

Bulletin of the Archaeological Society of Delaware



Number Thirty-three, New Series

Fall 1996

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CLINTON ALBERT WESLAGER

(1909 - 1994)

CLINTON ALBERT WESLAGER

(1909 - 1994)

With the death of noted historian Clinton A. Weslager on August 5, 1994, at age 85, archaeology lost one of its most prolific popularizers. Mr. Weslager joined the Archaeological Society of Delaware (ASD) in 1937, was awarded Life Membership in 1972, and was recipient of the Crozier Award in 1978. He served as President of ASD twice (1942-1947 and 1950-1953), was Editor of **The Bulletin of the ASD** for 16 years (1938-1953), and a Director (1953-1957). During his first term as President, Society membership more than doubled. In addition to State and local activities in archaeology, he served as President of the Eastern States Archaeological Federation (1956-1958).

Mr. Weslager wrote his first book, **Delaware's Forgotten Folk** in 1943. Seventeen other books followed over the next four and a half decades: **Delaware's Buried Past** (1944), **Delaware's Forgotten River** (1947), **The Nanticoke Indians** (1948), **Brandywine Springs** (1949), **Indian Place-Names in Delaware** (with A. R. Dunlap) (1950), **Red Men on the Brandywine** (1953), **The Richardsons of Delaware** (1957), **Dutch Explorers, Traders and Settlers in the Delaware Valley** (1961), **The Garrett Snuff Fortune** (1965), **The English on the Delaware 1610-1662** (1967), **The Log Cabin in America** (1969), **The Delaware Indians, A History** (1972), **Magic Medicine of the Indians** (1973), **The Delaware Indian Westward Migration** (1978), **The Nanticoke Indians, Past and Present** (1983), **The Swedes and Dutch in New Castle** (1987), **New Sweden on the Delaware** (1988), and **A Man and His Ship: Peter Minuet and the Kalmar Nyckel** (1989). His books, **Delaware's Buried Past**, **Brandywine Springs**, and **Red Men on the Brandywine**, are still in print.

Mr. Weslager was also author of countless papers, 21 of which were published by ASD. His pamphlet, **Indians of Delaware** (illustrated by John Swientochoski), was for many years given to new Society members. For his work over many years on behalf of American Indian rights, the Nanticoke Tribe of Sussex County and the Nanticoke-Lenape Tribe of Bridgeton, New Jersey elected him to honorary membership.

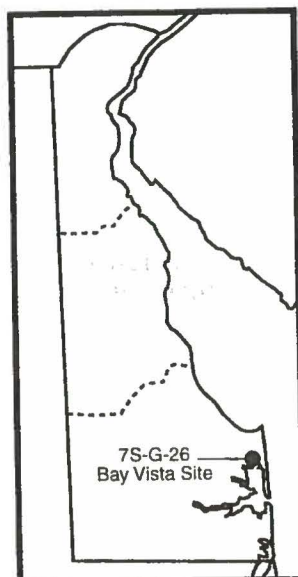
Reared in Pittsburgh, Mr. Weslager graduated from the University of Pittsburgh in 1933, and joined the DuPont Company in 1937. Among his various positions were editor of the firm's employee magazine, marketing manager for fabrics and finishes, and national sales manager for chemical specialties.

After retiring from DuPont in 1968, he taught Delaware history at Wesley College in Dover and at the University of Delaware before joining the history faculty at Brandywine College (now Widener University). He retired from teaching in 1983.

In 1985, Widener University, which had earlier cited his teaching excellence, awarded him an honorary Doctor of Humane Letters, and in 1993, Wesley College awarded him an honorary Doctor of Literature. Dr. Weslager was survived by his wife of 60 years, Ruth Hurst Weslager, a daughter, two sons, seven grandchildren, and three great grandchildren.

Herbert T. Pratt

Sources: **Wilmington News Journal**, August 7, 1994, p. 1, col. 1; Letter of nomination for the Crozier Award, January 7, 1979, ASD Archives.



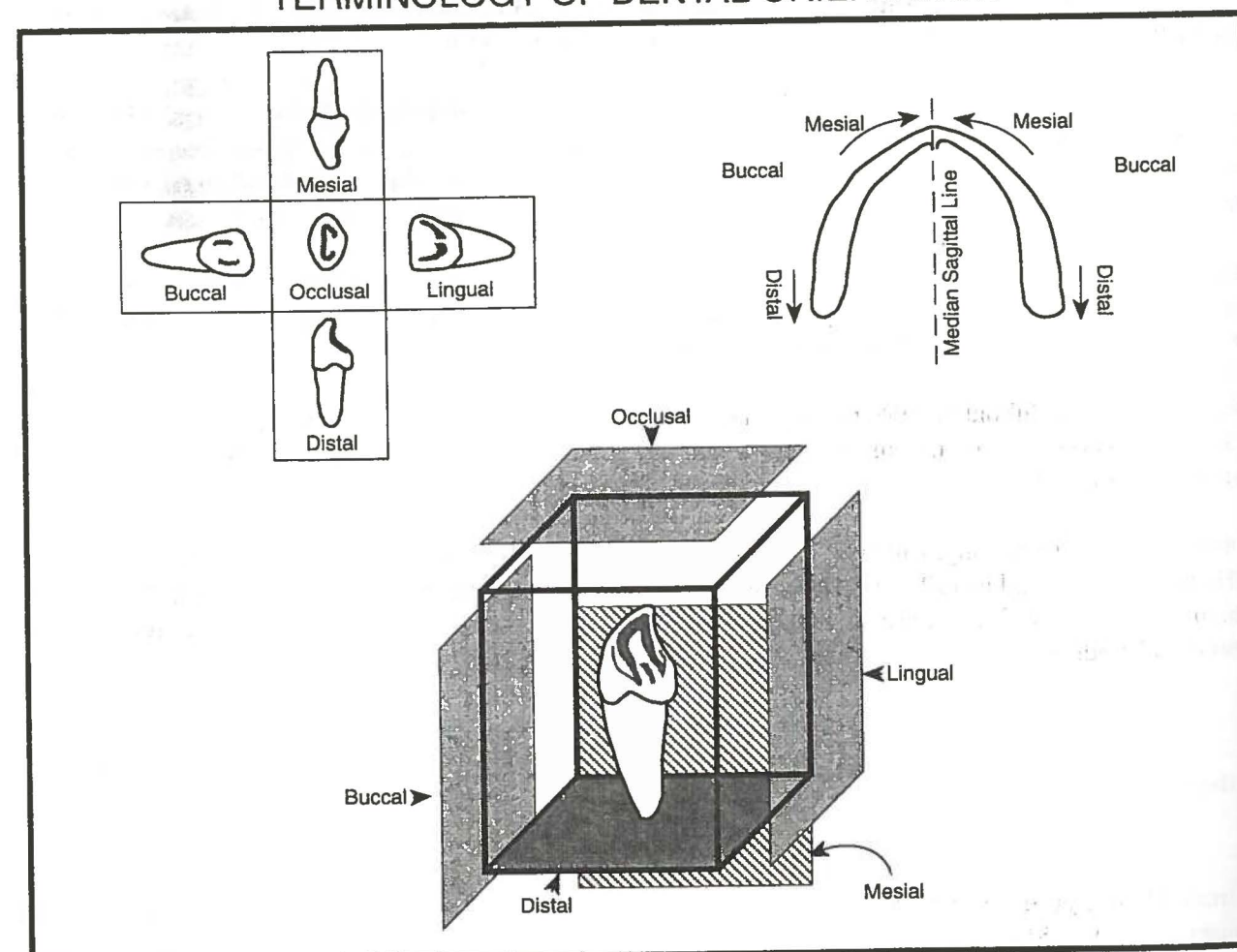
Location of 7S-G-26

THE BAY VISTA SITE (7S-G-26)

Ronald A. Thomas
MAAR Associates, Inc.

