

Introduction

(Overview to the Potomac Native Americans' Stoneage)

The fall line of the Potomac River in Maryland and Virginia was home to countless Native Americans who prehistorically left us evidences of their lifeways. It is a rich area archaeologically, and, in many ways, it is a complicated area to produce a history covering the Native Americans' 10,000+ years of occupation, which ranges from temporary campsites to long-term villages. This area was sparsely occupied during the early human history and heavily occupied at the time Captain John Smith visited the Potomac in 1608 (Potter 1993). The river's name is derived from the Patowomeke tribe that once lived in what is now Stafford County, Virginia (McCary 1957). Or as: *The 16 of June [1608], we fell with the River Patowomek* (Captain John Smith as in Haile 1998). The first Native Americans that Captain Smith met in the MRPV area were the Doeg, later changed to the Dogue (Johnson 1996).

For late prehistory, the entire Potomac River basin, including West Virginia's mountains and the Shenandoah River valley, saw different Indian tribes that spoke Siouan, Algonquian, and Iroquoian languages. Algonquian is the principal language



for the area under study. Most tribal chiefs were multilingual and could easily communicate with their neighbors. The arrival of Smith marked *what became* the end of the Powhatan chiefdom, especially for the upper Potomac River valley. From this time forward, the Indians eventually would be pushed out of the valley. At least Smith recorded the tribes living in the area, namely Pamunkeys, Piscataways, Tauxenents, and Nacotchtanks, which provides limited ethnographic data for the area (Potter 1993).

**Lithic technology ...
the science of prehistoric stone tools and their usage.**

As a geological feature, the river's fall line offered a crossing place throughout most of prehistory, provided crystalline stones for tools, supplied water including anadromous fish, had fertile areas for growing crops, and forests for hunting game. As an archaeological focus, it has extensive prehistoric cultural resources. From 9500 BC to Contact, pre-Contact Native Americans occupied the river basin and left countless millions of their artifacts. After Contact, we called the period (1600s) the protohistoric, which is not presented here archaeologically. For an ethnographic discussion of Virginia Indians, see Speck (1928), Haile (1998), Swanton (1946 and 1952), Hudson (1976), Wood, Waselkov, and Hatley (1989), Rountree (1989), and Potter (1993). For various population and tool estimates, see Hancock (1927), Mooney (1928), Dobyns (1966), Feest (1973), Ubelacker (1974), Turner (1978 and 1989), Hranicky and McCary (1996), Klein and Klatka (1991), and Johnson (1996). For settlement patterns, see Potter (1983), Custer (1990), and Brombery (1987). For coastal Algonquian studies, see Flannery (1939) and Doddard (1978), and for Woodland Period mortuary practices, see Bushnell (1920), Curry (1999 and 2000), and Gold (2000). Algonquian and Iroquoian languages are the principal spoken words, see Goddard (1978), Loundsburg (1978), and Feest (1978). All of the Native Americans' ethnographic histories are briefly presented, but the main focus is lithic technology. For early protohistory, Campbell (1906) offers an overview of missions in Maryland. Finally, as an overview of the archaeology in the area, see Dent (1995); his publication has an excellent summary of Chesapeake Bay area prehistory, and in the opposite direction, Holland (1960) offers perspectives from northwest Virginia. For local prehistories, see Arlington (Rose 1966), Fairfax (Johnson 1996), and Washington, DC (Humphrey and Chambers 1977). Finally, Porter (1979) offers a bibliographic overview; however, it needs updating. A lengthy bibliography for the river valley is presented in the reference section. And, the lithic technology of the Potomac River valley starts with the work of Holmes' (1897) *Stone Implements of the Potomac-Chesapeake Tidewater Province*, published by the Bureau of American Ethnology in Washington, DC.

In the 1860 Annual Report of the Smithsonian Institution in Washington City, A. Morlot of Lausanne, Switzerland wrote:

Not long ago we should have smiled at the idea of reconstructing the bygone days of our race previous to the beginning of history properly so called. The void was partly filled up by representing that ante-historical antiquity as have

been only of short duration, and partly by exaggerating the value and the age of those vague and confused notions which constitute tradition ... consider the antiquarian as a geologist, applying his method to reconstruct the first ages of mankind previous to all recollection, and to work out what may be termed pre-historical history.

