CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL

CONNECTING TRAILS EVALUATION STUDY

Chesapeake Conservancy

410 Severn Avenue, Suite 405
Annapolis, MD 21403

CONTENTS

Acknowledgments **2**

Executive Summary **3**

Statement of Study Findings **5**

Introduction **9**

Research Team Reports **10**
- Anacostia River **11**
- Chester River **15**
- Choptank River **19**
- Susquehanna River **23**
- Upper James River **27**
- Upper Nanticoke River **30**

Appendix: Research Teams' Executive Summaries and Bibliographies **34**
- Anacostia River **34**
- Chester River **37**
- Choptank River **40**
- Susquehanna River **44**
- Upper James River **54**
- Upper Nanticoke River **56**

ACKNOWLEDGMENTS

We are truly thankful to the research and project team, led by John S. Salmon, for the months of dedicated research, mapping, and analysis that led to the production of this important study. In all, more than 35 professionals, including professors and students representing six universities, American Indian representatives, consultants, public agency representatives, and community leaders contributed to this report. Each person brought an extraordinary depth of knowledge, keen insight and a personal devotion to the project.

We are especially grateful for the generous financial support that we received from the following private foundations, organizations and corporate partners: The Morris & Gwendolyn Cafritz Foundation, The Clayton Fund, Inc., Colcom Foundation, The Conservation Fund, Lockheed Martin, the Richard King Mellon Foundation, The Merrill Foundation, the Pennsylvania Environmental Council, the Rauch Foundation, The Peter Jay Sharp Foundation, Verizon, Virginia Environmental Endowment and the Wallace Genetic Foundation. Without their support this project would simply not have been possible.

Finally, we would like to extend a special thank you to the board of directors of the Chesapeake Conservancy, and to John Maounis, Superintendent of the National Park Service Chesapeake Bay Office, for their leadership and unwavering commitment to the Captain John Smith Chesapeake Trail.

PRINCIPAL PARTNERS

John S. Salmon, Historian, Project Coordinator

Paul Shackel, Center for Heritage Resource Studies, University of Maryland

David Gadsby, Center for Heritage Resource Studies, University of Maryland

Eric Larsen, Ph.D., Research Associate

Daniel R. Griffith, former Director of the Delaware Division of Historical and Cultural Affairs, currently President of Griffith Ecological Consulting

Jeffrey L. Hantman, Associate Professor and Director of Interdisciplinary Program in Archaeology, University of Virginia

Karenne Wood, Director, Virginia Indian Heritage Program

Deanna Beacham, Weapemeoc, Staff, Virginia Council on Indians

Katherine Faull, Professor of German and Humanities, Bucknell University

Ben Marsh, Professor of Geography and Environmental Studies, Bucknell University

David Minderhout, Professor Emeritus of Anthropology, Bloomsburg University

Alfred Siewers, Associate Professor of English, Bucknell University

Donald Grinde, Professor and Chair of American Studies, University of Buffalo

Sid Jamieson, Bucknell University

Hannah Hardy, Program Manager, Pennsylvania Environmental Council

John L. Seidel, Associate Professor of Anthropology and Environmental Studies, Washington College

John Maounis, Superintendent, Captain John Smith Chesapeake National Historic Trail

Stephen R. Potter, Ph.D., Regional Archeologist, National Capital Region, National Park Service

PROJECT TEAM

Charlie Stek, Chairman, Chesapeake Conservancy

Patrick Noonan, Vice-Chairman, Chesapeake Conservancy

David O'Neill, President, Chesapeake Conservancy

David Burke, Senior Advisor, Chesapeake Conservancy

Joel Dunn, Program Coordinator, Sustainable Chesapeake, The Conservation Fund

Tim Barrett, Intern, The Conservation Fund

** Please refer to the Chesapeake Conservancy website (www.ChesapeakeConservancy.org) to see the full list of advisors and supporters who contributed to the production of this report.*

EXECUTIVE SUMMARY

President George W. Bush signed the Captain John Smith Chesapeake National Historic Trail Designation Act (Public Law 109-418) into law on December 19, 2006. This is the first National Historic Trail that is also primarily a water trail. The National Trails System Act of 1968 that created the network of recreation, scenic, and historic trails also authorized the designation by the Secretary of the Interior or the Secretary of Agriculture of *connecting or side trails* as components of the principal trail. Chesapeake Conservancy, formerly the Friends of the John Smith Trail, funded a professional evaluation study of six Chesapeake Bay tributaries to determine their potential for designation as connecting trails:

- Anacostia River
- Chester River
- Choptank River
- Susquehanna River
- Upper James River
- Upper Nanticoke River

Because no written criteria or standards appear to exist by which a potential connecting trail can be evaluated for designation, the Conservancy has developed criteria based on themes enumerated in the CAJO feasibility study in cooperation with the National Park Service (NPS). The research teams were directed to apply these criteria as they evaluated the eligibility of potential connecting trails to be components of the NHT. The themes are:

1. Commemorate the voyages of exploration of Captain John Smith in 1607–1609
2. Recognize the American Indian towns and cultures of the 17th-century Chesapeake
3. Call attention to the natural history of the Bay (both historic and contemporary)

These purposes or themes suggested the criteria necessary to evaluate a potential connecting trail for inclusion as a component of CAJO. The criteria directly support and complement the purposes of CAJO as defined in the feasibility study. A potential connecting trail should be relatively closely associated with at least one of the criteria listed below to be eligible for designation; however, it is likely to be more favorably received if more than one close association is identified. A potential connecting trail should:

1. Be closely associated with the voyages of exploration of Captain John Smith in 1607–1609; and/or
2. Be closely associated with the American Indian towns and cultures of the 17th-century Chesapeake; and/or
3. Be closely illustrative of the natural history of the 17th-century Chesapeake Bay Watershed.

The following standards were created to establish the relative closeness of association with each theme:

1. Substantial association with Smith's voyages is established if there is data from both Smith's map and the accounts of Smith and others; moderate association is established if there is data from either Smith's map or the accounts of Smith and others; and indirect association is established if there is a lack of data from either Smith's map or the accounts of Smith and others
2. Substantial association with American Indian towns and cultures is established if there is data from Smith's map, the 17th-century accounts of Smith and others, and archaeology; moderate association is established if there is data from Smith's map or the 17th-century accounts of Smith and others, and archaeology; and indirect association is established if there is a lack of data from Smith's map or the 17th-century accounts of Smith and others, and limited or no archaeological evidence
3. Substantial association with the natural history of the Bay is established if there exists both contemporary and historic documentation of the natural history; moderate association is established if there is contemporary documentation but little or no historic documentation; and indirect association is established if there is little or no contemporary documentation and no historic documentation

The teams conducted research on the rivers, submitted periodic reports on their progress and preliminary findings, gave oral and illustrated presentations, evaluated the rivers for their relative closeness of association ("substantial," "moderate," "indirect," etc.) with the foregoing standards, and delivered final reports. The teams' conclusions follow:

ANACOSTIA RIVER. The main branch of the river from the connection with CAJO near the river's mouth at Hains Point upstream to Bladensburg meets the evaluation criteria for a connecting trail. This branch has substantial association with Criteria 1 and 2 and indirect association with Criterion 3. The upper branches did not meet the criteria.

CHESTER RIVER. The main branch of the river from the connection with CAJO near the river's mouth upstream to Millington, as well as certain branches described in the Executive Summary and depicted on the map, meet the evaluation criteria for a connecting trail. The Chester River has moderate association with Criterion 1 and substantial association with Criteria 2 and 3.

CHOPTANK RIVER. The main branch of the river from the connection with CAJO west of the river's mouth in the Chesapeake Bay upriver to Greensboro, as well as certain tributaries described in the Executive Summary and depicted on the map, meet the evaluation criteria for a connecting trail. The Choptank River has indirect association with Criterion 1 and substantial association with Criteria 2 and 3.

SUSQUEHANNA RIVER. The main branch of the river from the connection with CAJO near the river's mouth at Havre de Grace upstream via the North Branch to Lake Otsego near Cooperstown, New York, as well as the West Branch to the vicinity of Lock Haven, as described in the Executive Summary and depicted on the map, meet the evaluation criteria for a connecting trail. The indicated segments of the Susquehanna River have moderate to substantial association with Criterion 1 and substantial association with Criteria 2 and 3.

UPPER JAMES RIVER. The main branch of the river from the connection with CAJO at the Falls of the James River at Richmond west in two segments to Iron Gate, as described in the Executive Summary and depicted on the map, meets the evaluation criteria for a connecting trail. The first segment, which extends from the Falls upstream to the western extent shown on Smith's map (to the confluence with the Tye River at Norwood), has substantial association with all three criteria. The second segment, which extends to Iron Gate, has indirect association with Criterion 1 and substantial association with Criteria 2 and 3.

UPPER NANTICOKE RIVER. The main branch of the river from the connection with CAJO near the Delaware-Maryland state boundary upstream to a few miles east of Seaford on Deep Creek, as well as up Broad Creek to the pond east of Laurel, as described in the Executive Summary and depicted on the map, meet the evaluation criteria for a connecting trail. The Upper Nanticoke River has substantial association with all three criteria.

STATEMENT OF STUDY FINDINGS

Captain John Smith led two voyages in the Chesapeake Bay during the summer of 1608. Their purpose was to implement the Virginia Company's instructions to explore the region for valuable minerals, the Northwest Passage, and whatever else could be learned about this new world. As Smith and his crew sailed from Jamestown down the river toward the Bay, the fledgling colony confronted enormous problems that threatened its survival: the beginning of a drought, a poisonous water supply, alternately helpful and threatening Native inhabitants, a complex and unfamiliar Powhatan political and social system, strange illnesses, starvation, and frequently inept leaders within the colony. Smith, despite these challenges, successfully completed two voyages of discovery, forged trading alliances with several tribes, and brought his crew back safely to Jamestown, having lost only one man during two long journeys. And then, the second and most important part of Smith's work began: writing his books and drawing his map to explain and illustrate his discoveries and promote settlement.

Smith's writings and map powerfully influenced English settlement and exploration for the next century. Would-be adventurers, explorers, and settlers, as well as aristocrats and merchants with the power and money to finance new undertakings, studied Smith's map and read his books. Ships bearing colonists were dispatched to the Chesapeake, and slowly the settlements expanded up the Bay and its many tributaries. The new colonists found that Smith had not exaggerated the natural resources of the Bay, and also that he had at least prepared them for contact with the Native inhabitants to whom this country belonged. For the Chesapeake Indians, the influx of newcomers resulted in disruption and disaster as their delicate web of polities, alliances, trade networks, and agricultural systems was torn apart. Tribes were decimated, forced out of their old territories, and reduced to dependency on the dominant culture. Many simply disappeared, moving away or being absorbed into other tribes. Large farms and plantations replaced their small plots of corn and beans. By the end of the century, the land had been transformed, the new settlers had become established, and the harvesting of the Bay's natural resources had begun a slow progression to unsustainable levels. Smith's promotion of the Chesapeake had perhaps succeeded all too well.

Smith, of course, did not encounter a pristine Bay. The Indians had altered the environment through various activities, including farming, the construction of towns, and the deliberate burning of the forest understory. European visitors before Smith—the French and the Spanish—had inadvertently introduced foreign plant and animal species. The changes to the Bay's environment in the decades preceding Smith's voyages, however, were slight in comparison with those wrought by European settlers in the decades that followed. Despite four centuries of development and the inevitable changes that have occurred, what remains to tell the story of the Chesapeake and its tributaries, of its people, and of its natural resources seems as extensive in its way as what has been lost. Today, miles of shoreline look much as they did when Smith first saw them. Archaeological research, combined with written records, reveal much about the Chesapeake Indians of four hundred and more years ago. While the populations of certain creatures have dwindled dramatically or gone extinct around the Bay, others have flourished despite development or have arrived to fill the niches vacated by those that are gone. The Chesapeake region also continues to be a destination for settlers and visitors and a source of nourishment for both body and spirit as it was in the 17th century.

The Captain John Smith Chesapeake National Historic Trail was established to commemorate Smith's voyages in 1607–1609 on the Bay and its tributaries, to recognize the American Indian towns and cultures of the 17th-century Chesapeake, and to call attention to the natural history of the Bay. The Trail is not a mere scholarly exercise in research and mapping but also a place that tourists can visit, boaters can explore, and naturalists can study. Books, brochures, Web sites, and interpretation on the ground and in the water help visitors find the Trail and hear the stories that are told there. The Trail continues Smith's mission of promoting the Chesapeake, but by attracting visitors instead of settlers and by encouraging learning and recreation.

Even though visitors who have access to the water can retrace almost every known mile of Smith's voyages, if they confine themselves only to the Trail they will be missing much of the story and the Trail's educational mission will be incomplete. The story of Smith's journeys, of the Indians, and of the natural environment of the Chesapeake will be much fuller if it is not confined only to those places that Smith explored personally, or that appear on his map. Smith depended on the Native peoples to tell him about places that he could not reach himself, and others who came after him—from 17th-century settlers to 21st-century archaeologists—have continued to tell the story of the rivers Smith did not sail up and Indian towns he did not see. The cultural connectivity of these rivers and adjoining lands is well reflected and as intimately associated with the purposes of the Trail as the Trail itself.

This report discusses six such rivers: the Anacostia, Chester, Choptank, Susquehanna, Upper James, and Upper Nanticoke. All have close associations with two or more of the three primary purposes of the Trail, especially "recognizing the American Indian towns and cultures of the 17th-century Chesapeake." Indeed, the names of most of the rivers—Anacostia, Choptank, Susquehanna, Nanticoke, and the James (at first called the Powhatan), as well as the Chesapeake itself—are derived from the names of chiefdoms or tribes or towns that Smith encountered during his voyages and then recorded on his map. By doing so, Smith forever memorialized the early Indians and their stewardship of these rivers. The very names of these potential connecting trails further reflect cultural connectivity between past and present.

Smith mapped part of the Anacostia and explored by relation perhaps as far as today's Bladensburg; artifacts from Indian towns and other sites in the river's drainage reveal a great deal about the Native trade with the English; and although the river has been mostly developed, sites remain available to interpret the changes. Even though Smith did not explore or map the Chester and Choptank Rivers, his vivid descriptions of the Eastern Shore, its peoples, and its resources inspired traders and settlers to follow him to that part of the Chesapeake. The shores of both rivers are dotted with Indian town sites, and much of the land is evocative of the 17th century and is under protective easements.

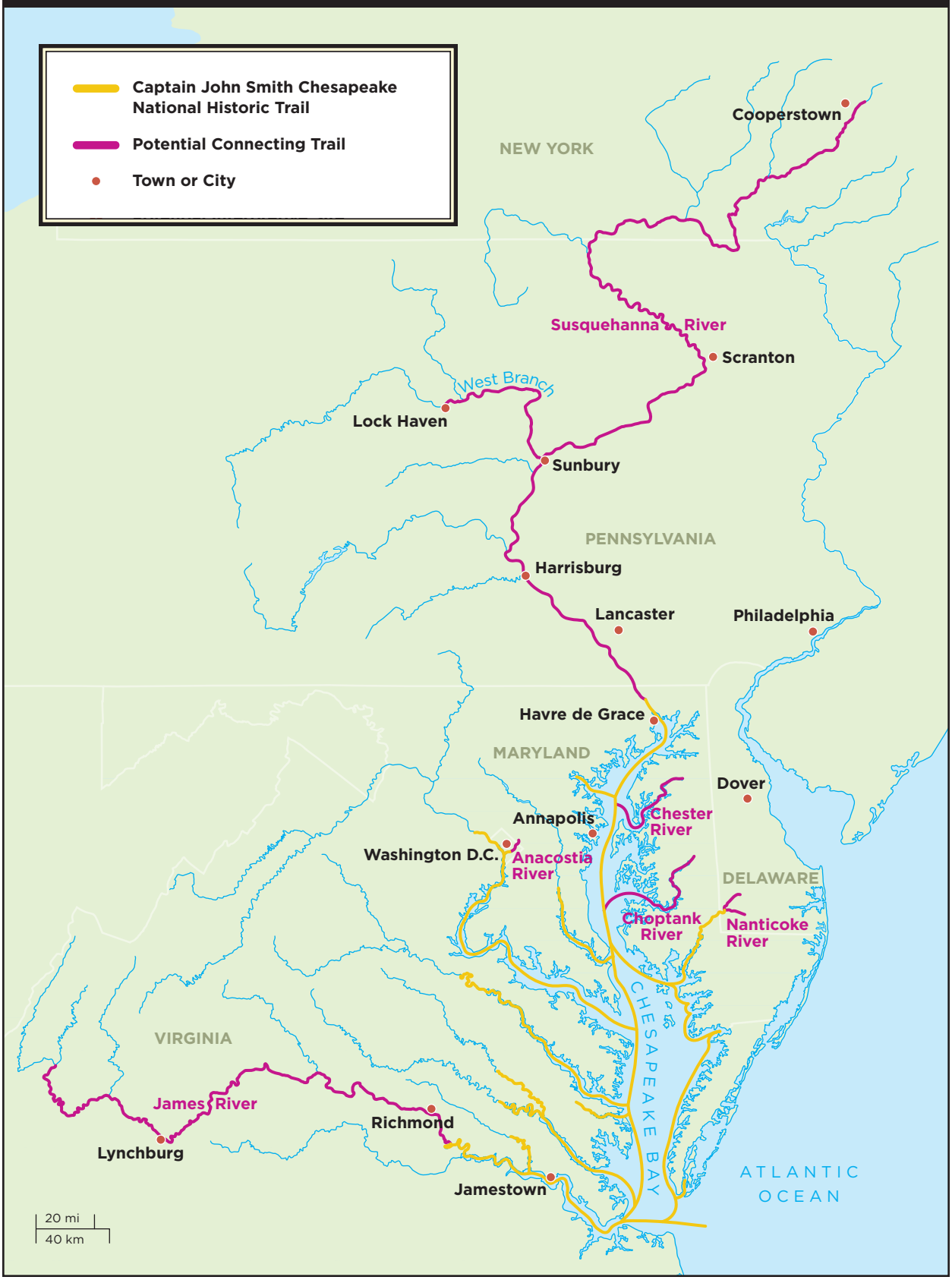
The Susquehanna River, the very source of the Chesapeake Bay, arises in New York and flows south through Pennsylvania and Maryland. Smith himself explored a section of the lower part and famously introduced the English world to the Susquehannock Indians, whose tribal identity survived well into the 18th century. An enormous amount of archaeological research has revealed the interconnectedness of the Susquehannock with the Iroquois in New York, and how the great river served as a highway of trade. Although intense development has occurred along parts of the shoreline, a significant portion retains its ability to illustrate the 17th-century natural world.

The Upper James River was terra incognita to English explorers until 1670, and to European settlement until the first quarter of the next century. It looms over the story of the Jamestown colonists like a cloud—the land to which Powhatan forbade them entry, the country of the ominous Monacan and Mannahoac, the question mark in the colonists' relations with the Powhatan. And yet John Smith managed to record about half of the Upper James (accurately) on his map, along with several towns, by interviewing Indians. Archaeologists, beginning with Thomas Jefferson, have learned more about the Native inhabitants by excavating sites in the river's drainage, and much is likewise known about the region's natural resources. At least ten potential sites for interpretation have been identified.

In present-day Delaware, Smith explored the Upper Nanticoke River for part of its length, but described some of his voyage in tantalizingly ambiguous language. Scholars have debated, for example, just what he meant when he wrote of a "bay," and whether he could have journeyed as far up the river as is alleged in the time he stated. These questions seem to have been answered, and there is also ample evidence of the Native occupation of the Upper Nanticoke from the distant past to modern times. Furthermore, significant portions of the river retain characteristics of the 17th-century natural environment.

Collectively and individually, these six rivers have clear and close associations with Smith's voyages and his promotion of the Chesapeake and its tributaries, they are clearly and closely associated with the Chesapeake Indians of the 17th century, and they clearly illustrate that the environment of the Bay has changed since Smith's voyages, but it frequently remains representative of the Bay's appearance at that time. Numerous interpretive sites on each river will tell the stories of Indian cultures and trade routes as well as exploration and settlement and convey the significance of Smith's achievement more fully than the designated trail can do alone. Together, the Captain John Smith Chesapeake National Historic Trail and these six potential connecting trails will further enhance the visitor experience and the ongoing efforts to preserve and improve the Bay, attract tourists, provide recreational opportunities, and interpret the long, rich history of the Chesapeake.

CAPTAIN JOHN SMITH CHESAPEAKE NHT AND POTENTIAL CONNECTING TRAILS



INTRODUCTION

In the summer of 1608, during two voyages, Captain John Smith led an expedition from James Fort in Virginia to explore the Chesapeake Bay and its tributaries. Smith later produced a map based on his "discoveries" and wrote several books, profoundly influencing the future settlement and development of the English-controlled portion of the New World.

In 2005, the four-hundredth anniversary of the establishment of the Jamestown colony was fast approaching. As part of the effort to commemorate that event, two bills introduced in the United States Congress (entitled the Captain John Smith Chesapeake National Historic Watertrail Study Act of 2005) authorized the Secretary of the Interior to "carry out a study of the feasibility of designating the Captain John Smith Chesapeake National Historic Watertrail as a national historic trail." Senator Paul S. Sarbanes (Maryland) introduced S.B. 336 on February 9, 2005, and on May 24, Representative Jo Ann Davis (Virginia) introduced H.R. 2588 in the House of Representatives. On August 2, 2005, President George W. Bush authorized the National Park Service (NPS) to study the feasibility of establishing the Captain John Smith Chesapeake National Historic Water Trail as part of the FY 2006 Interior, Environment and Related Agencies Appropriations Act. The study area at first included parts of three states—Virginia, Maryland, and Delaware—and the District of Columbia. On July 31, 2006, however, the Senate Committee on Energy and Natural Resources added Pennsylvania, noting that although "Smith's expeditions reached the mouth and falls of the Susquehanna River but did not venture into what is now Pennsylvania, . . . Susquehannock leaders from present-day Pennsylvania met and traded" with Smith. The committee also directed NPS "to explore connecting or side water trails where appropriate to provide additional points of public access [and] interpretation" by linking other trails to the National Historic Trail. The subsequent feasibility study concluded that Smith's voyages were indeed of national significance, that their influence on the settlement of the colony and the future of the Native peoples and the natural environment of the Chesapeake Bay was profound, and that the trail should be created. As a result of the study's findings and recommendations, Congress authorized the trail, and on December 19, 2006, President Bush signed the legislation that established the Captain John Smith Chesapeake National Historic Trail.