The Bay Vista Site (7S-G-26), located within a residential development along a tidal stream north of Rehoboth Bay in Sussex County, was initially explored by members of the Sussex Archeological Association (See Inset). During the past 20 years various investigations have found evidence of Woodland I activity with more substantial occupation during the whole of the Woodland II Period, ca. A.D. 900 to ca. A.D. 1600 (a semi-subterranean house pit was carbon-dated to ca. A.D. 1100). A burial pit contained bone remains of seven human interments and two canines. Recent data recovery operations resulted in the recording of additional refuse pits, sheet midden and a cremation burial (probably from the Woodland I occupation). The widespread aboriginal remains contained in the Bay Vista Site are likely to represent materials left by the ancestors of the Nanticoke Indians who inhabited the region during historic times, descendants of whom still live in Sussex County.

TERMINOLOGY OF DENTAL ORIENTATION



HUMAN REMAINS FROM FEATURE 1010, BAY VISTA SITE, REHOBOTH BEACH, DELAWARE

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The Bay Vista Site (7S-G-026) is located north of Rehoboth Bay in Sussex County, Delaware, on the west side of the Lewes and Rehoboth Canal, in the vicinity of Rehoboth Beach and Dewey Beach. The multicomponent site presents evidence of an eighteenth-century farmstead, as well as a prehistoric component relating to the Slaughter Creek Phase (Townsend).

Archeological excavation at the site in April 1995 revealed several prehistoric features, including a deposit of fragmentary human bones and teeth. This deposit was found immediately beneath a road surface within a modern housing development. Small fragments of disarticulated bones and teeth were recovered. Areas of burned soil with ash residue were noted in association with aspects of the human remains. Due to the compact nature of the soil, the entire feature was removed in sections for later study. Excavators noted the presence of both burned and unburned bone, and were uncertain if the remains represented a human cremation or residue of burned trash. They also noted that the feature may have been impacted by road construction in the 1960's.

After the human remains had been separated from the soil matrix, they were sent to the first author at the Smithsonian's National Museum of Natural History for analysis. Material sent included 11 bags of remains and associated materials, one "soil cast of a cranium" preserved with a 50 percent solution of water and Elmer's glue, and teeth packed in various small plastic containers.

Analysis

The weight of all material sent was approximately 2371.4 grams (5.23 pounds). The total material sent included one block of clay thought to represent a soil cast of a cranium. This item weighed approximately 777 grams (1.71 pounds). Also present (in addition to the human materials) were several ceramic fragments, sections of hardened soil, and apparent small rocks. The total weight of the human materials (bones and teeth) was approximately 1302.1 grams (2.87 pounds). The total volume of the remains was approximately 2600 ml.

The section of soil labeled "cranial cast" measures approximately 145 by 127 by 60 mm in size. The pattern of vessel markings preserved on the surface suggests that it may represent a soil cast of the interior surface of the left side of the cranium (temporal and parietal area). Many cranial fragments are present within the soil, including part of the petrous portion of a temporal bone. The fragments within the soil most likely represent sections of the top and/or right side of the cranial vault, which were probably crushed by ground pressure.



PLATE 1: Range of temperature effects on bone fragments. From left to right, unburned, charred, beginning calcination, and calcined. Scale in centimeters. (Photograph courtesy of Jane Beck, Smithsonian Institution)

The human remains were all very fragmentary, but varied in size from small ash particles to a fragment with a maximum length of 62 mm (2.4 inches). Coloration and evidence of heat exposure of the bone fragments also varied considerably. The remains were sorted into categories of unburned (light brown in color), charred (black or blue-grey in color), partially calcined (white with some areas of black or blue-grey) and calcined (mostly white in color). These categories represent the expected changes resulting from increasing heat exposure. Representative samples are presented in Plate 1. In Plate 1, from left to right, are fragments of unburned, slightly charred, a blue-grey fragment with beginning evidence of calcination, and on the right, a calcined fragment showing transverse fracture patterns.

The majority of the bones (706.3 g or 55.4 percent of total bone sample) were unburned. These fragments were light brown in color and displayed evidence of surface erosion, but no indication of burning. Of the 706.3 grams of unburned bone, 172.9 grams were cranial in origin (24.5 percent) and the remaining fragments were of post-cranial origin. The longest unburned fragment was 62 mm. The maximum cortical thickness among the long bone diaphysis fragments measured 11.64 mm. Recognizable bones include fragments from a tibia, hand phalanx, humerus, the chin area of a small mandible, and several fragments from the petrous portion of a temporal.

Partially burned or blackened fragments comprise about 475 grams or 37.2 percent of the total bone fragments. Of these, 26.30 grams were cranial in origin, while the remainder appeared to be post-cranial. The longest blackened fragment measured approximately 46.8 mm in length. Maximum cortical thickness of the long bone diaphysis fragments was 8.0 mm. Recognizable bones include a pisiform of the hand, and various post-cranial and cranial bones.

Partially calcined bones were present displaying the characteristic white appearance, as well as areas of black or blue-grey. These were fragments that were exposed to high temperature for a prolonged period and were beginning to show evidence of loss of the organic component of the bone. These fragments weighed approximately 61.6 grams (4.8 percent of total bone). The longest fragment was about 34.6 mm in length with a cortical thickness of 8.4 mm. All of these fragments appeared to originate from long bone cortical bone or spongy bone. No recognizable cranial fragments were present.

Only 33 grams (2.6 percent of the human bone sample) of completely calcined bones were present. These fragments display the maximum burning effects. In addition to their characteristic white coloration, they presented evidence of shrinkage and fracturing, indicators of in-flesh cremations. The longest fragment measured approximately 24.1 mm in length. Maximum cortical thickness was only about 3.2 mm. In contrast to the other samples discussed above, long bone diaphyses were minimally represented here. Most fragments originated from ribs, vertebrae, areas of spongy bone, and small tubular bones. Recognizable bones included three transverse processes from adult size thoracic vertebrae, and two transverse processes from thoracic vertebrae of a child, probably between four and eight years of age.

Dental Evidence

Approximately 26.2 grams of human teeth were present, consisting of thirty-seven permanent teeth, three deciduous teeth, and 11 fragments of permanent teeth. Based on attrition patterns, stage of formation, size, morphology, and taphonomic indicators such as color and evidence of burning, the teeth were sorted into a minimum of five individuals, labeled "A" through "E". In general, only the crowns of the teeth were well-preserved, showing minimal fracturing, while most roots were broken away or eroded postmortem. Black staining and calcination indicative of burning is visible on only nine teeth, probably originating from one individual.

Individual A

Teeth present are the maxillary right second molar, left lateral incisor, canine, second premolar, and first molar; and the mandibular right premolars, canine, left central incisor, and premolars. Also present are eight fragments of other molars. The stage of formation of the second molar (between crown 75 percent formed and crown complete) and the premolars (a complete crown with initial root formation), and the lack of wear on any of the teeth except the first molar suggest an age of approximately 6 to 7 years.

