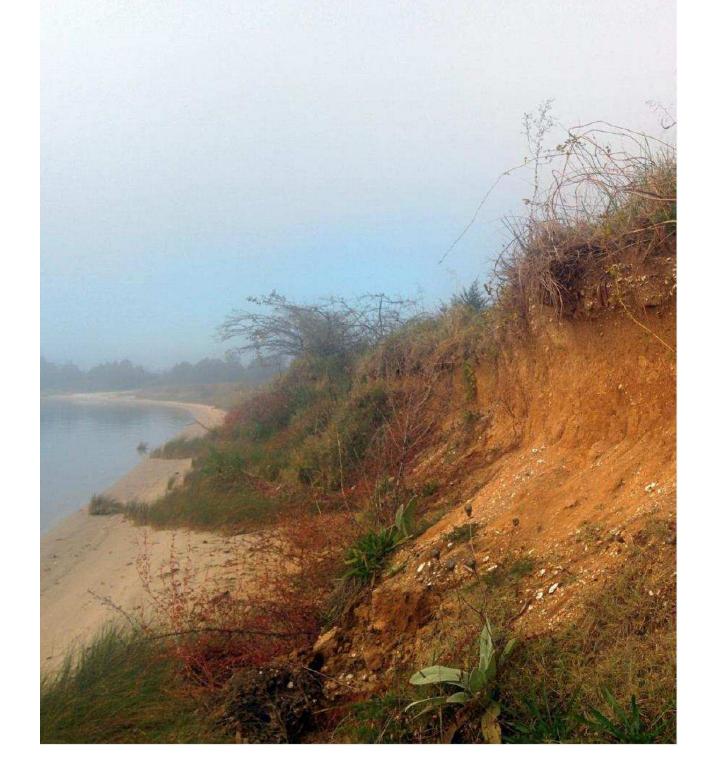
## Maryland Archeology Month 2017 ATTHE WATER'S EDGE: OUR PAST ON THE BRINK



## Maryland Archeology Month

## **Table of Contents**

1. New Threats to Archeological Sites, and the New Normal, Jen Sparenberg
2. Erosion and Archeological Site Loss Adjacent to the Chesapeake Bay and the Atlantic Coast, Darrin Lowery
3. A Return to Calverton, or What's Left of It, Jason Tyler
4. Protecting Eroding Sites at Jefferson Patterson Park and Museum, Ed Chaney
5. The Creeping Threat: Development, Sea Level Rise, Erosion, Subsidence, and the Archeological Resources in St. Mary's County, Scott Strickland
6. Consumer Desire, Historical Archeology, and the Anthropocene, Julia A. King and Phil Levy
7. Stemming the Tide: A View from the Shoreline, Claude Bowen 13
8. Using Old Maps & Computer Technology to Save Archeological Sites, Anastasia Poulos
9. What Can We Do to Preserve our History? C. Jane Cox
10. Excavating and Monitoring Archeological Sites along the Chesapeake Bay, Stephanie T. Sperling
11. Calvert County, Where Land and Water Meet, Kirsti Uunila21
Archeology Volunteer Programs
Messages from Institutional Sponsors
Messages from Supporting Organizations
Messages from Supporting Organizations

The cover photo, by Jason Tyler, is a view of the Calverton Site, 18CV22, on Battle Creek near its confluence with the Patuxent River. Eroding shell midden material can be seen near the surface of the eroding bank. Site of the first seat of government in Calvert County (1668-1725), erosion has resulted in more than 40 meters of documented landward migration over the past 150 years. With the colonial town decidedly oriented toward the shoreline of Battle Creek this has undoubtedly led to some site loss. This year the Archeological Society of Maryland and the Maryland Historical Trust will conduct their annual Tyler Bastian Field Session in Maryland Archeology at Calverton between May 26th and June 5th. Visit www.marylandarcheology.org for more information, and plan to join the effort!

