identified during excavation were slipper shells (*Crepidula fornicata*), as well as Atlantic...
The Hornblower II site contained an assemblage of fish bones, netsinkers, and a fish hook led Richard¬
son to suggest that the site may be a processing area, located on the terrace above an osprey
nest (Richardson, general site notes).

Stratum 2 was noticeably distinct from the pre¬
ceding levels, containing much less or no shell
in a darker, greasy soil. Photographs from the site
show a marked contrast in stratification at the in¬
terface of Strata 1B and 2, with shells disappear¬
ing almost completely in the older layers. Depths
of Stratum 2 range between 40-56 centimeters
below ground surface. Artifacts included many
quartz scrapers, knives, and points, as well as the
occasional tools from other rock types. Animal
bone was also preserved, dominated by white¬
tailed deer (Odocoileus virginianus). Pottery was
not found in this stratum. Three hearths were
identified from this layer.

Wading River points appeared again in Stratum
3, contained in the “coco brown” sandy soil. By
this stratum, shell was almost completely absent;
when present, it was whole shells in non-midden
contexts. Average depths for Stratum 3 were 50¬
84 centimeters below ground surface, with many
features interrupting the layer, including refuse
pits and six hearths. This layer was strikingly dif¬
ferent from Stratum 2, but faded more continu¬
ously into Stratum 4, also lacking shell deposits.
Other Late and Transitional Archaic points were
found, including Squibnocket Stemmed and an
argillite point, originally identified as a Snook
Kill. Hammerstones and a bone awl tip were also
found, along with many other worked tools. Rich¬
ardson suggested that Stratum 3 may have been
an open living surface for a long time, explaining
why so many point types were found intermixed.

The final cultural layer was Stratum 4, the earliest
level of human occupation at the site. Subsoil ap¬
ppeared in Stratum 4 as a yellowish-brown sand,
devoid of shell and only containing artifacts in the
uppermost levels. Artifacts were intermixed with
small glacial pebbles, including an unfinished celt and quartz tools, as well as an occasional shell. The layer started, on average, approximately 70 centimeters below ground surface and excavations were stopped around 100 centimeters in sterile soil. Quartz tools and Squibnocket points dominated the lithic assemblage; Late Archaic Otter Creek and Brewerton points were not found as seen in the earliest levels of other sites on the island (Richardson 1985). A Susquehanna Broad point (dated to the Transitional Archaic) was found in E5 N50. Only two percent of the site’s fauna came from this layer. Overall, Stratum 4 appears to represent a short-lived or temporary habitation site, perhaps visited seasonally as a fishing camp or quartz processing station. This contrasts with the intensive settlement seen on site several thousand years later.

In some units, a Stratum 5 was identified, a light tan beach sand. Unit W5 N50 has a clear profile showing the seven strata identified (Figure 4); Stratum 5 is seen in the rock layer at the bottom of the unit, incorporating Feature 55, a dog burial. This stratum appears to be non-cultural; those units which recorded it were excavated below Stratum 4 because they were following possible features (such as the large boulder concentration surrounding Feature 55). Other units that noted Stratum 5 include E0 N40, E0 N45, E5 N35, and N5 N50. The layer is undated because of its lack of diagnostic artifacts and was not targeted in the present research.

From the 1982 excavations, Richardson concluded that the site’s major occupations occurred in Strata 1 (including 1A and 1B) and 3. The most recent strata show dense shell middens and associated storage and refuse pits from the Late Woodland, suggesting a focus on estuarine resources from Squibnocket Pond and the coastal Atlantic, between which the site was located. Its earlier intensive occupation was in Stratum 3, a likely Transitional Archaic settlement characterized by numerous hearths. Like the later occupation, Stratum 3 appears to have had a specialized use, but in this case seems to have been a hunting camp rather than fishing station. Date estimates for both strata are based on diagnostic lithic and pottery artifacts as well as radiocarbon dates. The lack of shell in Strata 2-4 is likely related to the site’s distance from shellfish beds during the Late and Transitional Archaic eras, which became closer following rising sea levels and shoreline erosion in later periods.

**Timeline of Occupation**

Originally, estimated date ranges for Hornblower II were based on ceramic and lithic artifacts and charcoal-based radiocarbon dates from the 1964 excavation (Ritchie 1969). The stratigraphy at Hornblower II ranged from the Late Archaic (Strata 3-4) through the Late Woodland (Strata 1A and 1B). The four radiocarbon dates obtained by Ritchie are included in Figure 5 as Y-samples.

Richardson re-assessed the site stratigraphy after the 1982 excavation, submitting 16 charcoal and shell samples to Robert Stuckenrath at the Smithsonian Environmental Research Center, of which 12 were successfully dated, but unpublished. The nine charcoal dates are used here; seven are associated with archaeological features and one with

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**Figure 5: Probability distributions for all calibrated dates from Hornblower II.**
an ash lens, listed in Figure 5 as SI-samples. The remaining three dates were derived from quahog shell and are less reliable than bone or charcoal because of challenges in calibration (Barnosky and Lindsey 2010). Eight additional bone samples were chosen from the 1982 Hornblower II excavation assemblage by the author and submitted to the University of California Irvine AMS laboratory; six of these samples were successfully dated.

I calibrated all dates using CALIB version 7.1 (Steel 2001; Stuiver and Reimer 1993; Stuiver et al. 1998, 2017) based on the original, uncalibrated results. The resulting 2σ date ranges reflect the most current understanding of radiocarbon dating curves, differing slightly from the calibrated BC/AD dates published in Ritchie (1969). I have therefore referred to his uncalibrated BP results when conducting my own calibration.

Radiocarbon results show prehistoric occupation in the Late Archaic period and Woodland era (see Watson in press for detailed analysis). Six AMS samples from Hornblower II date Strata 1A, 2, 3, and 4, corresponding to the Late Woodland and Late Archaic periods (Figure 5). In total, the Late Archaic dates from the new radiocarbon dates at Hornblower II suggest almost 900 years of continuous occupation in Strata 2-4 (ca. 4464-5161 BP). The earliest settlement seems to have been seasonal and contingent on available plant and terrestrial resources. The marked increase in artifact densities and features all support the development of an intensive settlement, probably corresponding with seasonal peaks in fish and birds. After the boom of Stratum 3 receded, Stratum 2 was deposited, showing a sharp decline in feature density. Together, the Late Archaic components of this site compose most of its history.

The other two AMS dates obtained by the author provide evidence of Late Woodland settlement on the site, ranging from ca. 462-1182 cal BP. Previous results from Ritchie and Richardson showed a gap in dated material during the Woodland era; however, these additional Late Woodland dates fill in our picture of long-term Woodland site settlement and indicate that the Late Woodland was a long, continuous occupation and/or continually revisited seasonal site, just like the Late Archaic component. Unlike the earlier settlement on the site, the Late Woodland settlement appears to have been more sedentary, likely for several seasons each year based on the faunal assemblage. Like is seen at other sites nearby, the site’s foragers shifted their focus from terrestrial mammals and began to harvest a much wider spread of foodstuffs. Taxonomic diversity increases in fish and birds, but the biggest change from the Late Archaic to the Late Woodland was the adoption of intensive shellfishing.

Together, all radiocarbon dates demonstrate a pattern of consistent occupation throughout the Late Archaic, followed by almost 2,300 years of abandonment punctuated by one Early Woodland date from Stratum 2 (2354-2545 cal BP, SI-7118). Afterward, several hundred years of Middle Woodland occupation precede the long, continuous Late Woodland occupation.

Settlement at Hornblower II reproduces patterns found throughout coastal southern New England. Groups in this region took advantage of the long growing seasons for domesticates and large populations of migratory birds and fish (Hasenstab 1999). Additionally, coastal settlements have more often been identified as year-round because of the confluence of many, diverse resources that permitted longer occupation without depleting the natural environment. The rich faunal assemblage from Hornblower II supports this observation and indicates that its residents were able to reside at the site for most, if not all of, the year from a relatively early period.

**Subsistence Patterns**

*Faunal Assemblage Overview*

The faunal assemblage from Hornblower II yielded a collection of 25,512 bone fragments (NISP)
and at least 557 individuals (MNI) identified (see Appendix 1). Fragments were classified to lowest class, including species-level and size-based order for fragmentary or unclear specimens. A scant 0.27 percent was unidentifiable beyond “vertebrate.”

Mammals were the most common taxa at Hornblower II in overall count of fragments (NISP=11,996), but were not the dominant class of individual animals (MNI=76). Fish were almost as numerous as mammals (NISP=10,909) and were predominant when an approximate minimum number of animals is totaled (MNI=403). White-tailed deer (7.2%) were the most common mammal and are likely also represented by the large mammal (25.5%) category. These animals dominate the mammalian assemblage ahead of canids (0.34%) and medium mammals (4.1%). Deer (MNI=42) continue to outnumber canids (MNI=13), raccoons (MNI=3), and other large mammals like seals (MNI=5) when calculated as individuals. Overall, mammals are most strongly represented in Stratum 1B and compose approximately 47 percent of the total site assemblage.