No hypoplastic defects were noted.

In general, crown morphology is complex, including moderate double-shoveling on the buccal surfaces of the maxillary canine and premolars. Especially notable is a pronounced cusp on the lingual surface of the maxillary left lateral incisor. The cingulum of this crown shows unusual enlargement such that the mesial and distal aspects nearly reach the occlusal plane, leaving a deep cleft in the central portion of the lingual surface. The morphological result resembles a barrel-shaped incisor with a deep lingual cleft (Plate 2).

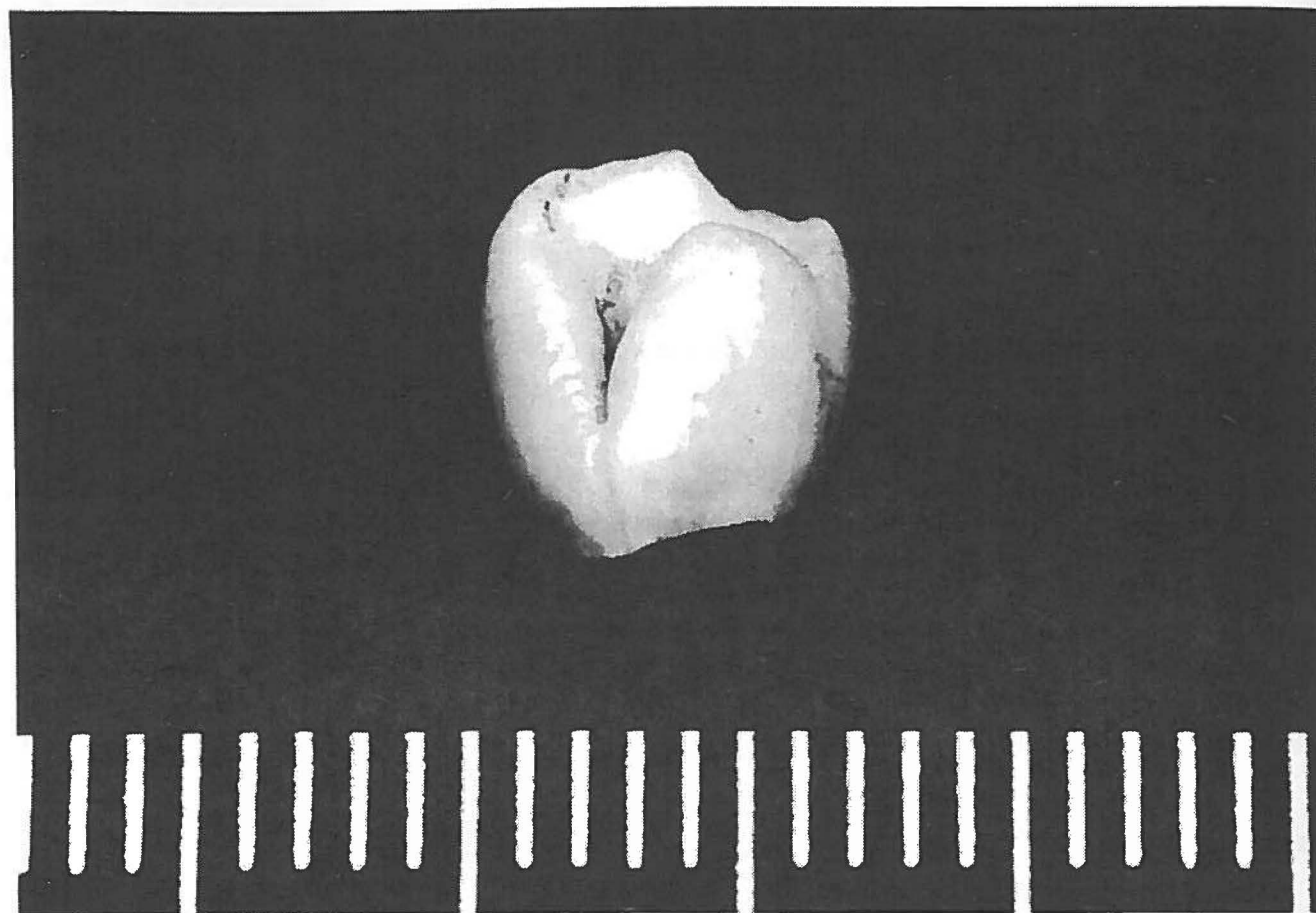


PLATE 2: Lingual view of maxillary permanent lateral incisor crown with unusual morphology. Scale in millimeters. (Photograph courtesy of Jane Beck, Smithsonian Institution)

Individual B

Teeth present are the maxillary left canine, first premolar, and molars; and the mandibular right second and third molars, first premolar, and left first premolar and second molar. The stage of formation of the third molar roots (between 75 and 100 percent complete), the extent of occlusal attrition, and the presence of a wear facet on the mesial surface of the third molar suggest an age of approximately 15 to 19 years.

This is the only individual who displays any evidence of burning on the dentition. The crowns show areas of blackening, which likely is fire-related, and most of the crowns and roots are calcined.

None of the teeth are carious, but two linear hypoplastic bands are visible on the third mandibular right third molar, located 0.8 and 1.4 mm from the cemento-enamel junction, suggesting they were formed around 11 to 12 years of age. These bands suggest periods of growth interruption due to physiological stress of the individual at that age.

Individual C

Teeth present are the maxillary right central incisor, left canine and first premolar; and the mandibular right first molar and both premolars, and the left premolars and first and second molars. The very slight amount of wear on the premolars and second molars, and the lack of a distal wear facet on the second molar suggest an age range of approximately 12 to 15 years.

No hypoplastic defects or carious lesions were noted, but brown staining and slight destruction of the enamel was noted at several interproximal contact points.

Pronounced doubled-shoveling is present on the maxillary right central incisor, with slight double-shoveling visible on the maxillary left canine and first premolar.

Individual D

Teeth present are the maxillary right premolars and the mandibular second and third molars. The extent of dental wear suggests an age of approximately 25 to 40 years.

No carious lesions or hypoplastic defects were noted.

The mandibular right second molar is unevenly worn, with concave wear centered on the lingual side of the distal surface of the tooth.

Slight double-shoveling with a pit on the mesial ridge was noted on the buccal surface of the maxillary right second premolar.

Individual E

Teeth present are the mandibular deciduous second molars and left canine. The extent of dental formation (crowns probably between 75 and 100 percent complete), suggesting an age at death of around nine months.

Discussion

The overall pattern of firing of the human remains was quite mixed. Over half of the fragments (by weight) were not burned at all. The most extreme burning was found on fragments primarily from the central thorax (vertebrae, ribs, etc.) of the individuals represented. Cranial fragments were represented only by unburned or charred fragments. Of 199.2 grams of cranial fragments, 172.9 (86.8 percent) were unburned, 26.30 grams (13.2 percent) were charred, and no cranial fragments displayed calcination. These data suggest burning by a small, but prolonged fire directed toward the middle of the individual. The lack of burning on such a large proportion of the fragments suggests either that remains of completely unburned individuals were mixed with those showing evidence of burning, or more likely, that the cremation fire was small and parts of the individual escaped burning completely. The archeologically noted presence of burned soil and ash residue indicates that the cremation took place in situ, rather than elsewhere with the remains gathered up and transferred to the site of discovery.

