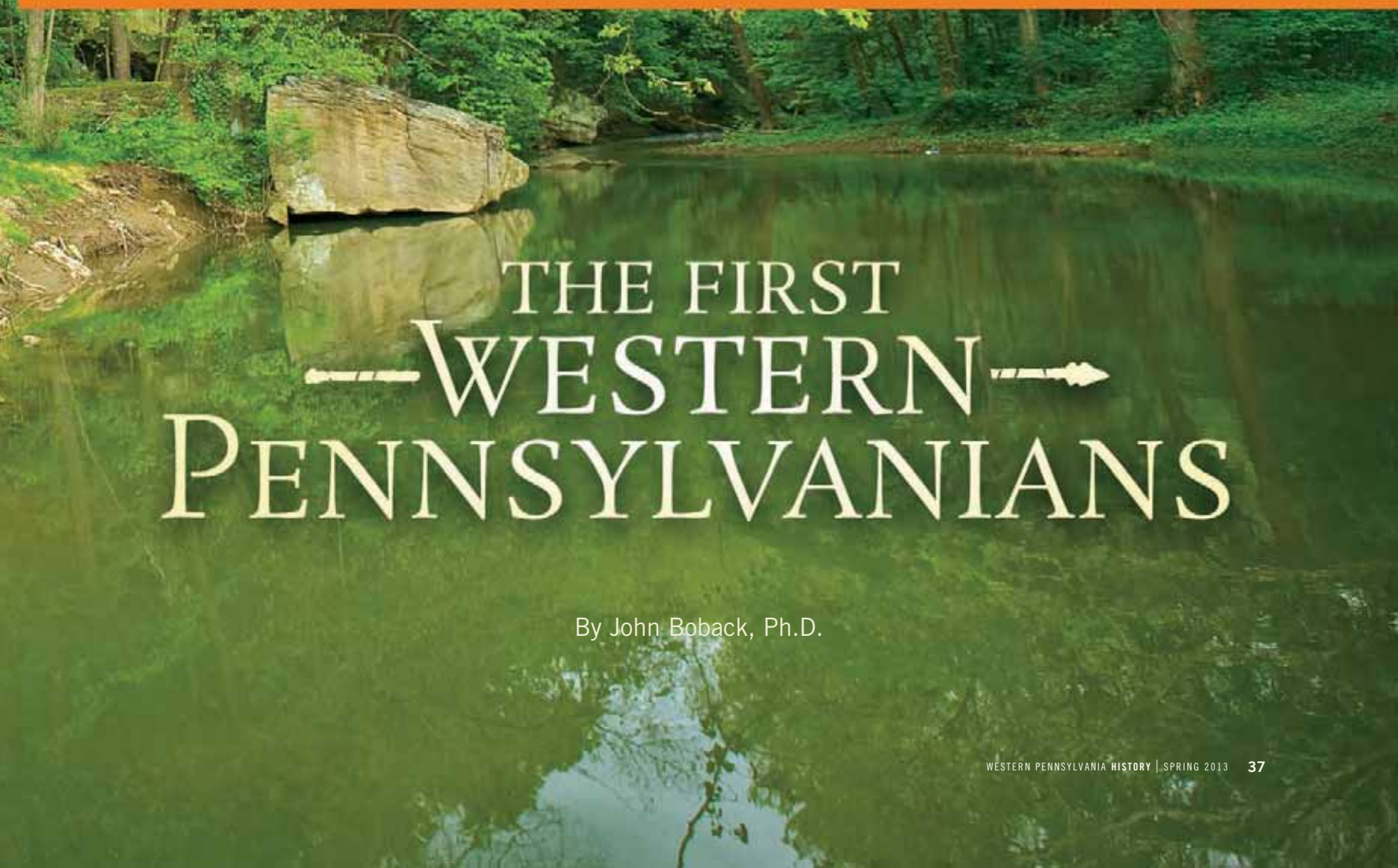






“What do you feel was the most significant artifact to be excavated during the Meadowcroft dig?” asked a participant at one of Dr. James Adovasio’s recent “Insider’s Tours” of the Rockshelter archaeological site. As principal investigator since the excavation began in 1973, Adovasio was in a good position to comment. Although his teams had discovered more than 20,000 artifacts, including the Miller lanceolate spear point and the Mungai stone knife, Adovasio declined to name a specific artifact. Instead, he used the opportunity to explain that the most significant thing to emerge from the sandy soils of the Rockshelter was not an object, but the discovery that every major cultural group of people to inhabit the region over the past 16,000 years had used the Rockshelter as a place to camp and carry out the activities of their daily lives. In essence, the Meadowcroft Rockshelter is a microcosm of the much larger story of the peopling of Western Pennsylvania.<sup>1</sup>