Unlike nearby sites like Frisby-Butler, mammals do not completely dominate the assemblage at Hornblower II. In several strata, although white-tailed deer are more prevalent in raw count (NISP), the estimated body count (MNI) is much higher in fish. Fish were most common in Stratum 1B (NISP=6,473) and were identified from eleven subfamilies; the most common species were striped bass (*Morone saxatilis*, 2.5%) and scup (6.4%). Another eleven subfamilies were identified in Aves (NISP=2,397), almost 9.4 percent of the assemblage. Amphibians and reptiles continued to be the least prevalent taxa, representing only 0.5 percent of the sample (NISP=142).

**Increased Taxonomic Diversity**

The 1982 excavations recovered thousands more bones than found by Ritchie in the 1960s, a result that can be directly attributed to the adoption of screening. Crew members from Ritchie’s digs note that they did not screen or float any dirt (cited in Kirakosian 2014: 243, quote from Roger interview), a practice that Ritchie was known for (Richardson 2018, personal communication; Schambach 2018, personal communication), although some samples may have been screened for Waters’ shell analysis (see Ritchie 1969: 245 “appears 1/8” or 1/6” used”). When artifacts are not subject to fine screening, minute food remains like fish bones are lost, leading to an overemphasis on shellfish, large animals, and worked bone (Sassaman 2006), a pattern seen from Ritchie’s earlier study. The 1982 samples were all screened through ¼” mesh, a practice that contributed to the greater diversity in the identified species.

Comparison of species presence between the 1964 and 1982 excavations at Hornblower II shows a dramatic difference in species diversity. In Waters’ original report, 14 mammal species were reported; 17 were identified from the 1982 assemblage. Most species overlapped, but several new taxa were identified, including small rodents and one possible lynx or bobcat. Several additional fish and reptile/amphibian species were identified in the later excavations.

The biggest difference, however, is in the bird assemblage, where the species count increases from 12 to 33. Bird bones are some of the smallest, most fragile specimens on a site and are often found as broken fragments in the screen. Integrating screening in 1982 significantly affected the taxonomic results and identified many subfamilies not known from the site, including gulls, alcids, owls, and birds of prey. It should be remembered, however, that the increase in diversity for birds and other animals is related both to screening and to differential preservation in layers with and without shell. The majority of the bird, fish, and other, more delicate bone were recovered from the upper strata where numerous shell deposits created a more neutral soil for bone preservation.
Woodland-to-Archaic Subsistence

Subsistence patterns inferred through the faunal assemblage do not indicate any drastic changes in hunting strategies over time. Relative frequencies (%NISP) of mammals, birds, and fish (the three predominant faunal categories) remain relatively stable from the Archaic to the Woodland eras. For instance, white-tailed deer comprise between 10.75-17.11 percent of the total identified assemblage in all strata. The largest percentage is seen in Strata 1A, 1B, and 3; the first two strata both date to the Late Woodland and are surrounded by a dense shell matrix. We might thus expect to find a greater percentage of non-deer, including fragile bird and fish bones, but instead see a relatively continuous, stable presence of large mammals.

It should be noted that differences between the Archaic (generally shell-free) and Woodland (shell-dominated) layers may be due to preservation. This likely explains part of the increase in birds in Strata 1A and 1B (and the drastic increase in diversity of ducks and seabirds), as well as the large estimated MNI for fish based on identifiable elements like the supraoccipital in scup (*Stenotomus chrysops*). In part, however, the prevalence of birds and fish in the Late Woodland strata 1A and 1B represent a differential food procurement strategy, emphasizing species that live in multiple nearby environments (including open ocean, the coast, the saltwater ponds, and the forested moraine).

In addition, there is the obvious adoption of intensive shellfishing during the Woodland period. Shell samples were not identified during this project and remain a rich research project for an interested researcher.

Regional patterns in diet

Considering Hornblower II as another shell midden along the coast helps explain many of the food choices that the indigenous residents made, but the analysis here highlights the other, non-marine foods that they used. These included terrestrial mammals, many pond species, and birds. Shellfish-rich deposits found in the top strata were the richest in terms of overall assemblage size and taxonomic diversity. At Hornblower II, the richest lens is Stratum 1B, although Stratum 1A is arguably connected and continues to show high numbers of shell and bone. The species identified here follow general trends for southern New England but provide one of the first in-depth zooarchaeological lists at a large-scale excavation since Ritchie’s non-screened excavations in the 1960s.

People living at this site took advantage of all habitats around them, incorporating terrestrial, riverine, coastal, and marine foods into their diet in a diverse subsistence base that remains generally steady over time. Marine mammals were perhaps the most varied choice, incorporated into diet after the initial occupation. Based on the faunal assemblage, particularly the diverse duck, loon, and fish deposits, Hornblower II was occupied intensely during the warm summer months and perhaps to a lesser extent during the cooler months. This is in contrast to the Frisby-Butler site on the other side of the pond, where the overwhelming dependence of white-tailed deer indicates that it was occupied primarily in the late autumn or winter when many of the pond species were unavailable, although the smaller amounts of bird and fish may suggest dietary augmentation when possible as the seasons broached the warmer months.

Ethnohistoric sources purport a sharp seasonal shift in subsistence fishing in eastern Massachusetts, focusing on ocean taxa in the summer before moving into freshwater ponds and rivers in the winter. Other accounts show that coastal fishing may have continued into the cooler months, as seen in Rhode Island (Salwen 1978; Wood 1865). The proximity of Hornblower II to dozens of other contemporary sites meant that, if occupied throughout the year, residents did not have to move between these ecozones, but seeming-
ly part-time seasonal occupation suggests that many sites were part of a larger network of wetu occupied during peak periods of resource accessibility.

**Conclusions**

The 1982 faunal assemblage from Hornblower II yields a detailed picture of pre-Contact life on Martha’s Vineyard. Its much larger and better-screened remains preserve a more nuanced picture of subsistence than was captured by Ritchie in the 1960s, although the overall patterns of warm-weather specialization and gradual move to shellfish-intensive hunting as settlement transitioned from the Archaic to the Woodland eras matches his interpretation.

Together, the radiocarbon dates from all samples provide evidence for two long-term occupation periods at the site, one primarily during the Late Archaic and another during the Middle and Late Woodland. The additional samples tested by Richardson and the current author flesh out this timeline, providing solid evidence for a gap in significant occupation lasting almost 2,000 years.

Additionally, new zooarchaeological analysis has greatly increased taxonomic diversity in birds and fish, species that comprise less biomass per individual but appear to have been a consistent and important component of diet. These smaller animals may also have been desired for their feathers, fur, and skeletal elements used to make tools. Their identification helps situate Hornblower II within southern New England, where it remains an exceptional example of coastal adaptation in these time periods.

**Acknowledgments**

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Steel, Daniel  

Stuiver, M., and P.J. Reimer  


Stuiver, M., P.J. Reimer, and R.W. Reimer  

Waters, Joseph H.  


Watson, Jessica E.  

Wood, William  

**Appendix 1: Fauna identified at Hornblower II (1982 excavation)**

<table>
<thead>
<tr>
<th>Archaeological Period (Late Woodland, Middle Woodland, Early Woodland, Late Archaic)</th>
<th>LW Str 1</th>
<th>LW Str 1A</th>
<th>LW / MW Str 1B</th>
<th>EW / LA Str 2</th>
<th>LA Str 3</th>
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### Mammalia (unidentified)

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**MAMMAL TOTAL**

|        |        | 400  | 3 | 1159 | 9 | 4833 | 29 | 2132 | 11 | 2499 | 21 | 408  | 3 |

### BIRDS

#### Anseriformes (ducks, geese, swans)

#### Anatidae (ducks, geese, swans)

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<th>EW / LA Str 2</th>
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TRANSITIONAL ARCHAIC AND WOODLAND OCCUPATION AT THE FRISBY-BUTLER SITE, MARTHA’S VINEYARD

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Abstract

Ongoing research into pre-Contact settlement and subsistence patterns on Martha’s Vineyard has highlighted dozens of sites clustered along the morainal ridges of the island’s northern and western borders. This paper seeks to add to this representation by examining data from Frisby-Butler, a shell-rich site located in southwestern Martha’s Vineyard that was excavated in 1981 but has since remained unanalyzed. Zoorchaeological analysis indicates that white-tailed deer (Odocoileus virginianus) was predominant in all levels, but increased diversity in birds and fish occurred during the time represented by the upper, shell-filled strata. The site was primarily used during the winter or was used as a deer-focused hunting camp based on seasonal data from age profiles and species presence. AMS radiocarbon dates indicate occupation during the Transitional Archaic (2,700-3,700 BP), Early Woodland (2,000-2,700 BP), and Late Woodland (450-1,200 BP) periods. This new analysis permits classifying Frisby-Butler as a short-term use site, perhaps favored by foragers as they moved around the island landscape seasonally.