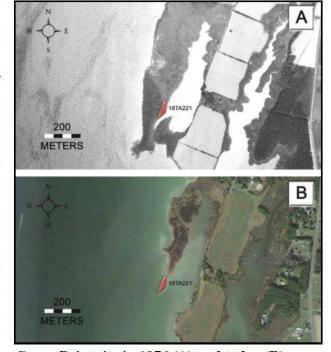
## Erosion and Archeological Site Loss Adjacent to the Chesapeake Bay and the Atlantic Coast

Darrin Lowery, Chesapeake Watershed Archaeological Research, and Smithsonian Institution

As a child growing up on Tilghman Island, I became acutely aware of shoreline erosion at a very early age. Most of my childhood was spent walking the coastal margins where land and water intersect. In the early 1970s, I began finding prehistoric artifacts, mainly projectile points, along the coastline at discrete locations. I later recorded these locations as archeological sites and ultimately published information about these ancient encampments. Unfortunately, many of the sites I found as a child no longer exist. Development did not destroy these sites and they did not sink! The sites were "bulldozed" or eroded away by the regular onslaught of wind, wave, and tidal action. Some of these sites contained irreplaceable evidence about ancient cultures that lived within the Chesapeake Bay watershed at times when sea level was markedly lower and the Northern Hemisphere climate was noticeably different.

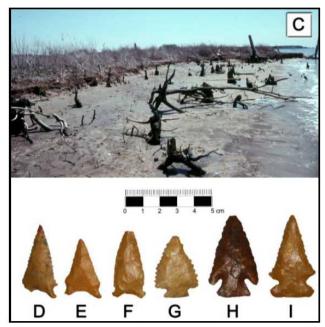
Crane Point (18TA221a) was an archeological site that provided a rare glimpse into the human use of the Chesapeake coastal plain between 11,500 and 9,800 years ago, or during the early Holocene. When the site was occupied, relative sea level varied between 43 meters (~141 feet) and 28 meters (~91 feet) below present and the encampment was situated near a first-order spring-fed

stream adjoining a drainage divide. However, when my father and I discovered the site in 1976 (see figure, A), its setting was an eroded point of land, which consisted of a forested hummock and a tidal marsh. The site was wedged between a small tidal creek and the Chesapeake Bay. erosion dismantled the subsoil of the site, my father and I observed numerous exposed archeological features including stone tool clusters, hearths, and concentrations of flake debris from tool-making. Over the years, I watched this unique site and its archeological features disappear into



Crane Point site in 1976 (A) and today (B).

Chesapeake Bay. Today, nothing remains of this site (figure, B) and the original site boundary lies within an insignificant portion of open Chesapeake Bay water. I can only presume that any remnant stone tools not collected from this location have been transported southward and eastward as a result of littoral wave energy. These displaced artifacts are now nothing more than flotsam and particles in the bay bottom sediment.



Crane Point site in 1989 (C) when investigated, and a sample of the recovered projectile points (D - I).

In 1989 (C), along with members from University of Delaware, I salvaged a few of the intact archeological features from the intact portion of this grand prehistoric encampment. investigations revealed diagnostic projectile points and (D-I), hide-working tools, and carbonized nutshells, seeds, and wood from a hearth. Many years have passed since the Crane Point site was lost to erosion. Over this period of time, I have recorded an additional 1,800 archeological sites in the region. I have repeatedly asked myself whether another site

comparable to Crane Point exists here. Unfortunately, the answer to this question so far is "no!" Any more stories that Crane Point might have told are now lost. The circumstance observed at Crane Point is repeating itself along many coastlines associated with Delmarva's Chesapeake Bay and Atlantic shorelines. For example, 35 of the 243 coastal archeological sites recorded along Virginia's portion of the Delmarva Peninsula have disappeared over the past 15 years as a result of shoreline erosion.

Most people confuse sea level rise with coastal erosion, but these are actually quite different geologic processes. As a coastal geologist, I recognize that sea level change occurs on a centennial or millennial time scale and is expressed by the formation of tidal marsh over former upland land surfaces. In contrast, fetch-related wave erosion occurs on an hourly or daily time frame and is manifest in the landward retreat of the shoreline and the rapid removal of sediment. With respect to Crane Point, the tidal marsh noted at the site was created as a result of sea level rise. However, the loss of the Crane Point site was a byproduct of shoreline erosion.

In summation, the single greatest threat to the archeological sites adjacent to the Chesapeake Bay is the Chesapeake Bay itself. Realizing this, I remain ever hopeful that cultural resource managers, concerned government agencies, and elected representatives will begin to address the magnitude of archeological site loss along the region's coastlines. Some information about these threatened coastal sites is better than no information.