# THE FIRST —WESTERN— PENNSYLVANIANS

By John Boback, Ph.D.



Unfortunately, most American history school texts and college survey courses relegate American Indians to an introductory background chapter that all too quickly moves on to Christopher Columbus, the Age of Discovery, and European colonization. When American Indians do make an appearance in later chapters, it is typically within the context of frontier warfare. The purpose of this article is to emphasize that Indians have inhabited Western Pennsylvania for a very long time and that their cultures have evolved considerably since their first arrival over 16,000 years ago.

Admittedly, long spans of time can sometimes be difficult to mentally grasp. It might help to think of 16,000 years as being equal to 160 centuries. For the sake of perspective, consider that the United States gained its independence barely two centuries ago. Christopher Columbus reached the Americas only about five centuries ago. The ancient Roman Empire rose to prominence

only about 20 centuries ago. For that matter, even the earliest Egyptian pyramid dates to a relatively recent 46 centuries ago. Meadowcroft, on the other hand, served as a campsite to Paleoindian hunter-gatherers 160 centuries in the past. Over the course of those 160 centuries, almost 800 generations of people have lived and died in Western Pennsylvania.

Despite the many centuries that separate modern Pennsylvanians from the first Pennsylvanians, we are all united in a very fundamental way. Regardless of when we may have lived, everyone has experienced the daily challenges of providing for the needs of their families and communities. What will our children wear for clothing? How will we put a roof over our heads? What's for dinner? Basic questions such as these have been the topics of conversations in Western Pennsylvania for over 16,000 years. But where the questions have remained the same, the ways that we answer them has evolved in some very profound ways.

**OPPOSITE PAGE:  
The Rockshelter.**

Meadowcroft Rockshelter and Historic Village.

The most widely supported theory postulates that a modest population of nomadic hunter-gatherers migrated eastward from Siberia onto the broad tundra-like expanse of Beringia no later than about 23,000 B.C.







## Ancient Hunter-Gatherers

Our knowledge of the first Pennsylvanians is far from complete. Although the Meadowcroft excavation documents people living in the region 16,000 years ago, it is unclear who they were, when they first arrived, or by what route they got here. Fortunately, traditional archaeology is today being augmented by innovative genetic testing methods that provide valuable insight into where the First Americans may have originated. The most widely supported theory postulates that a modest population of nomadic hunter-gatherers migrated eastward from Siberia onto the broad tundra-like expanse of Beringia no later than about 23,000 B.C. At

some point, at least a portion of this founding population embarked on a multi-generational migration southward into what is now the continental United States. From the outset, the imposing continental glaciers of the last Ice Age presented formidable barriers, which limited these first Americans to only two possible routes. One option was the Pacific Coastal Route, which would have involved using small boats to skirt the coastline as they traveled southward toward present-day California. The second option, which would only have been available prior to 24,000 years ago and again after 15,000 B.C., was the Ice-Free Corridor route that ran along the

eastern side of the Rockies. Once south of the glaciers, the Paleoindians could have spread out across the continent. Regardless of which route they followed, we know that small bands of hunter-gatherers had established hunting territories in Western Pennsylvania no later than 16,000 years ago.

An intimate connection existed between the First Americans and the land, climate, plants, and animals of their hunting grounds. For the Paleoindians, late Pleistocene Pennsylvania presented a harsh world by modern standards. The overall climate was decidedly colder with longer, frigid winters and





**ABOVE:** Meadowcroft Museum founder Albert Miller on left with lead archaeologist James Adovasio.  
Meadowcroft Rockshelter and Historic Village.