Figure 1: Map of Frisby-Butler and Hornblower II on Martha’s Vineyard.
Introduction

Pre-Contact foragers on Martha’s Vineyard took advantage of diverse ecosystems, moving across the island to extract seasonal resources and to better shelter against inclement weather (Chilton and Doucette 2002a, 2002b; Chilton and Herbster 2008; Herbster and Cherau 2006; Largy et al. 2002; Perlman 1977; Ritchie 1969; Waters 1967, 1969). Much like their counterparts on the mainland, these foragers transitioned from small, nomadic groups during the Archaic and earlier Woodland periods to larger, more sedentary clusters by the Late Woodland (450-1,200 BP) (Snow 1980). Although many researchers have explored the history of these people and their settlement patterns, some assemblages remain unstudied. This paper examines one collection with a rich dataset housed at the Robert S. Peabody Institute of Archaeology. The Frisby-Butler site was excavated in 1981 and yielded over 20,000 animal bone fragments. Recent faunal analysis examined the rich dataset used here to understand subsistence, especially seasonality and taxonomic diversity compared to the nearby site Hornblower II (detailed in full by Watson in review). A small sample of bones were also tested to determine AMS radiocarbon dates for each strata (see also Watson in press).

Site Background

Excavation History

Frisby-Butler was excavated by archaeologist James B. Richardson III in 1981 (Richardson 1985). Richardson’s attention was drawn to the site by Richard L. Burt from West Tisbury, who discovered the site and participated in the subsequent excavation. The archaeological site is almost evenly split between land owned by the Frisby and Butler families, so Richardson and Peterson negotiated with the landowners to permit a short-term excavation lasting from July 11 to August 12. Many of the excavators returned to dig at Hornblower II the following year.

The site itself is on a terrace rising above the eastern corner of Squibnocket Pond (Figures 1 and 2). Like many parts of the island, vegetation today is largely low-lying and hardy, including scrub oak, cedar trees, nettles, and poison ivy. Standing on site, one can see the ocean down the crest of the hill and the large brackish pond in the other direction. Nearby freshwater streams provided drinking water, while the pond and ocean were filled with plentiful shellfish, fish, turtles, waterfowl, and other catches.

Richardson and crew excavated 27 test pits throughout the general site area to establish stratigraphy and boundaries of the site. Their subsequent 13 excavation units explored the western segment of the test pit area (Figure 3). The site’s depth ranged between 60-90 centimeters, although most units ended on the shallower side. The center of each two-meter unit was excavated, leaving a 25-centimeter balk on all edges. Balks were removed in several units, marked with
hashed lines on map. All material was screened through ¼” mesh in the field. The site is overall shallower than others nearby, including Hornblower II, with a thinner shell deposit stratum and very little cultural occupation below the shell layer. A total of 24 features were identified at the site, including storage pits, middens, hearths, and a dog burial, as well as a series of post molds in Stratum 4.

Most of the site’s assemblage has remained unstudied until this research project. The assemblage includes all faunal remains, lithics, and pottery, in addition to samples of the shell matrix. The following analysis of the timeline of occupation and subsistence practices is based on the large faunal assemblage (n=19,373). Additional dating information from ceramic and lithic technologies is based on the original field notes; I did not personally conduct any lithic or pottery analysis. These artifact classes remain unstudied at the Robert S. Peabody Institute and will be of interest for future researchers.

Stratigraphy

Frisby-Butler is composed of four strata (Figure 4), each subdivided by arbitrary levels to control artifact provenience. The topsoil and sod cap layer in Stratum 1 consisted of a dark humus plow zone with very little shell and a low density of artifacts. Bone fragments and stone artifacts were recovered, including lithic flakes, but no features were noted in any unit at this depth. This topsoil stratum was shallower in some units, likely because of the slope on the site. An average end depth for Stratum 1 was 15 centimeters below ground surface.

Stratum 2 was the dense shell layer at the site, many of them highly crushed. Shellfish species identified by the excavators include Atlantic oyster (*Crassostrea virginica*), quahog (*Mercenaria mercenaria*), and mussel (*Mytilus edulis*). The copious amount of shell was surrounded by a dark sandy soil. Limited quantities of bone and lithic artifacts were found, as well as some grit- and shell-tempered pottery fragments. Identified artifacts include a Late Woodland-period Levanna point, Vinette 1 sherds, a bone knife, and beaver incisor gouges. Fire-cracked rocks and charcoal provide evidence for cooking hearths. Average depths in this stratum are 10-40 centimeters below ground surface.

In Stratum 3, shell almost completely disappears in comparison with the dense deposits above it. Dark brown sandy soil surrounds animal bones and stone tools were identified, many made of local quartz. Formal points included several Oriental Fishtail and Lagoon points. Across the site, depths of this stratum were approximately 48-68 centimeters below ground surface. In Feature 3, excavators found a Squibnocket point. These diagnostic tools all point to a Transitional Archaic or Early Woodland occupation in Stratum 3.

The final stratum contained few diagnostic arti-
facts in its light yellow or reddish-yellow sandy soil. Although some bone, fire-cracked rock, and quartz flakes were recovered, Stratum 4 marks the bottom of the site and transitions into sterile sand. Average depths are from 35-70 centimeters below ground surface. Diagnostic projectile points include a Wading River point, roughly dated between the Transitional Archaic and Middle Woodland periods by archaeological research elsewhere in New England (Boudreau 2008). A dog burial was found in this stratum, interred with a Brewerton point near its head. This was an older dog whose right front leg had broken and healed prior to its death (Richardson 1985:40). Additionally, a female artiodactyl and its fetus were found buried in Stratum 4; these were identified in the field as deer but were re-identified as an intrusive sheep or goat burial by Dr. Hugh Genoways, Curator of the Section of Mammals at the Carnegie Museum of Natural History.

The most intensive occupation at the site appears to have been during Stratum 2, likely dating to the Late or Transitional Archaic based on Vinette 1 sherds from Feature 15, although the presence of a Levanna point suggests a later, Late Woodland date (or post-depositional mixing). Richardson (1985:40) suggested that the earliest layer, Stratum 1, dated to the Late Woodland, while the underlying Strata 2-4 were all deposited during Late Archaic occupations. However, this conclusion is based on dates from the nearby Hornblower II site, which appears to be significantly different upon closer comparison.

**Radiocarbon Dates**

Original estimated date ranges were based on ceramic and lithic artifacts and charcoal-based radiocarbon dates from Ritchie’s excavation at Hornblower II (Ritchie 1969). The stratigraphy at Hornblower II ranged from the Transitional Archaic (Strata 3-4) through the Late Woodland (Stratum 1A and 1B). These dates were then informally applied to Frisby-Butler in lieu of radiocarbon testing until AMS dates were obtained in the current analysis.

The eleven successful AMS dates from the Frisby-Butler site date occupation to the Transitional Archaic (2,700-3,700 BP), Early Woodland (2,000-2,700 BP), and Late Woodland (450-1,200 BP) periods (Figure 5). One bone fragment was tested twice and the resulting dates were combined (shown as UCIAMS-pooled).

The oldest date at Frisby-Butler provides evi-
dence of Transitional Archaic or very early Early Woodland occupation (Stratum 4), seen from the dog burial in Feature 19. This date was obtained from a bone fragment belonging to domestic dog (*Canis familiaris*). The Brewerton point found alongside it also points to a Late Archaic or early Transitional date. The Transitional Archaic occupation appears to be brief, with a calibrated date of 2713-2751 cal BP. This estimated date has 100 percent probability at the 2-sigma range and provides a tight chronology for the earliest substantial visitation to this site. However, as mentioned before, the proximity of this date to the arbitrary cutoff for the Transitional Archaic period may also recommend its inclusion with the other Early Woodland dates. Four hearths and four pits were also found in this layer, but very little bone, shell, and other artifacts were recovered. Together, the radiocarbon date and distribution of features support an early, seasonal settlement. Orient Fishtail, Lagoon, Wading River, Squibnocket Stemmed, and Squibnocket Triangle points were all recovered from Stratum 4 (identified in the field notes).

Following the Transitional Archaic campsite, a break of approximately 300 - 350 years occurred before the most substantial settlement in the Early Woodland period, represented by eight dates. These dates were acquired from Strata 1 through 4, although most dates from this era were from Strata 2 and 3, the shell layer and underlying shell-free stratum. Continuous seasonal occupations are seen from 1992 - 2489 cal BP. Bone fragments used to obtain these dates included domestic dog, white-tailed deer (*Odocoileus virginianus*), and seal (*Phocidae* sp.).

