When first defined by John Witthoft in 1953, the Transitional Period was characterized by broad bladed bifaces, cache blades, steatite bowls, cracked rock features, a curated lithic technology, an emphasis on a staged, bifacial lithic reduction strategies, and in some areas, burial ceremonialism, which have been added to this list. Some researchers have linked the appearance of ceramics, and adaptations with a riverine focus. Large fire wrinkle on North American Flaked Technologies, by Jack Cresson.

Local researchers have added to this list. Some researchers have linked the appearance of ceramics, and adaptations with a riverine focus. Large fire wrinkle on North American Flaked Technologies, by Jack Cresson.

The Adaptive Significance of the Material Culture and Cultural/social Behaviors of the Time Remains Unclear, and Other Interpretive Perspectives

Session papers will be followed by 10 minute discussion periods.

Moderator - Michael Stewart

1:00 pm – 1:30 pm Problems, Problems, Problems: Working with the Archaeological Record of 3000-4000 BP, by Michael Stewart, Temple University

1:30 pm – 2:00 pm Evidence for Climatic Variability During the Sub-Boreal/Transitional Period: Fact or Fiction, by Frank Vento, Clarion University

2:00 pm – 2:30 pm Settlement Patterns, Lithic Preferences and Cultural Adaptations During the Transitional Period, by Kurt W. Carr, The Pennsylvania Historical and Museum Commission

2:30 pm – 3:00 pm The Transitional Archaic of the Susquehanna Valley, by Patricia Miller, KCI Technologies, Inc.

3:00 pm – 3:15 pm Break

3:15 pm – 3:45 pm Rethinking the Terminal Archaic in Pennsylvania: Hearths, Fish and Pottery, by Roger Moeller, Archaeological Services

3:45 pm – 4:15 pm An “Orient” Perspective on the Transitional Archaic in the Delaware Valley, by Joseph Blondino, Temple University

4:15 pm – 4:45 pm Archaic Settlement Demography and Population Ecology Focus on the
The Archaeology of The French and Indian War Period Forts

1:30 pm – 1:50 pm  The Fort LeBoeuf Site: An Unexpected Journey Into Public Archaeology, by Renata B. Wolyniec, Edinboro University of Pennsylvania and the Fort LeBoeuf Museum

1:50 pm – 2:10 pm  Fortifications at the Forks of the Ohio: Fort Duquesne, Pittsburgh and Fort Pitt, by Brooke S. Blades, A.D. Marble & Company

2:10 pm – 2:30 pm  Madame Montour's Ostsonwokin and the Long Peace: Colonial Encounters at the Eve of the French and Indian War, by Mary Ann Levine, Franklin and Marshall College

2:30 pm – 2:50 pm  The History of Archaeological Research at Fort Augusta, Pennsylvania's Largest French and Indian War Period Fort, by James A. Delle, Kutztown University

2:50 pm – 3:05 pm  Break

3:05 pm – 3:25 pm  Archaeology Month 2008 at Fort Hunter, by James T. Herbstritt, Kurt W. Carr and Douglas C. McLearen, Pennsylvania Historical and Museum Commission

3:25 pm – 3:45 pm  In Search of the Elusive Fort Morris, by Stephen G. Warfel

3:45 pm – 4:05 pm  Frontier Defenses in Virginia During French and Indian War, by Greg Adamson

4:30 pm – 5:30 pm  Tour of Museum Gallery and Archaeology Lab

6:00 pm – 6:30 pm  Wine & Cheese Reception Memorial Hall

6:30 pm – 9:00 pm  Dinner Banquet & Annual Awards Memorial Hall

Program Guest Speaker: Bruce Bomberger, Curator, Landis Valley Museum - French and Indian War Period Forts

In the mid 1990s, while working in the PHMC's Bureau for Historic Preservation, Bruce Bomberger received the task of surveying the likely remains of the State's sites associated with the French and Indian War and co-producing a reference booklet on its findings. This undertaking was spearheaded by a grant from the America's Industrial Heritage Project, a methodological, theoretical, and interpretive questions that confront researchers dealing with the archaeological record of the time.