Thus, this starts the study of prehistory, and over the years, American archaeologists have developed their science of the study of humanity – called prehistoric archaeology.

The study of archaeology starts in the Potomac River valley over 100 years ago. This publication is one of many past, present, and surely future studies on the river's former inhabitants called Native Americans. This study attempts a five-fold goal that is representative of all contemporary American archaeology:

- Reconstruct culture in a chronological order in local, regional, and national contexts.
- Reconstruct past lifeways of how people obtained their daily livelihood, in this case with lithics for tools.
- Achieve an understanding of how and why human societies have changed over time.
- Identify social/religious controls for tool change and maintenance.
- Explain how people adapted to particular environments, especially changing ecologies over time.

This archaeological overview is the underlying philosophy for this publication. Information and data for this goal come from many sources.

From the Hands of the Past to the Hands of the Future

We may find it amazing that Mother Nature has preserved prehistoric artifacts for thousands of years, and mankind can destroy them in a matter of minutes. At least, through care, concern, and commitment of some Americans, the hands of the past have passed their artifacts and history on to us, from which we will pass them on to future citizens who share our concerns about the past. Knowledge of the past – where we come from – is universal among humanity. Perhaps history and passing it to

offspring is what separates us from the rest of the animal kingdom.



Figure 1 – Held in Trust – 1999 Virginia Archaeology Month Poster. It featured archaeology in Alexandria.

We are temporary custodians of both public and private

prehistoric artifacts; however, the future depends on us to pass them forward in time. As a responsibility of archaeology, the discipline has developed outreach programs to take archaeology from the site and museum to the general public – show the past to the present in order to better safeguard it for the future.

Americans can trust that the past will be transferred to the future (Figure 1). One group of specialists will ensure that this happens – people who are trained and/or have an active interest

in archaeology are, of course, amateur and professional archaeologists. Throughout this publication, hands holding the past are presented – antiquity has that feeling of touching ancient people. For some, holding the past is electrifying or simply feeling the karma (previous prehistoric owner) of an object. Collecting these objects becomes a passion of processing antiquity. Study becomes a quest for knowing and understanding the past.

Will prehistoric artifacts be part of the public trust? Probably, but the main question as we move into the 21st century is – whose trust: Indians? Collectors? Politicians? Archaeologists? All?

From an archaeological perspective, we can ensure the accumulation and transfer of prehistory simply by collecting data from all prehistoric resources before they are destroyed or simply lost because of careless public servants, indifferent citizens, or dealers of antiquities (Figure 2). We cannot keep everything from the past, but representative samples can be used as the evidence of the past and tell the artifacts' cultural histories.

Regardless of the source, let archaeology have the data; perhaps, let the Indians have the artifacts. Knowledge should be the primary goal in the study of humanity, past and present; and, most importantly, across cultural boundaries. While Indian oral traditions are perfectly acceptable as a knowledge base of history, the science of archaeology offers an unbiased objectivity about history. Both have something to offer for those who *like history*. We will never know the complete history of mankind, but a sample as told from all viewpoints is a starting place for the future.

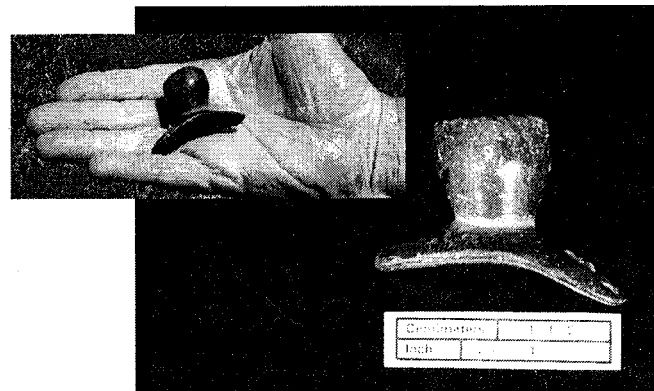


Figure 2 – Steatite Pipe Found by Hugh Stabler in the 1930s Along the Potomac River Beach at Lowes Island. The platform pipe's dimensions are L = 56, W = 27, H = 38 mm, and bowl diameter is 21 mm. It is saved for the future, as it will be turned over to Virginia for museum curation.