Both Strata 2 and 3 contained features indicative of more intensive settlement, including a house floor in the dense shell layer of Stratum 2 and an increase in the number and size of pits, both storage and refuse. Density of artifacts also increased during this period, coinciding with the earliest pottery at the site and several diagnostic projectile points (including one Bare Island point and one Meadowood). The faunal and shell assemblages show diversification in the forager diet, particularly through the marked increase in shellfish collection and increases in both richness and diversity of fauna. The earliest settlers, focused primarily on terrestrial taxa, had begun to hunt offshore by this point, seen from the remains of harbor seals and numerous sea birds. Additionally, rising sea levels and shoreline erosion meant that the site was closer to shellfish beds than in the earlier, Archaic occupations. The Early Woodland occupation provides evidence for modulating and diverse subsistence choices over time as the site continued to be a short-term hunting or gathering camp before becoming a more sedentary shellfishing camp.

Two features from Stratum 2 contributed to the Early Woodland radiometric data. These were Feature 1, a very large refuse pit that originated in Stratum 2 of unit N2 W16; and Feature 15, an ash lens in unit N2 W12 and N4 W12. Feature 1 appears to have been a pit used to cook shellfish before being cleaned out and reused for the same purpose (based on original field hypothesis). The final setup in the pit included a large mass of quahog, scallop, and oyster shells almost one meter deep. Underneath the shells was a thin, greasy
black layer of dirt with crushed deer bone, from which the AMS sample was obtained. Feature 15 was a thin layer of ash and bone underlying the oyster and other shells from Stratum 2, but judged to be separate from the sandy Stratum 3. It contained pockets of mixed shell debris and at least one fire-cracked rock along its edge.

The final date for Frisby-Butler is from the Late Woodland period (Stratum 1), estimated at 1060-1179 cal BP. Stratum 1 has very low artifact density compared to the other layers and, in many places across the site, was quite shallow. Like the Transitional Archaic occupation, settlement at the site during this era appears to have been brief and insubstantial, seen only from a small assemblage of material remains and no features. Evidence for the Late Woodland period follows an 800-year break in the site’s record. This date overlaps with the densest occupation at Hornblower II. The dearth of evidence for Stratum 1 may be impacted by historic plowing and residential construction nearby, but the general trend of abandonment is supported by the decline in artifacts dating to this era.

The almost continuous occupation of the site from the Transitional Archaic to the Late Woodland is interrupted by an absence of dates from the Middle Woodland period. Given the consistent midden deposition and relatively low number of dates, it is possible that additional testing may reveal settlement during the Middle Woodland. A Wading River point, possibly dating to this period, was found in Stratum 4. Additional research in the future will necessarily target this discrepancy. If indeed this gap occurred, it may show a more seasonal focus than described here, perhaps with a short-term abandonment to take advantage of more abundant foods elsewhere.

In sum, it appears that groups occupied the site for over 500 years during the Early Woodland period (Stratum 3), later revisiting the site at the start of the Late Woodland period (Stratum 1). The earliest dates fall within an estimated range for the Transitional Archaic period (Stratum 4), although the margin is so slim that this archaeological divide may not be meaningful. The earliest occupation appears continuous, likely a seasonal camp as the hunters took advantage of seasonal yields. During this era, the foragers at the site relied primarily on terrestrial foods as well as birds and fish, probably from the pond or close to the ocean shore. Shellfish were not integrated into their diets until the end of the Early Woodland (Stratum 2). A final, short-term event is dated to the Late Woodland, when the shellfish deposition decreased from its Early Woodland maximum.

### Subsistence Habits

#### Faunal Overview

A total of 19,373 fragments (NISP) and at least 178 individuals (MNI) were recovered from Frisby-Butler (see Appendix 1). All specimens were identified to the lowest taxonomic class possible. A small fraction was unidentifiable to taxonomic class and listed as “unidentified vertebrate” (1.67%) because of their extremely small size and poor preservation.

Mammals were the most common animals across all strata at Frisby-Butler, accounting for over 90 percent of all specimens (NISP=17,478) and almost 50 percent of individual animals (MNI=73). Mammals were most prevalent in Stratum 2. Cervids were the most commonly identified mammal (8.5%) and are composed almost exclusively of white-tailed deer. The known total of deer bones is likely under-represented as most of the “large mammal” fragments are probably white-tailed deer (33.7%) given the lack of other large mammals on the island. Indeterminate medium mammals also make up a significant portion of the assemblage (9.7%) and are likely unidentifiable fragments of raccoon (NISP=16) and canids (NISP=419). The same general relationship is observed with MNI with cervids (MNI=25) outnumbering raccoons (MNI=6) and canids (MNI=15). Other, smaller mammals included species like
muskrat (Ondatra zibethicus), beaver (Castor canadensis), and raccoon (Procyon lotor).

Fish are the second-most prevalent order at Frisby-Butler, composing approximately 3.9 percent of the total assemblage (NISP=762). Specimens were identified from nine subfamilies and are most prevalent in Stratum 2, a shell lens, and Stratum 4, a shell-free level. Fish bone fragments tally to almost 13 percent (%NISP) of the total assemblage at Frisby-Butler with elements from nine species. Stratum 2 shows the greatest species diversity, including fish from both the nearby ponds and the ocean.

Fish remains show the greatest difference between %NISP and %MNI. For instance, in Stratum 1, fish fragments only make up 1.03 percent of NISP, but amount to 16.7 percent of the calculated MNI. This is, in part, due to the high survival rate of the dense supraoccipital in scup (Stenotomus chrysops) that easily identifies individual fish. In Stratum 2, fish are 3.7 percent of the layer’s NISP, but 43.2 percent of its MNI, surpassing mammals. Strata 3 and 4 show reduced presence, ranging between 3.7 - 5.3 percent (%NISP) and 10 - 19.4 percent respectively (%MNI).

Reptiles and amphibians were the least common at the site (0.4%, NISP=84), although this is likely in part because of the very fragile nature of turtle, snake, and frog bones. The high soil acidities in the non-shell layers and large timescale likely decreased preservation. Additionally, several of these specimens appear to be more recent intrusions and may not account for prehistoric diet.

Like fish, birds were most common in Strata 2 and 4. The order Aves consists of species from eleven subfamilies, including woodland, pond, and shoreline species. Birds made up 3.7 percent of the total assemblage (NISP=726). Birds are plentiful around Squibnocket Pond, where flocks of ducks, geese, loons, and seabirds congregate each summer. The prehistoric foragers along its shores used avifauna for meat, tools, and decotation. Although birds were not a large part of diet, they were a consistent and often diverse resource. Eighteen species were identified at Frisby-Butler. Most of the assemblage is composed of lakebirds or shorebirds, especially anatids like dabbling and diving ducks. There is a decrease in birds over time: in Stratum 4, birds comprise 10.3 percent of the assemblage (%NISP), declining to 3.9 percent in Stratum 3, 2.3 percent in Stratum 2, and 0.7 percent in Stratum 1. Proportions derived from %MNI follow the same pattern, but more clearly show the importance of birds. Birds in Stratum 4 compose over 36.1 percent of the total assemblage (%MNI), second only to mammals like white-tailed deer. By Stratum 1, individual bird counts are negligible.

Relationships between the strata are complicated by ritual features. In Strata 1 through 3, birds are found in the general midden or storage feature pits. However, almost all Stratum 4 birds from are from the bottom of Feature 14, situated below a greasy black lens. The pit included a mixture of white-tailed deer, Herring gull (Larus argentatus smithsonianus), and Bald eagle (Haliaeetus leucocephalus). I have suggested elsewhere (Watson 2018; Watson in review) that this pit is related to a ritual feasting deposit associated with Thunderbird ceremonialism; further discussion of this stratum will take this unique deposit into account.

Regional Patterns

The predominance of white-tailed deer at Frisby-Butler indicates that it was occupied primarily in the late autumn or winter when many of the pond species were unavailable, although the smaller amounts of bird and fish may suggest dietary augmentation when possible as the seasons broached the warmer months. This pattern contrasts sharply with the nearby site Hornblower II, excavated by Richardson the following year (see Watson in review). Hornblower II has its diverse duck, loon, and fish deposits, occupied intensely during the warm summer months and perhaps to a lesser extent during the cooler months.
Many of the species identified from Frisby-Butler and Hornblower II are residents of nearby Squibnocket Pond. Waterfowl like ducks and geese were shot with bow and arrow or netted, while cormorants were hunted at night on their offshore roosts (Salwen 1978:162), similar to duck capture at night on lakes (Denys 1908:435-436). Otters, beavers, mink, and other estuarine mammals were trapped and skinned for their fur (and, for beavers, their incisors). Ethnohistoric records of fishing also show the importance of pond taxa as well as the many saltwater species found offshore. Fish were caught with bone hooks tied onto fibrous lines, by lance or harpoon from canoes, in nets, or at weirs built across streams (Salwen 1978). Once caught, fish were dried over a smoky fire or in the sun and stored for the winter¹. In eastern Massachusetts, women collected lobsters in the summer to be used as bait by male fishermen or dried and smoked for winter stores (Salwen 1978: 162; Wood 1865). This species is unseen archaeologically because they lack bones and do not preserve.