Available PAC Session Abstracts

Carr, Kurt W. Settlement Patterns, Lithic Preferences and Cultural Adaptations During the Transitional Period

Withfto proposed that the settlement patterns of the Transitional Period focused on riverine environments. He also proposed that in Pennsylvania, there were distinctive lithic preferences and a distinctive lithic reduction strategy during this period. This presentation will examine settlement patterns, patterns of lithic utilization and lithic technology for the Late Archaic, Transitional and Early Woodland Periods using data from the Pennsylvania Archaeological Site Survey files. These traits will be correlated with climatic changes resulting in a preliminary model for the evolution of cultural adaptations during this period.

Moeller, Roger Rethinking the Terminal Archaic in Pennsylvania: Hearths, Fish and Pottery

The Archaic is noted for having many local, specialized adaptations each with its own distinctive tool kits: Maritime, Piedmont, and Desert to name three. For some reason, Perkiomen, Susquehanna, and Orient are considered "cultures" continuing through the end of the Archaic and into the beginning of the Early Woodland. Some refer to these as part of the Terminal Archaic; others call this era Transitional. Although many topics will be discussed, the primary focus here will be on the classic presentation with huge hearths filled with fire cracked rock located on the floodplains of major rivers and their tributaries. The supposed function of these hearths was for the intensive processing of anadromous fish. If immense hearths were a necessary aspect of fish processing, what did the people do previously and subsequently? Answers will be sought using cultural ecology and economic anthropology.

Stewart, Michael Problems, Problems, Problems: Working with the Archaeological Record of 3000-4000 BP

This presentation introduces the session and outlines the various methodological, theoretical, and interpretive questions that confront researchers dealing with the archaeological record of the time.

Wholey, Heather A. Archaic Settlement Demography and Population Ecology Focus on the Terminal Archaic

A population model for the Virginia Archaic illustrates significant temporal and spatial variation in overall population density and local group size. While much of this variation is the product of adaptive responses in population growth rates, a good deal can also be attributed to other aspects of settlement demography, such as differing settlement patterns, mobility systems and land use routines that impact on archaeological visibility. Implementing concepts fundamental to population ecology, such as carrying capacity, migration and territoriality aid in the interpretation of manifest trends. Recent initial endeavors to apply this model to eastern Pennsylvania draws on watershed surveys conducted within the Susquehanna and Delaware sub-basins. Particular effort is made to address influences on apparent fluctuation in overall population growth, while focusing on the patterns evident for the Terminal Archaic.
Pattern comparisons, artifact analysis and recent carbon dating results, this paper will present the chronological sequencing of these occupations and people and their place in a broader regional context. Utilizing settlement of sites offers a unique and defining perspective of the evolution of these occupations. "Blades, Brooke S., Fortifications at the Forks of the Ohio: Fort Duquesne, Pittsburgh and Fort Pitt "During the decade from 1754 to 1764, three fortifications were constructed at the point of confluence between the Allegheny and Monongahela rivers in western Pennsylvania. The French Fort Duquesne stood from 1754 until its abandonment and partial destruction in late 1758. British forces constructed a small fort that was known to them as "Pittsburg" in the winter of 1758-59 along the Monongahela River, but by the spring and summer of 1759 had commenced the much larger Fort Pitt. None of these fortifications were ever attacked directly, although Fort Pitt was besieged by Native Americans for a time in 1763.

"Blades, Brooke S., Pat Fall, William Johnson and Frank Vento "A Preliminary Assessment of Prehistoric Occupation at the Forks of the Ohio "Archaeological monitoring and investigations at Point State Park in Pittsburgh during 2007 provided an opportunity to record important information relating to at least 8000 years of prehistoric occupation between the Allegheny and Monongahela rivers. Soil sediments and geochronology suggest the Holocene terrace between the rivers had built up approximately 20 feet between the end of the Pleistocene and the Middle of the Holocene, with the possibility of earlier occupation evidence in the 20 feet of alluvial sedimentation. Radiometric determinations and material culture indicate occupations from the Middle Archaic through the Late Prehistoric period. The survival of Woodland evidence at varying elevations indicates topographical diversity across the point.