The National Trails System Act of 1968 that created the network of recreational, scenic, and historic trails also authorized the designation of *connecting or side trails* as components of the principal trail. The Secretary of the Interior is authorized to designate connecting trails for national historic trails. Only two connecting trails have been designated, both in 1990, almost 20 years ago, by then-secretary Manuel Lujan. One connects the Ice Age National Scenic Trail to Timm's Hill, Wisconsin's highest point. The other connecting trail is the Anvik Connector, which links with the Iditarod National Historic Trail in Alaska.

In the autumn of 2008, the Friends of the John Smith Chesapeake Trail (now the Chesapeake Conservancy) decided to explore the designation of several Chesapeake Bay tributaries as connecting trails to CAJO. The Conservancy contacted scholars who are knowledgeable about the history of the region, the Indians who occupied the area early in the 17th century, Smith's exploratory voyages, and the natural environment and resources of the Bay. NPS provided important guidance on the qualifications for prospective scholars. Over several weeks, the Conservancy reached agreements with qualified scholars to form research teams to investigate the potential for each of the rivers to qualify as connecting trails.

The Conservancy also contracted with John S. Salmon to serve as the project coordinator as recommended by NPS. Salmon is the historian who wrote the statement of national significance for the CAJO feasibility study under contract with NPS, and is familiar with NPS planning processes as well as with the history of the Bay, Smith's voyages, and the Native peoples who inhabited the area. Salmon drafted the standards or criteria by which a potential connecting trail can be evaluated for designation. The Conservancy refined the criteria and NPS reviewed and accepted them. Salmon also communicated with the research teams, reviewed their interim reports, made suggestions, participated in conference calls as well as on-site meetings and Webinar sessions, and wrote this final report.

On January 5, 2009, Salmon and the Conservancy met in Annapolis, MD, at the Conservancy's offices to discuss the project and plan a tentative work schedule for the research teams. On March 5, the research teams, Salmon, and the Conservancy convened in Annapolis to meet face-to-face. John Maounis, NPS superintendent of the Captain John Smith Chesapeake National Historic Trail, made introductory remarks, and Salmon presented background on the CAJO feasibility study, the goals of the connecting trail project, the proposed criteria for connecting trail designation, the work schedule, and the proposed outline for the research teams' reports. During a discussion period, the work schedule was modified to allow for student assistant availability after the school year. Interim reports were due early in July, with responses from Salmon and the Conservancy due in the middle of the month. The participants agreed that final reports, maps, and illustrations would be submitted to Salmon and the Conservancy in November. Salmon's draft final report to the Conservancy (this document) would be due at the end of January 2010.

Interim reports were submitted in July, and during the next six months the teams communicated with Salmon and made reports on their progress via several WebEx conferences with the Conservancy. Salmon made presentations on the project on September 29, at a meeting of the Conservancy board at the National Geographic Society headquarters in Washington, DC, and on November 12 at a meeting of the CAJO CMP advisory council at the Matthew Henson Earth Conservation Center, also in Washington.

Most of the research teams submitted final reports by the end of November; the last was received in January 2010. Salmon submitted his draft final report to the Conservancy soon thereafter.

Research Team Reports

INTRODUCTION

Following are summaries of the final reports that each research team submitted. The Conservancy asked each team to define its study area, research its river in light of the three criteria (relative closeness of association with Smith's voyages, 17th-century Indians, and the natural history of the Bay), present its findings and conclusions, and note any sites that have potential for interpretation. Although the form of the reports varies somewhat from one team to another, each contains common elements reflected in the summations. First, the members of each team and their qualifications are presented. Second, the study area for each river is described. Third, the methods and results of the team's research are outlined. Fourth, the team's conclusions are briefly summarized. Fifth, a list of potential interpretive sites is given. The bibliographies that list the sources that each team consulted are presented in the appendix.

In addition, for each river, there is a map showing the study area, the potential connecting trail, and towns and other important sites. There are also representative images of the rivers, the artifacts, and the natural environment.

Anacostia River

RESEARCH TEAM

The University of Maryland Center for Heritage Resource Studies (CHRS) formed a five-member research team. Dr. Paul Shackel, Director of CHRS and Professor for the Department of Anthropology at the University of Maryland, College Park, has thirty years' experience as an archaeologist in the Middle Atlantic States and co-edited *Historical Archaeology of the Chesapeake* (Shackel and Little, 1994). David Gadsby (M.A.), Assistant Director of CHRS, is a Ph.D. candidate at American University and has worked in the Mid-Atlantic Region as an archaeologist for more than 10 years. Eric Larsen (Ph.D.), Research Associate, has been an archivist for History Associates, Inc., under contract to the Montgomery County Archives and has worked for more than twenty years as a historical archaeologist in the Mid-Atlantic Region. Recent projects include work in the City of Alexandria and along the Potomac River shoreline for the George Washington Memorial Parkway. Kyle Olin, Research Assistant, is a GIS specialist with the Department of Anthropology at the University of Maryland and created the map for this project from coverages supplied by the District of Columbia and the Maryland Historical Trust. Jennifer Carpenter, Graduate Assistant, is an archaeology graduate student in the University of Maryland, and helped collect information on sites in the District and the State of Maryland.

STUDY AREA

The team evaluated the Anacostia River in two segments. The first segment extends from the Anacostia's confluence with the Potomac River at Hains Point up the main branch to just above Bladensburg, where the river divides into the Northeast and Northwest Branches. The second segment extends upstream on each branch from that point. The rationale for thus dividing the study area is that John Smith's 1612 map shows the extent of a portion of the Anacostia River upstream from its confluence with the Potomac, which suggests that he either explored that far himself or obtained the information to illustrate the river on his map "by relation" from the Indians he encountered in the vicinity. The length of the part of the Anacostia that Smith illustrated is not known, although the team suggests that he may have intended to show (as he generally did elsewhere) the extent of the river to the head of navigation, present-day Bladensburg. His map does not show the upstream branches; however, because the entire river basin was important to the Native inhabitants, the team included the upper branches in the study area for research in relation to Criterion 2.

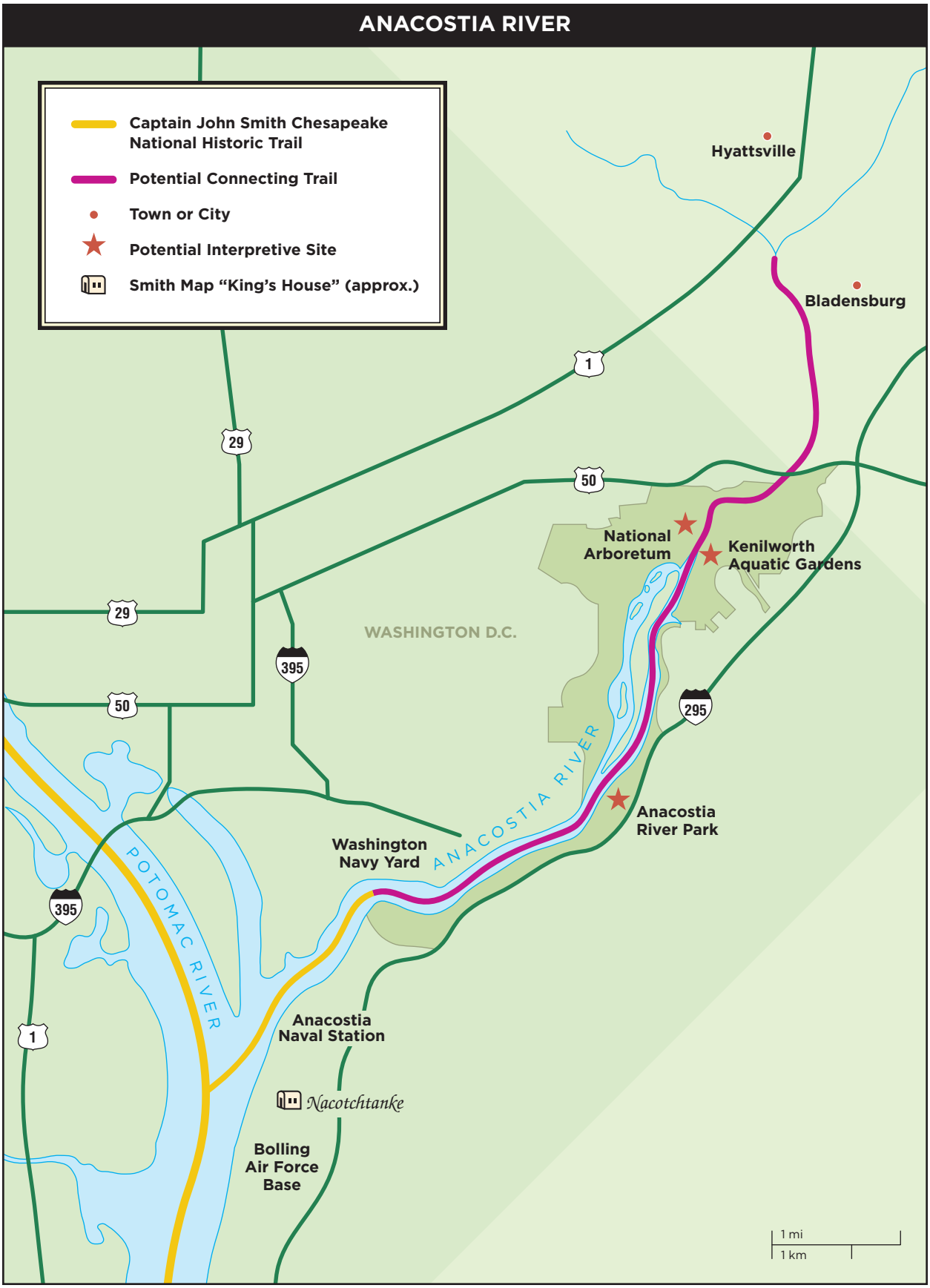
City of Washington from Beyond the Navy Yard (eastern bank of Anacostia River; Potomac River in distance on left), ca. 1833
Courtesy Library of Congress

RESEARCH METHODS AND RESULTS

To apply Criterion 1 (closeness of association with Smith's voyages), the team researched the standard writings by and about Smith and his journeys as well as archaeological site reports for the study area. As previously mentioned, Smith's 1612 map notes a short stretch of the Anacostia River from its mouth to a point some distance upstream, as well as the site of an Indian town, Nacotchtanke.

Although Smith's writings do not describe the Anacostia River specifically, he does mention Nacotchtanke town and the Potomac River as far upstream as Little Falls:

> *We were kindly used of these savages [farther downstream on the Potomac River, after first*


ANACOSTIA RIVER
Captain John Smith Chesapeake National Historic Trail
Potential Connecting Trail
Town or City
Potential Interpretive Site
Smith Map "King's House" (approx.)
Hyattsville
Bladensburg
National Arboretum
Kenilworth Aquatic Gardens
WASHINGTON D.C.
Anacostia River Park
Washington Navy Yard
ANACOSTIA RIVER
POTOMAC RIVER
Anacostia Naval Station
Nacotchtanke
Bolling Air Force Base
1
29
50
395
295
1 mi
1 km

appearing to be threatened]. . . . The like encounters we found at Patowomek, Cecocawonee, and divers other places, but at Moyaones, Nacotchtant [Nacotchtanke], and Toags the people did their best to content us. Having gone so high as we could with the boat [to Little Falls, several miles up the Potomac from Nacotchtanke], we met divers savages in canoes well loaden with the flesh of bears, deer, and other beasts, of which we had part.

Smith then described the mineral and other natural resources of the area based on his own observations and information that the Native inhabitants gave him. Smith's descriptions, as well as necessity, spurred trade and occasional conflict. In 1623, future fur trader Henry Fleet was captured by the Nacostians and held for five years until he escaped. Fleet learned their language during his captivity, returned to Nacotchtanke to trade in 1632, and discovered that the Nacostians enjoyed a monopoly on the beaver-pelt trade with the Iroquois. He also became a negotiator between the Virginia and Maryland colonies and the Indians.

With regard to Criterion 2 (closeness of association with the 17th-century Indians), the team consulted the abundant archaeological site reports for the Anacostia River and vicinity relating to Late Woodland and Contact Period sites. Much of the Anacostia flows through present-day Washington, DC. As the home of the Smithsonian Institution, the District along with the valleys of the Potomac and Anacostia Rivers have been surveyed extensively by Smithsonian archaeologists and others since late in the 19th century. The upper branches of the Anacostia River have likewise been surveyed, although in more recent times. Archaeologists have closely studied the main part of the river in the District because beginning late in the 19th century the marshes near the Potomac were filled in, and because subsequent development extended up the Anacostia.

The evidence for the presumed site of Nacotchtanke on the Anacostia River is based on Smith's map and accounts as well as on the artifacts recovered by 19th-century antiquarians. As one of them wrote, "these fields have been under cultivation for many years, and are regularly visited by local collectors, yet they are to-day, in places, fairly strewn with the wreck of the old village life." Upstream, in present-day Prince George's County, Maryland, outside the District, at least four sites have more recently been attributed to Late Woodland and Contact Period occupations. Another site with pre-Colonial artifacts has been found in Bladensburg, the first of its kind uncovered there. The archaeology and artifacts recovered there and elsewhere to date illustrate the long history of human occupation, food procurement and processing, and other activities. These data present a picture of "a rich and lively use of the river's resources by the Nacostians at the time of Smith's encounter with Nacotchtanke."

USS *Barry* at Washington Navy Yard on the Anacostia River
Courtesy Anacostia Watershed Society

In considering the Anacostia River in light of Criterion 3 (illustrating the natural history of the 17th-century Bay watershed), the team found the river to be a study in contrasts. The river, although freshwater, remains tidal, and continues to be affected by the tides of the Bay. From Smith's time until the 19th century when the river silted up, the Anacostia was navigable to Bladensburg, which was long an upstream port town. The lower part of the river has been developed since the 19th century and bears no resemblance to the watercourse that Smith encountered and that the Acostians of Nacotchtanke knew so intimately. Portions of the river upstream, however, have been preserved in an altered but still natural state in Anacostia River Park. In places, fragments of the once-marshy wetlands survive. Beavers, which previously were common, are beginning to return in a few places. Nearby, at the Belt Woods Natural Environment Area in Prince George's County, a small enclave of mature forest survives to exemplify the woodlands of Smith's and the Acostians' time. Plentiful opportunities exist, therefore, to illustrate the change in the natural environment of the Anacostia River and vicinity between the Late Woodland and Contact Period and the present day.

Anacostia River
Courtesy Anacostia Watershed Society

CONCLUSIONS

The team concludes that the main branch of the Anacostia River from its connection with the NHT on the river upstream to Bladensburg substantially meets Criteria 1 and 2. Smith likely either explored that extent of the river himself or obtained information from the Nacostians, and important archaeological evidence still exists to illustrate the occupation of the Native peoples along the river from the Late Woodland and Contact Period; and the river's natural history and the dramatic changes that have occurred to its environment can be illustrated and interpreted. The main branch meets Criteria 1, 2, and 3 for designation as a connecting trail.

The team concludes that the Northeast and Northwest Branches upstream from Bladensburg do not meet the criteria for a connecting trail. Smith did not show them on his map and possibly did not know about them; the archaeological record is not as extensive for the Late Woodland and Contact Period. The river's natural history has suffered from the dramatic changes that have transformed its environment; therefore, the association with Criterion 3 is indirect.

POTENTIAL INTERPRETIVE SITES

The team has identified several potential sites along the Anacostia River for interpretation of the river. They include Anacostia River Park, the grounds of the National Arboretum, and Kenilworth Aquatic Gardens.

RECREATIONAL OPPORTUNITIES

The Anacostia River is one of most historic waterways in America. Beginning above the city of Bladensburg, the river flows south and westward, eventually crossing into the District of Columbia. Paddlers can experience breathtaking Kenilworth Aquatic Gardens and the U.S. National Arboretum —our country's garden and living museum—which has a floating dock that serves as one portal to the river and the Anacostia River Water Trail.

Chester River

RESEARCH TEAM

Dr. John L. Seidel, Director of Washington College's Center for Environment & Society (CES) and Professor of Anthropology & Environmental Studies at Washington College, led the team and wrote the report. Dr. Seidel has more than thirty years of experience in archaeology, historic preservation, and environmental assessment. Washington College, through CES, the Public Archaeology Laboratory, and the Geographic Information Systems Laboratory, has conducted extensive primary research on the history and archaeology of the Chester River, including archival research, field archaeology on Native American and early colonial sites, and maritime archaeology and remote-sensing surveys in the river. Elizabeth Seidel, Director of Washington College's Public Archaeology Laboratory, was the lead researcher, and has more than twenty years of experience in archaeology and archival research. Prof. William Schindler, of Washington College's Department of Sociology and Anthropology, and Darrin Lowery, a staff archaeologist with the Washington College Public Archaeology Laboratory and Smithsonian Institution Predoctoral Fellow, assisted with the assessment of American Indian associations with the connecting trail. Stewart Bruce, Program Coordinator of the Washington College GIS Laboratory, and Buffy Conrad, a student intern in the GIS Lab, gave GIS support. The ten students of the 2009 Archaeology Field School assisted with assessments of the Indiantown Farms site. Chris Cerino of Sultana Projects assessed the river's historical and environmental significance based on his extensive field experience on the river in canoes, small boats, and the replica schooner *Sultana*.

Aerial view of Chester River
Courtesy John L. Seidel

STUDY AREA

The team defined the study area as the main branch of the Chester River from its mouth and connection with CAJO upstream to just above Millington, as well as all of the tributaries that are navigable by boat, canoe, or kayak. The tributaries include Grays Inn Creek, Langford Creek, Church Creek, Corsica River, Morgan Creek, Walsey Creek, Queenstown Creek, Tilghman Creek, Emory Creek, and Island Creek. This study area was chosen to cast the widest net for accessible sites that might be related to the three criteria.

RESEARCH METHODS AND RESULTS

The team researched the standard writings by and about Smith and his journeys as well as archaeological site reports for the study area to apply Criterion 1 (closeness of association with Smith's voyages). Smith clearly depicted and described the Tockwogh River (Sassafras River) on his 1612 map and in his writings. He discussed the residents of the Tockwogh town and his interactions with them, and he also mentioned the Ozinies, who lived nearby to the south and who the team concluded were the people whom subsequent Europeans called the Wicomiss. While Smith did not explicitly record the Chester River on his map, the team observed after comparing the map with modern nautical charts that one of Smith's inlets is located approximately at the river's mouth. He did not write about the river, either, but Smith's detailed account of his dealings with the friendly Tockwogh and his description of the natural resources of the upper end of the Chesapeake Bay influenced the first wave of English settlement in the region as personified by William Claiborne. This young entrepreneur, who was born in 1600 and arrived in the Virginia colony at age twenty-one, subsequently explored the northern Chesapeake and traded with the Susquehannock. In 1631, he established a trading post on Kent Island (which Smith had included on his map) off the mouth of the Chester River, and the site quickly

became the focus of settlement. Despite a long-standing story of a conversation in London between Smith and Claiborne, the team found no clear link or contact between the two. It seemed obvious, however, that Smith's map and writings were influential in Claiborne's later exploration and settlement of the Chester River area.

To study the area in light of Criterion 2 (closeness of association with the 17th-century Indians), the team reviewed the ample literature concerning archaeology and the history of the Native peoples on and near the Chester River, beginning with Smith's quite detailed account of the Tockwogh and their palisaded town. Although the site of the Ozinies (Wicomiss) town has not been positively identified, the location of the symbol on Smith's map placed it close to the Chester River, and the team speculated that Indiantown Farm on the south side of the river may in fact be the site. In addition, so many Late Woodland and Contact Period sites have been found on the river and its tributaries that it is apparent that the Native occupation before and during the 17th century was substantial. Using predictive modeling, and comparing the results with known sites, the team concluded that much of the

environment of the Chester River and its tributaries was ideal for such occupation. The population density there, the team concluded, may well have been higher than other studies have predicted. Trade beads of the general time frame of the Smith era have been found at a number of sites, further strengthening the association of the river with the Native peoples of the 17th century, who utilized it as a highway of commerce as well as a source of sustenance.

With regard to Criterion 3 (closely illustrative of the natural history of the 17th century), the team noted multiple contemporary descriptions of the area's flora and fauna, including those of Smith, Father Andrew White (1634), and various early settlers and their letters, diaries, and official records. From oysters to flying squirrels, from arrow arum to prairie grasslands and giant oaks, the natural resources and wonders of the northern Chesapeake greatly impressed the early European visitors and settlers. The Chester River continues to sustain a wide variety of wildlife and plant life today, although some species, including oysters and most predators, have declined or disappeared. Seasonal waterfowl pass through the area on the Atlantic Flyway, the deer population is substantial, and native and introduced plants vie for space along the waterline. Despite the inevitable changes that settlement and development have produced, however, the team was impressed by the extent to which much has remained little changed. Because so many acres of land adjoining the river and its tributaries are permanently protected, the team concluded that the natural environment as it exists today is "representative" of the environment of the 17th century to an unusually high degree. The team offered detailed examples, segment by segment, of the Chester River and its tributaries. Citing the conclusions of other groups that have studied the Chester River, such as the Eastern Shore Heritage Area management team, the research team concludes that "the Chester River retains a remarkable ability to illustrate landscapes and habitats that were present when John Smith visited the Upper Bay."