**Taxonomic Diversity**

Taxonomic diversity at Frisby-Butler contrasts strongly with other sites around Squibnocket Pond. Compared to the wide range of mammals found at Frisby-Butler, Hornblower II has a much greater diversity of birds and fish. There is a lot of overlap with many taxa found at both sites, but the assemblages show a markedly different usage of fish and rare species like black bear (*Ursus americanus*) and osprey (*Pandion haliaetus*).

Relative abundance of the four faunal orders varies within and between sites. Taxonomic variation has been explored by strata in the preceding sections. Overall differences between Frisby-Butler and Hornblower II vary by measure, shown in Figure 6. The heavily fragmented assemblage of large mammals and white-tailed deer dominate both sites when estimated by %NISP, particularly at Frisby-Butler (91.6 percent of the total site assemblage). The dominance of mammals is diffused by %MNI, where fish and birds total almost 50 percent. In contrast, fish and mammals are almost equally represented at Hornblower II by %NISP, but calculating MNI showcases the amount of fish brought onto the site (71.96 percent). Other categories differ less drastically between the sites, including birds, which have more fragments at Hornblower II but almost the same %MNI as Frisby-Butler, and reptiles, which are mostly likely over-represented by %MNI by intrusive modern scavengers like mice (*Mus musculus*) at Frisby-Butler.

Changes in taxonomic frequencies over time can be measured using the Shannon Weaver Index, a measure of diversity and equitability (Greyson 1981: 82-85; Pielou 1966; Reitz and Scarry 1985: 20; Shannon and Weaver 1949; Sheldon 1969). Diversity is a measure of how many species are represented in a collection and the similarity in

![Figure 6: Relative abundance for all taxa.](image-url)
abundance of the sample’s taxa, with values ranging from 0 to 4.99 (Emery 2004: 32). When specimens are distributed equally among taxa, a sample with a greater number of taxa will be more diverse; samples which are dominated by one taxon, however, are less diverse than those with fewer total taxa (Flad 2005). High diversity values reflect relatively lower frequencies in a greater range of taxa. Equitability is derived from the Diversity Index and measures the distribution of individuals within species. Higher values indicate more equitability, reflecting a normal distribution of a few dominant species and lesser frequencies of other taxa. Equitability values range from 0 to 1. Additionally, richness is calculated by count of species within each group. These biodiversity measures are dependent on sample size (Greyson 1981: 82-85) but are useful for understanding the range of taxa exploited at the sites.

Table 1 lists the richness, diversity, and equitability values for each stratum from Frisby-Butler and Hornblower II, calculated using taxa identified to species or genus (if species-level was not identified). Biodiversity values were calculated using NISP of taxa in each component. Large mammals are grouped with cervids, medium mammals grouped with canids, and small mammals grouped with rodents. Unidentified taxa not identified to size were not included in the analysis.

The significance of increased speciation in Strata 2 and 4 at Frisby-Butler and Strata 1A and 1B at Hornblower II in reflected in the higher indices of diversity shown in Figure 7, contrasting with the deer-focused assemblage in Stratum 1, Frisby Butler. The focus on cervids and demersal fish is also reflected in the higher indices of equitability in Hornblower II. In fact, almost all equitability values are higher at Hornblower II, indicating greater dominance of a few species rather than a more even distribution like is seen at Frisby Butler. These results reflect differences within and between sites, indicating different specializations throughout the Late Holocene.

Although the assemblages differ from others in the region, the general trend of increased capture of fish during the Late Woodland period fits into the projected regional scheme of increased interest in coastal foods in the last 2,000 years. Land mammals continue to be very important for these groups throughout the history of the sites, but the diversity indices showcase the importance of other taxa during the course of the site occupations.

**Conclusion**

The faunal remains from Frisby-Butler provide a glimpse into the site’s occupants over the past
2,000 years. White-tailed deer dominate the identified species, and together with a lack of migratory and other warm-weather species, the remains suggest a cooler-weather focus. Its assemblage was less diverse than other sites nearby, such as Hornblower II, but showcased the same increase in shellfishing in the later Woodland era that is seen at most coastal sites throughout southern New England.

The faunal assemblage also facilitated the first radiocarbon dates at the site, demarcating a minimum of three settlements periods: Transitional Archaic, Early Woodland, and Late Woodland. This site helps fill out our picture of settlement on Martha’s Vineyard and contributes to a broader timescale of coastal movement in southern New England. It also represents the first published account of settlement and subsistence at the site; the remaining lithic, shell, and pottery assemblages remain unstudied and would be an ideal project for additional research.

Acknowledgments

I am grateful to the staff at the Robert S. Peabody Institute of Archaeology for their assistance accessing this assemblage and generous permission to use images. This paper greatly benefitted from discussions with Jim Richardson and Bob Feranec, who helped situate the site notes and radiocarbon results. This study was funded by the University at Albany Benevolent Association and Initiatives for Women. AMS dates were funded by the New York State Museum.

Notes

¹ Shellfish were also dried and saved for later seasons. Some early reports counted these fares as emergency rations, a view no longer supported by archaeological assemblages.

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Emery, Kitty F.  

Flad, Rowan K.  

Grayson, Donald K.  

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Shannon, Claude E., and Warren Weaver  

Sheldon, Andrew L.  

Snow, Dean  

Speck, Frank G., and Ralph W. Dexter  

Waters, Joseph H.  


Watson, Jessica E.  


Wood, William  
Appendix 1: Fauna identified at Frisby-Butler

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<td>Rattus norvegicus</td>
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<td>cf Muridae</td>
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<td><strong>Canidae (dogs, wolves, foxes, other canids)</strong></td>
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<td>cf Vulpes vulpes</td>
<td>cf red fox</td>
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<td>cf Urocyon cinereoargenteus</td>
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### Archaeological Period (Late Woodland, Early Woodland, Transitional Archaic)

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<td>Artiodactyla (even-toed hoofed mammals)</td>
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<td>Cervidae (deer)</td>
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<td>Ovis aries</td>
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**MAMMAL TOTAL**

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### BIRDS

#### Anseriformes (ducks, geese, swans)

#### Anatidae (ducks, geese, swans)

<table>
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<th>Species</th>
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<th>EW Stratum 3</th>
<th>EW / TA Stratum 4</th>
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<td>Branta canadensis</td>
<td>Canada goose</td>
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<td>Cygnus columbianus</td>
<td>Whistling swan</td>
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<td>cf Anas acuta</td>
<td>cf Northern pintail</td>
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<td>cf Aythya valisneria</td>
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### Archaeological Period (Late Woodland, Early Woodland, Transitional Archaic)

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<th>EW / TA Stratum 4</th>
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<tbody>
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<td>cf Melanitta fusca</td>
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<tr>
<td>Melanitta sp.</td>
<td>scoter</td>
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<td>Anatidae sp.</td>
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<td>duck/goose/swan</td>
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<tr>
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<td>Accipitridae (hooked bill birds)</td>
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<td>cf Atlantic sturgeon</td>
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<td>Perciformes (perch-like ray-finned fish)</td>
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<td>cf Stenotomus chrysops</td>
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<td>Labriformes (wrasses)</td>
<td>Labridae (wrasses)</td>
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<td>EW Stratum 2</td>
<td>EW Stratum 3</td>
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<td>Ranidae (true frogs)</td>
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Massachusetts Archaeological Society

******
An invitation to help preserve the past...for the future

Pictograph & Drill
(Wapanucket, Middleborough)

Stone Effigy
(Wapanucket, Middleborough)

Turtle Petroglyph

Purpose
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McDERMOTT SITE, MARTHA’S VINEYARD

ANDREW STANZESKI
3207 Alabama Road, Camden, NJ 08104

Introduction

The McDermott site is an Early and Late Woodland period site located on Martha’s Vineyard. One almost complete vessel and fragments of another were found at the site in a Late Woodland feature. Also, found in another Late Woodland feature was a pendant with a possible thunderbird motif. During the time of excavation, the site was being prepared for a housing project. The year was 1971 and I was stationed in the U. S. Coast Guard at Gay Head Station (#49) in Menemsha. The following report was written in the mid-1970s with some changes and updates since that time.