Burkett, Kenneth "It’s about Time! A chronological assessment of the Late Prehistoric villages at Fishbasket "Continued excavations at the Fishbasket site complex along the Redbank Creek on the boarder of Clarion and Armstrong counties, Pennsylvania has revealed a succession of large villages which cumulatively span most of the Late Prehistoric period. Such a packed series of sites offers a unique and defining perspective of the evolution of these people and their place in a broader regional context. Utilizing settlement pattern comparisons, artifact analysis and radiocarbon dating results, this paper will present the chronological sequencing of these occupations and discuss both continued similarities and obvious cultural changes that occur here through time.

Carr, Kurt W., James Adovasio and Frank Vento "A report on the 2008 field investigations at the Shoop site "In John Witthoft’s 1952 analysis of the Shoop site was based on an unprovenience surface collection that was recovered from eleven concentrations. Nearly all of the artifacts are made from Onondaga chert 350 kilometers to the northwest of Shoop. His research has had a huge affect on Paleoindian studies, especially the analysis of settlement patterns. This presentation will review the results of the first systematic excavation ever conducted at one of Witthoft’s concentrations including the first comprehensive mapping; a lithic sourcing analysis and a description of over 800 provenience artifacts recovered during 2008.

Chiarulli, Beverly A. and Sarah W. Neusius "Update on the IUP Late Prehistoric Project "The Johnston site (36ln2) excavations are part of our larger effort to investigate archaeological sites in the three watersheds that cross Indiana County. The Conemaugh Blacklick, Loyalhanna, and Crooked Creek Watersheds all contain multiple Late Prehistoric/Late Woodland villages and through a systematic program of limited excavation, analysis of old collections, analysis of faults and faunal samples and radiocarbon dating, we have gained new insights into the cultural dynamics in this region. Through the past year’s investigations, we have obtained new dates on the Tearing Run (36ln59), Dividing Ridge (36ln477), and Mary Rinn Sites (36ln29) as well as for the Johnston site. In addition, other collaborators have conducted geophysical investigations at the Dividing Ridge site and analyzed botanical samples from six other sites. This presentation summarizes the results of our work.

Coppock, Gary F. and John M. Sittler "A Geoarchaeological Investigation of the Aughwick Creek Watershed: An Introduction "This paper provides an introduction to a geoarchaeological research project currently underway in the Aughwick Creek watershed (Watershed 12C) in south-central Pennsylvania. The study is being performed as an alternative mitigation effort for two National Registration period roughly sites (36Hu199 and 36Hu200) that were impacted by improvements to SR. 522 within the Blacklog Narrows in Cromwell Township, Huntington County. The goals of the research are: 1) to identify and describe the alluvial and colluvial landforms within the watershed to determine how and when they were formed; 2) to assess the paleoenvironment of the watershed and how it changed through time by studying soil development and sedimentation rates, pollen, and plant remains; and 3) to create an archaeological sensitivity map of the watershed based on the soil characteristics and paleoenvironmental data. A geographic information system (GIS) will be developed to graphically display the data and results. The research will not only be useful for interpreting archaeological sites in the region, but will also serve as an important planning tool for PennDOT and other agencies. The results will help developers avoid archaeological sites (and thus minimize related costs) when designing construction projects within the Aughwick Creek watershed and similar settings in south-central Pennsylvania. It is anticipated that the project will be completed in the fall of 2009, after which detailed results will be presented.

Cresson, Jack "A Case for Prehistoric Fog: A New Wrinkle on North American Flaked Technologies "North American flaked lithic technology is, for the most part, underpinned by simple, straight-forward percussion and pressure techniques. Except for key phrases in the Paleoindian and Broadspear Periods, (wherein the use of grinding in the production of flaked lithic items was principally confined to specialized techniques applied to small areas, e.g. platform preparation and dorsal ridge abrasion); the practice and use of more complete grinding of surfaces and edges as a viable mechanism to improve and enhance the flaking process has no precedent. Until now!

"Grinding, as a surface treatment in prelude to finishing-fine in the mode and parlance of modern lapidary flint knapping-is known as “flake over grind” technique or FOG."

This paper unravels the use of grinding as observed in the Grownower Phase of the Paleo-Eskimo Tradition from the Maritime Provinces of Newfoundland and Labrador. Grinding surfaces and edges in biface production is an unknown practice in this hemisphere but has been recorded in several Old World contexts, (1) within the Scandinavian Neolithic and (2) the Pre-Dynastic Egyptian Chalcolithic Periods. Its punctuated occurrence, within a large sample, is roughly analogous to the Eastern Region-Early/Middle Woodland Period- is indeed enigmatic with no known antecedents. Archaeological data from sites in Labrador and Newfoundland along with experimental research findings will be advanced to make a unique case for a New World, Old World Neolithic production system.