The calcined remains generally indicate prolonged exposure to temperatures above 800 degrees Celsius. Such color changes signal the loss of the organic component of the bone and may be accompanied by a size reduction of up to 25 percent (Ubelaker, 1989; Van Vark, 1970).

The total quantity of remains present is low in consideration of the number of individuals present. In a British study of 15 commercially cremated adults, McKinley (1993) found the weight of the cremated remains to be between 1227 and 3001 grams. Thus, if all of the cremated remains from the minimal five individuals represented here were present, one would expect a total weight of several thousand grams, substantially more than is actually present. An unknown factor here is the quantity of material, if any, lost when the feature was disturbed by previous construction. It is also possible that the remains of the infant may have been reduced to such small fragments that they did not survive the centuries in the soil or were too small to be recognized at recovery.

Of the individuals represented by the teeth, only those of a probable 15 to 19 year old individual showed evidence of burning. The calcined bone remains included fragments from an adult size individual as well as a child. Thus, the interment contained remains of at least five individuals, at least two of which were burned. Since the extent of burning was relatively minimal, it is not possible to determine if these remains were burned in the flesh or as dry bones. Several of the calcined remains showed limited areas of fractures consistent with those expected from remains burned in the flesh, however, the expression is too minimal to be conclusive.

Those fragments which display variation in the extent of change caused by heat consistently display the greatest heat change on their external surfaces. This suggests the fragments were larger when exposed to the heat and subsequently fractured, either because of the heat or later taphonomic factors.

According to the archeologist in charge, Ronald A. Thomas (personal communication), this feature likely relates to the Slaughter Creek phase of Delmarva chronology, with Townsend Series ceramics. According to Thomas (1987), mortuary procedures within this phase include both primary burials and secondary ossuary type deposits. Previous research on burials of this phase interpreted evidence of burning as resulting from fire being built over secondary deposits. Available evidence regarding burial feature 1010 does not sufficiently clarify the spatial relationships of the original cremation fire and the remains. Field research identified an area of intense fire exposure in the soil in one limited area of the burial feature, as well as charcoal distributed throughout the soil in association with the feature. Analysis does reveal important new information about the individual composition, bone fragmentation and firing patters, and thus adds new detail to the complex pattern of mortuary procedure of this time period.

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A CHRONOLOGY OF ARCHAEOLOGY IN DELAWARE

Herbert T. Pratt

Archaeology is the study of past human life and activities through the scientific examination of excavated artifacts and material remains. The primary objective of archaeology is to reconstruct human activities that occurred during prehistoric and early historic times.

The best indications are that humankind arrived on the North American continent from Asia about 15,000 years ago, and in what is now the state of Delaware, 10,000-12,000 years ago.¹ In 1985, there were 1885 recorded prehistoric archaeological sites in the state (New Castle County, 601; Kent County, 948; and Sussex County, 336).² The oldest of these, the Mitchell Family Farm Site (7NC-A-2) in Northern New Castle County near Hockessin, by radiocarbon dating, is placed at 9530 B.C.³

For ease of study, Delaware's prehistory can be divided into five periods of time, from the earliest settlements to the arrival of Henry Hudson, the first European explorer, in Delaware Bay, in 1609, through the mid-eighteenth century, when archaeology can no longer provide any information on Native Americans in Delaware.⁴

Date	Cultural Period Designation	Description	Approximate Percentage of Known Sites ⁵
12,000 B.C. - 6500 B.C.	Paleo-Indian	The earliest inhabitants	10%
6500 B.C. - 3000 B.C.	Archaic	Hunters and gatherers	9%
3000 B.C. - A.D. 1000	Woodland I	Beginnings of sedentary life	43%
A.D. 1000 - A.D. 1609	Woodland II	Cultural diversity	38%
A.D. 1609 - A.D. 1740	Contact	Interaction with Europeans	< 1% ⁶

Descendants of these early native inhabitants still live in the State, particularly in Sussex County and, unlike those of most other states, are not under any special governmental restrictions.

The recorded history of what is now the state of Delaware began with the arrival in 1638 of the first permanent Swedish settlers at the present-day site of Wilmington. Swedish rule gave way to Dutch (1655), then to English (1664), and finally, in 1776, to American.⁷ Largely because of cultural-resource management legislation, the number of recorded historical archaeological sites grew from fewer than 40 reported in 1976, to over 480 in 1990, to 600 or more in 1995.⁸

The interest in and study of archaeology in Delaware can be typed by four periods of activity.⁹

	Dates
Speculative Period	1492-1840
Classificatory-Descriptive Period	1840-1914
Classificatory-Historical Period	1914-1960
Explanatory Period	1960-Present

The Speculative Period covers all the activities which preceded the scientific investigation of our prehistoric past. The Classificatory-Descriptive Period focuses primarily on the description and rudimentary classification of archaeological materials. The Classificatory-Historical Period seeks to directly link historically documented Native American societies with prehistoric societies. The main characteristics of the Explanatory Period relate to attempts to explain why cultures change through time.

The Explanatory Period is, in many ways, the most significant because it marks the decline of work by talented, extremely dedicated, highly motivated, but catch-as-catch-can avocational archaeologists and the rise of research by full-time, fully-funded professionals. These professionals, unlike most avocationalists, can bring to each archaeological study a vast array of knowledge about physical and cultural anthropology, the physical sciences (biology, botany, chemistry, ecology, geology, mineralogy, etc.), sociology, history, folk ways, and mythology.

This chronology is not a history and makes no pretense at interpreting Delaware's archaeological past. It is simply a list of events selected to show the continuum of growth, and the social, scientific, and professional institutionalization of archaeology in Delaware, particularly since the 1960s. The few scientific excavations which are included, for the most part, are those which are "firsts" or have other special significance. A few events having no long-term importance are included for color and contrast.

In the process of data compilation, I became more keenly aware of the great contributions made by a few individuals, the value of good publicity in raising public interest, and that the results of many early excavations have never been reported in the literature. It is hoped that this chronology will provide a useful overview of archaeology in Delaware for those who are not inclined to make a more scholarly study.

The Chronology*

- 1608 Captain John Smith reports that the Nanticoke Indian tribes numbered between 100 and 3000 people.
- 1644 Johan Printz, Governor of New Sweden, writes to Queen Christina sending her a belt of wampum beads and a tobacco pipe "which the savages themselves have made of stone." This is the earliest record of Indian artifacts in the area that is now Delaware.
- 1683 William Penn describes the Lenni Lenape or Delaware Indians.
- 1748 Peter Kalm, a Swedish botanist, records a century after the first settlers arrived along the Delaware River, that farmers often uncover stone artifacts in their fields. He also found "an old Swedish silver coin of Queen Christina's reign" at a depth of about a yard." This is the first documented evidence of historical archaeology in what would become the State of Delaware.
- 1838 William Huffington, of Dover, editor of the **Delaware Register and Farmers' Magazine**, publishes a general history of the Delaware and Nanticoke Indians.
- 1841 James Curtis Booth, of Philadelphia, publishes **Memoir of the Geological Survey of the State of Delaware**.