CONCLUSIONS

The team concludes that the Chester River and its tributaries are sufficiently closely associated with the three CAJO themes that they meet all three criteria for a connecting trail. The association is moderate under Criterion 1, since Smith did not himself explore the river, note it on his map, or write about it. He did, however, describe the natural resources and Native peoples of this part of the Upper Bay area in enough detail to influence and attract subsequent explorers and settlers such as William Claiborne. The team found the association of the river with 17th-century Indians (Criterion 2) to be substantial. Smith's account of his encounter with the Tockwogh, the later experiences of Claiborne and other traders, the evidence offered by the numerous Late Woodland and Contact Period sites and the artifacts found there, and the likelihood of a large number of other such sites based on the positive results to date from predictive modeling, all support the team's conclusion. Likewise, with regard to Criterion 3, the team found that the Chester River possesses substantial potential for

***Kalmar Nyckel* off Chestertown, Downrigging Weekend 2007**
Courtesy John L. Seidel

Marsh and forest on Eastern Neck Island
Courtesy National Fish and Wildlife Federation

illustrating the natural history of the 17th-century Chesapeake. A high percentage of the land along the river and its tributaries is protected and many other stretches of the watercourse are free of development or lightly altered, thereby visually representing and illustrating the river as it appeared in Smith's day.

The team specifically identified the following stretches of the Chester River and its tributaries as meeting the three criteria for a connecting trail: The main stem of the Chester River, from its mouth and connection with the main trail upstream to the town of Millington; the entire length of Church Creek (Kent County); Grays Inn Creek from its mouth to the fork at Skinners Neck (Kent County); the upper portion of the West Fork of Langford Creek, on either side of Poplar Neck to Ricauds Branch Road (Kent County); Morgan Creek from its mouth north to a point just below Rt. 213, Augustine Herrman Highway (Kent County); Walsey Creek from its mouth to the intersection with Rt. 50-301 (Queen Anne's County); Queenstown Creek, from its mouth up the north branch to its end (Queen Anne's County); Tilghman Creek, from its mouth to the end (Queen Anne's County); Emory Creek, from its mouth to the end (Queen Anne's County); and Island Creek (Queen Anne's County), from its juncture with Southeast Creek to Sparks Mill Road (on both the east and west forks).

POTENTIAL INTERPRETIVE SITES

The team identified several public landings, water access points, piers, parks, and wildlife management areas that are suitable for interpretation. These are noted on the accompanying map in the team's report.

RECREATIONAL OPPORTUNITIES

The Chester River, a 46-mile-long tributary of the Chesapeake Bay, features rural landscapes, pristine wetland habitats, and numerous historic sites and recreational opportunities. The Chester River Water Trail provides canoeists, kayakers, and small-boat enthusiasts with unique recreational opportunities on some of America's most scenic tidal waters.

Choptank River

RESEARCH TEAM

Dr. John L. Seidel, Director of Washington College's Center for Environment & Society (CES) and Professor of Anthropology & Environmental Studies at Washington College, led the team and wrote the report. Dr. Seidel has more than thirty years of experience in archaeology, historic preservation, and environmental assessment. Washington College, through CES, the Public Archaeology Laboratory, and the Geographic Information Systems Laboratory, has conducted extensive primary research on the history and archaeology of the Chester River, including archival research, field archaeology on Native American and early colonial sites, and maritime archaeology and remote-sensing surveys in the river. Elizabeth Seidel, Director of Washington College's Public Archaeology Laboratory, was the lead researcher, and has more than twenty years of experience in archaeology and archival research. Prof. William Schindler, of Washington College's Department of Sociology and Anthropology, and Darrin Lowery, a staff archaeologist with the Washington College Public Archaeology Laboratory and Smithsonian Institution Predoctoral Fellow, assisted with the assessment of American Indian associations with the connecting trail. Dr. Ralph Eshelman, a private consultant with expertise in paleontology, archaeology, and history, previously surveyed the upper Choptank River in a project that resulted in a water trail along the Choptank and Tuckahoe Creek. Stewart Bruce, Program Coordinator of the Washington College GIS Laboratory, and Buffy Conrad, a student intern in the GIS Lab, gave GIS support.

STUDY AREA

The team established the study area as the main branch of the Choptank River from its mouth and connection with CAJO upstream to just above Greensboro in Caroline County, Maryland, as well as Tuckahoe Creek and all of the tributaries that are navigable by boat, canoe, or kayak. The tributaries at the mouth of the river, including the Tred Avon River and several small creeks, were not included. The study area was otherwise broadly defined to include accessible sites potentially related to the three criteria.

Contact Period artifacts, Poplar Island, MD
Courtesy Darrin Lowery, Center for Environment and Society, Washington College

Aerial view, Kings Creek *Courtesy Aloft Aerial Photography*

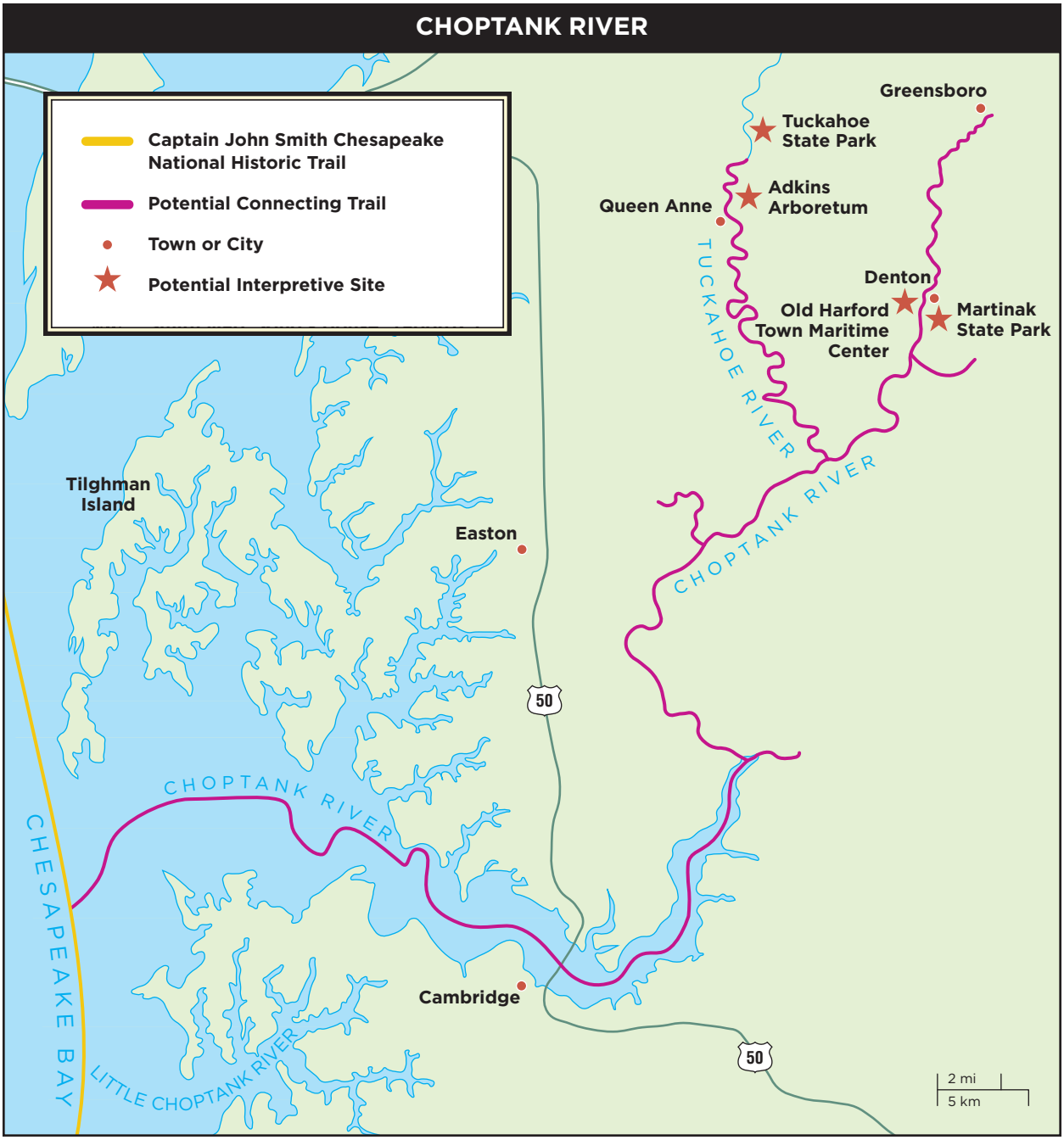
RESEARCH METHODS AND RESULTS

The team described the Choptank River as the longest on the Eastern Shore and noted that in 1985 the Maryland Rivers Study Wild and Scenic Rivers Program selected it as one of four state rivers with a composite resource value of greater than statewide significance. Assessing the river under Criterion 1 (close association with Smith's voyages), the team also noted the observation that "no river in the Chesapeake region has done more to shape the character and society of the Eastern Shore than the Choptank." The team's research into the writings of Smith and others appears to support this conclusion. Despite the river's subsequent significance, the team acknowledged that John Smith missed the river as he and his crew "hasted for the river Bolus [Patapsco]," probably because Sharps Island (which was larger in Smith's day) concealed it from his view. Smith neither mapped nor described the river in his writings, but his map and publications focused the attention of subsequent explorers and settlers on the Eastern Shore. Those who followed Smith included John Westlock, who by 1620 was trading with the Manokin in present-day Somerset County, Maryland, and William Claiborne, who established a trading post near the Chester River in 1631. Other traders and settlers followed on their heels.

Under Criterion 2 (closeness of association with 17th-century Indians), the team noted that Smith described in some detail the Native inhabitants of rivers to the south of the Choptank (the Pocomoke and Nanticoke) as well as the Sassafras (Tockwogh) to the north. Smith noted his encounter with the Tockwogh in great detail, and the team presented his description of the people as likely being typical of other tribes in the region. Like the Tockwogh, the Native peoples of the Choptank River and its tributaries used the watercourse as a highway of commerce and warfare. They also relied on it for fish and fowl, and grew crops and hunted along its banks. A dozen archaeological sites have been identified on the river and on Tuckahoe Creek that date to the Late Woodland and Contact Period, and most of them contained trade beads and other artifacts dating to early in the 17th century. One even included 16th-century-dated coins. The team applied predictive modeling to the river based on the data available at the Maryland Historical Trust, and concluded that it indicated "the potential for a higher density of Native American occupation than has been previously uncovered along the Choptank." The known Indian tribes who lived along the Choptank (which was also their collective name) were the Transquaking, the Ababco, and the Hatsawap, and they traded with Westlock, Claiborne,

and other Europeans. The Choptank signed a treaty with the Maryland colony in 1659 that established a reservation for them; it continued in existence until 1799. Several Choptank archaeological sites have been identified on former reservation land.

With regard to Criterion 3 (closely illustrative of the Bay's 17th-century natural history), the team cited the descriptions of the Upper Chesapeake written by Smith, Father Andrew White, and others. Like the Chester River (indeed the Bay as a whole), the Choptank historically supported a vast array of marine life as well as migratory birds, deer and predators, and trees and grasses. Because oak-hickory forests predominated in the upper Choptank, mast was plentiful and supplied squirrels, turkeys, and deer, which in turn supported the human population. Today, much of the Choptank shoreline is either protected by "critical areas" legislation (especially marshlands) or is under easements held by the Maryland Environmental Trust, the Maryland Historical Trust, agricultural land-preservation



districts, Rural Legacy areas, and the like. Although these protected areas vary in size, in total they are large and help to keep the river shoreline "representative" of the environment of 1608, if not "replicating" it. The team explored the river and its tributaries by boat and the final report offers detailed descriptions of the various segments. The team concluded that the Choptank River "retains a remarkable ability to illustrate natural landscapes similar to those of the 17th century, as well as to interpret cultural landscapes of both Native peoples and early colonists."

CONCLUSIONS

The team concludes that the Choptank River and several of its tributaries are sufficiently closely associated with the three CAJO themes that they meet all three criteria for a connecting trail. The association with Criterion 1 is moderate since Smith did not himself explore the river, note it on his map, or write about it. The Smith map, however, indicated islands at the mouth of the Choptank that included Sharps Island and Tilghman Island. It also suggested that interior waterways existed on the Eastern Shore behind the islands that obscured Smith's view. Smith's contemporaries relied on his map, which with his writings illustrated the Bay's potential as a trading region and as an area for settlement. Westlock, Claiborne, and others followed Smith's lead with trading posts and settlements. Smith's exploratory voyages clearly had a substantial effect on the settlement of the Choptank River. The team found a substantial association of the river with 17th-century Indians (Criterion 2). The accounts of Smith and others, as well as the outcomes to date of predictive modeling for the likelihood of a large number of Late Woodland and Contact Period sites, are cited in support of this conclusion. Most important, archaeological investigations have revealed abundant evidence of interactions between Native inhabitants of the river and European traders. A dozen sites have yielded early glass trade beads and some of the few Contact Period copper artifacts from the region. Finally, in consideration of Criterion 3 (close association with the natural history of the 17th-century Chesapeake watershed), the team concluded that the Choptank River has substantial potential to illustrate the natural history of that period. An unusually high percentage of the land is protected by easements and other arrangements, and some portions of the river well represent the species diversity of the period. Along much of the river, and on certain tributaries such as Tuckahoe Creek and Kings Creek, the shoreline is evocative of the 17th century.

Oyster aquaculture at Marinetics, Todds Point
Courtesy Michael Hardesty, Center for Environment and Society, Washington College

The team concludes that the following portions of the Choptank River and its tributaries meet all three connecting trail criteria: the main stem of the river from its mouth and connection with CAJO upstream to the town of Greensboro; the smaller creeks shown on the accompanying map but especially such important tributaries as Hunting Creek to its fork, Hog Island and its small guts, Kings Creek to a point approximately one mile above the Kingston Bridge Road, Watts Creek to Double Hill Road, and Tuckahoe Creek from the confluence with the Choptank to Mason Bridge at the north end of Tuckahoe State Park.

POTENTIAL INTERPRETIVE SITES

The team identified numerous potential interpretive sites, which are shown on the accompanying map. They include Tuckahoe State Park and Adkins Arboretum, Martinak State Park, Old Harford Town Maritime Center and Museum, and a few historical sites.

RECREATIONAL OPPORTUNITIES

The Choptank River, called "the noblest watercourse on the Eastern Shore," has excellent recreational opportunities, offering the public some of the Eastern Shore's best fishing, canoeing, and birding experiences. The Choptank and Tuckahoe Rivers Water Trail encompasses 80 miles along the two rivers, linking multiple public access points, state parks, and natural and historic areas.

Susquehanna River

RESEARCH TEAM

The research team's professional staff included Katherine Faull, Professor of German and Humanities, Bucknell University, Moravian–Native American contact studies; Donald Grinde, Professor of American Studies and History, State University of New York at Buffalo, Iroquois history and New York Indian cultures and history; Ben Marsh, Professor of Geography and Environmental Studies, Bucknell University, cultural landscapes and GIS mapping expert; David Minderhout, Professor Emeritus of Anthropology, Bloomsburg University, Pennsylvania and Delaware Indian cultures and history; and Alfred K. Siewers, Associate Professor of English, Coordinator of the Nature and Human Communities Initiative, environmental cultural studies. Donald Grinde and Sid Jamieson were the Native American advisors. The interns who assisted with research included undergraduates Emily Bitely, Bucknell University, and Jessica Dowsett, Bloomsburg University; graduates Molly Clay, Jenny Stevens, and Joseph McMullen III, of Bucknell University; and Mary Kohler, Ph.D. candidate at SUNY Buffalo.

STUDY AREA

The team divided the river into four segments for the purposes of its study: Lower Susquehanna River (Havre de Grace, MD–Harrisburg, PA); Middle Susquehanna (Harrisburg-Sunbury); Confluence Area, West Branch (Sunbury–Lock Haven) and Main Branch (Sunbury–Wyoming Valley); and Upper Susquehanna Valley and Headwaters (Wyoming Valley–Cooperstown, NY). Various members of the team studied specific segments.

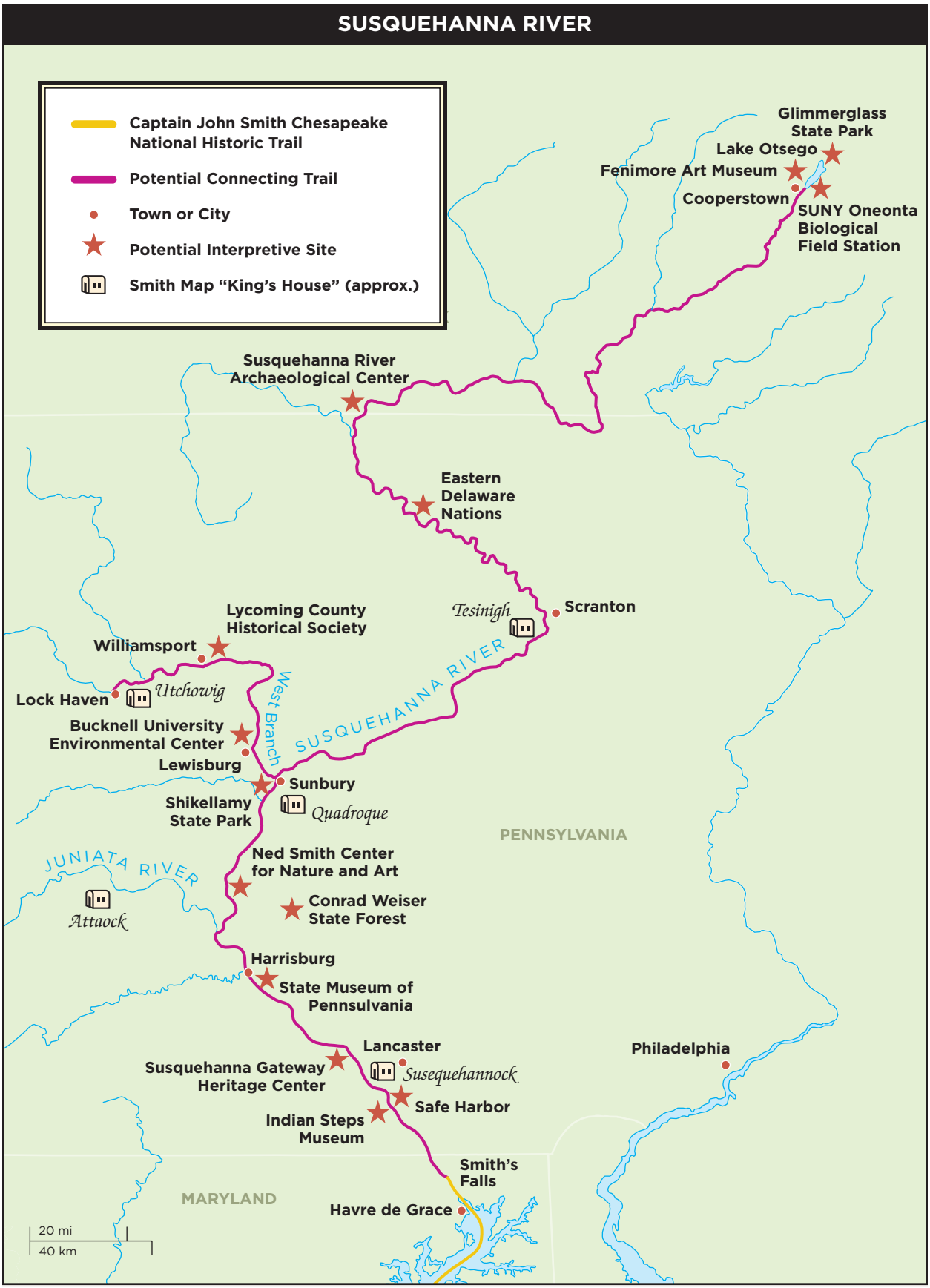
RESEARCH METHODS AND RESULTS

The team examined the evidence for closeness of association with Criterion 1 (John Smith's exploration of the Bay and its tributaries). Smith traveled up the Susquehanna River to Smith's Falls near the present-day Conowingo Dam in northeastern Maryland, mapped the river to that point, and also wrote about it. He obtained the locations of the Susquehannock towns "by relation" from the Susquehannock whom he met near the falls and recorded the river and towns on his map as well. These towns

John Smith map, showing Susquehanna River and Indian towns

include Sasquesahanough, Quadroque, Attaock, Utchowig, and Tesinigh. The best-known town is Sasquesahanough (Susquehannock), the site of which has been identified archaeologically near Washington Boro. The locations of the others, which have been the subject of extensive debate and investigation over the years by many archaeologists and historians, have proved elusive. The research team, by georeferencing modern locations onto Smith's map, estimates that the site of Utchowig, the farthest-northwestern town on Smith's map, may have been located at Williamsport on the West Branch, or perhaps as far west as Lock Haven. Tesinigh, which stood as far up the North Branch as Smith's map extends, may have been located at present-day Wyoming near Wilkes-Barre. South of those towns and north of Susquehannock town, Attaock may have been located somewhere on the Juniata River, while Quadroque might have been at present-day Sunbury. Despite the uncertainty about the towns' locations, however, it is clear that Smith's map represents (with reasonable accuracy) Susquehannock territory from the mouth of the river on the Chesapeake Bay north to within about fifty miles of the present-day Pennsylvania–New York border—a straight-line distance of about one hundred and thirty miles. And Smith only saw about the first ten of those miles for himself.

Under Criterion 2 (close association with the 17th-century Indians), the team noted that the origins of


SUSQUEHANNA RIVER
Captain John Smith Chesapeake National Historic Trail
Potential Connecting Trail
Town or City
Potential Interpretive Site
Smith Map "King's House" (approx.)
Glimmerglass State Park
Lake Otsego
Fenimore Art Museum
Cooperstown
SUNY Oneonta Biological Field Station
Susquehanna River Archaeological Center
Eastern Delaware Nations
Tesinigh
Scranton
Lycoming County Historical Society
Williamsport
Lock Haven
Utchowig
West Branch
SUSQUEHANNA RIVER
Bucknell University Environmental Center
Lewisburg
Sunbury
Quadroque
Shikellamy State Park
PENNSYLVANIA
JUNIATA RIVER
Ned Smith Center for Nature and Art
Conrad Weiser State Forest
Attaock
Harrisburg
State Museum of Pennsylvania
Lancaster
Susquehannock
Susquehanna Gateway Heritage Center
Safe Harbor
Indian Steps Museum
Philadelphia
Smith's Falls
MARYLAND
Havre de Grace
20 mi
40 km

the Susquehannock have been, like the sites of their towns, the subject of considerable debate among scholars. At the present, however, there seems to be general agreement that the Iroquois culture of which the Susquehannock were a part has been confirmed archaeologically to have arisen on the Susquehanna River north of today's Harrisburg near Liverpool. It then spread north along the river into present-day New York, where numerous sites (the Owasco culture) confirm the link through burial patterns, bone technology, and ceramics. Evidence of this culture is found as far north as Lake Ontario and the Mohawk Valley. As the culture spread during a period of global warming, groups became increasingly isolated in terms of culture and dialect, and evolved into the tribes known as Mohawk, Oneida, Onondaga, Seneca, Cayuga, and Susquehannock, who are now generally acknowledged to be of Mohawk ancestry. About 1300 AD, the onset of the Little Ice Age gradually resulted in the movement of the Susquehannock south to the lower stretches of the river, although it was the Native people who were there at least three hundred years earlier who created the notable Safe Harbor petroglyphs that dot the river near Conestoga.