Delle, James A. "The History of Archaeological Research at Fort Augusta, Pennsylvania’s Largest French and Indian War Period Fort "In the summer of 2007, as part of the Fort Augustus Project, Portfol, the fort itself along with the soldier’s direct action, Fort Augusta played a crucial role in fortifying the Susquehanna Valley during the French and Indian War. Located in the modern city of Sunbury, near the historic village of Shamokin, Fort Augusta was the largest colonial-period fort built in Pennsylvania. Despite the fact that the site is located in an urban area, a number of archaeological investigations have been done at the site.
These include WPA excavations in the 1930s, and a series of salvage/mitigation excavations completed in the 1970s, 1980s, and most recently in 2005-06. This paper synthesizes this work to report on the history of research at Fort Augusta.

Fritz, Brian L.  
Old Dirt Along the Clarion River: Evidence of Ice Wedge Casts in Alluvial Soils and the Potential for Discovering Preserved Late Pleistocene Habitation Sites.

Archaeological investigations of alluvial soils along the Clarion River in Elk County, Pennsylvania have revealed soil features that resemble ice wedge casts and patterned ground that are generally associated with periglacial conditions. These soil features, along with three bulk soil AMS dates, suggest that this alluvial landform was stable during the Late Pleistocene. Stable alluvial surfaces dating to Clovis and pre-Clovis times are exceedingly rare. If the age interpretations of the soils and sediments prove to be correct then this location may provide one of the best opportunities for discovering preserved evidence of early Paleo-Indian occupations within Pennsylvania.

Herbstrit, James T., Kurt W. Carr and Douglas C. McLearen  
Archaeological Monts 2008 at Fort Hunter.

Fort Hunter Park is a public recreation area sitting high above the Susquehanna River in Dauphin County, Pennsylvania. The park’s name refers to a French and Indian War supply fort that once sat within the park boundaries. Although historical records strongly suggest that the park is indeed the correct location, the actual fort remains have not been identified archaeologically. Over the past three years, Pennsylvania Historical and Museum Commission archaeologists have conducted excavations to locate these fort features and to introduce Pennsylvania’s rich archaeological heritage to the park’s visitors. With the assistance of an enthusiastic group of committed volunteers, this program of “public outreach” demonstrates how professional and non-professionals can work together to share in the discovery of the past. Although the fort’s blockhouse and fortification(s) have yet to be identified, numerous artifacts spanning a period of over 9,000 years were recovered. In addition, features and artifacts from the 18th century (including the fort period) were identified. A second aspect in this presentation will focus on the artifacts and their relationship to the Fort Hunter site.

Levine, Mary Ann  

The Long Peace established by William Penn stretched from the colony’s founding until the mid-1750s. After 1750, Penn’s Woods witnessed considerable bloodshed as the colonial landscape was forever transformed. This paper examines early 18th century colonial encounters just prior to the French and Indian War by focusing on one recently re-discovered village—Otstonwakin—and its leader—Madame Montour.

Moynic, Mark A.  
The Rest of the Story of Sugar Run Mound (36Wa359), a Hopewellian Squawkie Hill Phase site, Warren County, Pennsylvania.

Sugar Run Mound (36Wa359) was a Squawkie Hill Phase Hopewellian burial mound located in Warren County Pennsylvania. The earliest burial phase included a central cist, a bird and possible cel/ax effigies made from large stone cobbles. Multiple cremations were interred under the features of Mound Unit 1. Mound Unit 2 consisted of two stone box tombs each containing an extended burial. Mound Unit 3 had an extended burial laid on the existing ground surface. The different modes of burial indicate the function of Sugar Run Mound changed through time. This paper explores those changes.

Moeller, Roger  
Cultural Ecology on a Need to Know Basis.