History, Location and Field Work

The first archaeological research was done on the island by Samuel J. Guernsey (1915) in Chilmark. This was followed by excavations by Douglas S. Byers and Frederick Johnson (1940), also in Chilmark. E. Gale Huntington (1959) worked on a site in Oak Bluffs. In the 1960s William A. Ritchie (1969) excavated 6 sites, resulting in the publication of his classic book, The Archaeology of Martha’s Vineyard. James B. Richardson III (1985; Watson 2019) conducted research at 3 sites in Chilmark and Aquinnah. Elizabeth S. Chilton (2002) worked at Lucy Vincent Beach in Chilmark. There have been numerous sites excavated throughout the island by the Public Archaeology Laboratory (Herbster and Cherau 2006). A number of these sites are multicomponent shell middens, with the McDermott site in Oak Bluffs the only excavated site along the eastern shore of the island.

The McDermott site is located on Martha’s Vineyard, Massachusetts, Dukes County (see Figure 1). The site is on the north side of Major’s Cove, south of Oak Bluffs and north of Ocean Heights. County Road lies to the west while Vineyard Road lies to south. The site was discovered in the winter of 1970 during clearing for a new road for a...
proposed housing project. Excavations were conducted during the months of December and January.

At the time of discovery, the McDermott site was covered with pitch pine, scrub oak and cedar trees. A shell midden twenty feet in diameter occupied the most eastern portion of the site. This midden, at the time, had been disturbed by collectors. The files of the Massachusetts Historical Commission indicate that this shell midden is likely 19-DK-33, recorded in the vicinity based on the collections of Ruth Redding (Jonathan Patton, personal communication, September 2019). The northern portion of the site is bordered by swamp with Sengekontacket Pond to the south. This is a large, shallow salt water pond, whose outlet connects directly with Nantucket Sound, at Edgartown Beach and Joseph Sylvia State Beach. The eastern most part of the site evidently has a higher wind-chill factor, because of winter winds sweeping in directly off Nantucket Sound. The inland setting along Major’s Cove has a high knoll to the east and another high knoll (50-feet in elevation) to the north. In this area also is Fresh Pond, a freshwater kettle hole pond. This area would offer an ideal shelter throughout the year. Russell Gardner (1993:4-5), citing Charles Edward Banks’s 1911 history of the Vineyard, places the Wampanoag town Pohquauke in this part of San-chakantackett Neck.

Testing in this sheltered area revealed an undisturbed shell midden. Archaeologist Jill Bouck recorded the site 19-DK-83 in this vicinity in 1978 (Jonathan Patton, personal communication, September 2019). This area was then laid out in five-foot excavation units (Figure 2). The units were excavated by stratum; features were excavated separately. In Stratum III the subsoil was taken down at least 6-inches or more in some units. At the property owner’s request, the units were filled in at the end of each day. This was done as a safety measure, but also to forestall any vandalism. Fortunately, the site was not disturbed during the excavation period. A total of 11 units and 16 features were excavated.

No game animals were seen during the excavation. However, deer tracks were abundant in the swampy area. The only historic evidence found was a refuse dump of recent origin, in the northwestern section of the site.

**Stratigraphy, Features, Post holes**

The stratigraphic levels observed are described below:

*Stratum I* averaged 6-inches in depth and was a dark organic sandy loam layer streaked with humus and finely crushed shell.

*Stratum IA* measured 2 to 8-inches in depth and 90 percent was whole and broken shell. The soil was a dark organic sandy loam. This was the shell...
midden that occupied an area approximately 15 by 20-feet. Hard shell clam or quahog (Mercenaria mercenaria) and softshell clam (Mya arenaria) were the predominate shellfish in the midden.¹ Other shellfish found in the midden and in features were bay scallop (Argopecten irradians), Virginia oysters (Crassostrea virginica), blue mussel (Mytilus edulis), and Atlantic ribbed mussel (Geukensia demissa). In smaller quantities were boat or slipper shell (Crepidula fornicata) and channeled pear conch (Busycotypus canaliculatus). One worm tube shell (Vermicularia spirata) was found in Stratum IA. No shell tools were found, but at the time they were not commonly recognized at sites (Stanzeski 1979:37, 15-18). Also, bone fragments, mostly of white-tail deer (Odocoileus virginianus), were found. All deer bone had been broken, presumably for marrow extraction. Some showed signs of dog gnawing.

Stratum II varied in thickness from 5 to 8-inches. This stratum was a sandy loam soil, light brown in color, and intermixed with some bone and fragmented shell. Ten features were found in this stratum; all were excavated.

Stratum III subsoil was a yellow sandy loam soil, with no shell. Two features were found in this stratum and were excavated.

Two other features were found in the newly cleared road that passed through the site. They were located 50-feet northwest of the main excavation area. The features appeared at the base of Stratum II after the removal of the top soil. The features were designated 1R and 2R.

Post molds were found in the primary excavation area of the McDermott site. Post molds originated in Stratum IA and Stratum II and were 2 to 3-inches in diameter. The post molds extended an average depth of 6-inches into Stratum II and were a dark brown sandy loam soil with crushed shell. No post mold configuration was evident.

Artifacts

Artifacts were most abundant in the features found at the McDermott site.² Feature descriptions and the artifacts found in the features are detailed in the following pages. A number of artifacts were found on the site surface. These include one Jack’s Reef Pentagonal point (Figure 3-7) and a Levanna point (Figure 3-27). The Levanna projectile point was found near Feature 1R (in the road). Both were made of rhyolite porphyry. Also, on the surface (not pictured) was one large triangular point, one Rossville, and two fragments of an unknown type; all were made of rhyolite porphyry. One Lagoon projectile point (material: quartz latite porphyry)³ and one preform of a rhyolite Jack’s Reef projectile point also were found on the surface. One broken Fox Creek projectile point (material: argillite) and one Vinette I potsherd (Ritchie 1969:223-224) also were found on the site surface. The Vinette I sherd was fabric impressed inside and out, with grit temper. The Fox Creek point was the only projectile point found dating from the Middle Woodland period.

No artifacts, only shell fragments, were found in Stratum I. In Stratum IA of the midden the following artifacts were found: one base of a triangular point (material: rhyolite); a fragmentary quartz point; one round flat mica schist pebble; one deer skull fragment (parietal pair) with organic material inside; two polished splinter awls of deer metapodial (Figure 3-8 and 3-14); one humerus fragment tool, possibly a gouge or beam-er; one antler flaking tool (Figure 3-3); and one Jack’s Reef projectile point made of quartz latite porphyry (Figure 3-5). Diagnostic material in Stratum IA dated to the Late Woodland period.

Artifacts recovered in Stratum II included one preform of rhyolite; one broken quartz preform; one quartz latite porphyry preform (Figure 3-25); one quartzite hammerstone; two flake tools of rhyolite; one broken Rossville point; one broken Levanna point of rhyolite; and one Rossville point of quartz latite porphyry (Figure 3-11). Potsherds
Figure 3. Artifacts from the McDermott site: 3-1, section of polished bone awl, probably deer; 3-2, side scraper, rhyolite; 3-3, antler flaking tool; 3-4, Lagoon projectile point, quartz latite porphyry; 3-5, Jack’s Reef, quartz latite porphyry; 3-6, Jack’s Reef, quartz latite porphyry; 3-7, Jack’s Reef Pentagonal Point; 3-8, polished splinter awl of deer metapodial fragment; 3-9, Lagoon projectile point, quartz latite porphyry; 3-10, Rossville projectile point, quartz latite porphyry; 3-11, Rossville point quartz latite porphyry; 3-12, Rossville projectile point, quartz latite porphyry; 3-13, Rossville Point, quartz latite porphyry; 3-14, polished splinter awl of deer metapodial fragment; 3-15, ulna or fibula; 3-16, pendant, possibly seal tooth; 3-17, ceramic pipe bowl fragment; 3-18, claystone pendant, thunderbird motif; 3-19, pottery game or counting disk, shell tempered; 3-20, pottery game or counting disk, grit tempered; 3-21, trianguloid knife, quartz latite porphyry; 3-22, unfinished stemmed point, fine-grained sandstone; 3-23, unfinished stemmed point, rhyolite; 3-24, ovate knife, crystalline material; 3-25, preform, quartz latite porphyry; 3-26, possible Jack’s Reef Projectile Point, quartz latite porphyry; 3-27, Levanna point, quartz latite porphyry; 3-28, Levanna point, quartz latite porphyry; 3-29, Levanna point, red quartzite; 3-30, Levanna point, crystalline material; 3-31, potsherd, cord wrapped exterior, grit temper; 3-32, potsherd, possibly Vinette type.
found consisted of one shell impressed rim sherd and 12 body sherds with smooth exterior and interior surfaces; all potsherds were shell tempered.

In Unit A2 east of the hearth there were 11 Rossville points, 4 side notched (Meadowood-like) and one trianguloid knife; these points were made of rhyolite \( (n = 7) \), quartz latite porphyry \( (n = 8) \), and quartz latite \( (n = 1) \). All projectile points were broken, except for one Rossville point (see Figure 4). Likely they were collected (found) on the site or were retained after initial breakage to be reworked into tools. Stratum II was a mix of Early and Late Woodland materials.

No artifacts were found in Stratum III outside of the features.