Study Overview

This study presents lithic projectile point and micro-macrotool technologies that were used by pre-Contact Native Americans. It includes major published references for tool technologies, industries, classes, and types in the area called here – the Middle Potomac River Valley (MPRV) provenance. The MPRV fits into what archaeologists call the Middle Atlantic Culture Area (MACA). This culture area is only one of numerous culture areas; namely, the northeast and southeast are proximity

culture areas. All United States/Mexico/Canada culture areas were established by Kroeber's (1939) Cultural and Natural Areas of Native North America that is a principal influence in the publication.

Note: Some archaeologists consider old publications as passé and refuse to use them. Most elders in archaeology's golden days have presented artifact identifications and classifications, methods, and interpretations that were reasonably correct; so why re-invent the *prehistoric wheel*? Of course, there are new discoveries and techniques that provide new interpretations about the past. But, as a demand, all graduate students must read the old literature ... maybe even use some of it.

As a total picture of eastern Indian history, MACA does not always stand alone as a culture area; in fact, many times it shows southern influences, such as Morrow Mountain and Savannah River technologies; other times northern influences, such as Lamoka, Koens-Crispin-Lehigh, and Orient technologies; and even western influences, such as Adena and Hopewell technologies. These technological influences are the result of migrational patterns, trade associations, political controls (intracultural relations), and/or language and kinship relations. The Indian's total technological universe (macrotechnology) in the eastern U.S. woodlands and the middle Atlantic seaboard are found in the MPRV; however, a microtechnology exists which identifies the MPRV's material culturally. This publication is a presentation of MPRV artifacts, but for *comparative examples*, artifacts from all the Middle Atlantic States (and other states) are used. Tools or implements are divided into the following classes:

- 1 - Microtools (points, drills, scrapers, etc.)
- 2 - Marcotools (axes, celts, mauls, splitters, etc.).

Which are subdivided into the following classes:

- 1 - Points
- 2 - Axes
- 3 - Celts
- 4 - Knives
- 5 - Drills
- 6 - Scrapers
- 7 - Adzes
- 8 - And more classes.

Of all the cultural remains left by the Indians, lithic flakes are the most common and, at the same time, are the most diagnostic items recovered in archaeological contexts. Flakes are the *signatures of prehistoric knappers*; and, if only analyzed by using tool production methodologies, flakes provide a tremendous amount of data. In some cases, flakes can be refitted back into cores or bifaces that give an insight into the Indian's logic and method of producing a tool.

When tools and implements are classified and grouped, namely shapes, materials, sources, activities, stratigraphically, chronologically, etc., they provide one basis for interpreting Indian prehistory. Naturally, other cultural remains make up the archaeological record. It was a lithic world, and the Indians, especially in early prehistory, depended on stone materials for tools with which they secured their daily livelihood. As such, MPRV stone studies are presented throughout this publication

with a focus of being highly significant in culture. This stone study offers methodological examples for other archaeological investigations. Culture and technology are not synonymous; they are different. Technology does not necessarily drive culture or cause culture change



Figure 3 - Sample of a Local Point MPRV Collection Used in This Study. The major focus was to find representative specimens of all tool industries. As an estimate, nearly 60% of the collections represented tool types that either could not be typed or represented types that remain to be identified. The major problem with this study approach is the lack of archaeological contexts for the collections. Broken tools were included and used for obtaining descriptive and distributional data. They are used in illustrations where appropriate; broken and expended tools represent the norm in field-collected and site-produced artifacts. Or as a parallel from another time:

I do not, however, desire to deal with these collections specifically, to describe them or review their history, but to present an analysis of the group of phenomena to which they belong (Holmes 1894).

Artifact Study Basis

This point typology and tool study was based on private and public collections in the MPRV. It consisted of over 30,000 specimens, which included all tool industries, but mostly broken projectile points. Most of the artifacts were recorded by county provenance and were found within a mile of the river.

These study collections consisted of field-collected artifacts. While over the years some artifacts were collected from archaeological sites, none of the artifacts were *dug* from archaeological sites (Figure 3). Approximately 40% of these collections contained broken, quartzite Savannah River or Late Archaic materials, or miscellaneous, nontypeable bifaces. Thus, the remainder was used to produce the basic study data. Also, Late Archaic bifaces from broken specimens are presented.