Late in the 17th century and into the 18th century, Iroquois and other tribes settled along the North Branch in the vicinity of Sunbury, where the town of Shamokin grew up. This may also have been the site of Quadroque, according to georeferencing Smith's map. The Iroquois Confederacy, which consisted of the Five Nations of upstate New York (Mohawk, Oneida, Onondaga, Seneca, and Cayuga), waged a long campaign early in the 17th century to conquer the wayward Susquehannock and control the full extent of the river—the primary highway of trade. Ultimately, the Susquehannock reunited with their northern brethren, whether by being "conquered" by them or by seeking refuge from the onslaught of European frontiersmen. The story of their subsequent decline in Pennsylvania and reunification with the Iroquois in upstate New York is well documented.

Less well known, perhaps, is the connection of the Susquehanna with the Nanticoke River of Maryland and Delaware, which John Smith visited and described. During the first half of the 18th century many Nanticoke, pressed by European settlers, relocated from the Eastern Shore of Maryland to the Susquehanna River. They settled first around the mouth of the Juniata River north of Harrisburg and then moved north to the vicinity of Wyoming near Wilkes-Barre.

The team assessed the river under Criterion 3 (illustrative of the natural history of the Bay and its tributaries in the 17th-century). Bone fishhooks and stone net sinkers found at many sites underscore the importance of the river's natural resources as sustenance for the Susquehannock and the other cultures that lived along its shores. Oak, chestnut, and hickory forests supplied nuts and mast as food for deer, elk, bear, and humans. Anadromous fish such as shad, as well as local fish species and freshwater mussels were abundant. The Susquehanna River Valley is famously one of the richest agricultural areas in the United States today and was likewise naturally fertile in the 17th century. Susquehannock women cultivated large quantities of beans, corn, and squash in their gardens. Archaeological evidence, specifically the analysis of bones recovered from Susquehannock burial sites, confirms that the people were "robust and well fed." In addition, Smith described them as "giants," but his description is generally discounted (although the Susquehannock leaders may have sent their largest warriors to meet and impress Smith). Besides being a fertile source of food, the Susquehanna River was also a major highway of commerce and warfare for the Native peoples.

CONCLUSIONS

The team concludes that the Lower Susquehanna River (Havre de Grace, MD–Harrisburg, PA) has a

Susquehanna River, Washington Boro, near site of Susquehannock town *Courtesy Joseph McMullen, Bucknell University*

substantial association with Smith's exploration of the Bay and its tributaries (Criterion 1). This is a part of the river that, according to available evidence and georeferencing, Smith either visited himself or described and mapped by relation from the Native inhabitants. In addition, it is this part of the river that has substantial association with the Susquehannock from Smith's contact with them until the massacre at Conestoga and the return of the survivors to New York (Criterion 2). This segment also contains parts of the river reminiscent of the colonial settlement era, thus substantially associating it with the natural history of the Bay in the 17th century (Criterion 3).

The Middle Susquehanna (Harrisburg-Sunbury), which Smith mapped but did not write about, is moderately associated with his exploration (Criterion 1) and is substantially associated with the history of the Indians of the 17th century (Criterion 2). Its natural history relates to that of the Bay, and stretches of the river are evocative of conditions in the 17th century (Criterion 3), giving it substantial association.

The team concludes that the Confluence Area, West Branch (Sunbury–Lock Haven) and Main Branch (Sunbury–Wyoming Valley), is substantially associated with the Indians of the 17th century (Criterion 2) and the natural history of the Bay and its tributaries (Criterion 3). John Smith also mapped the area by relation from the Susquehannock, although today the locations of Utchowig and Tesinigh are unknown (Criterion 1); the association is moderate.

Finally, the team concludes that the Upper Susquehanna Valley and Headwaters (Wyoming Valley–Cooperstown, NY) segment is also substantially associated with the Indians of the 17th century (Criterion 1) and the natural history of the Bay's tributaries (Criterion 3). The archaeological record illustrates both criteria especially well, with many town and fishing sites identified. The connection with Smith's voyages (Criterion 1) is indirect, since he neither explored nor mapped this region.

The team concludes, then, that the various segments are sufficiently closely associated with at least two of the three CAJO themes and therefore meet at least two of three criteria for a connecting trail, as described above.

Petroglyph, Susquehanna River
Courtesy Ben Marsh, Bucknell University

POTENTIAL INTERPRETIVE SITES

The team identified a large number of potential interpretive sites along the Susquehanna River. They include the Safe Harbor petroglyphs; Susquehanna Gateway Heritage Center; Indian Steps Museum; State Museum of Pennsylvania (Harrisburg); Ned Smith Center for Nature and Art; Conrad Weiser State Forest and Bucknell Roaring Creek Facility; Shikellamy State Park; Lycoming County Historical Society; Bucknell University Environmental Studies Center; Susquehanna River Archaeological Center; Eastern Delaware Nations; Haudenosaunee (Iroquois) Confederacy; Fenimore Art Museum; Glimmerglass State Park; and SUNY Oneonta Biological Field Station at Lake Otsego.

RECREATIONAL OPPORTUNITIES

From its headwaters in Cooperstown, New York, south to the Chesapeake Bay at Havre de Grace, the Susquehanna River is one of the largest rivers in the United States and provides tremendous recreational opportunities. The Susquehanna River Water Trail consists of more than 550 miles of water trails on the North Branch, West Branch, and main stem of the river in Maryland, Pennsylvania, and New York. The water trail has been recognized as an American Canoe Association Recommended Trail and is part of the Pennsylvania Water Trail System and the Chesapeake Bay Gateways and Watertrails Network.

Upper James River

RESEARCH TEAM

Jeffrey L. Hantman, Ph.D., Associate Professor and Director, Program in Archaeology, Department of Anthropology, University of Virginia, was the researcher. He has for decades collaborated with the Monacan Indian Nation of Amherst County to explore the research and interpretive areas of interest to the Monacan people. His research in archaeology is concerned with regional systems and cultural change, especially change that resulted from colonialism. He also studies early relations between European colonists and Indians, relations between Native peoples in the centuries before and during European colonization, and the present-day effects of colonialism on Native peoples.

STUDY AREA

The researcher divided the Upper James River into two segments. The first begins at the connection to CAJO at the Falls of the James at Richmond and extends upstream to its confluence with the Tye River, at about the farthest distance represented on Smith's map. This segment is located mostly in Virginia's Piedmont to the foothills of the Blue Ridge. The second segment continues west from that point to the juncture with the Cowpasture and Jackson Rivers near Iron Gate, where the James River proper begins in the Appalachian Mountains. Smith did not map this segment of the James River.

RESEARCH METHODS AND RESULTS

With regard to Criterion 1 (close association with Smith's explorations of the Bay and its tributaries), the researcher concludes that the Upper James River has an unusual connection. Although Smith never explored it, and the paramount chief Powhatan allowed other English colonists very limited access to the region beyond the Falls, that region loomed large over the political and diplomatic history of the early colony in its relations with the Powhatan. One can speculate about why Powhatan stymied the colonists in their attempts to visit this country: fear of an alliance between the English and Powhatan's alleged "enemies," the Monacan; or a desire on Powhatan's part to engage the English as allies against the Monacan when the paramount chief deemed it expedient? The reasons probably will never be known, but the Monacan and the Upper James always seemed to lurk in the background of the negotiations and conversations between English leaders such as Smith and Powhatan. Nonetheless, Smith was able to learn enough about the region, probably from conversations with the Powhatan, accurately to depict the Upper James and several Monacan towns on his map and write knowingly about the area in his publications. Remarkably, despite the allure of the Upper James's reputed mineral resources, Europeans did not explore it until John Lederer's expeditions in 1670 and did not settle there until the first quarter of the 18th century.

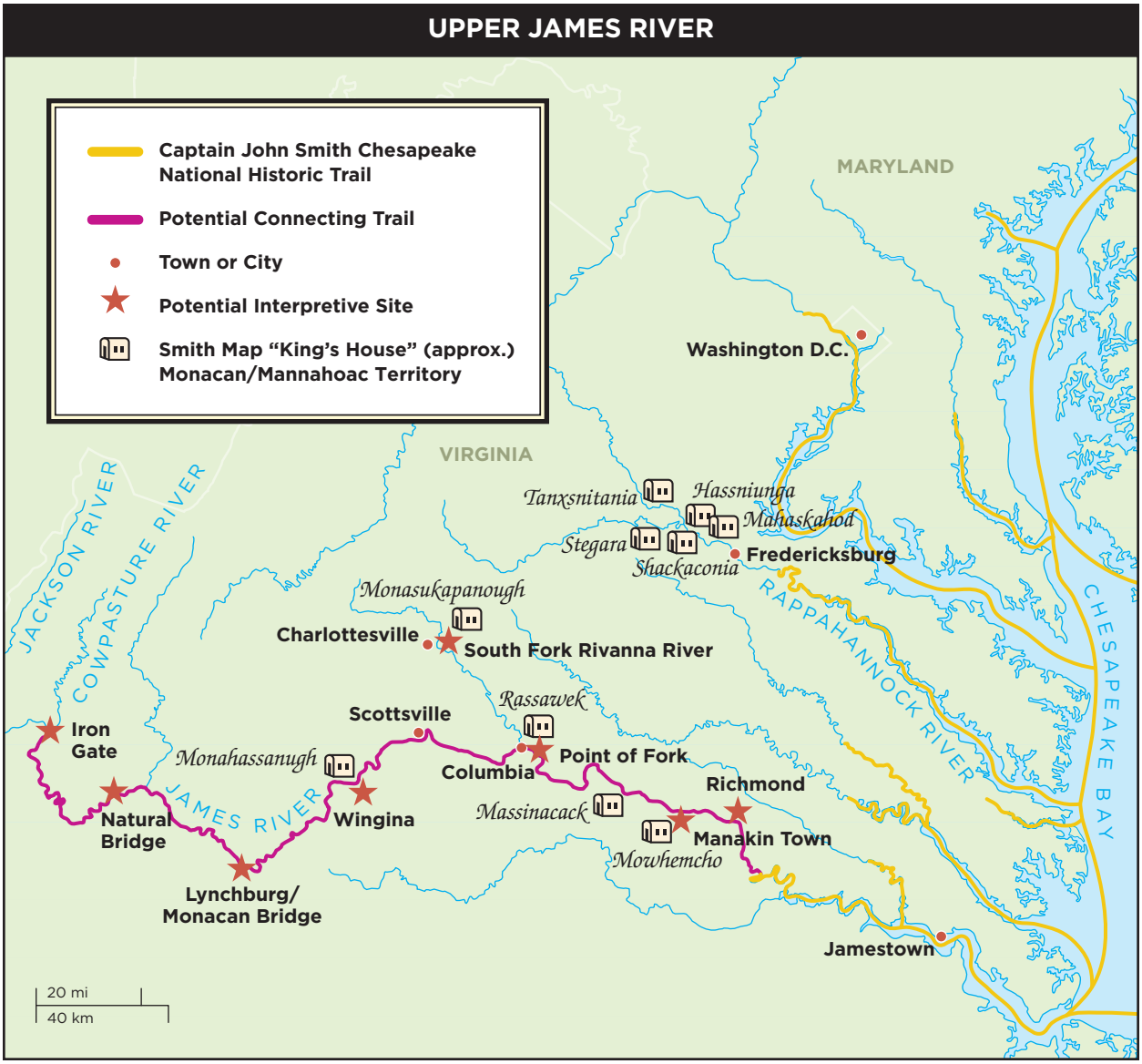
The researcher concludes that a good deal is known about the association of the Upper James River drainage with the Indians of the 17th century (Criterion 2). "By relation" from the Indians, Smith wrote about the Monacan and their likely ethnological kinsmen on the upper reaches of the Rappahannock River, the Mannahoac. One of the most remarkable conversations about the area took place when a wounded and captive Mannahoac, Amoroleck, answered Smith's questions about his "world" and provided Smith with a great deal of information about the inhabitants of the Virginia Piedmont. Additional information is available today from the numerous archaeological sites that have been excavated along the Upper James River,

Falls of the James River
Courtesy John S. Salmon

Archaeological site of a Monacan house at location of Monahassanaugh "King's town" identified on John Smith's map, Upper James River, Nelson County
Courtesy Jeffrey L. Hantman

where artifacts common to the Monacan have been identified. The most famous of these sites is Thomas Jefferson's Monacan mound on the Rivanna River near Charlottesville, which he excavated in 1787 in the first scientific archaeological study in the present-day United States. Other sites including those of two towns that Smith recorded on his map—Monahassanaugh and Monasukapanough—have yielded data concerning the Monacan occupation before and after Smith's time.

Criterion 3 (closely illustrative of the natural history of the 17th-century Chesapeake Bay and its tributaries) is discussed both in light of what archaeological studies have revealed and what is known today about the mineral resources of the



Upper James region. The archaeological sources present evidence of familiarity with copper and its uses among the Monacan. Clearly, the Native inhabitants also hunted, fished (especially during the seasonal migrations of anadromous species such as shad), and farmed plots of corn in the bottoms. In addition, although parts of the Upper James River have been altered over the centuries by agriculture and the construction of towns and dams, much of it still remains reminiscent of the river that John Smith described and the Monacan peoples knew intimately.

CONCLUSIONS

The researcher concludes that both segments of the Upper James River are substantially associated with and illustrative of the Indian inhabitants of the 17th century and the natural history of the Chesapeake Bay and its tributaries (Criteria 2 and 3). The first segment, in addition, is substantially associated with the exploration of the Bay and its tributaries by Smith and the other colonists, in that he learned about it "by relation" from the Indians and mapped and described it accurately (Criterion 1). The association of the second segment with Smith is indirect. The entire Upper James River, then, from the Falls at Richmond to the juncture with the Cowpasture and Jackson Rivers at Iron Gate, meets at least two of the three criteria for a connecting trail.

POTENTIAL INTERPRETIVE SITES

The researcher identified ten potential sites. They include the Falls of the James at Richmond; the site of Manakin Town; Point of Forks, Columbia; site of Monasukapanough town and site of Jefferson's Monacan burial mound, South Fork, Rivanna River, Charlottesville; site of Monahassanaugh and site of largest Monacan archaeological excavation on the James River, at Wingina, west of Scottsville; Monacan Bridge, Lynchburg; Natural Bridge; and Iron Gate, the junction of the Cowpasture and Jackson Rivers, where the Upper James begins.

RECREATIONAL OPPORTUNITIES

Tremendous recreational opportunities exist along the Upper James River, including boating, canoeing, fishing, hiking, biking, birding, and other outdoor experiences. In addition, Botetourt County Tourism manages the Upper James River Water Trail, which guides visitors on the river and the adjacent lands.

17th-century arrow points from Monasukapanough "King's town" identified on John Smith's map, Upper James River
Courtesy Jeffrey L. Hantman and University of Virginia Center for Digital History

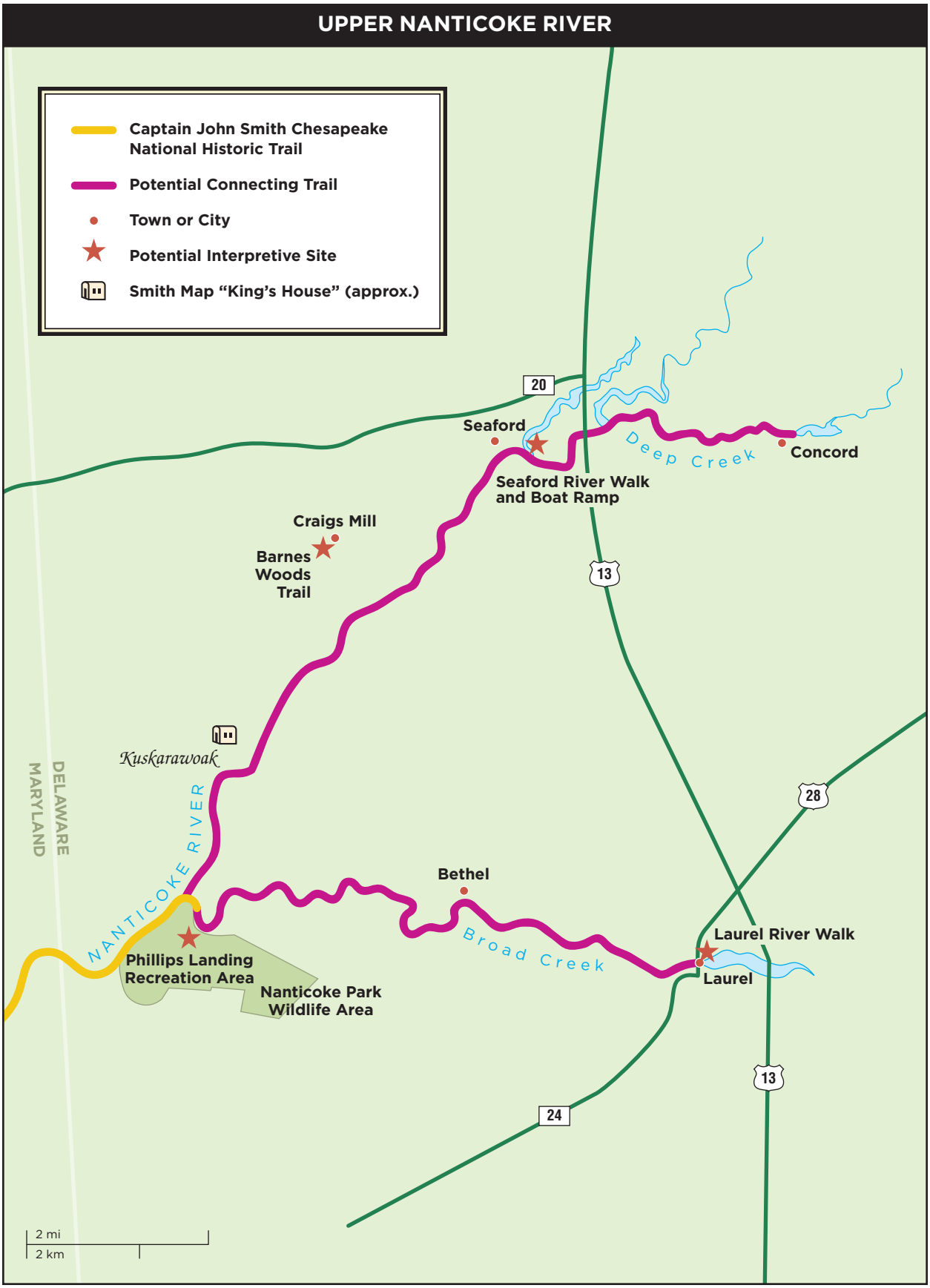
Upper Nanticoke River

RESEARCH TEAM

Daniel R. Griffith, M.A., the principal researcher, has thirty-five years of experience in the study of American Indian history and the archaeology of Delaware and served as the Delaware State Archaeologist and State Historic Preservation Officer for sixteen years until his retirement in 2005. He participates in and advises others on fieldwork and research on regional American Indian sites. He served for two years as the Director of the Roosevelt Inlet Shipwreck Project in Lewes, Delaware, and is the project director for the Archaeological Society of Delaware for the Avery's Rest Project (1675–1682). For ten years he has taught archaeology and Native American history as an adjunct professor to the Department of History at Wesley College in Dover, Delaware. Virginia R. Busby, Ph.D., conducted documentary research related to the John Smith voyages and Native occupations of the study area. She has more than sixteen years of experience in archival and archaeological research on the 17th-century Nanticoke River and its Native and colonial settlements. She also has worked with indigenous and other local populations, conservation groups, and local municipalities in both Delaware and Maryland, particularly regarding land and historic site preservation, oral history, and historical and cultural interpretation. She now serves as a commissioner for the Maryland Commission on Indian Affairs. William H. Davis, historian for the Nanticoke Indian Association, Inc., in Millsboro, Delaware, provided an understanding of the landscape and history as a knowledgeable descendant of the Indian populations that interacted with John Smith, his crew, and subsequent colonists.

STUDY AREA

The research team established the study area as the Nanticoke River watershed, starting at the junction with CAJO at Broad Creek in Delaware and extending upstream generally eastward on the river's branches and tributaries. The river drains about a third of the land in the present-day state of Delaware. To distinguish the upstream Delaware portion of the river from the downstream part in Maryland, the former is referred to in the report as the Upper Nanticoke River.

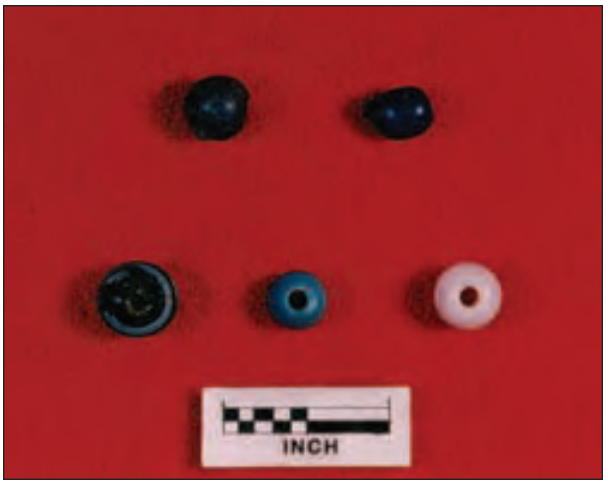

UPPER NANTICOKE RIVER
Captain John Smith Chesapeake National Historic Trail
Potential Connecting Trail
Town or City
Potential Interpretive Site
Smith Map "King's House" (approx.)
20
Seaford
Deep Creek
Concord
Seaford River Walk and Boat Ramp
Craigs Mill
Barnes Woods Trail
13
Kuskarawoak
DELAWARE
MARYLAND
NANTICOKE RIVER
28
Bethel
Broad Creek
Laurel River Walk
Laurel
Phillips Landing Recreation Area
Nanticoke Park Wildlife Area
13
24
2 mi
2 km

RESEARCH METHODS AND RESULTS

The team consulted primary and secondary sources including the map and writings of John Smith and the proceedings of the Council of Maryland and Somerset County in the Archives of Maryland, conducted interviews with members of the Nanticoke tribe, and made a kayak trip on the Nanticoke River and Broad Creek to examine and photograph the natural environment and important archaeological sites. In addition, the team reviewed archaeological site reports and studied artifacts at the state's Division of Historical and Cultural Affairs.