* Abbreviations Used:

ASD: Archaeological Society of Delaware; DADS: Delaware Archaeological Data System; DelDOT: Delaware Department of Transportation; ESAF: Eastern States Archaeological Federation; KCAS: Kent County Archeological Society; SAA: Sussex Archeological Association; SSAH: Sussex Society of Archeology and History; UDCAR: University of Delaware Center for Archaeological Research

- 1850 Henry DuPont begins to collect stemmed points, broadspears, steatite bowl fragments and ground stone tools along the Brandywine Creek near Hagley, New Castle County.
- 1856 Last Nanticoke Indian fluent in the tribal language dies.
- 1864 Hilborne T. Cresson, avocational archaeologist of Germantown, Pennsylvania, finds near Holly Oak, New Castle County, a shell incised with the likeness of a woolly mammoth. This artifact became a vital part of the controversy over early man in America.
- 1865 Dr. Joseph Leidy, of the University of Pennsylvania, the first scholar to show an interest in Delaware archaeology, investigates aboriginal shell heaps near Lewes. Report published in **Proceedings of the Philadelphia Academy of Sciences**, 1865 and 1866.
- 1870 Francis Jordan, avocational archaeologist of Philadelphia, explores Rehoboth area, Sussex County.
- 1875 Joseph Wigglesworth, of Wilmington, begins surface collecting Indian artifacts as a boy along the streams of New Castle County.
- 1882 Cache of argillite blades "large enough to fill a peck measure" discovered at depth of 10-20 feet on the banks of the Christina River in Wilmington during dredging at Lobdell Car Wheel Works.
- 1886 Hilborne T. Cresson excavates a deep rock shelter on Naaman's Creek, New Castle County and reports four levels of occupation. Rock shelters are rarely found in Delaware.
- 1889 Joseph Wigglesworth learns excavating techniques by working with Dr. Warren K. Moorehead in Ohio.
- 1905 Joseph Wigglesworth begins excavation of the Indian Mound Site, near Red Lion, New Castle County.
- 1915 Dr. Frank G. Speck, anthropologist of the University of Pennsylvania, publishes **The Nanticoke Community of Delaware**, Museum of the American Indian-Heye Foundation, New York.
- 1920 Joseph Wigglesworth excavates Indian burials south of Rehoboth.
- 1922 Nanticoke Indian Association incorporated to preserve tribal customs as the result of encouragement from Dr. Frank G. Speck of the University of Pennsylvania.
- 1928 First Indian graves at South Bowers, Kent County, discovered by accident during grading of a roadbed.
- 1933 Dr. D. S. Davidson, of the University of Pennsylvania, begins excavations at Slaughter Creek, Sussex County.

Archaeological Society of Delaware (ASD) founded on February 24 by educator H. Geiger Omwake in meeting at Dover High School, the "purpose of the Society being scientific." Omwake elected President, March 17.

The Archaeological Society of Delaware helps found the Eastern States Archaeological Federation (ESAF).

Volume 1, Number 1 of **The Bulletin of the Archaeological Society of Delaware** published.

- 1934 Indian dugout or canoe found in six feet of sand near Dagsworthy Landing near Dagsboro, Sussex County. The dugout was 12 feet long, 18 inches wide, and 12 inches deep. The canoe is now lost.
- Delaware passes its first laws protecting aboriginal sites.
- 1935 Civilian Conservation Corps (CCC), under the direction of Dr. J. Alden Mason and Dr. D. S. Davidson, both of the University of Pennsylvania, excavate a shell midden at Prime Hook Neck, Slaughter Creek, Sussex County.
- 1939 Crane Hook Cemetery, at a 17th century Swedish settlement and church site on the Christina River, excavated and dated ca. 1715-1813, prior to building Wilmington's new marine terminal.
- 1940 State Legislature defeats for the second time a bill to appropriate \$15,000 to buy the Joseph Wigglesworth (died 1938) collection of 15,000 Indian artifacts which represent every state in the U.S.
- 1941 ASD opens Archaeological Museum at the University of Delaware, with H. Geiger Omwake acting as Curator. A collection of 15,000 artifacts supplied by Omwake forms the nucleus for other items supplied by Harry Wilson, Archibald Crozier, C. A. Weslager, George Lobdell, John Higler, J. L. Banning, Jr., and the University.
- 1941 Lamont DuPont Copeland and Col. George A. Elliott become Patrons of the ASD.
- 1941 Joseph Wigglesworth collection of artifacts donated by his widow to the ASD and placed on loan to the museum at the University of Delaware. Museum closed 1943-1945 during WW II. Project abandoned in 1952 and the artifacts stored.
- 1943 Clinton A. Weslager publishes **Delaware's Forgotten Folk: the Story of the Moors & Nanticokes**.
- 1944 Clinton A. Weslager publishes **Delaware's Buried Past, a Story of Archaeological Adventure**.
- 1947 Eastern States Archaeological Federation meets in Wilmington, November 8, 9.
- 1948 Clinton A. Weslager publishes **The Nanticoke Indians: A Refugee Tribal Group of Pennsylvania**.
- Sussex Archeological Association (SAA) organized with 15 members on January 7 at the Sequoia Tea Room, Lewes, following an invitation by H. Geiger Omwake. K. D. Gowan elected President.
- Sussex Archeological Association excavates the Townsend Site near Lewes. This site is noted for its fine ceramics from the Woodland II Period.
- Archaeology first taught at the University of Delaware, probably by Dr. Frederick B. Parker, Associate Professor of Sociology. This course, "A Survey of Prehistoric Archaeology," was "offered occasionally" until 1968 when it became a regular course. Also in 1968, a course in "field methods" was added at "selected sites in Delaware." In 1970, three courses in archaeology were offered, four in 1972, five in 1974, and six in 1978.
- Volume 1, Number 1 of **The Newsletter of the Sussex Archeological Association** issued in April, Henry Hutchinson, editor. Name changed later that year to **The Archeologist** at the suggestion of Orville H. Peets.

- 1950 Dr. Arthur R. Dunlap, of the University of Delaware and Clinton A. Weslager publish **Indian Place Names in Delaware**.
- 1951 Colonial log house, ca. 1750, known as Josh's cabin, near State Road, New Castle County, excavated under the direction of Clinton A. Weslager. This house, which is now in the Delaware State Museum, was the first historical project undertaken by ASD and preceded by two decades the general interest in African-American archaeology in the United States.
- 1953 ASD, under the direction of Clinton A. Weslager, excavates at the old State House-Court House in New Castle, site of continuous governmental activities from the time of William Penn.
- Clinton A. Weslager publishes **Red Men on the Brandywine**.
- Clinton A. Weslager publishes **A Brief Account of the Indians of Delaware**.
- State updates its laws protecting aboriginal sites.
- H. Geiger Omwake heads efforts which persuade the Delaware State Legislature to create a seven-member Delaware Archaeological Board, one function of which is to maintain an inventory of archaeological sites. Warren W. Mack, of the State Highway Department, becomes Chairman.
- 1954 Delaware Archaeological Board meets with ASD and the SAA to initiate the Delaware Site Survey.
- ASD members led by L. T. Alexander, complete excavations at the John Dickinson Mansion on St. Jones River near Dover. Dickinson (1732-1808), sometimes known as "The Penman of the American Revolution," was a prime mover in establishing the new nation.
- Frank Austin and fellow members of the Sussex Archeological Association conduct exploratory excavations at South Bowers Beach.
- Clinton A. Weslager becomes President of the Eastern States Archeological Federation and serves four years.
- 1955 Elwood S. Wilkins, Jr., with help from the ASD, expertise from John Witthoft of the University of Pennsylvania, and financial assistance from the Delaware Archaeological Board, begins excavations at the Minguannan Site on White Clay Creek, London Britain Township, Chester County, Pa. Work at site ends in 1959.
- ASD begins publication of the **Inksheds** newsletter in October.
- First archaeological surveys conducted in State. SAA surveys Sussex County and the ASD surveys Kent and New Castle Counties.
- 1956 First archaeological surveys published.
- Sussex Archeological Association, under the direction of C. A. Bonine, excavates site believed to be the Dutch palisade, built at Zwannendael (near present-day Lewes) in 1631.