A major objective of this study is to include as many formerly unpublished artifacts as possible and expand current MPRV projectile point typology. And, because major private collections are disappearing, an objective of this study was to record and document some of them before they disappeared. Private collections often contain a representative selection of artifacts for the entire prehistoric chronology for a region. The Trittipoe site (Hranicky and MacCord 2000) and Fisher site (MacCord and Hranicky 1983) collections were also used in this study. The Pamunkey Museum provided ethnographic specimens for this study.

Publishing artifacts from all these sources adds to our knowledge of artifact type distributions, stylistic variations, and usage and human behavior. Each collection that was used was recorded, analyzed, and photographed; sample artifacts were then chosen for this study. Those points and tools generally best represent points and tools for that classification. They are average specimens that are found in the MPRV; however, in some cases, better quality materials are shown. All illustrated points and implements are from the MPRV unless noted otherwise. Georeferencing by county is not used for the MPRV. Daily mobility of the Indians precludes specific local provenances. Thus, a generalized reference to artifact geography is used. There are examples from other geographies that are used for comparative specimens which are marked by county and state. The projectile point types that were selected are based on type publications of Ritchie (1961), Coe (1964), Broyles (1971), Hranicky (1994), Kent (1970), and based on archaeological surveys and general artifact collection analyses. New point types are presented based on the study collections. The large tool types and classes are based on Hranicky (1995) and numerous society bulletins and journals. Two previous Maryland artifact studies that were used as early collections studies are Steponatis (1980) and Wanser (1982).

This publication is divided into:

- **Introduction**
- **MPRV Environment**
- **Prehistoric MPRV Chronology**
- **Toolmaking Technology**
- **Projectile Point Typology**
- **Projectile Points**
- **MPRV Flakes as Tools**
- **Bifaces as Knives**
- **Artifact Caches**
- **Miscellaneous Tools/Implements**
- **Experimental Archaeology**
- **References.**

This publication is the result of the author's work, investigation, artifact recording, and general archaeological research in the MPRV over the last 30 years. This study of stone tools and implements was performed to present a public artifact record that includes:

- ✓ **History of MPRV archaeology (people and sites)**
- ✓ **Environmental influences (Indian resource utilization)**
- ✓ **Tool materials and manufacture (procedures and production)**
- ✓ **MPRV artifacts (classification and typology)**
- ✓ **Indian oral histories (social and religious factors)**
- ✓ **Tool usage by the Indians (living archaeology).**

The overall approach for this study was to attempt to place all study artifacts into an environmental setting, namely ecoscenes and watersheds, and then analyze all artifacts using a structural-functional approach. All of this is discussed in a chronological framework with various social manifestations, such as economics, migrations, political organizations, local resource

exploitations, climatic influences, and linguistic groupings. Of course, use of these factors varies by time period.

MPRV Timeframe

Eastern U.S. prehistory is classically divided into:

- 1 – Paleoindian Period (9500 to 8500-8000 BC)
- 2 – Archaic Period (8000 to 2000 BC)
- 3 – Woodland Period (2000-1000 BC to 1600 AD).

While references to pre-Paleoindian and post-Woodland (Contact) Periods are made, the basic framework for this study is the above list. See Prehistoric MPRV Chronology section.

Early Collectors in the MPRV

Three early-day collectors in the MPRV are Judge William J. Graham, Titus Ulke, and S. V. Proudfit. Graham was a judge for the U.S. Court of Customs and Patent Appeals. He died in 1937, and his collection is now at the Smithsonian. Ulke lived in the Georgetown area. His collection is also at the Smithsonian. Proudfit collected in the 1880-90s and published *Ancient Village Sites and Aboriginal Workshops in the District of Columbia* in the newly formed Anthropological Society's *American Anthropologist* in 1889. These men walked fields when open farm land made up the MPRV. They collected and published, but most importantly, their artifact collections are in the public realm. Other collections, most are now in the public realm, are illustrated and discussed throughout this publication.

Study Collections

This study would not have been possible without the kindly and cooperative assistance of six MPRV collectors. The collectors used here have maintained their collections in a scientific manner that permitted easy access to the artifacts and, more importantly, their data. Repeating, the purpose of archaeology is to collect data about antiquities – not artifacts.

This study followed what is an old concept in science, namely, the 1822 Scientific Congress of Carlsruhe's (Grand Duchy of Baden which became part of Germany) Rule 10:

The association shall process neither collections nor property of any sort. An object presented at any of the settings shall be returned to its owner. The accruing expense shall be provided for by an assessment made with the consent of the members present.