**RIGHT:** At approximately 12-14,000 years old, the Miller lanceolate point from Meadowcroft is one of the oldest spear points ever found in North America.  
Meadowcroft Rockshelter and Historic Village.



Flint spear points, stone knives, basketry, a bone snare trigger, roasting pits, food storage pits, freshwater mollusk shells, nuts, hackberry seeds, and the bones from a diverse array of animals ... indicate that the Meadowcroft Rockshelter served as an important food procurement and processing camp.

shorter, cooler summers.<sup>2</sup> Continental glaciers still dominated half of North America, although they had withdrawn northward to present-day Erie by the time Paleoindians first camped at Meadowcroft. The overall cooler climate in combination with local variations in elevation had a profound impact on the vegetation of the region. The landscape comprised a mosaic of different ecosystems that are simply not seen in our region today. Boreal forests of spruce and fir trees likely dominated much of the landscape, while short grasses and diminutive, slow-growing flowers characterized the higher elevations.<sup>3</sup> Of particular significance was the existence of scattered stands of hardwood deciduous trees such as oaks, hickories, and walnut that grew within scattered groves.<sup>4</sup> Paleoindian hunter-gatherers could easily have visited all three of these major ecosystems within just a few days walk.

The success or failure of a band of hunter-gatherers hinged on having ready

access to a variety of natural resources. Considering that each ecosystem contained its own distinct suite of plant and animals species, it is evident why Pleistocene Pennsylvania's mosaic of different plant communities proved so beneficial to the nomadic Paleoindians who lacked permanent villages, agriculture, or even domestic animals aside from the dog. For hunter-gatherers, the forests and fields functioned as supermarkets, pharmacies, and hardware stores. A deep familiarity with the local plant, animal, and mineral resources allowed the Paleoindians to hunt for and gather all the food, medicinal herbs, and raw materials necessary to provide for their daily needs. Whether it was a specific medicinal plant, a rich deposit of flint, or the most likely spot to locate a herd of white-

tailed deer, the elders knew where to find the needed resource, thus helping to ensure the success of the band.

Although nomadic, hunter-gatherers did not move about randomly. Instead, they moved intentionally from one base camp to another in an annual cycle aimed at exploiting seasonably available resources. For example, the band might camp along a major creek in the early spring to take advantage of the annual fish spawn. Then they might relocate to a marshy area to gather the freshly laid eggs of migratory waterfowl. By late spring and early summer, the band might camp in an upland meadow to harvest a succession of ripening wild strawberries, raspberries, and blackberries. The location of late summer base camps may have been influenced by the need for edible walnuts, acorns, hickory nuts, and hackberries. During the winter, the desire for a sunny southern exposure and protection from the wind may have influenced the location of a base camp. The arrival of early spring started anew the annual cycle of seasonal movements.

Archaeological evidence from the Meadowcroft Rockshelter reflects the



seasonal nature of the hunter-gatherer lifestyle. Lead investigator Adovasio points out that the Rockshelter saw its heaviest use as a base camp during the late summer and fall. In addition, the presence of bird eggshells indicates that people occasionally camped at the Rockshelter during the spring.<sup>5</sup> Of special note is the fact that most of the Rockshelter artifacts in some way relate to the quest for food. Flint spear points, stone knives, basketry, a bone snare trigger, roasting pits, food storage pits, freshwater mollusk shells, nuts, hackberry seeds, and the bones from a diverse array of animals ranging in size from elk to frogs

collectively indicate that the Meadowcroft Rockshelter served as an important food procurement and processing camp.

Just as significant is that Meadowcroft lacks the remains of any late Pleistocene mega-fauna. Although the Paleoindians shared the landscape with mastodons, mammoths, giant beavers, dire wolves, and short-faced bears, Paleoindians apparently did not hunt them. The absence of mega-faunal remains helps to dispel the long-standing misconception that Paleoindians specialized in big game hunting. Instead, in Western Pennsylvania, they appear to have primarily been small game hunters and intensive foragers. This is not to say they might

not opportunistically exploit the discovery of a recently deceased or weak mammoth, but if they did, all evidence of this is absent at Meadowcroft. In a community where the loss of even a single able-bodied adult might spell the difference between the success and failure of the band, it made good sense to avoid the large and dangerous mega-fauna.<sup>6</sup>

The bands of hunter-gatherers that visited Meadowcroft tended to be modest in size with eight to ten men, women, and children likely being typical. They might camp at the Rockshelter for a week or so before moving on to their next base camp. On occasion these small bands joined

American Indians have fished with nets in Western Pennsylvania for thousands of years.  
Meadowcroft Rockshelter and Historic Village.