**Summary of Features**

A total of 14 features were found. A number of features had evidence of use as storage pits,
which were then reused as refuse pits; for example, Features 1R and 2R, the features found in the road. In the main excavation area Features 4 and 9 had also been used as refuse pits. Feature 12 was a hearth. Twelve features were in or extended from Stratum II. Features 2 and 4 were located in Stratum III.

Stratum II Features

Many of the features in Stratum II were sterile storage pits; these are described in Table 1. Features 9, 10, 11, and 12 had likely been first made and used as storage pits, but were then later filled with refuse. These features and their contents are described below.

Feature 9 was 36-inches in diameter and its bottom depth from surface was 38-inches. It had a cylinder-shaped profile and was filled with dark brown, sandy/loam soil. It was first used for storage, then reused as a refuse pit during the Late Woodland period. Artifacts found in Feature 9 are pictured in Figure 3 and described in the figure caption. The point types are markers for the Late Woodland. Two partial vessels were found in the feature as well, and are described in more detail below. These vessels also support a Late Woodland date for terminal use of the feature.

Faunal and shellfish remains also were found in Feature 9. Most faunal material found was from white-tailed deer. All deer bones were broken for extraction of marrow. Teeth marks from animal gnawing were evident on the bones as well. One splintered bone had a cone shape hole from breakage. Four deer bone fragments were the by-product of tool making, including the end of a left tibia shaft (sub-adult or juvenile); one metacarpal shaft (also known as a cannon bone), one distal right metatarsal (right epiphysis) fused, and one proximal end right metatarsal. The process of bone tool making involved cutting and snapping the bone. Experiments demonstrated that stone tools had been used to make the cut marks. Also found was one left lower jaw of a gray fox (Urocyon cinereoargenteus). Unidentified bird bills also were found, but were heavily warped, possibly due to postmortem conditions. They can be compared to small loons (Gavia sp.), terns (Sterna sp.) and the red-throated loon (Gavia stellata). Also, one common snapping turtle (Chelydra serpentina) carapace marginal shell fragment was found. Shellfish found were soft shell clam, bay scallop, ribbed mussel and blue mussels. In the bottom of the feature mostly ribbed mussels were found.

Feature 10 was 24-inches in diameter with a bottom depth from surface of 24-inches. It had a U-shaped profile and was comprised of dark brown, sandy/loam soil. It was first used as a storage pit then as a refuse pit; it dates to the Late Woodland period.

Table 1. Summary of sterile storage pit features in Stratum II.

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<tr>
<th>Feature #</th>
<th>Dimensions</th>
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<th>Soil</th>
<th>Type</th>
<th>Age</th>
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<td>1</td>
<td>24-inches in diameter, bottom depth from surface 32-inches</td>
<td>U-shaped</td>
<td>dark brown sandy/loam soil</td>
<td>sterile storage pit</td>
<td>Late Woodland</td>
</tr>
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<td>3</td>
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<td>U-shaped</td>
<td>dark brown, sandy/loam soil</td>
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</tr>
<tr>
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<td>16-inches in diameter, bottom depth from surface 28-inches</td>
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<td>dark brown, sandy/loam soil</td>
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</tr>
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</tr>
<tr>
<td>8</td>
<td>30-inches in diameter, bottom depth from surface 26-inches</td>
<td>Cylinder-shaped</td>
<td>dark brown, sandy/loam soil</td>
<td>sterile storage pit</td>
<td>Late Woodland</td>
</tr>
</tbody>
</table>
Feature 11 was 26-inches in diameter with a bottom depth from surface of 23-inches. It had a U-shaped profile and was comprised of dark brown sandy/loam soil. It was first used as a storage pit and then as a refuse pit, dating to the Early or Late Woodland periods. Artifacts found in Feature 11 include 1 Lagoon projectile point (material: quartz latite porphyry) (Figure 3-4).

Feature 12 was approximately 26-inches in diameter, with a bottom depth from surface of 15-inches. It was comprised of a light brown, sandy/loam soil and appears to have been a sterile hearth dating to the Early or Late Woodland periods. Artifacts found adjacent to the hearth include 1 Lagoon projectile point (material: quartz latite porphyry) (Figure 3-9); 1 possible Jack's Reef projectile point (material: quartz latite porphyry) (Figure 3-26); and 1 Rossville projectile point (material: quartz latite porphyry) (Figure 3-12).

Features in Stratum III

All features in Stratum III were confined entirely within this stratigraphic unit. They are described below.

Feature 2 was 36-inches long by 25-inches wide; the bottom of this feature measured 38-inches from the ground surface. It was basin-shaped in profile and was comprised of light brown sandy/loam soil. It was a sterile storage pit possibly dating to the Early Woodland period.

Feature 4 was 12-inches in diameter, cone-shaped in profile; the bottom of the feature was 36-inches from the ground surface; it was comprised of dark yellow sandy/loam. Its use remains unknown; it may have been a lithic storage pit dating from the Early Woodland period. Artifacts found in Feature 4 include 54 flakes (specifically, 22 thinning flakes, 15 primary flakes, 14 decortification flakes, and 3 flake fragments, all of chert); 2 hammerstones (material: quartzite); 6 fragments of cobble reduction, all decortification flakes (material: quartz orthoclase gneiss); and 3 crude unfinished stemmed points [material: 1 fine grain sandstone (Figure 3-22), 1 of rhyolite (Figure 3-23), and 1 base made of rhyolite].

Road Features

Feature 1R was disturbed and no measurements were made. It had a U-shaped profile and was composed of dark brown sandy/loam soil, with shell. It was a storage pit that was later used as a refuse pit during the Late Woodland period. Artifacts from Feature 1R are shown in Figure 3. This was the only feature with a larger trianguloid knife and fragments of others. Artifacts in Feature 1R include 1 Jack's Reef Pentagonal point (material: quartz latite porphyry) (Figure 3-6); 1 section...
of a polished awl (material: probably metapodial fragment, deer) (Figure 3-1); 2 Lavanna points [material: crystalline quartz (Figure 3-30) and red quartzite (Figure 3-29)]; 1 Lavanna point (material: quartz latite porphyry) (Figure 3-27); 1 trianguloid knife (material: quartz latite porphyry) (Figure 3-21); 2 Lavanna point fragments (material: quartz latite porphyry); 1 trianguloid knife fragment (material: quartz latite porphyry); 1 biface tip fragment (material: chert); 1 trianguloid knife fragment (material: quartz); 1 trianguloid knife fragment (material: quartz latite porphyry); 1 potsherd with grit temper, exterior smooth over cord impressed surface, interior smooth; 2 potsherds with shell temper, extraverted rim, cord-maleated exterior, smooth interior; and 3 potsherds with shell temper, rounded rims, cord-maleated with trailed scallop incising (or ribbed mussel) linear decoration exterior, smoothed over cord impressed interior.

Also found in Feature 1R is an interesting claystone pendant with a possible thunderbird design (Figure 3-18, and Figures 5 and 6). Triangles and Xs inscribed on the pendant were observed by James B. Richardson III (personal communication, 2017), who thought the image might be a thunderbird (Bouck and Richardson 2007:11-190). The thunderbird is a giant, sacred eagle-like bird that causes lightning, thunder and wind, devours serpents, and is a guardian spirit among some Native American people (Lenik 2012:163-185).

The image of the thunderbird occurs in petroglyphs on large rock outcroppings, on stone, metal, clay, and shell artifacts, and even as tattoos found on portraits of Native Americans (Lenik 2012:163-185). An account book from the 1780s from Martha’s Vineyard and in the collection of the Martha’s Vineyard Museum has impressed on the cowhide cover a thunderbird (Bouck and Richardson 2007:11-19; James Richardson III, personal communication, August 17, 2019). One other thunderbird figure has been found on Martha’s Vineyard dating to the Late Woodland period. It occurs on a fragment of pottery found at Menemsha Pond (Hedden 1991:41-50). Bouck and Richardson (2007:15) explain that in its most simplified form the thunderbird appears as an X, possibly representing the intersection of sky and earth manifest in these creatures. On Martha’s Vineyard a total of three thunderbird figures have been found, as well as two other artifacts with an incised X figure; one of these is on a gorget fragment from West Tisbury and one is on a hammerstone from Vineyard Haven (Bouck and Richardson 2007:163-185).

Feature 2R was disturbed and measured 18-inches in diameter. It had a U-shaped profile, was comprised of dark brown, sandy/loam soil with shell and deer bone. It was likely a storage pit and

Tracing the lines (not the trowel marks) on the McDermott site pendant reveals lines for the two wings on either side of a central triangle depicting the body (see Figure 6). On the top right of the triangle are three lines, one for the neck and two others forming the open beak. The left side below the wing has two lines possibly representing lightning. The wing on the right is smaller than that on the left. The artist could have been running out of room to make a full wing. The pendant also could be showing a side profile of a thunderbird, because of the manner in which the neck and beak are depicted on the right side.