To analyze the closeness of the association of the Upper Nanticoke with Smith's voyages of exploration (Criterion 1), the team carefully reviewed the literature and the various interpretations of Smith's description of this part of his journey. Scholars have intensely debated the location of a key Indian town, Kuskarawoak. While there is some evidence that the town may have been located at today's Vienna, Maryland, at the site of the Chicone Nanticoke Indian Reservation, the team determined that Smith's writings as well as archaeological evidence strongly indicates its location as being in present-day Delaware on the north side of the Upper Nanticoke River, inland from the river's mouth as was typical of "King's Houses" then. Scholars have also questioned whether Smith could have reached that site from the mouth of the river within the date range he gave in his writings. The team determined that to travel the required distance was indeed achievable in the speedy Indian canoes available to Smith. Much depends, the team decided, on a reader's correctly interpreting the 17th-century meanings of the words Smith used to describe his location and activities. The team concludes that both Smith's words and archaeological research support not only the location of Kuskarawoak in Delaware but also the location of the "trading branch" that Smith mentioned, which was likewise in Delaware, probably on Prickly Pear Island where trade goods such as beads and pipe fragments typical of the early 17th century have been found.

The team examined the historical and archaeological record to determine the closeness of the association of the Upper Nanticoke River with 17th-century Indians (Criterion 2). Smith reported that the Nanticoke lived in five towns, and he mapped three of them (Nause and Nantaquak in present-day Maryland and Kuskarawoak in today's Delaware). Smith recorded but did not map two other towns, Sarapinagh and Arseek; probably the Indians told him about them. The Nanticoke used the river and the Bay as part of their trading network, in addition to utilizing the watercourses' natural resources. Archaeological research identified eight sites on the Upper Nanticoke River and its tributaries that were occupied during the Late Woodland and Contact Period. Diagnostic artifacts from several of the sites included early-17th-century trade beads, fine terracotta tobacco-pipe sherds, and Townsend ceramics. Between the time of Smith's visit and the end of the century, interest in trade between the Europeans and the Nanticoke ebbed and flowed with political conditions and the inevitable decline in trade goods valued by the English, such as beaver pelts. By 1700, the surviving Indians largely inhabited the Chicone Nanticoke Indian Reservation and the Broad Creek Nanticoke Indian Reservation, and by midcentury most had removed to other areas altogether. Many moved to the Susquehanna River in Pennsylvania. Today, Delaware Nanticoke descendants live in eastern Sussex County in Millsboro, where they share their culture with visitors.



Upper Nanticoke River trade beads from Site 75H114, across river from Prickly Pear Island. Group 1, 1600 AD–1700 AD; Group 2, 1690 AD–1740s AD.
Courtesy Charles Fithian, Delaware State Museums, Division of Historical and Cultural Affairs

With regard to Criterion 3 (closely illustrative of the 17th-century Chesapeake watershed), the team found that the Upper Nanticoke River upstream from the Maryland-Delaware state line had relatively few modern intrusions or significant landscape modifications until Butler Mill Branch on the Nanticoke

River and the community of Bethel on Broad Creek. Such intrusions and modifications become more frequent upstream from those points. Historically, in addition, the relative sea level in the Chesapeake Bay watershed has risen between two feet and four and a half feet since 1608, thereby affecting the salinity of tributaries such as the Nanticoke and also the kind and distribution of aquatic and riverside plant and animal communities. Areas close to the Bay that were marshland in colonial descriptions are now shallow creeks; standing dead trees farther inland reflect relatively recent submersions of low-lying but once-dry land. The Upper Nanticoke River therefore may serve as a laboratory in which to trace the changes to the river since Smith's voyages from natural causes as well as from human activities.

CONCLUSIONS

The team concludes that portions of the Upper Nanticoke River watershed in Delaware are substantially associated with all three connecting trail criteria. From the connection with CAJO at Broad Creek, one arm of the potential trail would extend from Phillips Landing there up Broad Creek past Bethel to Records Pond dam in Laurel. The other arm would extend up the main branch of the Nanticoke River to Deep Creek, and then up Deep Creek to Concord Pond dam. Although the Nanticoke Indians occupied the entire watershed, the specified segments are not only substantially associated with the Native peoples, but are also the segments most substantially illustrative of the natural history of the 17th-century Bay watershed (Criteria 2 and 3). In addition, the segment from the CAJO connection upriver to at least the purported site of Kuskarawoak below Barnes Woods is substantially associated with John Smith and his voyage on the river and may be close to where Smith placed the cross that marked the upper limit of his exploration (Criterion 1).

POTENTIAL INTERPRETIVE SITES

The team suggested Phillips Landing, Laurel River Walk, Seaford River Walk and Boat Ramp, and Barnes Woods Trail as potential interpretive sites.

RECREATIONAL OPPORTUNITIES

The Upper Nanticoke River stretches approximately 26 miles through Sussex County, Delaware, and includes important tributaries such as Broad Creek and Deep Creek. Considered one of the most pristine watercourses in the Chesapeake, the river and the Upper Nanticoke River Water Trail link multiple public access points, state parks, and natural and historic areas.

Upper Nanticoke ceramics. Roulette decorated pipe, 1640 AD–1670 AD (far left). Townsend direct cord, 1370 AD–1670 AD (left and below). *Courtesy Daniel L. Griffith, Griffith Archaeology Consulting*

Appendix

RESEARCH TEAMS' EXECUTIVE SUMMARIES AND BIBLIOGRAPHIES

The research teams for each river submitted reports that contained a list of the team members, executive summaries of the team's research and findings, and bibliographies of sources that each team consulted. Each team's sources included certain standard works. John Smith wrote the principal descriptions of his Chesapeake Bay voyages: *A True Relation of such occurrences and accidents of noate as hath hapned in Virginia since the first planting of that Collony* (1608), *A Map of Virginia* (1612), and *The Generall Historie of Virginia, New-England, and the Summer Isles*. They are published in Philip L. Barbour, ed., *The Complete Works of Captain John Smith*, 3 vols. (Chapel Hill: University of North Carolina Press, 1986). Virtually everything the other Virginia colonists wrote during the period is in Edward Wright Haile, ed., *Jamestown Narratives: Eyewitness Accounts of the Virginia Colony: The First Decade: 1607–1617* (Champlain, Va.: RoundHouse, 1998). The most recent study of Smith's voyages is Helen C. Rountree, Wayne E. Clark, and Kent Mountford, *John Smith's Chesapeake Voyages, 1607–1609* (Charlottesville: University of Virginia Press, 2007).

ANACOSTIA RIVER

Executive Summary

The Captain John Smith Chesapeake National Historic Trail (NHT) was created with three stated purposes. These included: the commemoration of the explorations of John Smith in 1607–1609, to recognize associations with 17th-century Indian populations, and to commemorate associations with the natural history of the Chesapeake Bay watershed in the 17th century. The Center for Heritage Resource Studies (CHRS) has conducted a historical and archaeological review of the upper Anacostia watershed in order to evaluate the river for inclusion as a connecting trail to the John Smith NHT. The study examined the entire watershed, but divided the results into the upper tributaries of the Anacostia (Northeast Branch, Northwest Branch, and Sligo Creek) and the main trunk of the Anacostia that runs southward from Bladensburg, Maryland, through the District of Columbia to the confluence with the Potomac River. Both sections of the watershed were evaluated in terms of meeting the same three criteria used to establish the original John Smith NHT.

The Center for Heritage Resource Studies found that the entire watershed can be considered as meeting the criteria. However, it was also determined that one section had a greater association than the other. The main trunk of the Anacostia River, from Bladensburg to Hains Point (See Figure 1), meets the criteria and should be considered for a connecting trail.

Association with Smith's Voyages: *Substantial association*. This area (or at least a significant portion of it) is included on Smith's 1612 Map. Smith, however, does not write about the Anacostia directly. Given the goals of exploration, we argue that either Smith explored the Anacostia himself or directly obtained information about the river for inclusion on his map.

Association with Indians of the 17th Century: *Substantial association*. Smith writes about the village of Nacotchtanke. Archaeology provides evidence of Nacotchtanke's locations and further evidence of use of the eastern bank of the Anacostia. Identified

sites (to date) are predominantly family campsites relating to the procurement of food or resources within the area.

Illustrative of Natural History of Chesapeake Watershed in the 17th Century: *Indirect association*. The Anacostia has been significantly changed into an urban waterway. Portions of the river are being cleaned up and portions (such as Kenilworth Park, the shoreline of the National Arboretum, and the Anacostia Park up through Bladensburg) can be places where the changed environment could be interpreted. Little that resembles the natural environment of the 17th-century Anacostia remains. However, the urban waterway and its cleanup provide a useful foil for interpreting the area in the time of Smith's explorations.

The rest of the upstream river is also related to the above criteria; however, the association is far less strong. As result, CHRS concludes that it does not meet the criteria for a connecting trail.

Bibliography

Beitzell, Edwin W. *Life on the Potomac River*. Abell, MD: N.p., 1968.

Biddle, John F. "Historical Geography of Bladensburg, Maryland." MA thesis, Catholic University of America, 1954.

Bowie, Effie Gwynn. *Across the Years in Prince George's County*. Richmond, VA: Garrett and Massie, Inc., 1974.

Christopher Goodwin & Associates. "Phase III Archeological Data Recovery of Site 18PR119 (Sherwood II Development), Prince George's County, Maryland." Prepared for South Charles Realty, 1997.

———. "Phase I Archeological Survey of the Adelphi Manor Water Quality Project, Prince George's County, Maryland." Prepared for Loiederman Associates, Inc., 1994.

Clark, Wayne E. "The Origins of the Piscataway and Related Indian Cultures." *Maryland Historical Magazine* 75, No. 1 (1980): 8–22.

Curry, Dennis C. *Feast of the Dead: Aboriginal Ossuaries in Maryland*. Crownsville, MD: Archeological Society of Maryland and the Maryland Historical Trust, 1999.

Dent, Richard J., Jr. *Chesapeake Prehistory: Old Traditions, New Directions*. New York: Plenum Press, 1995.

Ferguson, Alice L., and T. Dales Stewart. "An Ossuary near Piscataway Creek." *American Antiquity* 6 (1940): 4–18.

Fogel, Heidy, Dennis Kneper, and Michael Petraglia. "Archeological Excavations at Kettering Park Site (18PR174), Prince George's County, Maryland." Maryland State Highway Administration. 1994.

Gibb, James G., and Donald K. Creveling. "Phase I Archeological Survey of the Proposed Anacostia Tributaries Trail in Hyattsville-Bladensburg, Prince George's County, MD." Prepared for the MNCPPC. 1993.

Gottschalk, L. C. "Effects of Soil Erosion on Navigation in Upper Chesapeake Bay." *Geographical Review* 35 (1945): 219–238.

Hienton, Louise Joyner. *Prince George's Heritage: Sidelights on the Early History of Prince George's County, Maryland, from 1696 to 1800*. N.p.: The Maryland Historical Society, 1972.

———. *Items from the Maryland Gazette 1745–1785 Concerning Christopher Lowndes of Bostwick*. Bladensburg, MD: N.p., 1968.

Holmes, William Henry. "Stone Implements of the Potomac-Chesapeake Tidewater Province." *15th Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1893–1894*. Washington, DC: Government Printing Office, 1897.

Hornum, Michael, John Clarke, Christian Davenport, and Thomas Majarov. "Phase III Archeological Data Recovery At Site 18PR545, USDA Beltsville Agricultural Resource Center, Prince George's County, Maryland." Prepared for Meta Engineers, 2000.

Humphrey, Robert C., and Mary Elizabeth Chambers. *Ancient Washington: American Indian Cultures of the Potomac Valley*. Washington, DC: George Washington University, 1985.

LeeDecker, Charles H. "Phase IB Archeological Survey of the WMATA Branch (F) Route, Prince George's County, Maryland." 1996.

————————. "Phase II Archeological Investigation of the Naylor Road Site (18PR463), Green Line (F) Route, Branch Avenue Segment, Washington Regional Metrorail System, Prince George's County, Maryland. Prepared for Woodward-Clyde Consultants, 1996.

————————, and Brad Koldehoff. "Excavation of the Indian Creek V Site (18PR94), Prince George's County, Maryland." Prepared for Wallace Roberts & Todd and WMATA, Washington, DC, 1991.

Little, Barbara. "National Capital Area Archeological Overview and Survey Plan, US Department of the Interior, National Park Service, National Capitol Area." 1995.

Louis Berger & Associates. "Phase I Cultural Resource Survey Site 12, Patuxent Wildlife Research Center, Prince George's County, Maryland." Prepared for the US Fish and Wildlife Service, 1991.

Louis Berger Group, Inc. "Bold, Rocky, and Picturesque: Archeological Identification and Evaluation Study of Rock Creek Park Volume I." Prepared for National Park Service, National Capital Region, August 2008.

MacCord, Howard A. "Archeology of the Anacostia Valley of Washington, D.C., and Maryland." *Journal of the Washington Academy of Sciences* 47 (1957): 393–397.

Moore, Charles, ed. *The Improvement of the Park System for the District of Columbia [McMillan Commission]*. Washington, DC: Government Printing Office, 1902.

Munford, Barbara. "Phase II Cultural Resources Investigation of Site 18PR404, the Surratts Road Site, Prince George's County, Maryland." Prepared for the Maryland State Highway Administration, 1991.

Parsons Brinckerhoff. "Phase 1(a) Archeological Assessment of Proposed Improvements to South Capitol Street Corridor, Washington, DC." Prepared for the District Department of Transportation, January 2006.

Polglase, Christopher R. "Phase III Archaeological Data Recovery of Site 18PR119, Sherwood II Development, Prince George's County, Maryland: Final Report." Christopher Goodwin & Associates, 1999.

Proudfit, S. V. "Ancient Village Sites and Aboriginal Workshops in the District of Columbia." *American Anthropologist* 2 (1889): 241–246.

Roller, Michael. Personal communication, 2009.

Schmidt, Susan. *Landfall Along the Chesapeake: In the Wake of Captain John Smith*. Baltimore: Johns Hopkins University Press, 2006.

"South Capitol Street Phase 1(b) Archeological Survey of the South Capitol Street Corridor, Washington DC." N.p.: 1968.

Trigger, Bruce, ed. *Handbook of North American Indians, Volume 15: Northeast*. Washington, DC: Smithsonian Institution Press, 1978.

Van Horn, R. Lee. *Out of the Past: Prince Georgians and Their Land*. Riverdale, MD: Prince George's County Historical Society, 1976.

Versar. "Phase I Archeological Survey of the Naval Research Laboratory, Washington, DC." Draft report prepared for US Department of the Navy, January 2006.

Virta, Alan. *Prince George's County: A Pictorial History*. Norfolk: The Donning Company, 1984.

————————. "The Development of a Commercial Center at the Fork of the Eastern Branch." Unpublished paper. University of Maryland, 1972.

Watson, James Douglas. *Prince George's County: Past and Present*. Washington, DC: Federal Lithographic Co., 1962.

Wheeler, Linda. "Beaver Continues to Dine on Tidal Basin." *Washington Post*. April 8, 1999, A1.

Williams, Brett. "A River Runs Through Us." *American Anthropologist* 103 (2001): 409–431.

Williams, John Page. *Chesapeake: Exploring the Water Trail of Captain John Smith*. Washington, DC: National Geographic Society, 2006.

Wright, Mary Margaret. *Port O'Bladensburg: A Brief History of a 1742 Town*. Bladensburg, MD: Bladensburg Publishers, 1977.

CHESTER RIVER

Executive Summary

The work summarized in this report was carried out under contract to the Conservation Fund and the Friends of the John Smith Chesapeake Trail, with the intent of providing sufficient information to assess the potential for designation of the Chester River, a Maryland tributary of the Chesapeake Bay, as a "connecting trail" to the Captain John Smith Chesapeake National Historic Trail, as defined by the National Trails System Act (Public Law 90-543). The work was carried out from April through November of 2009 by a team assembled by Washington College's Center for Environment & Society.

The research team consulted a variety of primary and secondary sources, historic maps, and archaeological site data held by the Maryland Historical Trust, the Washington College Geographic Information Systems Laboratory, and other repositories. The river and its major tributaries were examined by boat from its mouth up to Crumpton, and by canoe from Crumpton to beyond Millington. Based on these and other investigations, the river's eligibility as a connecting trail was assessed using three criteria: 1) association with John Smith's voyages; 2) association with 17th-century Indians; and 3) association with the natural history of the 17th-century Chesapeake. In this executive summary, the basic findings are reviewed in the outline below, with an accompanying map (Figure 1) that depicts the segments of the river that we consider a potential connecting trail.

Criterion 1: Significance of the River's Association with the Voyages of Exploration of John Smith, 1607–1609

Assessment: Moderate association

Rationale: A careful analysis of Smith's description of his voyages and analysis of his 1612 map indicate that he did not personally visit the Chester River. Instead, he likely heard reports about the river and its inhabitants, the Ozinies. Nevertheless, Smith's observations and depiction of Kent Island and river inlets in the area, and his accounts of inhabitants such as the Ozinies, Tockwogh, and Susquehannocks, made the potential of the area clear to other Englishmen such as William Claiborne. Smith's map was the best depiction of the Bay until Augustine Herrman produced his map in 1670. The Smith map clearly indicated several inlets in that vicinity of the Eastern Shore, one of which must have been the Chester. The map was relied upon heavily by Smith's contemporaries and made clear the Upper Bay's potential, first as a trading region and later as an area for settlement. Claiborne followed precisely this model with his 1631 settlement on Kent Island and trading post at the mouth of the Susquehanna River. While Smith did not visit, his work had a substantial impact on the river's settlement.

Criterion 2: Association with the American Indian Towns & Cultures of the 17th-Century Chesapeake

Assessment: Substantial association

Rationale: John Smith and subsequent visitors recorded significant presence of American Indians on and around the Chester River, including the Ozinies, the Wicomiss (possibly another name for the Ozinies), the Monponson, and the Matapeake. Other groups such as the Susquehannock and Massawomeck traded or raided in the area around the Chester. Archaeological investigations have revealed abundant evidence of Native American presence along the river, including much Late Woodland and Contact Period material, including glass trade beads at sites such as Indiantown Farms. In addition, GIS-based predictive modeling indicates that extensive areas along the Chester and its tributaries are high-probability areas for American Indian habitation; five years of field testing supports the validity of the model.

Criterion 3: Potential for Illustrating the Natural History of the 17th-Century Chesapeake

Assessment: Substantial potential

Rationale: Using contemporary accounts of the 17th-century landscape and archaeological evidence to establish a baseline, the Chester River was visually examined on land and by boat for most of its length. Not only is an unusually high percentage of its land in conservation easements or other protections, but significant portions replicate much of the species diversity of the period and are evocative of the era. These range from the 2,285-acre Eastern Neck National Wildlife Refuge at the mouth of the river to unspoiled creeks, the restored grasslands of the 5,000-acre Grasslands Plantation (all in conservation easements), and to upper stretches of the river that have wild rice and arrow arum and show high, wooded bluffs. In between these natural protected areas are farms that mimic the early, dispersed settlement pattern of the colonial era, and the early town of Chestertown, which may be seen as the legacy of John Smith.

Conclusions
We conclude that the Chester River meets all three criteria for a connecting trail to the Captain John Smith Chesapeake National Historic Trail, as defined by the National Trails System Act (Public Law 90-543). The river has a level of association with John Smith or significance relative to the standards on all three criteria set forth for evaluation.

We conclude that there is a high level of significance related to the criteria for the portions of the river and its tributaries listed below and illustrated in Figure 1. For the reasons articulated in this report, it is our assessment that this range of inclusion offers multiple opportunities and experiences that will be more attractive to the public and more likely to see widespread public use and enjoyment. Furthermore, the inclusive nature of these connecting segments ensures that public enjoyment will expand beyond the lower reaches of the river to include freshwater, inland waterways—these are important in helping to define and evoke the range of habitats through which early explorers moved and that American Indians used for travel and resource extraction. The potential connecting segments are as follows:

The main stem of the Chester River, from its mouth and connection with the main trail upstream to the town of Millington;
The entire length of Church Creek (Kent County);
Grays Inn Creek from its mouth to the fork at Skinners Neck (Kent County);
The upper portion of the West Fork of Langford Creek, on either side of Poplar Neck to Ricauds Branch Road (Kent County);
Morgan Creek from its mouth north to a point just below Rt. 213, Augustine Herrman Highway (Kent County);
Walsey Creek from its mouth to the intersection with Rt. 50-301 (Queen Anne's County);
Queenstown Creek, from its mouth up the north branch to its end (Queen Anne's County);
Tilghman Creek, from its mouth to the end (Queen Anne's County);
Emory Creek, from its mouth to the end (Queen Anne's County);
Island Creek, from its juncture with Southeast Creek to Sparks Mill Road (on both the east and west forks) (Queen Anne's County)

Bibliography

Alsop, George. *A Character of the Province of Maryland*. 1666. Reprint. Newton D. Mereness, ed. Cleveland, OH: Burrows Brothers Co., 1902.

Bourne, Michael O. *Historic Houses of Kent County: An Architectural History, 1642–1860*. Chestertown, MD: Historical Society of Kent County, 1998.

Browne, William H., ed. *Archives of Maryland: Proceedings and Acts of the General Assembly of Maryland*. Vol. V, 1667–1688. Baltimore: Maryland Historical Society, 1883– .