*She Claims the Rockshelter* by Andrew Knez.  
Two 18th-century Eastern Woodland Indians visit  
a rockshelter only to discover it has already  
been claimed by a family of black bears.

Andrew Knez, Jr.

with adjacent bands for the purposes of gathering particularly abundant resources or for members to find suitable mates.<sup>7</sup> Unfortunately, nothing is known of their marriage or child-rearing practices. Evidence from other hunter-gatherer archaeological sites suggests high mortality rates. An estimated half of all children likely died prior to the age of five. The physical rigors and dangers of the hunter-gatherer lifestyle also took a heavy toll on adult men and women alike. Excessive walking, running, and

bending degraded the cartilage in their joints and contributed to widespread osteoarthritis. Anyone surviving into their 40s would likely have been considered an elder.<sup>8</sup> Although the hunter-gatherer lifestyle may not have been “solitary, poor, nasty, brutish, and short” in a classic Hobbesian sense, it no doubt would have been exceedingly difficult by modern standards.

Change came very slowly for the various hunter-gathering peoples of Western Pennsylvania. Regardless of whether they

lived 16,000 or 5,000 years ago, they basically lived a nomadic lifestyle that revolved around hunting and foraging for all of life’s necessities. Unfortunately, we will never know most of the details of their lives. Being an ancient people who preserved knowledge through oral tradition, we know practically nothing of their languages, spiritual beliefs, interpersonal customs, or even what they called themselves. Most of what we do know is based on the artifacts and other material objects they left behind.



Archaeological evidence from Meadowcroft and the surrounding area indicates that even though the Paleoindians and their archaic descendants lived a hunter-gatherer lifestyle, their material culture evolved over time. For example, the earliest hand-held stone chopping axes eventually gave way to finely made hatchets with ground-stone heads and wooden handles. Likewise, the earliest stone spear points went through a series of improvements over time that made them easier to affix to wooden shafts. Additional innovations came in the form of new tools such as carved soapstone cooking pots and ground-stone mortars and pestles. Despite all of these changes in material culture, the first Pennsylvanians still lived a nomadic hunter-gatherer lifestyle for over 12,000 years.

## The Agricultural Revolution

Around 3000 B.C., an unknown Indian hunter-gatherer did something truly revolutionary. He or she planted a seed in the ground with full intentions to return later to harvest whatever had grown. With this simple act, the Agricultural Revolution in eastern North America began. Despite the game-changing nature of this act, fully developed farming did not appear overnight. Quite the contrary, as over the next few thousand years Indians continued to live a mostly hunter-gatherer

lifestyle while only cultivating small garden plots on the side. These first horticulturalists initially had no domestic plants. Instead, they cultivated several wild plant species which already had been gathered for centuries by their ancestors. By saving and cultivating seeds from their best plants, the American Indians, over time, created domestic varieties. In total, Indians in eastern North America domesticated seven previously wild plants. Squash, sunflower, and sumpweed provided them with edible seeds. Goosefoot and erect knotweed supplied green edible leaves. Maygrass and little barley produced grains suitable for grinding into flour. The cultivation and domestication of plants altered the course of American Indian history.