Earliest record of use of the trinomial registration system for archaeological sites developed by the Sussex Archeological Association, based on a national system used by the Smithsonian Institution. SAA originates and implements the county block letter designation now in use.

- 1957 State Highway Department, now the Delaware Department of Transportation (DelDOT), begins its Archaeology Series of reports on research sponsored by the department. As of 1996, 155 of these reports have been issued, 148 since 1980.

Minguannan Chapter of ASD organized with ten members; James B. Akerman elected Chairman. Dues set at \$0.50 per year. Later, it was renamed the Opasiskunk (White Clay Town) Chapter. Chapter became inactive around 1984 after key members moved away.

Sussex Archeological Association (SAA) renamed Sussex Society for Archeology and History (SSAH).

ASD names Charles F. Kier, Jr., a power company executive, as first recipient of the Archibald Crozier Award for "distinguished achievements in Delaware Archaeology." ASD member Crozier (1878-1954) was an outstanding avocational archaeologist from New Castle County.

- 1958 Delaware Archaeological Board renews its efforts "to enlist the cooperation of the State Park Commission for archaeological investigation of state-owned lands under its jurisdiction."

Herbert T. Pratt, a chemical engineer, publishes a history of the Archaeological Society of Delaware, and starts a twenty-year quest to collect copies of all missing ASD publications and to bring its scattered records into an archive collection.

ASD celebrates its 25th Anniversary.

ESAF meets in Wilmington, November 8, 9.

The Delaware Archaeological Board and the Delaware State Highway Department reach agreement for doing archaeological surveys of all future highway rights-of-way.

Dr. Jacob Gruber of Temple University conducts the first highway right-of-way survey along future I-95 from the Maryland line to Farnhurst. "Contract price including report not to exceed \$350."

- 1959 Delaware State Highway Department agrees to a policy to notify the Delaware Archaeological Board whenever archaeological materials are discovered during highway construction.

Dr. Bert Salwen, of New York University, conducts a contract study for the Delaware Archaeological Board of the site of a proposed Hercules Powder Co. plant at Lewes, Sussex County. The \$350 cost, which was borne by Hercules, was the first funding of Delaware archaeology by a corporation.

- 1960 Tancopanican Chapter of ASD, northern New Castle County, organized January 19, with artist John Swientochowski as Chairman. Chapter became defunct in the early 1980s.

Delaware State Museum excavates at St. Jones River Adena Grave Site under the supervision of Leon DeValinger.

- 1961 Joint Finance Committee of the State Legislature denies approval of \$500 annual budget of Delaware Archaeological Board. Support of Governor Elbert Carvel is of no avail.

- 1962 ASD member Dr. Allen Schiek, a dentist, spearheads excavation of 17th century Caleb Pusey house at Upland, "the oldest intact English-built house in Pennsylvania." Pusey, a Quaker miller, served in the Pennsylvania assembly for two decades and was a recognized peacemaker among the native Indian tribes.

ASD member John Swientochowski spearheads excavation of 17th century Collins-Johnson house site in lower New Castle County on the Delaware River. This house was moved to Odessa and restored by Winterthur Museum.

ASD excavates a Swedish log cabin at Price's Corner, New Castle County, before it is moved to Fort Christina Park in Wilmington. This was believed to be one of the earliest log houses built in America.

ASD supports founding of the Delaware Academy of Science.

- 1963 ASD member John L. Ludlow, a chemical engineer, spearheads excavation at the 18th century Lea-Derickson House built ca. 1770, 1801 Market St., Brandywine Village, Wilmington. During Revolutionary times, Brandywine Village was a large milling center and furnished flour and meal for the American troops.

Dr. T. Dale Stewart publishes report on the Townsend Site near Lewes in **The Archeolog**, Volume XV, Number 1, documenting work done in 1948.

- 1964 ASD member John Swientochowski spearheads excavation at Brandywine Academy (built 1796), Vandever Avenue, Wilmington.

SSAH, with help from American University, conducts excavations along U.S. 13 near Frederica, Kent County.

Adena burials and artifacts discovered during U.S. 13 Frederica bypass construction. Delaware Archaeological Board conducts salvage excavations. At the time, this was one of the most important archaeological finds in the State. Curiosity seekers promptly mutilate site.

- 1965 Ronald A. Thomas hired as first State Archaeologist, January 30. Budget set at \$20,000.

Delaware Archaeology, the bulletin of the Delaware Archaeological Board, begins publication.

Kent County Archeological Society (KCAS) organized with 30 members. W. H. Draper, Jr., elected President, April 21.

- 1966 Ronald A. Thomas begins excavation at the Island Field Site, South Bowers Beach, Kent County. This site, which yielded thousands of artifacts dating from 400 B.C. to A.D. 1400 and more than 100 graves, proved to be one of the most important in Delaware.

- 1967 **Archaeology in Delaware**, an educational pamphlet for the general public, published by the Delaware Archaeological Board.

1001 persons visit the Island Field Site on Labor Day. Public interest leads the State to appropriate \$100,000 for a museum.

Archaeologist Cara Lewis hired by the Delaware Archaeological Board.

ASD member James B. Akerman appointed Staff Archaeologist at Hagley Museum in Wilmington and begins excavation of sites around the former DuPont powder mills. This work was at the forefront of industrial archaeology. (The Society for Industrial Archaeology was founded in 1971.)

The Minguannan Chapter of ASD, under the direction of Elwood and Marie Wilkins, sets up archaeological exhibits for the Delaware Academy of Sciences at the newly-formed Iron Hill Museum.

- 1968 Delaware Archaeological Board phased out and replaced by Section of Archaeology, Division of Historical and Cultural Affairs, Department of State.

H. Geiger Omwake donates his collection of tobacco pipes to the Archaeological Society of Delaware and the Smithsonian Institution.

James B. Akerman and colleagues excavate the Garden Site at Eleutherian Mills, home of E. I. DuPont (1771-1834) on the Brandywine River. This work, published in **Historical Archaeology**, Volume II, 1968, pp. 69-72, anticipated the present-day interest in landscape archaeology by two decades.

Ivor Noel Hume, of Historic Williamsburg, dedicates his book, **Historical Archaeology**, to "The Archaeological Society of Delaware, AGS and ESW" (Dr. Allen G. Schiek and Elwood S. Wilkins, Jr.). This book was the first definitive guide to historical excavations.

- 1969 A complete rare platform pipe found at the Island Field Site by ASD member Dr. Allen G. Schiek. Later on, a number of pipe fragments were found.

- 1971 Excavations by Edward F. Heite, under contract to the DAB, show that the blockhouse at the Robinson House (Naaman's Tea House) in Claymont is from the 19th century, not 1659, as traditionally held. The house is now a museum.

A Handbook for Delmarva Archaeology, by Cara Lewis Wise, published by Section of Archaeology, Delaware Division of Historical and Cultural Affairs, Department of State.