Curry, Dennis. "Prehistoric Kent County." In *Historic Houses of Kent County: An Architectural History, 1642–1860*. Chestertown, MD: Historical Society of Kent County, 1998.

Davidson, Thomas. "The Powhatans and the Eastern Shore." In Helen C. Rountree, ed., *Powhatan Foreign Relations, 1500–1722*. Charlottesville: University Press of Virginia, 1993.

Dent, R. J. *Chesapeake Prehistory: Old Traditions, New Directions*. New York and London: Plenum Press, 1995.

Eastern Shore Heritage. *Stories of the Chesapeake Heritage Area Management Plan*. Chestertown, MD: Eastern Shore Heritage, Inc., 2004.

Feest, Christian. "Nanticoke and Neighboring Tribes." In Bruce Trigger, ed., *Handbook of North American Indians, Volume 15: Northeast*, 242–252. Washington, DC: Smithsonian Institution, 1978.

Kavanagh, M. *Archaeological Reconnaissance of Proposed Channel Improvements in the Upper Chester Watershed, Kent and Queen Anne's Counties, Maryland. Maryland Geological Survey File Report No. 147*. 1979. Baltimore, MD.

Klingelhofer, Eric. "The Search for 'Ffort Conquest' and the Claiborne Virginian Settlement: An Archaeological Survey of Garrett Island, Cecil County, Maryland, 1984." Unpublished paper. Crownsville, MD: Maryland Historical Trust.

Lippson, A. J. *The Chesapeake Bay in Maryland: An Atlas of Natural Resources*. Baltimore and London: The Johns Hopkins University Press, 1973.

Lowery, D. L. "The 1992 Archaeological Survey of Kent Island." Unpublished paper. N.d. Crownsville, MD: Maryland Historical Trust.

————. "A Supplementary Report of the 1992 Archaeological Survey of Kent Island." Unpublished paper. 1993. Crownsville, MD: Maryland Historical Trust.

————. "Archaeological Survey of the Chester River, the Wye River, and the Prospect Bay Drainages, Queen Anne's County, Maryland." Unpublished paper. 1993. Crownsville, MD: Maryland Historical Trust.

————. "Archaeological Survey of Interior Queen Anne's County, Maryland." Unpublished paper. 1994. Crownsville, MD: Maryland Historical Trust.

————. "A Supplementary Archaeological Survey of Interior Queen Anne's County, Maryland." Unpublished paper. 1995. Crownsville, MD: Maryland Historical Trust.

Marye, William B. "The Wicomiss Indians of Maryland." *American Antiquity* 4 (1938): 146–152.

Matthews, E. D., and W. U. Reybold III. *Soil Survey: Queen Anne's County, Maryland*. Washington, DC: United States Department of Agriculture Soil Conservation Service, 1966.

Pohuski, Michael. "The Underwater Search for William Claiborne's 17th-Century Settlement in the Upper Chesapeake." In John D. Broadwater, ed., *Underwater Archaeology Proceedings from the Society for Historical Archaeology Conference*. Richmond, VA: Society for Historical Archaeology, 1991.

Rountree, Helen C., and Thomas Davidson. *Eastern Shore Indians of Virginia and Maryland*. Charlottesville: University Press of Virginia, 1997.

Seidel, John L., Darrin Lowery, and Tom Davis. *A Cultural Resource Management Geographic Information System and Archaeological Predictive Model for Kent and Queen Anne's Counties, Maryland*. Report Prepared for the Maryland State Highway Administration. Chestertown, MD: Washington College Public Archaeology Laboratory, n.d.

————, Darrin Lowery, and Wendy Miller. *A Cultural Resource Management Geographic Information System and Archaeological Predictive Model for Maryland's Upper Eastern Shore: Cecil, Kent, Queen Anne's, Caroline & Talbot Counties, Maryland*. Report Prepared for the Maryland State Highway Administration. Chestertown, MD: Washington College Public Archaeology Laboratory, 2007.

————, and Bill Schindler. *Report on Archaeological Investigations at Indiantown Farm, Queen Anne's County Maryland*. Chestertown, MD: Washington College Public Archaeology Laboratory, forthcoming.

Strachey, William. "The History of Travel into Virginia Britannia: The Book of the First Decade [1612]." In Edmund Wright Haile, ed. *Jamestown Narratives*. Champlain, VA: RoundHouse, 1998.

Torrence, Clayton. "The English Ancestry of William Claiborne of Virginia." *Virginia Magazine of History & Biography* 56 (1948): Part II, pp. 431–460.

Virginia Colonial Records Project. Microfilm Records of the British Public Record Office. William Claiborne and Kent Island. Reel 93. Alderman Library, University of Virginia, Charlottesville.

White, Andrew. *A Relation of the Sucessefull Beginnings of the Lord Baltemore's Plantation in Maryland. Being an extract of certaine Letters written from thence, by some of the Aduenturers, to their friends in England, 1634*. Shea's Early Southern Tracts, No. 1. Albany, NY: Reprinted by Joel Munsell, 1865.

White, E. A. *Soil Survey of Kent County, Maryland*. Washington, DC: United States Department of Agriculture, Soil Conservation Service, 1982.

CHOPTANK RIVER

Executive Summary

The work summarized in this report was carried out under contract to the Conservation Fund and the Friends of the John Smith Chesapeake Trail, with the intent of providing sufficient information to assess the potential for designation of the Chester River, a Maryland tributary of the Chesapeake Bay, as a "connecting trail" to the Captain John Smith Chesapeake National Historic Trail, as defined by the National Trails System Act (Public Law 90-543). The work was carried out from April through November of 2009 by a team assembled by Washington College's Center for Environment & Society.

The research team consulted a variety of primary and secondary sources, historic maps, and archaeological site data held by the Maryland Historical Trust, the Washington College Geographic Information Systems Laboratory, and other repositories. The river and portions of its major tributaries were examined by boat specifically for this study; the study of other portions drew on the extensive prior experience of the research team on the Choptank River. Based on these and other investigations, the river's eligibility as a connecting trail was assessed using three criteria: 1) association with John Smith's voyages; 2) association with 17th-century Indians; and 3) association with the natural history of the 17th-century Chesapeake. In this executive summary, the basic findings are reviewed, with an accompanying map (Figure 1) that depicts the segments of the river that we consider a potential connecting trail.

Criterion 1: Significance of the River's Association with the Voyages of Exploration of John Smith, 1607–1609

Assessment: Indirect association

Rationale: A thorough review of Smith's description of his voyages and an analysis of his 1612 map indicate that he did not personally visit the Choptank River. Nevertheless, Smith's observations of the portions of the Eastern Shore to the south, along the Nanticoke River, and to the north, from Kent Island to the Head of the Chesapeake Bay, attracted the immediate interest of his contemporaries. Smith mapped the islands in front of the Choptank River, and his work made the potential of the area for trade and eventual settlement clear to other Englishmen such as John Westlock, John Nuttall and William Claiborne, who traded in the region and provided additional information that led to settlement. Smith's map was the best depiction of the Bay until Augustine Herrman produced his map in 1670. The Smith map clearly indicated islands at the mouth of the Choptank that included Sharps Island and Tilghman Island, and his map left open the possibility of interior waterways behind the island barrier. The map was relied upon heavily by Smith's contemporaries and made clear the middle Bay's potential, first as a trading region and later as an area for settlement. Claiborne followed precisely this model with his 1631 settlement on Kent Island and a trading post at the mouth of the Susquehanna River. While Smith did not personally visit the Choptank, his work had a substantial impact on the river's settlement.

Criterion 2: Association with the American Indian Towns & Cultures of the 17th-Century Chesapeake

Assessment: Substantial association

Rationale: Archaeological and historical evidence leave no doubt that the Choptank River was extensively settled by Native Americans at the time of John Smith's exploration up the Chesapeake Bay. Archaeological investigations have revealed abundant evidence of Native American presence along the river, including much Late Woodland and Contact Period material, such as early glass trade beads and some of the few Contact Period copper artifacts from the region. GIS-based predictive modeling

indicates that extensive, uninvestigated areas along the Choptank and its tributaries are high probability areas for American Indian habitation; five years of field testing supports the validity of the model. From an archaeological perspective, the Choptank may in fact be one of the richest areas on the Eastern Shore. In addition, the historical record of the later occupation of native peoples and their adaptation to English incursions is remarkably rich. One of the nation's earliest reservations was set aside for the Choptank Indians, and it was occupied by them as a distinct area until 1799. Even now, their descendants are the heirs and stewards of a rich tradition in this region.

Criterion 3: Potential for Illustrating the Natural History of the 17th-Century Chesapeake

Assessment: Substantial potential

Rationale: Using contemporary accounts of the 17th-century landscape and archaeological evidence to establish a baseline, the Choptank River was visually examined on land and by boat, several detailed descriptions of the river's potential for eco- and heritage tourism were examined, and experts on the research team were in agreement as to the potential of the river. Not only is an unusually high percentage of its land in conservation easements or other protections, but significant portions also replicate much of the species diversity of the period and are evocative of the era. Along much of the river's length, and that of remarkable tributaries such as Tuckahoe Creek and Kings Creek, it is possible to shut out the 21st century and conjure images of the 17th century and the pre–Contact Period. Stories of species diversity, landscape resilience, and changing ecosystems over space abound.

We conclude that the Choptank River meets all three criteria for a potential connecting trail to the Captain John Smith Chesapeake National Historic Trail, concluding that there is a high level of significance for the portions of the river and its tributaries listed below and illustrated in Figure 1. For the reasons articulated in this report, it is our assessment that this range of inclusion offers multiple opportunities and experiences that will be more attractive to the public and more likely to see widespread public use and enjoyment. Furthermore, the inclusive nature of these connecting segments ensures that public enjoyment will expand beyond the lower reaches of the river to include freshwater, inland waterways—these are important in helping to define and evoke the range of habitats through which early explorers moved and that American Indians used for travel and resource extraction.

The potential connecting segments are as follows: The main stem of the Choptank River, from its mouth and connection with the main trail upstream to the town of Greensboro.

While smaller creeks are included in this designation, we suggest including the following important tributaries:
Hunting Creek to its fork
Hog Island and its small guts
Kings Creek, to a point approximately one mile above the Kingston Bridge Road (this bridge is visible in Figure 29)
Watts Creek to Double Hill Road
Tuckahoe Creek from the confluence with the Choptank to Mason Bridge, at the north end of Tuckahoe State Park.

Bibliography

Alsop, George. *A Character of the Province of Maryland*. 1666. Reprint. Newton D. Mereness, ed. Cleveland, OH: Burrows Brothers Co., 1902.

Bourne, Michael O. *Historic Houses of Kent County: An Architectural History, 1642–1860*. Chestertown, MD: Historical Society of Kent County, 1998.

Browne, William H., ed. *Archives of Maryland: Proceedings and Acts of the General Assembly of Maryland*. Vol. V, 1667–1688. Baltimore: Maryland Historical Society, 1883–.

Busby, Virginia. Personal communication to Tim Barrett. June 6, 2008.

Curry, Dennis C. *Feast of the Dead: Aboriginal Ossuaries in Maryland*. Crownsville, MD: Archeological Society of Maryland and the Maryland Historical Trust, 1999.

————. "Prehistoric Kent County." In *Historic Houses of Kent County: An Architectural History, 1642–1860*. Chestertown, MD: Historical Society of Kent County, 1998.

Davidson, Thomas. "The Powhatans and the Eastern Shore." In Helen C. Rountree, ed., *Powhatan Foreign Relations, 1500–1722*. Charlottesville: University Press of Virginia, 1993.

Dent, R. J. *Chesapeake Prehistory: Old Traditions, New Directions*. New York and London: Plenum Press, 1995.

Eastern Shore Heritage. *Stories of the Chesapeake Heritage Area Management Plan*. Chestertown, MD: Eastern Shore Heritage, Inc., 2004.

Eshelman, Ralph E., and Carl W. Scheffel, Jr. *Maryland's Upper Choptank River and Tuckahoe Creek Cultural Resource Inventory*. Denton, MD: Old Harford Town Maritime Center, 1999.

Feest, Christian. "Nanticoke and Neighboring Tribes." In Bruce Trigger, ed., *Handbook of North American Indians, Volume 15: Northeast*, 242–252. Washington, DC: Smithsonian Institution, 1978.

Footner, Hulbert. *Rivers of the Eastern Shore*. 1944. Reprint ed. Centreville, MD: Tidewater Publishers, 1972.

Kavanagh, M. *Archaeological Reconnaissance of Proposed Channel Improvements in the Upper Chester Watershed, Kent and Queen Anne's Counties, Maryland. Maryland Geological Survey File Report No. 147*. 1979. Baltimore, MD.

Kenny, Hammill. *The Place Names of Maryland: Their Origin and Meaning*. Baltimore: Museum and Library of Maryland History, Maryland Historical Society: 1984.

Klingelhofer, Eric. "The Search for 'Ffort Conquest' and the Claiborne Virginian Settlement: An Archaeological Survey of Garrett Island, Cecil County, Maryland, 1984." Unpublished paper. Crownsville, MD: Maryland Historical Trust.

Lippson, A. J. *The Chesapeake Bay in Maryland: An Atlas of Natural Resources*. Baltimore and London: The Johns Hopkins University Press, 1973.

Lowery, D. L. "The 1992 Archaeological Survey of Kent Island." Unpublished paper. N.d. Crownsville, MD: Maryland Historical Trust.

————. "A Supplementary Report of the 1992 Archaeological Survey of Kent Island." Unpublished paper. 1993. Crownsville, MD: Maryland Historical Trust.

————. "Archaeological Survey of the Chester River, the Wye River, and the Prospect Bay Drainages, Queen Anne's County, Maryland." Unpublished paper. 1993. Crownsville, MD: Maryland Historical Trust.

————. "Archaeological Survey of Interior Queen Anne's County, Maryland." Unpublished paper. 1994. Crownsville, MD: Maryland Historical Trust.

————. "A Supplementary Archaeological Survey of Interior Queen Anne's County, Maryland." Unpublished paper. 1995. Crownsville, MD: Maryland Historical Trust.

————. "A Survey of Selected Prehistoric Artifact Collections Associated with the Choptank River Watershed, Maryland." Unpublished paper. 1999. Crownsville, MD: Maryland Historical Trust.

————. "Early 17th Century Sites in the Upper Chesapeake Bay Region: An Analysis of Five Archaeological Sites in Queen Anne's County and Talbot County." *Maryland Archaeology* 31, No. 1–2 (March–September 1995): 59–68.

Marye, William B. "The Wicomiss Indians of Maryland." *American Antiquity* 4 (1938): 146–152.

Matthews, E. D., and W. U. Reybold III. *Soil Survey: Queen Anne's County, Maryland*. Washington, DC: United States Department of Agriculture Soil Conservation Service, 1966.

McNamara, Joseph M. "Excavations on Locust Neck: The Search for Historic Indian Settlements in the Choptank Indian Reservation." *Journal of Middle Atlantic Archaeology* 1 (1985): 87–96.

Murray, William Vans. *A Vocabulary of Nanticoke Dialect*. Daniel G. Brinton, ed. Reprint, *Proceedings of the American Philosophical Society* 21 (1893). N.p.: Evolution Publishing, 2005.

Papenfuse, Edward C., and Joseph M. Coale. *The Maryland State Archives Atlas of Historical Maps of Maryland, 1608–1908*. Baltimore: The Johns Hopkins University Press, 2003.

Parker, Julia F., and Beverly R. Ortiz. *It Will Live Forever: Traditional Yosemite. Indian Acorn Preparation*. 2nd ed. Berkeley, CA: Heyday Books, 1996.

Pohuski, Michael. "The Underwater Search for William Claiborne's 17th-Century Settlement in the Upper Chesapeake." In John D. Broadwater, ed., *Underwater Archaeology Proceedings from the Society for Historical Archaeology Conference*. Richmond, VA: Society for Historical Archaeology, 1991.

River Heritage. "Choptank and Tuckahoe Creek Guide." Denton, MD: Old Harford Town Maritime Center, n.d. Online resource at www.riverheritage.org/riverguide/

Rountree, Helen C., and Thomas Davidson. *Eastern Shore Indians of Virginia and Maryland*. Charlottesville: University Press of Virginia, 1997.

Schindler, Bill. "Middle Woodland Exploitation of Migratory Fish in the Delaware." PhD diss., Temple University, 2006.

————. "Rethinking Middle Woodland Settlement and Subsistence Patterns in the Middle and Lower Delaware Valley." *North American Archaeologist* 29, No. 1 (2008): 1–12.

————. "Location, Location, Location: The Archaeology of Prime Fishing Site Selection." Paper presented at the Annual Middle Atlantic Archaeology Conference, Ocean City, MD, 2009.

Seidel, John L. *The Chester River: Feasibility Study for Nomination as a Connector Trail in the Captain John Smith National Historic Trail*. Report prepared for the Friends of the John Smith Trail. Chestertown, MD: Center for Environment and Society, Washington College, 2009.

————, Darrin Lowery, and Tom Davis. *A Cultural Resource Management Geographic Information System and Archaeological Predictive Model for Kent and Queen Anne's Counties, Maryland*. Report prepared for the Maryland State Highway Administration. Chestertown, MD: Washington College Public Archaeology Laboratory, n.d.

————, Darrin Lowery, and Wendy Miller. *A Cultural Resource Management Geographic Information System and Archaeological Predictive Model for Maryland's Upper Eastern Shore: Cecil, Kent, Queen Anne's, Caroline & Talbot Counties, Maryland*. Report prepared for the Maryland State Highway Administration. Chestertown, MD: Washington College Public Archaeology Laboratory, 2007.

————, and Darrin Lowery. "Interim Report on the Kent County Archaeological Survey and Predictive Modeling." Report prepared for the Maryland Historical Trust. Chestertown, MD: Washington College Public Archaeology Laboratory, 2008.

————, and Bill Schindler. *Report on Archaeological Investigations at Indiantown Farm, Queen Anne's County Maryland*. Chestertown, MD: Washington College Public Archaeology Laboratory, forthcoming.

Strachey, William. "The History of Travel into Virginia Britannia: The Book of the First Decade [1612]." In Edmund Wright Haile, ed. *Jamestown Narratives*. Champlain, VA: RoundHouse, 1998.

Torrence, Clayton. "The English Ancestry of William Claiborne of Virginia." *Virginia Magazine of History & Biography* 56 (1948): Part II, pp. 431–460.

Virginia Colonial Records Project. Microfilm Records of the British Public Record Office. William Claiborne and Kent Island. Reel 93. Alderman Library, University of Virginia, Charlottesville.

Walker, Jesse. "Archaeological Investigations of the Holland Point Site (18DO220), Dorchester County, Maryland." MA thesis, Temple University, 2003.

White, Andrew. *A Relation of the Sucessefull Beginnings of the Lord Baltemore's Plantation in Maryland. Being an extract of certaine Letters written from thence, by some of the Aduenturers, to their friends in England, 1634*. Shea's Early Southern Tracts, No. 1. Albany, NY: Reprinted by Joel Munsell, 1865.

White, E. A. *Soil Survey of Kent County, Maryland*. Washington, DC: United States Department of Agriculture, Soil Conservation Service, 1982.

Williams, John Page. *Exploring the Chesapeake in Small Boats*. Centreville, MD: Tidewater Publishers, 1992.

SUSQUEHANNA RIVER

Executive Summary

The three research teams working on the Susquehanna River have each produced substantial final reports on the connections between John Smith's voyages around the Chesapeake Bay in 1608 and the Susquehanna River. From these reports, it is the opinion of the principal researchers that the Susquehanna River meets the criteria for a potential connecting trail to the Historic John Smith trail. Basing its conclusions on detailed investigation of the history of Native American settlement along the river, archaeological evidence, natural history of the river, and the cultural significance of the river to contemporary Native Americans, the team concludes that the Susquehanna meets all three criteria:

A. The Susquehanna River shows a close association with Smith's actual voyages, in terms of his travel to the mouth of the Susquehanna and direct important exchanges with the Susquehannock Indians who inhabited the river corridor, and his mapping of Indian sites along the Susquhanna (Criterion 1 moderate to substantial);

B. The river corridor shows a strong connection with 17th-century Native American peoples known to John Smith (Criterion 2 substantial);

C. It also remains importantly illustrative of the natural history of the 17th-century Chesapeake Bay Watershed, both in terms of existing landscapes and habitats and its integral ongoing connection as the largest source of the Chesapeake, which is in effect geologically an ancient section of the Susquehanna Valley (Criterion 3 substantial).

In our view, the above associations also require that the river be considered holistically, as a historical environmental-and-cultural system, focusing on its main corridor from the existing John Smith Trail near the Chesapeake to the Susquehanna headwaters at Lake Otsego. Traveling this system in the context of the John Smith Trail involves dynamically traveling through layers of time and nature, given the river corridor's connections with the peoples directly encountered and mapped by John Smith, in their dynamic interactions with one another before and during his era, and with the Euro-American movement into the watershed following Smith. In this sense, the potential designation of the main corridor as a connecting trail not only reflects historic and environmental links of northern "Iroquoia" to the realms of the Susquehannocks experienced by Smith, but also provides a needed cultural corrective to potential Eurocentric focus of the Smith Trail. Its name would likely derive from indigenous language and it would link the Smith Trail directly with living Iroquois and Eastern Delaware people who mainly live in and engage with the upper watershed and who historically incorporated remnants of the Susquehannocks. It would also preserve and re-present historic perspectives of native peoples looking out from the heart of the Eastern Woodlands to meet and encounter Smith and his people downriver as they in turn came up the Chesapeake.

Finally, in terms of the third criterion, the Susquehanna watershed remains a living system integrally related to the Chesapeake, preserving on large stretches glimpses of scenery experienced by kayak and land sojourners today as evocative of pre-settlement and early settlement landscape and natural history connected with Smith's experience. We find significant segments to be eminently interpretable, preservable, and (in part) restorable. Considering the Chesapeake-Susquehanna network as a whole in designation would support integrated recreational, educational, and environmental opportunities while avoiding older Eurocentric paradigms. This would provide more authentic engagement with indigenous holistic perspectives on space and natural systems evident from Smith's era and subsequent reports (what one historian described as a

fluid "archipelago" of native communities on the Susquehanna), in line also with new scholarly emphasis on the continuum of nature and culture in environmental systems (as in models of environmental semiospheres in biosemiotics).