One of the most profound changes wrought by the Agricultural Revolution was the transition it sparked from native peoples living a nomadic lifestyle to inhabiting permanent villages. The impetus for this shift came from multiple directions. From a pragmatic perspective, living close to one's fields made it considerably easier to tend crops and to protect them from animal pests. After all, the more domesticated a plant becomes, the more assistance it requires from humans in order to survive. Wild grains, for

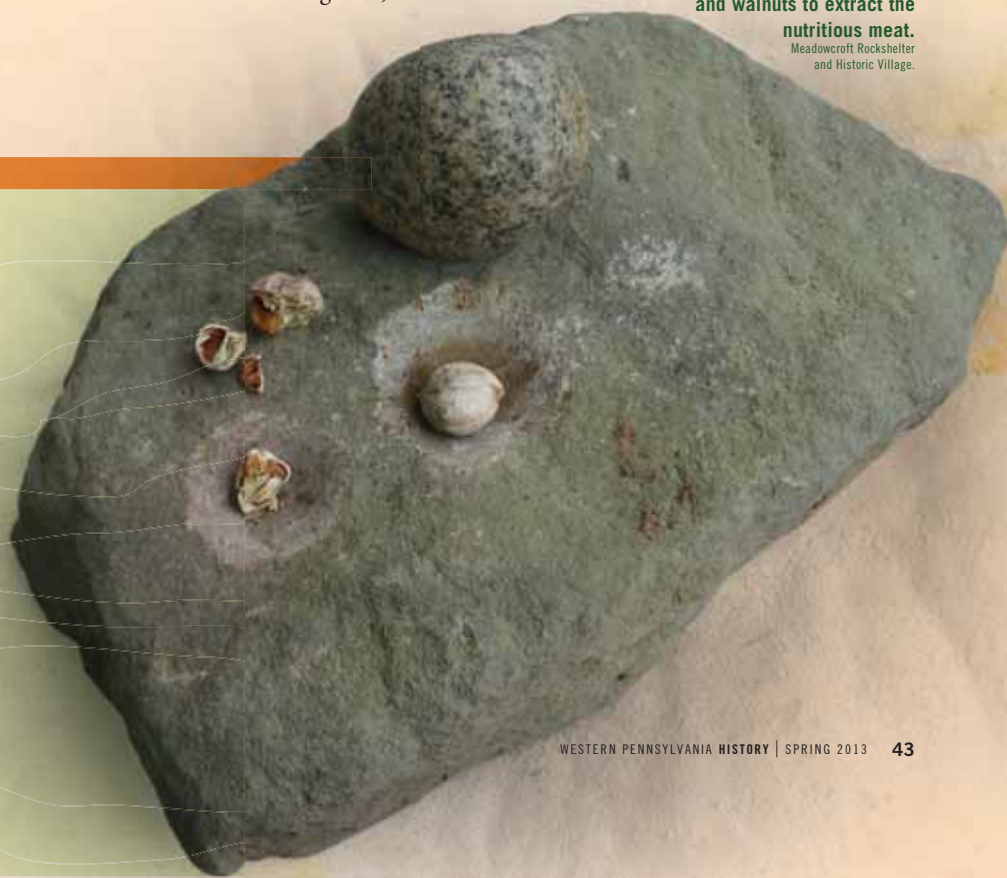
example, often have thick, protective seed coats while their domestic counterparts have thinner, more vulnerable seed coats. Likewise, high yield domestic crops growing in a densely planted field are more attractive to animal pests than are low yield wild varieties. In short, the success of domestic plants is generally dependent upon the close attention and care of a nearby farmer.

Farming produces a greater abundance of food than nomadic gathering, further leading to a more sedentary lifestyle for American Indians. Consider the Hopewell mound-building cultural group that lived in extreme Western Pennsylvania about 2,000 years ago. It is estimated that a one-acre Hopewell field planted equally with marsh elder and goosefoot could produce a quarter of the calories needed for a family of ten for an entire year. Although hand-processing all of those seeds would have been tedious and time-consuming, the actual harvest itself would have required only a week's worth of work for the family.<sup>9</sup>

Despite the advantages of agriculture, the Indians did not entirely abandon hunting and gathering. One reason for this is that,

**Nutting stones made it easy for Indians to break open hard hickory and walnuts to extract the nutritious meat.**  
Meadowcroft Rockshelter and Historic Village.

Regardless of whether they lived 16,000 or 5,000 years ago, American Indians basically lived a nomadic lifestyle that revolved around hunting and foraging for all of life's necessities.





Indian foragers gathered a wide variety of edible nuts, berries, tubers, greens, and mushrooms from the surrounding forests. The Indians' continued reliance on hunting and gathering is evidenced by archaeologists' discovery of a dozen 2,000-3,000-year-old campsites in the vicinity of Meadowcroft.