Note: The history of science is not a focus here; only its implications on the modern practice of it.

Once upon a time, collectors regularly attended state and local archaeological meetings and brought their recent discoveries. Due to various reasons, this is no longer the practice. Now, it is necessary to go to them to study their artifacts. Private collections are numerous in any part of the U.S.

Most collectors are knowledgeable about prehistory and respond to research questions with valuable answers. Those collectors used in this study are very active in talking to local schools,

contributing to local and state archaeological societies, reporting sites they find, and most importantly, publishing their finds. Serious collectors do not dig on archaeological sites, but restrict their field activities to farm-field, surface finds. In many cases, these collections end up in the public domain. For example, two collections used in this study are Charles A. Pettit (see his references) and Spencer O. Geasey (see his references) collections that are now at the Jefferson-Patterson archaeological park in Maryland (Figure 4). Also, see Pettit quote in the Miscellaneous Tool/Implements section.



Figure 4 – Ronald G. Orr working on collection records at the Jefferson-Patterson Museum in Maryland. He was extremely helpful in showing collections for this study.

Amateur archaeologists also made this study possible. An example is Paul Cresthull who was editor of Maryland Archaeology for years. His interest and contributions are extensive (see his references). And for a Virginia amateur, Lanier Rogers has years of study and work at the Thunderbird site in Warren County, Virginia (see Prehistoric Chronology section and his references). Of course, there are members of the professional archaeological community who say collectors, amateurs, knappers are "... and ..., etc." (Figure 5). Contributions are not always restricted to artifacts. Scott Silsby is a well-known naturalist and flintknapper. His work is shown in the Experimental Archaeology section, and he contributed greatly to this presentation for his understanding tool chassis, lithic materials, and tool usage.

Romantically, every collector may dream of obtaining antiquities for safekeeping for the future of humanity. But, most assume some growth in the monetary value of their objects d' historia. As was said of George Gustav Heye (as in the Heye Foundation):

He accomplished something of enduring significance in his life of focused accumulation, though our contemporary sensibilities may not be entirely comfortable with an individual who appropriated, on a massive scale, the evidence of cultures not his. Some may even see in Heye's action a bloodless reenactment of earlier great wrongs. And yet, in his unstoppable course, Heye saved an irreplaceable living record that might otherwise have gone to oblivion. (November 2000, Lawrence M. Small, Secretary, Smithsonian Institution, Washington, DC).

We may never know the value of collectors of Native American artifacts; we can only appreciate what we have and ensure that

archaeology is the only means to the science of studying the past. Trustingly, part of the private collections will end up in the public domain.



Figure 5 – The Buried World of Material Culture is Subject to Many Viewpoints ... archaeologists, historians, relic dealers, collectors, writers, politicians, Indians, etc. (Arrows are modern replications.)

In the real world of archaeology, history, and possibly anthropology, we have a wide range of interests and practices that affect antiquities. For the world of archaeology, we find the following (Hranicky 1996):

1 - **Collector** - anyone who accumulates specific objects; one who usually has considerable knowledge about the topic. Any person who has one or more Indian artifacts.

2 - **Looter** - anyone who willfully destroys a (pre-) historical context (site) to obtain artifacts for profit or personal gain.

3 - **Pothunter** - see looter. Term generally is used to refer to someone who digs on an archaeological site without archaeological training, archaeological certification, or permission to dig.

4 - **Relic Hunter** - usually means hunting on archaeological sites with a metal detector.

5 - **Treasure Hunter** - anyone who hunts lost gold mines, sunken ships, the Fountain of Youth, Atlantis, or other noble fantasies.

6 - **Relic Miner** - one who pays for a square area on a site in which he digs for artifacts and keeps what is found.

Note: Even if records are kept, relic mining is never archaeology.

7 - **Historian** - scholar who studies paper, oral, or magnetic forms of documentation about history. Usually not involved in material culture except above-ground structures or places where events happened.

8 - **Amateur Archaeologist (AA)** - anyone who participates in scientific archaeology by working with professional archaeologists; mainstream of the American archaeological community.

9 - **Paraprofessional Archaeologist (PPA)** - anyone who has training in archaeology without the extensive college course work; training in amateur certification programs; advanced-experienced amateur.



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