In short, the potential designation of the main Susquehanna corridor as a connecting trail would serve as a deserved tribute to the larger networks of both Native American cultures and natural environments that engaged in direct exchange with John Smith and Anglo culture in the seventeenth century, in a foundational era and region for America, while providing incredible opportunities for environmental, community, and cultural synergy and restoration in the Susquehanna-Chesapeake complex today. It would also would enable the Haudenosaunee (Iroquois) Confederacy, probably the largest organization of historic Native American governments in the northeastern U.S., and representing the cultures from which the Susquehannock communities that Smith knew had emerged and to whom their remnants later returned, to join if it chooses as a direct partner with the National Park Service in the John Smith Chesapeake Trail network. As a man with Susquehannock ancestry, living today in the potential Susquehanna connecting trail corridor in Pennsylvania, put it to one of our researchers regarding his cultural connections to the river, "You know, in the native way of thinking, something that has movement is alive, and if it's alive then it is a spiritual being. That includes not just animals and birds and things, but also the river. I grew up along the Susquehanna River. My grandmother, who taught me most of what I know about being native, always used to say to me, 'That river is you. Without that river, our people would not be who they are.' So, it is important to care for the river for the Seven Generations to come."

Bibliography

Adovasio, J. M., J. D. Gunn, J. Donahue, and R. Stuckenrath. "Meadowcroft Rockshelter: Retrospective 1976." *Pennsylvania Archaeologist* 47 (1977): 1–93.

Aquila, Richard. *The Iroquois Restoration: Iroquois Diplomacy on the Colonial Frontier, 1701–1754*. Detroit, MI: Wayne University Press, 1983.

Barton, Edwin M. *Columbia County: A History*. Bloomsburg, PA: Edwin M. Barton, 1984.

Bartram, John. "Journal." In *Journals: Shamokin, The Indian Capital, 1737–1755*. Vol. 11. Sunbury, PA: The Northumberland County Historical Society Archives.

————. *Travels in Pensilvania and Canada*. Ann Arbor, MI: University Microfilms, Inc., 1966.

Beauchamp, William Martin. *Moravian Journals Relating to Central New York, 1745–66*. New York: The Dehler Press, 1916.

Becker, Marshall J. "A New Haven for Some Acculturated Lenape of Pennsylvania During the Indian Wars of the 1760's." *Pennsylvania History* 60 (1993): 322.

————. "The Stature of a Susquehannock Population of the Mid-16th Century Based on Skeletal Remains from 46HM73." *Pennsylvania Archaeologist* 61, No. 2 (September 1991): 73–88.

Bomboy, Robert P. *Danville: The Bicentennial History*. Danville, PA: The Danville Bicentennial Committee, 1991.

Bradsby, H.C. *History of Bradford County, Pennsylvania*. Chicago: S. B. Nelson & Co., 1891.

————. *History of Luzerne County*. Chicago: S. B. Nelson & Co., 1893.

Brandão, José António. *"Your Fyre Shall Burn No More": Iroquois Policy Towards New France and Its Native Allies to 1701*. Lincoln, NE: University of Nebraska Press, 1997.

Brashler, Janet. "A Middle 16th Century Susquehannock Village in Hampshire County, West Virginia." *West Virginia Archaeologist* 39 (1987): 1–30.

Bressler, James. "The Ault Site (36LY120): A Multicomponent Site Including a Fortified Shenks Ferry Village." *Pennsylvania Archaeologist* 79 (2009): 30–53.

———————. "Excavation of the Bull Run Site 36LY119." *Pennsylvania Archaeologist* 50 (1980): 31–63.

———————. "Excavation of a Shenks Ferry Habitation Complex on Canfield Island, Lycoming County, Pennsylvania (36LY251)." *Pennsylvania Archaeologist* 63 (1993): 77–89.

———————. "Indian Occupations of the Brick Farm Area: Susquehannock Occupation, 1600–1650." *Now and Then* 11 (1955): 93–101.

———————. *Prehistoric Man on Canfield Island*. Williamsport, PA: Lycoming County Historical Society, 1989.

———————, Ricki Maietta, and Karen Rockey. *Canfield Island Through the Ages*. Williamsport, PA: Lycoming County Historical Society, 1983.

———————, and Harry D. Rainey. *Excavation of the Snyder Site*. Williamsport, PA: Lycoming County Historical Society, 2003.

———————, and Karen Rockey. *Tracking the Shenks Ferry Indians at the Ault Site*. Williamsport, PA: Lycoming County Historical Society, 1997.

Brubaker, John H. *Down the Susquehanna to the Chesapeake*. University Park, PA: Penn State University Press, 2002.

Bushnell, David I. *Native Villages and Village Sites East of the Mississippi*. Bulletin 69. Washington, DC: Government Printing Office, 1919.

Cadzow, Donald. *Archaeological Studies of the Susquehannock Indians of Pennsylvania*. Harrisburg, PA: Pennsylvania Historical Commission, 1936.

Cajete, Gregory, ed. *A People's Ecology: Explorations in Sustainable Living*. Santa Fe, NM: Clear Light Publishers, 1999.

Calloway, Colin G. *New Worlds for All*. Baltimore: John Hopkins University Press, 1997.

Carmer, Carl. *The Susquehanna*. New York: Rinehart & Co., 1955.

Carter, John H. *Allummapees, King of the Delawares at Shamokin*. Sunbury, PA: The Northumberland County Historical Society, 1998.

———————. *Early Events in the Susquehanna Valley*. Millville, PA: Northumberland County Historical Society.

———————. "Indian Tribes of Shamokin." In *History of Sunbury*, 70–83. Sunbury, PA: The Northumberland County Historical Society, 1995.

———————. *The Shamokin Indian Traders*. Sunbury, PA: The Northumberland County Historical Society, 1995.

Chapman, Isaac. *History of Wyoming*. New Orleans: Polyanthos Press, 1971.

Clark, John S., and Louise Welles Murray, eds. *Selected Manuscripts of General John S. Clark Relating to the Aboriginal History of the Susquehanna*. Wilkes-Barre, PA: E. B. Yordy Co., 1931.

Cobb, Charles R. "From Frontier to Border Along the Iroquois Southern Door." *Archeologies: Journal of the World Archeological Congress* 1 (2008): 110–128.

Cooper, James Fenimore. *The Deerslayer*. 1841. New York: Bantam Classic, 2008.

Cooper, William. *A Guide in the Wilderness*. New York: Books for Libraries Press, 1970.

Custer, Jay F. "Archaeological Excavations at the West Water Street Site, Lock Haven, Clinton County, Pennsylvania." *Journal of the Lycoming County Historical Society* 18 (1997): 24–33.

———————. "Pennsylvania Profile No. 12: An Un - usual Indian Land Claim From Lancaster County." *Pennsylvania Archaeologist* 65 (1995): 41–47.

———————. *Prehistoric Cultures of Eastern Pennsylvania*. Series 7. Harrisburg, PA: Pennsylvania Historic and Museum Commission Anthropology, 1996.

————————, and E. B. Wallace. "Patterns of Resource Distribution & Archaeological Settlement Patterns in the Piedmont Uplands of the Middle Atlantic Region." *North American Archaeologist* 3 (1982): 139–172.

————————, Scott C. Watson, and Daniel N. Bailey. "A Summary of Phase III Data Recovery Excavations at the West Water Street Site (36CN175), Lock Haven, Clinton County, Pennsylvania." *Pennsylvania Archaeologist* 66 (1996): 1–53.

Dennis, Mathew. *Cultivating a Landscape of Peace: Iroquois-European Encounters in the Seventeenth-Century America*. Ithaca, NY: Cornell University Press, 1993.

Donehoo, George P. *A History of the Indian Villages and Place Names in Pennsylvania*. Lewisburg, PA: Wennawoods Publishing, 1928; 1999.

————————. *The Indians of Pennsylvania*. Sunbury, PA: The Northumberland County Historical Society, 1999.

————————. *Pennsylvania: A History*. New York: Lewis Historical Publishing Co., 1926.

Edmonds, Margot, and Ella E. Clark. *Voices of the Winds: Native American Legends*. New York: Castle Books, 2003.

Egle, William H. *History of the Commonwealth of Pennsylvania*. Philadelphia: E. M. Gardner, 1883.

Englebrecht, William. *Iroquoia: The Development of a Native Nation*. Syracuse, NY: Syracuse University Press, 2003.

Eshleman, H. Frank. *Annals of the Susquehannocks & Other Indian Tribes of Pennsylvania, 1500–1763*. Lewisburg, PA: Wennawoods, 2000.

————————. *Lancaster County Indians: Annals of the Susquehannocks and Other Indian Tribes of the Susquehanna Territory from About the Year 1500 to 1763, the Date of their Extinction*. Lititz, PA: Express Printing Co., 1909.

Ettwein, John. "Reverend John Ettwein's Notes of Travel from the North Branch of the Susquehanna to the Beaver River, Pennsylvania, 1772." *Pennsylvania Magazine of History and Biography* 25, no. 2 (1901): 208–219.

Fenton, William. *The Great Law and the Longhouse: A Political History of the Iroquois Confederacy*. Norman, OK: University of Oklahoma Press, 1998.

Fenton, William N., and John Witthoft. "Iroquois Anthropology at the Mid-Century." *Proceedings of the American Philosophical Society* 95 (1951): 102–110.

Frost, James Arthur. *Life on the Susquehanna: 1783–1860*. New York: Columbia University Press, 1951.

Funk, Robert E. *Archeological Investigations in the Upper Susquehanna Valley, New York State*. New York: Persimmon Press, 1993.

Gardner, Eugene. "An Archaeological Study of Indian Village Sites in the Lower Wyoming Valley." *Pennsylvania Archaeologist* 9 (1939): 21–34.

Gardner, William. "Early & Middle Woodland in the Middle Atlantic: An Overview." In Roger Moeller, ed., *Practicing Environmental Archaeology: Methods & Interpretations*, 53–86. New York: American Indian Archaeological Institute, 1982.

Garrahan, Francis. "Airport II Site: A Clemson/Island/Oswasco Settlement on the North Branch of the Susquehanna River." *Pennsylvania Archaeologist* 60 (1990): 1–31.

Gearhart, Herbert G. "Journal of Etienne Brule, Interpreter and Guide to Champlain, the French Governor of Canada; and who was perhaps the first white man to descend the Susquehanna River, 1615." In *Shamokin: The Indian Capital of the Province of Pennsylvania to 1755*. Vol. 17. Sunbury, PA: Northumberland County Historical Society Archives.

Geidel, Richard, Kenneth W. Robinson, Thomas W. Neumann, and R. Christopher Goodwin. *An Archaeological and Historical Overview of the Wyoming Valley Flood Protection Study Area*. Vol. 1. Frederick, MD: R. Christopher Goodwin and Associates, Final Report, 1988.

Godcharles, Frederic. "Large Andaste Vessel Restored by Dr. Stewart—Found Near McElhattan." *Pennsylvania Archaeologist* 8 (1938): 81–82.

———————. "Valuable Recoveries at Fort Augusta: Work Done by WPA Project." *Pennsylvania Archaeologist* 8 (October 1938): 75–78.

Graybill, J. "The Shenks Ferry Complex Revisited." In Fred Kinsey and Roger Moeller, eds., *New Approaches to Other Pasts*, 51–60. Bethlehem, CT: Archaeological Services, 1989.

Graymont, Barbara. *The Iroquois*. New York: Chelsea House Publishers, 1988.

Griffin, James B. "The Athens Excavations." *Pennsylvania Archaeologist* 3 (1931): 3.

Grinde, Donald A., Jr., and Bruce E. Johansen. *Exemplar of Liberty: Native America and the Evolution of Democracy*. Los Angeles: American Indian Studies Center, 1991.

Grumet, Robert S. *Historic Contact: Indian People & Colonists in Today's Northeastern United States in the 16th Through 18th Centuries*. Norman, OK: University of Oklahoma Press, 1995.

Grzybowski, Susan D. *Phase I Cultural Resource Investigation and Historic Architectural Assessment SR 0029 and 0006, LR 1013, Section E 10*. East Orange, NJ: Louis Berger and Associates, 1995.

Halsey, Francis Whiting. *The Old New York Frontier*. New York: Ira J. Friedman, Inc., 1901.

———————. *A Tour of Four Great Rivers: The Hudson, Mohawk, Susquehanna, and Delaware in 1769*. Richard Smith, ed. New York: Ira J. Friedman, Inc., 1964.

Hamilton, Kenneth. "John Ettwein's Visit to Friedenshutten on the Susquehanna in 1768." *Settler* 4 (1957): 56–62.

Hanlon, Edward F. *The Wyoming Valley: An American Portrait*. Woodlands Hills, CA: Windsor Publications, 2003.

Hanna, Charles A. "The Shamokin Traders and the Shamokin Path." In *The Wilderness Trail, Or the Ventures and Adventures of the Pennsylvania Traders on the Allegheny Path*, 192–222. New York: The Knickerbocker Press, 1911.

Harvey, Oscar Jewell. *A History of Wilkes-Barre, Luzerne County, Pennsylvania*. Wilkes-Barre, PA: Wyoming Historical & Geological Society, 1909.

Hatch, James W., and Ira C. Beckerman. *An Archaeological Reconnaissance of North Central Wyoming & South Central Susquehanna Counties, Pennsylvania*. University Park, PA: Penn State University Press, 1979.

Hayes, D. R., D. C. Roper, J. Schuldenrein, and W. R. Stinson. *Archaeological Investigations at the Susquehanna SES: The Susquehanna SES Floodplain*. Jackson, MI: Commonwealth Associates, 1981.

Heckewelder, John. "History, Manners & Customs of the Indian Nations Who Once Inhabited Pennsylvania & Neighboring States." *Memoirs of the Historical Society of Pennsylvania* 12 (1876).

Heisey, Henry W., W. Fred Kinsey, Jeffrey R. Graybill, et al. "Shenks Ferry Culture: A View from 1971." *Pennsylvania Archaeologist* 41, no. 4 (December 1971), 1–70.

Heisey, Henry W., and J. Paul Witmer. "Of Historic Susquehannock Cemeteries." *Pennsylvania Archaeologist* 32 (1962): 99–130.

———————. "The Shenks Ferry People: A Site and Some Generalities." *Pennsylvania Archaeologist* 36, no. 1 (April 1964), 8–34.

Heverly, Clement. *History and Geography of Bradford County*. Towanda, PA: Bradford County Historical Society, 1926.

Higgins, Robert M. "An Indian Site in the Borough of Montoursville." *Journal of the Lycoming County Historical Society* 13 (1986): 28–34.

Hill, Ronald B. "A Brief History of the Andaste Nation." *Pennsylvania Archaeologist* 6 (1936): 35.

Hodge, Frederick Webb, ed. "Susquehanna." In *Handbook of American Indians North of Mexico*. Vol. 2, pp. 653–658. Bulletin 30. Washington, DC: Government Printing Office, 1910.

Hollister, Horace. *History of the Lackawanna Valley*. Baltimore: Heritage Books, 1998.

Howard, J. Smoker. "The Chronological Placement of the Hershey Site and Implicationson a Dynamic Socio-Cultural Landscape." *Pennsylvania Archaeologist* 73, no. 2 (Fall 2003): 16–30.

Hsiung, David C. "Death on the Juniata: Delawares, Iroquois, and Pennsylvanians in a Colonial Whodunit." *Pennsylvania History* 65 (1998): 445.

Hultkrantz, Ake. *Native Religions of North America: The Power of Visions and Fertility*. Prospect Heights, IL: Waveland Press, 1987.

Hunter, Charles E. "A Susquehanna Indian Town on the Schuykill." *Pennsylvania Archaeologist* 53, No. 3 (September 1983): 17–18.

Hyde, Marcella M. *Bradford County: The Story of its People*. Canton, PA: Marcella Hyde, 1985.

Inskip, Gregory A. "Safe Harbor Petroglyphs—Carved by the Shawnee?" *Pennsylvania Archaeologist* 60, no. 2 (September 1990): 71–74.

Jameson, John Franklin. *Narratives of New Netherland, 1609–1664*. New York: Scribner, 1909.

Jennings, Francis. The Founders of America. New York: W. W. Norton & Company, 1993.

————. "Glory, Death, and Transfiguration: The Susquehannock Indians in the Seventeenth Century." *Proceedings of the American Philosophical Society* 112 (1968): 15–53.

————. "The Indian Trade of the Susquehanna Valley." *Proceedings of the American Philosophical Society* 110 (1966): 406–424.

————. "'Pennsylvania Indians' and the Iroquois." In Daniel K. Richter and James H. Merrell, eds. *Beyond the Covenant Chain: The Iroquois and Their Neighbors in Indian North America, 1600–1800*, 75–91. Syracuse, NY: Syracuse University Press, 1987.

Johansen, Bruce E., and Barbara A. Mann, eds. *The Encyclopedia of Native American Legal Tradition*. Westport, CT: Greenwood Press, 1998.

Keith, Charles P. "The Red Neighbors." *Chronicles of Pennsylvania: 1681–1776* 1 (1917): 90–122.

Kent, Barry C. *Susquehanna's Indians*. Harrisburg, PA: Pennsylvania Historical and Museum Commission, 1984.

————, Janet Rice, and Kakuko Ota. "A Map of 18th Century Indian Towns in Pennsylvania." *Pennsylvania Archaeologist* 51, no. 4 (December 1981): 1–18.

————, Ira F. Smith III, and Catherine McCann, eds. *Foundations of Pennsylvania Prehistory*. Anthropological Series 2. Harrisburg, PA: Pennsylvania Historical & Research Commission, 1971.

Kerber, Jordan E., ed. *Archeology of the Iroquois: Selected Readings & Research Sources*. Syracuse, NY: Syracuse University Press, 2007.

Kie, Elwyn V. *Pictorial & Written History of Bradford County, Pennsylvania*. Vols. 1–2. Towanda, PA: Bradford County Historical Society, 1992.

Kinsey, W. Fred, and Jay F. Custer. "Lancaster County Park Site (36LA96): Conestoga Phase." *Pennsylvania* Archaeologist 52, no. 3–4 (September 1982): 25–56.

Kinsey, W. Fred, III, and Jeffrey R. Graybill. "Shenks Ferry Culture: A View from 1971." *Pennsylvania Archaeologist* 41 (1971): 1–44.

Klein, Philip S., and Ari Hoogenboom. *A History of Pennsylvania*. University Park, PA: Penn State University Press, 1973.

Kuhn, Robert D., and Martha L. Sempowski. "A New Approach to Dating the League of the League of the Iroquois." *American Antiquity* 66 (2001): 301–314.

Leder, Lawrence H., ed. *The Livingston Indian Records, 1666–1723*. Gettysburg, PA: The Pennsylvania Historical Association, 1956.

Littell, Walter R. *A History of Cooperstown (Including "The Chronicles of Cooperstown" by James Fenimore Cooper, "The History of Cooperstown" by Samuel M. Shaw, "The History of Cooperstown" by Walter R. Littell)*. New York: The Freeman's Journal Company, 1921.

Lloyd, Norman. *History of Lycoming County*. Indianapolis, IN: Historical Publishing Co., 1938.

Lucy, Charles L. "Notes on a Small Andaste Burial Site and Andaste Archaeology." *Pennsylvania Archaeologist* 20 (1950): 55–62.

————. "Pottery Types of the Upper Susquehanna." *Pennsylvania Archaeologist* 29 (1959): 28–37.

————. "The Tioga Point Farm Sites 36 BR3 and 36 BR52: 1983 Excavation." *Pennsylvania Archaeologist* 61 (1991): 1–18.

————. "An Upper Susquehanna Mixed Site." *Pennsylvania Archaeologist* 22 (1952): 95–97.

————, and Ted Keir. "36 BR81: A Multicomponent Site Near Wyalusing, Pennsylvania." *Pennsylvania Archaeologist* 72 (2002): 1–16.

————, and Richard J. McCracken. "The Blackman Site (36BR83): A Fortified Susquehannock Village in Bradford County, Pennsylvania." *Pennsylvania Archaeologist* 55 (1984): 5–29.

————, and Leroy Vanderpoel. "The Tioga Point Farm." *Pennsylvania Archaeologist* 49 (1979): 1–12.

Lyon, Norman. *The Drama of Early Wyalusing*. Wyalusing, PA: The Rainbow Club, 1938.

Macauley, James. *The Natural, Statistical, and Civil History of the State of New-York*. Vol. 1. New York: Gould & Banks, 1829.

Macdonald, Douglas H. "Historic Settlement Patterns and Lithic Usage in the Upper Juniata River Basin." *Pennsylvania Archaeologist* 76, no. 1 (Spring 2006): 48–62.

McCracken, Richard. "The Trojan Site (36 BR149)." *Pennsylvania Archaeologist* 59 (1989): 1–21.

McCracken, Richard J. "Susquehannocks, Brule and Carantouanais: A Continuing Research Problem." *Bulletin and Journal of Archaeology for New York State* 91 (1985): 39–51.

————, and Charles L. Lucy. "Analysis of a Radiocarbon Date from the Blackman Site, An Early Susquehannock Village in Bradford County, Pennsylvania." *Pennsylvania Archaeologist* 59 (1989): 14–18.

Meginness, John. *Otzinachson: A History of the West Branch Valley*. Williamsport, PA: Lycoming County Historical Society, 1889. Reprint. Baltimore: Gateway Press, Inc., 1991.

Merrell, James. "'The Cast of His Countenance': Reading Andrew Montour." In Ronald Hoffman, Mechal Sobel, and Fredrika J. Teute, eds. *Through A Glass Darkly: Reflections on Personal Identity in Early America*, 13–39. Chapel Hill: University of North Carolina Press, 1997.

————. "Indian History during the English Colonial Era." In Daniel Vickers, ed. *A Companion to Colonial America*, 118–135. Oxford: Blackwell Publishing, 2003.

————. *Into The American Woods: Negotiators on the Pennsylvania Frontier*. New York: W. W. Norton & Co., 1999.

————. "The Other 'Susquehanna Traders': Women and Exchange on the Pennsylvania Frontier." In Robert Olwell and Alan Tully, eds. *Cultures and Identities in Colonial British America*, 197–219. Baltimore: The John Hopkins University Press, 2006.