Acorns have been a staple of the Eastern Woodland Indian diet for over a millenium.  
Meadowcroft Rockshelter and Historic Village.



unlike prehistoric Eurasians, the Eastern Woodland Indians lacked domestic farm animals to use as a source of meat. Eventually, Indian farmers began to keep wild turkeys in a semi-domestic state, but this was not quite the same as keeping a domestic flock. Even the horse, which is so often associated with American Indians, did not become available until Europeans later brought riding horses to the Americas. In short, the Indians had little choice but to hunt, trap, and fish to procure animal protein. Besides the absence of a domestic meat source, native farming also involved too few domestic crops to meet their total nutritional needs. To compensate for this shortcoming, Indian foragers gathered a wide variety of edible nuts, berries, tubers, greens, and mushrooms from the surrounding forests. The Indians' continued reliance on hunting and gathering is evidenced by archaeologists' discovery of a dozen 2,000-3,000-year-old campsites in the vicinity of Meadowcroft. At least eight of these likely served as short-term campsites while three or four others functioned as intensively used base camps. The Meadowcroft Rockshelter falls into this latter category.<sup>10</sup>

Eastern North America was not the only place on earth where indigenous people invented agriculture. In all, this happened at about ten different places throughout the world, including Mexico.

By about 2,000 years ago, a couple of key Mesoamerican domestic plants had been introduced into Western Pennsylvania.

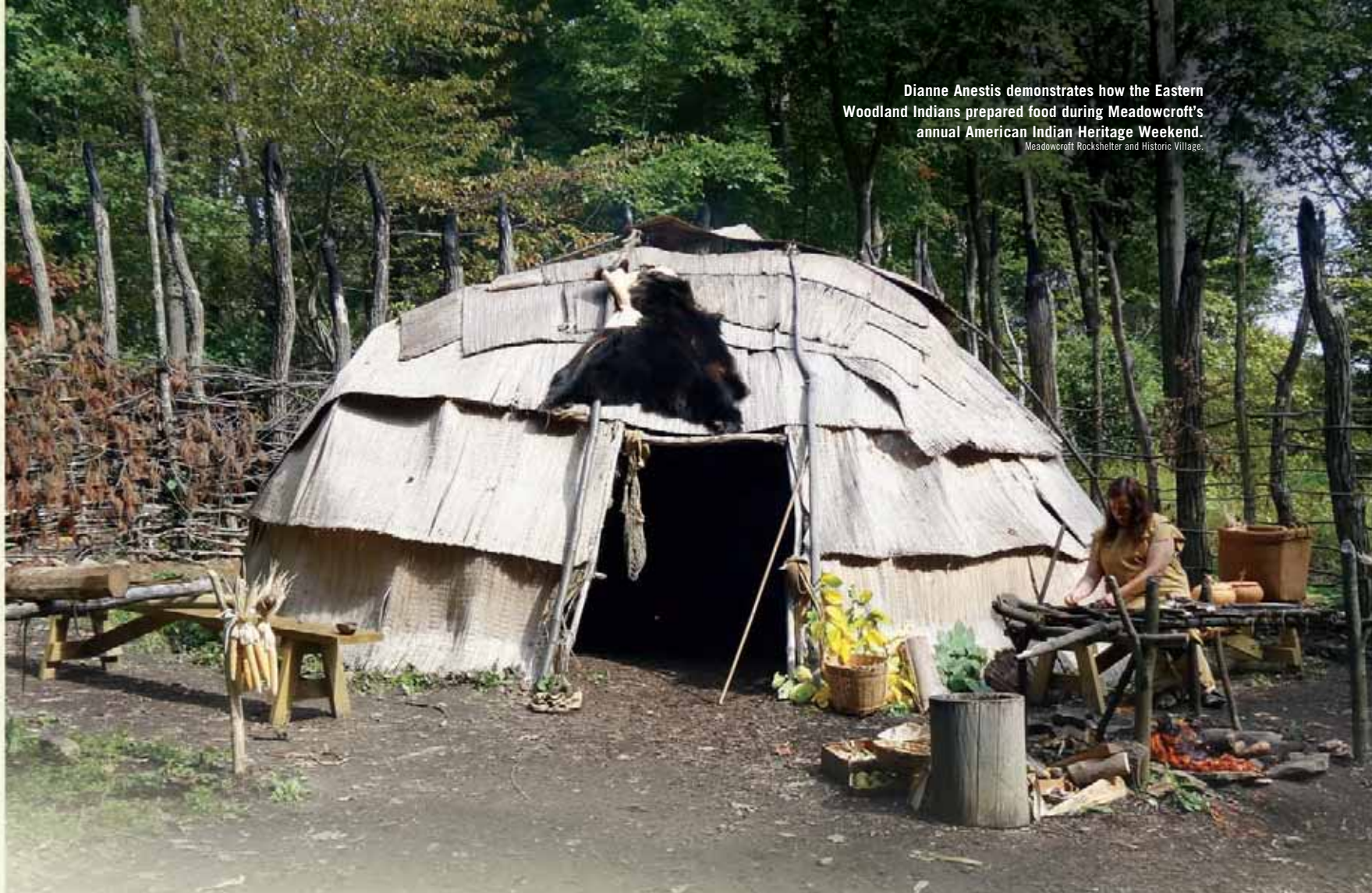
These included several varieties of squash and corn (maize). In fact, the oldest known corn cobs in the eastern United States were found at the Meadowcroft Rockshelter. Despite