- 1972 Archaeologist Ned Heite heads the newly-formed State Historic Preservation Office.

State opens Island Field Museum and Research Center at South Bowers Beach.

- 1973 Section of Archaeology starts excavation at the Old State House (built ca. 1780) in Dover. Work completed in 1976.

ESAF meets in Wilmington, November 2-4.

- 1974 Staff of State Archaeologist consists of five people: Ronald A. Thomas, Daniel R. Griffith, Richard E. Artusy, Clifford M. Lefferts, Abbey Feierstein, and Faye Stocum.

First regional site distributions and settlement models produced by Ronald A. Thomas, Daniel R. Griffith, Cara Wise, Richard Artusy and others. These studies used modern ecological data to predict site locations and seasonal occupations.

Art-mobile exhibition, "Indian Art in Delaware," tours state, April 1 - May 24, under auspices of Delaware State Arts Council and Section of Archaeology.

Delaware Archaeological Council/Delaware Clearinghouse for Archaeology formed by professional archaeologists from Delaware and the eastern shore of Maryland and Virginia.

Salvage excavation of the Bennett's Point House Site in Maryland, under the direction of ASD member John L. Ludlow, closed. The house site was believed to be that of Richard Bennett (1665-1749), whose obituary called him "probably the wealthiest man on the continent."

ASD library of 475 issues of 61 different journals from around the United States placed on loan to the State's Division of Historical and Cultural Affairs at the Island Field Museum. Collection augmented materials donated earlier by H. Geiger Omwake and H. W. T. Purnell.

ASD moves its artifact collections from the University of Delaware into storage at Walker's Mill, Hagley.

- 1975 Last ASD publication missing from the archives, **Indian Towns of Southeastern Sussex County**, by William B. Mayre (1940), donated by member Arthur G. Volkman.

- 1976 Chemist Elwood S. Wilkins, Jr. and librarian Richard Quick culminate seven years of archaeological and historical research in the 1960s with the publication of ASD Monograph 1, **The House on the Kerby Tract, Better Known as Carson's or the Buck Tavern ca. 1728-1821 and 1821-1963**. They proved that George Washington could not have stayed in this building at Summit Bridge as had been long believed. Professionals have called this work "the best of the avocational publications for an historic site." The building now stands in Lums Pond State Park.

Ronald A. Thomas forms Mid-Atlantic Archaeological Research (now MAAR Associates), the state's first firm to do contract archaeology.

Ronald A. Thomas elected President of the Eastern States Archaeological Federation.

- 1977 Kent County Archeological Society becomes a chapter of ASD.

Delaware State Museum establishes the position of Curator of Archaeology. Position discontinued in 1980 but revived in 1988.

University of Delaware acquires the 200-piece Lammot DuPont private collection of Indian artifacts.

- 1978 First graduate level courses in archaeology taught at the University of Delaware.

University of Delaware acquires from ASD the Joseph Wigglesworth collection of Indian artifacts.

St. Jones Neck Sites in Kent County listed in the National Register of Historic Places, based on field work by the KCAS.

- 1979 State Historic Preservation Office provides grants to the University of Delaware for archaeological research.

MAAR Associates receives major contract from the Delaware Department of Transportation (DelDOT) to excavate the Delaware Park Site, New Castle County. Site proved to be one of the largest from the late Woodland I Period (A.D. 700 - A.D. 800).

William L. Pederson, editor, publishes an index to **The Archeolog**, the bulletin of the SSAH.

Dr. Jay F. Custer joins the University of Delaware as the first full-time faculty member in prehistoric archaeology to have the Delmarva Peninsula as a primary research focus.

- 1980 Dr. Jay F. Custer conducts an eight-week field school in the methodology of archaeological research.

DelDOT hires archaeologist Kevin Cunningham to coordinate its site surveys and research.

- 1982 State Historic Preservation Office provides grants to the Department of Natural Resources and Environmental Control for archaeological surveys, the first of which is at Lums Pond State Park, New Castle County.

The Historical Society of Delaware hosts a wine and cheese reception for the opening of the exhibit, "The Archaeology of the Thomas Mendinghall Privy," based on excavations done in 1975-1976 by the University of Delaware and the Delaware State Museums. First colono ware found in Delaware recovered. Colono ware is a non-turned, slow-fired ceramic, that is neither European nor prehistoric Indian, but perhaps African-American.

Mendinghall exhibit displayed at the Delaware State Museums.

- 1983 DelDOT begins archaeological survey of proposed State Route 1.

State's General Assembly approves a bill to substitute the term "archaeological" for "aboriginal" in Delaware laws.

- 1984 Dr. Jay F. Custer, of the University of Delaware, publishes **Delaware Prehistoric Archaeology: An Ecological Approach**.

University of Delaware Center for Archaeological Research (UDCAR) established.

British sloop-of-war De Braak discovered off Cape Henlopen by Sub-Sal, a marine salvage company. The De Braak, which capsized in a squall off Lewes in 1798, was reportedly carrying the wealth captured from two Spanish vessels.

- 1985 City of Wilmington hires archaeologist Conrad Goodman to develop a city-wide plan: **Not a Bad Measure of Man: An Archaeological Resources Plan for Wilmington Delaware**.

- 1986 Hull of the British sloop-of-war De Braak and 20,000 associated artifacts recovered by Sub-Sal. Its legendary cargo of gold was no more than a legend.

Delaware General Assembly passes legislation ordering that excavated skeletal remains of Native Americans in the Island Field Museum be removed and reburied. Graves are left open. Reburials completed in 1988.

Dr. Jay F. Custer edits **Late Woodland Cultures of the Middle Atlantic Region**.

Archaeologist Edward F. Heite, under contract to the Trustees of New Castle Common, verifies the location of Fort Casimir built on the Delaware River ca. 1651 by Dutch Governor Peter Stuyvesant.

Dr. Jay F. Custer becomes President of the ESAF.

- 1987 National Shipwreck Act passed by Congress to prevent looting and destruction of important finds.

Sussex Society for Archeology and History disbands and places its archives in the Special History Collections of the Laurel Public Library.

- 1988 Computerized Delaware Archaeological Data System (DADS) established at the University of Delaware by Dr. Jay F. Custer. System contains locational, cultural and historical dates on 4361 prehistoric sites on the Delmarva Peninsula and nearby southeastern Pennsylvania.

Middle Atlantic Archaeological Conference held at Rehoboth Beach.

- 1989 Archaeologist Daniel R. Griffith appointed head of Delaware's Division of Historical and Cultural Affairs, Department of State.

Dr. Jay F. Custer publishes **Prehistoric Cultures of the Delmarva Peninsula: An Archaeological Study**.

University of Delaware hires first faculty member for historical archaeology, Dr. Lu Ann De Cunzio.

University of Delaware acquires the 600-piece L. T. "Duke" Alexander (died 1989) pipe collection along with a small library of pipe literature. Alexander, an office manager, helped Colonial Williamsburg catalog its collection of rare pipes.

- 1990 Delaware State Museums initiate Colonial Delaware Project. Project is the first long-term sustained study of 17th and 18th century Delaware.

United States Census shows 2546 American Indians living in Delaware.

ESAF library and archives moved to the University of Delaware.

- 1991 Work begun by Herbert T. Pratt and Ronald A. Thomas to revitalize the ASD, which had been largely inactive for about five years.