————————. "Shamokin, 'the very seat of the Prince of darkness': Unsettling the Early American Frontier." In Andrew R. L. Cayton and Fredrika J. Teute, eds. *Contact Points: American Frontiers from the Mohawk Valley to the Mississippi, 1750–1830*, 16–59. Chapel Hill: University of North Carolina Press, 1998.

————————. "Shikellamy, 'A Person of Consequence.'" In Robert S. Grumet, ed. *Northeastern Indian Lives,1632–1816*, 227–257. Amherst, MA: University of Massachusetts Press, 1996.

Miller, Randall M., and William Pencak. *Pennsylvania: A History of the Commonwealth*. University Park, PA: Penn State University Press, 2002.

Minderhout, David J., and Andrea T. Frantz. *Invisible Indians: Native Americans in Pennsylvania*. Amherst, NY: Cambria Press, 2008.

————————. "Native American Horticulture in the Northeast." *General Anthropology* 16 (2009): 1–7.

Miner, William Penn. *History of Wyoming*. Philadelphia: J. Crissy, 1845.

Mithun, M. "The Proto-Iroquoians: Cultural Reconstruction from Lexical Materials." In M. K. Foster, J. Campisi, and M. Mithun, eds. *Extending the Rafters: Interdisciplinary Approaches to Iroquoian Studies*, 259–281. Albany: State University of New York Press, 1984.

Moorehead, Warren K. *A Report of the Susquehanna River Expedition*. Harrisburg, PA: Pennsylvania Historical and Museum Commission, 1936. Reprinted in *The Museum of the American Indian*. Andover, MA: The Andover Press, 1938.

Morgan, Christopher, and E. B. O'Callaghan, eds. *The Documentary History of the State of New York*. Vols. 1 and 4. Albany, NY: Weed, Parsons & Co., 1850.

Morgan, Lewis H. *League of the Ho-Dé-No-Sau-Nee or Iroquois*. New York: Burt Franklin, 1902.

Murray, Louise Welles. "Aboriginal Sites Near Teaoga, Now Athens, Pennsylvania." *American Anthropologist* 23 (1921): 183–214.

————————. *Clark Manuscripts: Aboriginal History of the Susquehanna*. Lewisburg, PA: Wennawoods Publishing, 2008.

————————. *A History of Old Tioga Point and Early Athens, Pennsylvania*. Wilkes-Barre, PA: The Raeder Press, 1908.

Myers, James P., Jr. "The Reverend Thomas Barton's Authorship of the Conduct of the Paxton Men, Impartially Represented." *Pennsylvania History* 61 (1994): 155.

Myers, Richard. *The Long Crooked River*. Boston: The Christopher Publishing House, 1949.

Neff, George H. "How the Indians Lived at Shamokin." In John H. Carter, ed. *History of Sunbury*, 515. Sunbury, PA: The Northumberland County Historical Society, 1995.

Nelson, Melissa K., ed. *Original Instructions: Indigenous Teachings for a Sustainable Future, The Iroquois Confederacy*. Rochester, VT: Bear & Company, 2008.

Newman, Walter S., and Bert Salwen, eds. *Amerinds and their Paleoenvironments in Northeastern North America*. New York: New York Academy of Sciences, 1977.

Orlandini, John. *The Ancient Native Americans of the Wyoming Valley: 10,000 Years of Prehistory*. Shavertown, PA: John Orlandini, 1996.

————————. *Indians, Settlers, and Forgotten Places in the Endless Mountains*. Shavertown, PA: John Orlandini, 2008.

————————. "The Passenger Pigeon: A Seasonal Native American Food Source." *Pennsylvania Archaeologist* 66 (1996): 71–77.

————————. *The Papers of Sir William Johnson*. In *Documentary History of New York State*. Vol. 4. Albany: The University of the State of New York, 1921.

Parker, Arthur C. *The Archeological History of New York*. New York State Museum Bulletin, Nos. 237–238, 668–670. Albany: The University of the State of New York, 1920.

———————. *The Constitution of the Five Nations*. New York State Museum Bulletin, No. 184, p. 42. Albany: The University State of New York, April 1916.

———————. *The Influence of the Iroquois on the History & Archaeology of the Wyoming Valley, Pennsylvania*. Wilkes-Barre, PA: Wyoming Historical and Geological Society, 1911.

———————. "The Origin of the Iroquois as Suggested by Their Archeology." *American Anthropologist New Series* 18 (1916): 479–507.

Parucha, Leonard F. *The Last of the Susquehannocks*. Lock Haven, PA: Leonard F. Parucha, 2006.

Pearce, Stewart. *Annals of Luzerne County*. Philadelphia, PA: Lippincott & Co., 1866.

Peck, George. *Wyoming: Its History, Stirring Incidents & Romantic Adventures*. New York: Harper & Bros., 1858.

Pendergast, James F. "Susquehannock Trade Northward to New France Prior to AD 1608: A Popular Misconception." *Pennsylvania Archaeologist* 62 (1992): 1–11.

Perkins, Mrs. George A. *Early Times on the Susquehanna*. Binghamton, NY: Malette & Reed, 1870.

Petrillo, Charles, and John Orlandini. *Indians of the Susquehanna & Wyoming Valleys: Selected Readings*. Wilkes-Barre, PA: Wyoming Historical & Geological Society, 1992.

Purdy, Truman H. "Shikellamy." In *Legends of the Susquehanna, and Other Poems*, 7–32. Philadelphia: J. B. Lippincott Company, 1888.

Richter, Daniel. "A Framework for Pennsylvania Indian History." *Pennsylvania History* 57 (1990): 236–261.

———————. *Native Americans' Pennsylvania*. University Park, PA: The Pennsylvania Historical Association, 2005.

———————. *The Ordeal of the Longhouse: The Peoples of the Iroquois League in the Era of European Colonization*. Chapel Hill: The University of North Carolina Press, 1992.

———————. "War and Culture: The Iroquois Experience." *William and Mary Quarterly*. 3rd Ser., 40 (1983): 528–559.

Runkle, Stephen A. *Native American Waterbody and Place Names Within the Susquehanna River Basin*. Harrisburg, PA: Susquehanna River Basin Commission, 2003.

Schoff, Harry L. "Report of the Archaeological Excavations Carried On at the J. T. Roberts Property, Montoursville, Lycoming County, Pennsylvania." *Pennsylvania Archaeologist* 7 (1937b): 8.

———————. "A Report of the Excavation of the Ancient Indian Burial Mound near Muncy, Lycoming County, Pennsylvania." *Pennsylvania Archaeologist* 7 (1937a): 3–5.

Schrabisch, Max. "Aboriginal Shelters of Wyoming Valley & Vicinity." *Proceedings of Wyoming Historical & Geological Society* 19 (1926): 47–218.

Shaffer, Gary D. "An Examination of the Bead Hill Site in the Wyoming Valley." *Pennsylvania Archaeologist* 68 (1998): 18–41.

Shutt, Amy C. "Tribal Identity in the Moravian Missions on the Susquehanna." *Pennsylvania History* 66 (1999): 378.

Sipe, C. Hale. *The Indian Chiefs of Pennsylvania*. Lewisburg, PA: Wennawoods, 1927.

Smith, Ira F., III. "The Parker Site: A Manifestation of the Wyoming Valley Culture." *Pennsylvania Archaeologist* 43 (1973): 1–56.

———————. "Schultz Site Settlement Patterns and External Relationships." *Bulletin of the New York State Archaeological Association* 50 (1970): 27–34.

Snow, Dean R. *The Iroquois*. Malden, MA: Blackwell Publishing, 1994. Reprint, Malden, MA: Blackwell Publishing, 1996.

Sorg, David J. "Lost Tribes of the Susquehanna." *Pennsylvania Archaeologist* 74 (2004): 63–72.

———. "Problematic Tribal Names of Pennsylvania." *Pennsylvania Archaeologist* 76, No. 2 (Fall 2006): 48–53.

Spittal, W. G., ed. *Iroquois Women: An Anthology*. Ontario: Iroqrafts, Ltd., 1990.

Staats, F. Dayton. "Susquehannock Schultz Incised Bowl." *Pennsylvania Archaeologist* 49 (1979): 81–82.

Stewart, R. Michael. "Clemson Island Studies in Pennsylvania: A Perspective." *Pennsylvania Archaeologist* 60 (1990): 79–107.

———. "Comparison of Late Woodland Cultures: Delaware, Potomac and Susquehanna River Valleys, Middle Atlantic Region." *Archaeology of Eastern North America* 21 (1993): 163–178.

———. "Trade & Exchange in Middle Atlantic Prehistory." *Archaeology of Eastern North America* 17 (1989): 47–78.

Stewart, T. B. "The Andaste Camp Site at Pine, Clinton County, Pennsylvania." *Now and Then* 4 (1930): 76–78.

Sugrue, Thomas J. "The Peopling & De-peopling of Early Pennsylvania: Indians and Colonists 1680–1720." *Pennsylvania Magazine of History and Biography* 116 (1992): 3–32.

Taylor, Alan. "Wasty Ways: Stories of American Settlement." *Environmental History* 3 (July 1988): 291–310.

Thieme, Donald M. "Hands Washed in a Muddy Stream: Corrections & Further Thoughts on Wyoming Valley Landscape Evolution." *Pennsylvania Archaeologist* 69 (1999): 45–52.

———, and Joseph Schrildenrein. "Wyoming Valley Landscape Evolution and the Emergence of the Wyoming Valley Culture." *Pennsylvania Archaeologist* 68 (1998): 1–17.

Tioga Point Museum. *Summary of Sites Represented in Native American Collections*. Athens, PA: Tioga Point Museum, 1997.

Tooker, Elizabeth. "The Demise of the Susquehannocks: A 17th Century Mystery." *Pennsylvania Archaeologist* 54, Nos. 3–4 (September–December 1984): 1–10.

Town of Hartwick Historical Society. *Hartwick: The Heart of Otsego County, NY*. Hartwick, NY: Syllables Press, 2002.

Turnbaugh, William A., and Donald R. Schmidt. "Interpreting Finds from a Small Disturbed Site." *Pennsylvania Archaeologist* 49 (1979): 1–8.

Twigg, Deb. "Revisiting the Mystery of 'Carantouan' and Spanish Hill." *Pennsylvania Archaeologist* 75, No. 2 (2005): 24–33.

———. *Spanish Hill and Carantouan: The History, the People, and the Politics*. Sayre, PA: Susquehanna River Archaeological Center of Native Indian Studies, 2007.

U.S. Census Bureau. *The American Indian and Alaskan Native Population*. Washington, DC: U.S. Department of Commerce, 2004.

Waldman, Carl. *Atlas of the North American Indian*. New York: Checkmark Books, 2000.

Wallace, Paul. "Historic Indian Paths of Pennsylvania." *Pennsylvania Magazine of History: Journal of the Historical Society of Pennsylvania* 76 (1952): 1–29.

———. *Indians in Pennsylvania*. Harrisburg, PA: Pennsylvania Historical and Museum Commission, 1981 [1993].

———. "We came out of the Ground." In *Pennsylvania: Seed of a Nation*, 8–19. New York: Harper & Row, 1962.

Wallower, Lucille. *Indians of Pennsylvania*. State College, PA: Penn's Valley Publishers, 1956.

Weiser, Conrad. "Journey to Onondago." In *Journals: Shamokin, The Indian Capital, 1737–1755*. Vol. 11. Sunbury, PA: The Northumberland County Historical Society Archives.

Wellenreuther, Herman. "White Eyes and the Delaware's Vision of an Indian State." *Pennsylvania History* 68 (2001): 139.

Weslager, C. A. *The Delaware Indians: A History*. New Brunswick, NJ: Rutgers University Press, 1972.

Witthoft, John. "Ancestry of the Susquehannocks." In John Witthoft, ed., *Susquehannock Miscellany* (Harrisburg, PA: Pennsylvania Historical and Museum Commission, 1959), 19–60.

————. "Pottery from the Stewart Site, Clinton County, Pennsylvania." *Pennsylvania Archaeologist* 24 (1954): 22–29.

————, ed. *Susquehannock Miscellany*. Harrisburg, PA: Pennsylvania Historical and Museum Commission, 1959.

————, and W. Fred Kinsey III. *Susquehannock Miscellany*. Harrisburg, PA: Pennsylvania Historical and Museum Commission, 1959.

Wooley, Charles. "A Two Years Journal in New York and Part of Its Territories in America." In *Historic Chronicles of New Amsterdam, Colonial New York and Early Long Island*. New York: Ira J. Friedman, Inc., 1968.

Wren, Christopher. *Aboriginal Pottery, Susquehanna River Region, Wyoming Valley, Pennsylvania*. Wilkes-Barre, PA: Wyoming Historical & Geographical Society, 1905.

————. "Some Indian Graves at Plymouth, Pennsylvania." *Proceedings of the Wyoming Historical & Geological Society* 12 (1912): 199–204.

————. *A Study of North Appalachian Indian Pottery*. Wilkes-Barre, PA: E. B. Yordy, 1914.

Wykoff, M. W. *Iroquoian Prehistory and Climate Change*. Ithaca, NY: Cornell University Press, 1989.

Young, Robert Kennedy. *Tales of Tioga, Pennsylvania, and Its People*. Philadelphia: Lippincott & Co., 1916.

Zinzendorf, Nicholas. "Journey to Shamokin." In *Journals: Shamokin, The Indian Capital, 1737–1755*. Vol. 11. Sunbury, PA: The Northumberland County Historical Society Archives.

UPPER JAMES RIVER

Executive Summary

This report summarizes the potential for the Upper James River of Virginia as a connecting trail to the Captain John Smith Chesapeake National Historic Trail. A summary of research of historic documentary and archival data, as well as limited field reconnaissance, are presented to support the summary.

The scope of work outlined for the project identified three themes of potential significance to be evaluated for the connecting trails. This report presents conclusions for the Upper James in light of the criteria for evaluation based on the themes and developed by the Friends of the John Smith Trail, the Conservation Fund, and John Salmon, as summarized by Salmon in a memo to project researchers of September 30, 2009. The themes are:
a) associations of the Upper James with Captain John Smith's 1607–09 voyages of exploration;
b) associations of the Upper James with 17th century Indians of the Chesapeake; and
c) areas which are illustrative of 17th century natural history and/or events shaped by natural history in the region.

Based on the research that has been completed, and to better explain the conclusions that are presented here, the data for the Upper James are described in terms of association with two segments or sections of the study area. The first section begins at the current boundaries of the Trail, near Richmond, and extends to the location of the westernmost edge of John Smith's 1608 map. The second section extends from that point to the juncture of the Jackson and Cowpasture Rivers, near the headwaters of the James. Figure 1 identifies the location of the Upper James River study area with the locations of sections 1 and 2 identified by shading. Figure 2 identifies the James River within the larger Chesapeake watershed of Virginia and Maryland.

The report summarizes the ethnohistoric and archaeological data for both sections and assesses that data relative to the thematic associations described above. The report concludes that Section 1 has substantial association with all three criteria and Section 2 has substantial association with Criteria 2 and 3, i.e., all of the Upper James River, meet at least two if not all three of the criteria for a potential connecting trail. Justification for that conclusion for each section is provided in the main body of the report. Jamestown-era documentation supporting the conclusions can be found in Appendices A, B, and C.

This report also identifies and briefly describes 10 potential interpretive sites for the Upper James, and outreach organizations that may have an interest in the Upper James River Connecting Trail.

Bibliography

Alvord, Clarence W., and Lee Bidgood. *The First Explorations of the Trans-Allegheny Region by the Virginians, 1650–1674*. Cleveland, OH: Arthur H. Clark Co., 1912.

Briceland, Alan Vance. *Westward from Virginia: The Exploration of the Virginia-Carolina Frontier, 1650–1710*. Charlottesville: University of Virginia Press, 1987.

Bushnell, David. "Discoveries Beyond the Appalachian Mountains in September, 1671." *American Anthropologist* 9 (1907): 45–56.

Cumming, William P., ed. *The Discoveries of John Lederer*. Charlottesville: University of Virginia Press, 1958.

Egloff, Keith, and Stephen Potter. "Indian Ceramics from Coastal Plain Virginia." *Archaeology of Eastern North America* 10 (1982): 95–117.

————, and Deborah Woodward. *First People: The Early Indians of Virginia*. 2nd ed. Charlottesville: University of Virginia Press, 2006.

Gallivan, Martin. *James River Chiefdoms*. Lincoln: University of Nebraska Press, 2003.

————. *Early Horticultural Settlement in the James River Piedmont: Excavations at the Partridge Creek Site (44AH193), Stapleton, Virginia*. Research Report Series No. 12. Richmond: Virginia Department of Historic Resources, 2003.

Gold, Debra. *Bioarchaeology of the Virginia Mounds*. Tuscaloosa: University of Alabama Press, 2003.

Hantman, Jeffrey. "Between Powhatan and Quirank: Reconstructing Monacan Culture and History in the Context of Jamestown." *American Anthropologist* 92 (1990): 676–690.

————. "Monacan Archaeology of the Virginia Interior, A.D. 1400–1700." In D. Brose, C. W. Cowan, and R. C. Mainfort, Jr., eds. *Societies in Eclipse: Archaeology of the Eastern Woodlands Indians, A.D. 1400–1700*, 107–123. Washington, DC: Smithsonian Institution Press, 2001.

Hodges, Mary Ellen. "The Archaeology of Native American Life in Virginia in the Context of European Contact: Review of Past Research." In T. R. Reinhart and D. Pogue, eds. *The Archaeology of Seventeenth Century Virginia*, 1–66. Richmond, VA: Dietz Press, Special Publications of the Archeological Society of Virginia No. 20, 1993.

Ingram, Bruce. *The James River Guide: Fishing and Floating on Virginia's Finest*. Lakeville, MN: Ecopress, 2007.

Jefferson, Thomas. *Notes on the State of Virginia*. William Peden, ed. New York: W. W. Norton and Co., 1982.

Lapham, Heather. *Hunting for Hides*. Tuscaloosa: University of Alabama Press, 2005.

Lewis, Clifford M., and Albert J. Loomie. *The Spanish Jesuit Mission in Virginia, 1570–1572*. Chapel Hill: University of North Carolina Press, 1953.

MacCord, Howard. *The Lewis Creek Mound Culture in Virginia*. Richmond, VA: Special Publication of the Archaeological Society of Virginia, 1986.

Moore, Clarence. "Sheet Copper from the Mounds Is Not Necessarily of European Origin." *American Anthropologist* 5 (1903): 27–41.

Mouer, L. Daniel. "A Review of the Archaeology and Ethnohistory of the Monacans." In J. Mark Wittkofski and Lyle Browning, eds. *Piedmont Archaeology*. Richmond: Special Publication of the Archeological Society of Virginia No. 10, 1983.

Quinn, David Beers. *Set Fair for Roanoke: Voyages and Colonies, 1584–1606*. Chapel Hill: University of North Carolina Press, 1985.

————————. *The Roanoke Voyages, 1584–1590*. Vols. 1 and 2. New York: Dover Publications, 1991.

Sweet, Palmer, Richard Good, James Lovett, Elizabeth V. M. Campbell, Gerald Wilkins, and Lesley Meyers. *Copper, Lead and Zinc Resources in Virginia*. Charlottesville: Virginia Division of Mineral Resources Publication 93, 1989.

Whyte, Thomas, and Steven Thompson. "Archaeological Investigations at the Bessemer Site: A Late Woodland Period Dan River and Page Component Village Site on the Upper James River, Virginia." Unpublished report. 1989. Virginia Department of Historic Resources, Richmond.

Wood, Karenne, ed. *The Virginia Indian Heritage Trail*. 3rd ed. Charlottesville: Virginia Foundation for the Humanities, 2009.

UPPER NANTICOKE RIVER

Executive Summary

The research team concludes that the Upper Nanticoke River watershed in Delaware has substantial association with all three criteria for a potential connecting trail to the Captain John Smith Chesapeake National Historic Trail.

Segments of the watershed meet the criteria differently. The segment of the river system that connects to the existing trail and is most closely illustrative of the natural history of the Chesapeake Bay watershed is the area downstream from Butler Mill Branch on the main channel of the Nanticoke River and from the Town of Bethel, just upstream of Phillips Landing on Broad Creek, to its confluence with the Nanticoke River. To this area we would add the segment of the Nanticoke River north of Butler Mill Branch up to and including Deep Creek to Concord Pond dam. The archaeological sites upstream on the Nanticoke River and Deep Creek appear to be associated with the town of Kuskarawoak and other upstream Nanticoke Indian towns, as well as providing one option for where John Smith may have placed a cross marking his limit of exploration. On Broad Creek the potential trail is extended upstream from Bethel to the "wadeing place" at Records Pond dam in Laurel, one boundary of the Broad Creek Nanticoke Indian reservation in 1711. The potential connecting trail is the area in which the watershed best represents the voyage of John Smith and the 17th-century Indians of the Chesapeake.

The Nanticoke Indians of the entire watershed were affected in direct and significant ways by John Smith's voyage, the leading edge of English colonization. In fact, the same people who met John Smith were the same people who, during certain seasons of the year, hunted, trapped, gathered, and lived in the upper reaches of the watershed and beyond. Nanticoke Indian history and the effect of European colonization on the changes in and persistence of the Nanticoke Indian culture is a significant theme for interpretation in relation to the voyages of Captain John Smith.

Bibliography

Busby, Virginia Roche. "Transformation and Persistence: The Nanticoke Indians and Chicone Indian Town in the Context of European Contact and Colonization." PhD diss., University of Virginia, 2009.

Dent, Richard J., Jr. *Chesapeake Prehistory: Old Traditions, New Directions*. New York: Plenum Press, 1995.

Feest, Christian F. "The Nanticoke and Neighboring Tribes." In Bruce Trigger, ed. *Handbook of North American Indians, Volume 15: Northeast*. Washington, DC: Smithsonian Institution Press, 1978.

Griffith, Daniel R. *Townsend Ceramics and the Late Woodland of Southern Delaware,* MA thesis, The American University, 1977.

————————. *Townsend Ceramics and the Late Woodland of Southern Delaware*. In *Maryland Historical Magazine* 75, No. 1 (March 1980): 23–41.