The essence of cultural ecology is to understand the interaction of humans with and within their environment. Through time cultural adaptation has enabled humans to become less dependent on the vagaries of temperate climate, fluctuations in precipitation, and resource availability. As anthropologists we have studied the theories and debated the philosophies of Leslie White, Robert Carneiro, V. Gordon Childe, Julian Steward, Thomas Malin, and Charles Darwin as they have applied to living cultures, but now we have blended all this into a cultural ecology of prehistoric societies. Although we give lip service to the concept of cultural ecology, are we really utilizing these implicit and explicit concepts to the maximum extent possible?

Neusius, Sarah W. and Beverly A. Chiarulli  
More New Perspectives on the Johnston Site: The 2008 Excavations.

In the summer of 2008, the IUP Archaeological Field School conducted additional excavations at the Johnston site (36INZ2) as a follow-up on our 2006 test excavations. The 2008 excavation had the goal to confirm the location of the double stockade and identify a house structure. Although we did not locate a house structure inside this stockade as we had hoped to do, we did excavate a major portion of the stockade trench full of refuse as well as many postholes and other features. The artifactual, faunal and ethnobotanical remains as well as carbon and soil samples obtained are now giving us a variety of new ideas about the nature of this site and the number of components it contains.

Oshock, Robert  
The Consol Site (36Wm100) A Monongahela Drew Phase Village.

Members of the Westmoreland Archaeological Society (WAS), Chapter 23 of the Society for Pennsylvania Archaeology are currently conducting excavations at the Consol site in Western Pennsylvania, in Westmoreland County on a high hilltop along the mainstream of the Youghiogheny River. Five stockade lines of this Monongahela Drew Phase, Late Pre Historic village along with 28 roundhouse patterns have been exposed and documented. Drew decorated pottery will be examined along with other Early and Middle Monongahela Drew phase artifacts. Projectile points and chert tempered pottery are indicating an organized village existed here and was first occupied in the Woodward time period. It has probably taken our 8 man field crew longer to excavate this Monongahela Drew site than they actually lived in the village.

Paul A. Rabe  
Late Woodland/Late Prehistoric Rockshelter Use.

The latest stages of prehistory in the Northeast and Middle Atlantic witnessed a marked and widespread increase in the use of rockshelters. Archaeologists throughout the region have noted the phenomenon but failed to provide a convincing explanation. I examine several possible reasons for this increased use of rockshelters. Some may have spent more time at rockshelters and present a case study from the Mykut Rockshelter, 36Hu143, in central Pennsylvania.

Warfel, Stephen  
In Search of the Elusive Fort Morris.

Where in the world is Fort Morris? This question has hung like a cloud over the Shippensburg community for more than a century. Local and state authorities have identified three locations as the site of the French and Indian War period defense work, defying logic and a fundamental law of physics. Learn how renewed documentary analysis, historical geography, and archaeological testing are integrated to unravel the mystery of Shippensburg’s colonial past.

Wolfmeece, Renata B.  
The Fort LeBoeuf Site: An Unexpected Journey into Public Archaeology.

In 1975, Edinboro University of Pennsylvania embarked on a multi-year search for remains associated with the French Fort sur la Rivière aux Boueufs, destination of George Washington’s first mission as an officer in 1753 and last diplomatic skirmish before the beginning of the French and Indian War. Complicating the problem was the multi-component nature of the fort’s blockhouse and fortification(s). Archaeologists throughout the region have noted the phenomenon but failed to provide a convincing explanation. I examine several possible reasons.

Wyatt, Andrew  
Final Excavation Results from the Lemoyne Borough Memorial Park Site (36Cu194): A Washington Boro Stage Susquehannock Village in Cumberland County, Pennsylvania.

With data recovery excavations completed in August 2008, the Lemoyne Borough Memorial Park site (36Cu194) represents the northernmost known Susquehannock village in the lower Susquehanna Valley. Provisionally dated to the Washington Boro stage of the traditional Susquehannock chronology (circa 1600-1625 A.D.), the investigated portion of the site contained a palisade, at least one partial longhouse pattern, and numerous refuse-filled pits. This presentation updates the preliminary excavation results reported at last year’s conference, and will focus on the site’s European trade item and pottery assemblages with those recovered from the Schultz and Washington Boro village sites farther south in Lancaster County. Aspects of the site’s internal patterning suggest a shorter occupation span than either of the Lancaster County villages.