State expands its laws governing protection of archaeological resources.

Delaware State Museums open "Discover Archaeology" exhibit in Dover.

ASD resumes publication of **Inksheds**, its newsletter.

- 1992 De Braak ship collection acquired by the State of Delaware and placed under the administration of the Delaware State Museums. This material gives an unparalleled look at life at sea and maritime technology during the late 19th century.

Minguanan Chapter of ASD begins meeting again.

- 1993 ASD elects officers, streamlines its bylaws, takes steps to reinstate its charter as a non-profit corporation, begins holding monthly Board meetings, resumes publication of **Inksheds**, begins to issue delayed volumes of the **Bulletin**, and revives the Crozier Award.

KCAS issues a publicity brochure.

The Minguannan chapter of ASD changes its name to the New Castle County Chapter.

ASD honors Dr. Leon DeValinger as sixty-year member and last surviving Charter Member, October 9.

- 1994 The New Castle County Chapter of ASD, assisted by Friends of Brandywine Springs, begins excavations at the 19th century amusement park at Brandywine Springs, New Castle County.

Delaware strengthens its laws governing archaeological sites.

- 1995 ASD Board of Directors agrees to deposit its archives in the Special Collections of the Hugh M. Morris Library at the University of Delaware.

Dr. Lu Ann De Cunzo, of the University of Delaware, in conjunction with the Historical Society of Delaware, begins summer archaeology camps for high school students at the George Read II House (built 1797-1801) in New Castle. Read was a signer of the Declaration of Independence.

Excavations begin at Greenbank Mill, Red Clay Creek, New Castle County. This mill, the longest continually operating mill in Delaware (1670-1968), produced flour and meal, and at various times woolen yarns, and lumber.

Dr. Cara Blume begins "Time Travelers" programs, which invite public participation in professionally-run archaeological digs.

Odessa Chapter of ASD organized September 25, with Sue Ferenbach as President.

ESAF meets in Wilmington, October 26-29.

ASD Board of Directors establishes a Publication Endowment Fund to underwrite the **Bulletin** and appoints a Board of Fund Managers.

- 1996 ASD receives the New Castle County Historic Review Board's Historic Preservation Award for its work at Greenbank Mill and the 19th century amusement park at Brandywine Springs.

Dr. Jay F. Custer publishes **A Guide to Prehistoric Arrowheads and Spearpoints of Delaware**.

No fewer than 38 people residing or working in Delaware earn their living through archaeology. Of the 38, 24 are professionally trained and are members of ASD. About 135 people hold memberships in the ASD and its three chapters. Four State agencies employ archaeologists. DelDOT reports having eight contract archaeological firms with up to 40 employees working at 24 sites, and that it is spending half a million dollars to dig and fully document two sites. That is a far cry from 1961 when the old Delaware Archaeological Board could not get its \$500 budget approved by the State Legislature. Archaeology is alive and well in The First State.

Acknowledgments

The following people corrected errors in my original draft, supplied new data, suggested interpretations and significance, and offered encouragement: Marianne Akerman, James B. Akerman, H. Milton Barbehenn, Dr. Cara Blume, Wade P. Catts, Juliana Cheng, Macon H. Coleman, Kevin Cunningham, Dr. Jay F. Custer, Alice Guerrant, Dr. Leon DeValinger, Keith Doms, Madeline Dunn, Charles H. Fithian, Daniel R. Griffith, Edward F. Heite, Dr. John Harris, Mary S. Pratt, Lewis M. Purnell, Marilyn Spong, Charles E. Stump IV, Ronald A. Thomas, and Elwood S. Wilkins, Jr.

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9. Custer, Ref. 1, pp. 59-80; Catts and De Cunzo, Ref. 8, p. 175, use only two time periods for historical archaeology, e.g., 1933-1965 and 1965 to present.

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The Bulletin of the Archaeological Society of Delaware. Complete runs of **The Bulletin of the Archaeological Society of Delaware** are available at the Historical Society of Delaware, Wilmington, and the Morris Library of the University of Delaware, Newark. An index of all issues 1933-1994 is published in **The Bulletin of the Archaeological Society of Delaware**, New Series No. 32, Fall 1995. The Society has some back issues for sale.

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Delaware Department of Transportation Archaeology Series. These reports, which are numbered serially, have been issued sporadically since 1957, and cover research sponsored by the Department. Complete files of the reports are available at the Delaware State Museums and at DelDOT. The Wilmington Institute Library and the University of Delaware have most of the reports. As of July 1996, 155 reports had been issued.

The Delaware Index and the Vertical File at the Wilmington Institute Library references about 25 newspaper articles relating to Delaware archaeology, mostly from the 1960s-1970s.

Inksheds: Newsletter of the Archaeological Society of Delaware. Started in 1955 and issued five times a year, publication was spasmodic 1975-1986, and then once a year 1986-1988, after which publication ceased. Publication resumed quarterly in May 1993. A collation of all issues 1955-1994 is given in the **Finding Aid to the Archives, 1933-1994**, Archaeological Society of Delaware Paper No. 10.

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ADDENDUM TO ISSUE NUMBER 32, FALL 1995.

Due to an editorial error, the following text from "The Colonial Delaware Project, 1620-1775" by Charles Fithian (Bulletin No 32, pp.3-4) was omitted. The following text constitute the final three paragraphs of the article. Please accept the editors' sincerest apologies.

The analysis of assemblages of ceramics, glass, and other artifacts as well as faunal and floral materials are yielding important insights into colonial material and domestic life. Ceramic types, marked tobacco pipes, and Continental table glass testify that settlers on the Delaware frontier participated in an extensive global economy. Colonial material culture in Delaware is being found to exhibit some interesting differences to that found in the Chesapeake colonies. Food remains are showing that the colonists used domestic animals, but also incorporated a wide range of wild resources throughout period.

The study of a variety of historical documents is also providing new insights into early Delaware. Biographical files on nearly 2200 individuals have been compiled. The data gained from them and other sources are being used to examine such topics as immigration patterns, settlers origins, population mortality and stability, social structure, gender and race relations, agriculture and economics to mention just a few.

These site collections also contain important data about Delaware's ecosystems at the time of the arrival of the Europeans and of the important interaction between the new settlers and the natural environment. A charcoal sample provided the first physical evidence of the composition of forests in the 17th-century. The analysis of oyster shells has shown the patterns of use of this resource and evidence of their depletion as early as the 18th-century. Historical research also indicates colonial Delawareans began having a noticeable impact on the Delaware estuary's natural resources shortly after initial settlement began to intensify.

The Colonial Delaware Project is challenging some long standing views about early Delaware and is plowing new ground that is yielding new information. What is emerging from this research is that Delaware was not the "nondescript colony" as has been assumed in the past, but was instead a dynamic and distinctive cultural area very early in its history. This project has much yet to accomplish, but it has already begun to reveal this obscure, but important, period of Delaware's history.

Join the
Archaeological Society of Delaware

The **Archaeological Society of Delaware (ASD)**, founded in 1933, joins amateur and professional archaeologists together in the study and appreciation of archaeology in general and archaeological investigations in Delaware in particular. Memberships include a subscription to the **Inksherds**, the quarterly newsletter containing announcements about meetings and activities, and the **Bulletin**, an annual report detailing recent research in Delaware. Opportunities to participate in a variety of field projects are also open to members.

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