Figure 7. Vessel 1, dentate impressed. Courtesy of Carnegie Museum of Natural History.
then used as refuse pit during the Late Woodland period. Artifacts in Feature 2R include 1 Rossville projectile point (material: quartz latite porphyry) (Figure 3-10) and 1 ovate knife (material: crystal-line quartz) (Figure 3-24).

Vessels found in Feature 9

In my original 1970s draft of this paper I considered proposing new pottery types for the two vessels found in Feature 9. Creating new types has since fallen out of favor. Instead I offer detailed descriptions of the two vessels.

Vessel 1 is represented by 90 pot sherds and exhibits a dentate impressed decoration (Figures 7 and 8). The temper is a mix of crushed scallop shell, and also other types of crushed shell, varying in size from $1/64$ inches to $\frac{1}{4}$ inches (0.4 mm to 6.35mm). There was no leaching of the shell. The texture is compact and smooth. The hardness is measured as 2.5 to 3 on the Mohs scale. The color is brown (7.5YR 5/2 to 5/4 on the Munsell chart).

Firing: thoroughly oxidized.

Manufacture: coil or fillet technique not observable because the paste was well consolidated.

Surface Treatment: The exterior of vessel was fabric impressed, though the neck area had been wiped smooth with fabric, except for some fabric impressions left on the collar. Interior of the vessel was wiped smooth with fabric.

Decoration: done with a bone or stick. The lip is flat with dentate impressions going across from left to right. Dentate impressions are evident on the rim and shoulder around the circumference of the vessel and are bounded by two lines on the rim and three on the shoulder.

Vessel size: capacity approximately one gallon, diameter 8-inches.
Form: rim flat, collar straight, neck constricted, body circular and fully globular.

Comparisons: This vessel looks much like Clasons Point Stamped (Kostiw 2015:101; Smith 1950), known on the southern New England coast. In William Fowler’s (1966:56-58) classification scheme this would be a Stage 3 type pot. Also, see the comparisons on the other vessel found in Feature 9, and comments.

Vessel 2 (Figures 8 and 9) is a large portion of a globular vessel (72 sherds were recovered) with stamped decoration made with ribbed mussel shells. The temper is a mix of crushed scallop shell and other types of shell varying in size from 1/64 inch to 1/4 inch (0.4 mm to 6.35 mm). There is no leaching of the shell. The texture is compact and smooth. The vessel exhibits a hardness of 2 to 2-1/2 on the Mohs scale. The color is brown (7.5YR 5/2 to 5/4 on the Munsell chart). <Figure 9>

Firing: Thoroughly oxidized.

Manufacture: Possibly coil or fillet technique, not observable because the paste is well consolidated.

Surface Treatment: The exterior of the vessel is fabric impressed from rim to neck at an angle of 45 degrees; fabric impressions also extend from the neck to the base going around the vessel’s circumference. The base is very smooth. The interior of the vessel was wiped smooth with a course fabric or a tool, such as a soft shell clam.

Decoration: Decoration was executed with a ribbed mussel shell. The rim is flat with vertical ribbed mussel impressions. From rim to the neck are ribbed mussel shell impressions (over the fabric impressions), in lines of one or two in a zig-zag pattern of 40 degrees to 340 degrees going around the circumference of the vessel. The impressions on the neck are like those on the lip and formed from vertical ribbed mussel shell impressions. At first I thought the decoration was made with a scallop shell. Scallop shell radial ribs are bigger, however, and ribbed mussel are smaller. In a comparison test, the ribbed mussel fit right into the impressions on the vessel.

Vessel size: Capacity approximately one gallon, approximate diameter 8 inches.

Form: Rim flat, collar convex, neck constricted, body circular and fully globular.

Comparisons: The mussel shell decoration can be compared to similar scallop shell decoration. Earlier pottery with scallop shell decoration is found in the early Point Peninsula culture in New York, New England, and southern Canada (Ritchie 1965:203-228). This pottery is called St. Lawrence Pseudo Scallop Shell. The later scallop shell decoration found in the Late Woodland is from the Sebonac Phase of the Windsor Tradition, and also with the Clasons Point Phase of the East River Tradition found in the Bronx, New York (Ritchie 1965:269-271; Smith 1950). The Clasons Point Phase endured into European Contact times (Ritchie 1965:271). The pottery type has been found on Staten Island, New York and at the Tottenville Bluff site (Kostiw 2015:101). Scallop shell decorated pottery has been found on Martha’s Vineyard by William A. Ritchie (1969). One other almost complete vessel has been found on the Vineyard in Chilmark. That vessel is shell decorated below the lip with fiber impressions, the type of shell used is unknown (Petersen and Burt 1985:1-10). Beyond Massachusetts the type is found in Long Island, southern Connecticut (Lavin 1991:68-94), on Fishers Island (Funk and Pfeiffer 1988:69-110), and north into Maine and the Maritime Provinces (Petersen and Sanger 1989). In William Fowler’s (1966:56-58) typology this is a Stage 3 type pot. No scallop shell or ribbed mussel shell decorated pottery has been found in southern New Jersey (Michael Stewart, personal communication). On the central and southern New Jersey coast none has been found by the author. One potsherd has been found in the upper
Delaware River, above the Delaware Water Gap, in Feature 119 at the Faucett Site (36-Pi-13A). This was a rim sherd with scallop shell decoration (Michael Stewart, personal communication). In the state of Delaware, no scallop shell decorated pottery has been found (Dan Griffith, personal communication). At the Abbott Farm site in New Jersey (28-ME-1), one scallop shell decorated rim sherd was found in the so-called “low lands” portion of the site by the author in the 1960s. The type also was found by Dorothy Cross at the Abbott Farm site; she referred to it as Pseudo-Rocker-Stamped (Cross 1956:144).

Comments: The interior of the vessel contained very small fish scales. It is possible that the vessel was used for boiling fish at the time of breakage. The two vessels found in Feature 9 are from the Late Woodland period.

Summary and Conclusion

The McDermott site is an Early and Late Woodland component site located on Martha’s Vineyard. The location is in a sheltered area of Sengekontacket Pond, Major’s Cove, where winter winds were blocked by two knolls. Fresh Pond, a fresh water pond located on the site, and Sengekontacket Pond, a salt water feature, made an ideal location for human occupation. The fresh water pond attracted game, such as deer. The salt water pond provided resources such as shellfish, fish, turtle, and water fowl.

The site was never plowed. Stratum I was a humus layer that formed for a considerable time. Stratum IA was a shell midden that was Late Woodland in age. Stratum II was the living floor for the Late Woodland component. Most features and postholes found started in Stratum II. Almost all features that did originate in Stratum II had Late Woodland artifacts with some Early Woodland artifacts mixed in as well. Stratum III, the subsoil, was the earliest occupation level. All features found in Stratum III were Early Woodland in age.

The Late Woodland is represented by Levanna, Jack’s Reef Pentagonal points, large triangularoid knives, bone tools, a pipe fragment, ornaments of bone and stone, gaming discs, and Late Woodland pottery. One of the ornaments—a pendant—has a thunderbird motif engraved on one side. The Late Woodland shell decorated pottery is similar to that found at other sites in New England. At this time shell decorated pottery is known south of Staten Island, New York only at the Abbott Farm site near Trenton, New Jersey.

Only one artifact represents the Middle Woodland period, a Fox Creek point fragment. Also, this was the only point found made of argillite. The Early Woodland is represented by Rossville, Lagoon, and side-notched (Meadowood-like) projectile points with some Vinette type pottery.

The McDermott Site was occupied for short periods of time throughout the year, with an ideal location for a winter encampment. Only a fraction of the site was excavated. It is possible that if portions of the site still remain further investigation might reveal other features and periods of occupation.

Acknowledgments

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Notes

¹ Scientific names were checked against the Integrated Taxonomic Information System (ITIS) and the World Register of Marine Species (WoRMS). Only currently accepted names were used. Many readers may note that species like the channeled whelk are better known as Busycon canaliculatum; that name, however, is considered a synonym.

² The bone artifacts, gaming disks, pipe, and pendants pictured in the report are missing. If found, please donate to the Martha’s Vineyard Museum. The gesture would be appreciated. Thank you!

³ Objects identified as quartz latite porphyry are likely felsite.

⁴ An iron knife and a primary rhyolite flake were used on bone and cut down to the same depth observed on the bone artifacts. It took approximately 150 strokes with both tools to achieve the cuts. The iron knife cut marks had straight edges with less of a V-shape. The ridges on the rhyolite flake produced a V-shaped cut. Water was added during the bone cutting experiment; that aided in making the strokes back and forth. This indicates that the patterns made on the bones found on site were made with a stone tool. The stone tool used in the experiment had only a slight rounded and crushed edge after use.

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NOTES TO CONTRIBUTORS

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