being over 2,500-years-old, the cobs survived in the ground because they had been charred, or carbonized, in a campfire. How this corn came to be at Meadowcroft and who carried it there is unclear. Regardless, the appearance of Mesoamerican corn and squash in the region signaled the future direction of indigenous agriculture in Western Pennsylvania.

Despite the many advantages offered by sub-tropical plants such as corn, the climate of Western Pennsylvania simply proved too cold for it to become a widespread crop. Although the last Ice Age had ended about 10,000 years earlier, overall average temperatures were cooler than they are today and did not provide a sufficiently long growing season. This all changed around A.D. 900 when global temperatures increased by a few degrees. Known as the Medieval Optimum, this warm period had a profound impact throughout the North Atlantic. The warming temperatures melted arctic ice allowing Viking explorers to venture westward, eventually colonizing Greenland and Newfoundland around A.D. 1000. More importantly for the people of Western Pennsylvania, the warming climate allowed the Eastern Woodland Indians to cultivate new local varieties of Mesoamerican crops on a large scale.

After the year 1000, corn, beans, and squash became the dominant crops of Eastern Woodland Indian farmers. Unlike Eurasians who possessed draft animals capable of pulling plows and creating furrows in a field, the Indians used digging sticks and hoes to form the topsoil into small, mounded hills. One acre of farmland contained upwards of 2,500 hills.<sup>11</sup> In each hill the Indians cultivated all three plants. Known to the Iroquois as the "Three Sisters," corn, beans, and squash are mutually beneficial when planted together. The corn serves as a living beanpole around which the beans vine. In return, the beans possess bacteria capable of extracting atmospheric nitrogen and storing it in nodules on the





roots. Corn, a type of grass, thrives in the high nitrogen soil. Furthermore, the broad leaves of squash and pumpkins discourage the growth of weeds and keep the soil moist by shading the ground. A new field typically produced upwards of 30 bushels of corn per acre.<sup>12</sup> With such high corn yields, Indian farmers abandoned less productive crops such as maygrass and knotweed.<sup>13</sup>

Over the next few centuries, Three Sisters agriculture became the foundation of the Eastern Woodland Indians' subsistence. Corn, beans, and squash could be dried and stored away as insurance against possible famine. As food supplies became more reliable, populations grew and people began to occupy permanent, year-round villages surrounded by agricultural fields. An estimated half to three-quarters of the Indians' food came from their farms while the remainder

derived from hunting and gathering.<sup>14</sup> Local agrarian societies emerged with names such as the "McFate," "Fort Ancient," and "Monongahela" cultural traditions. Just like their hunter-gatherer ancestors, they lacked written languages; hence archaeologists named their cultures according to where evidence of them was first discovered. For example, the "Monongahela" are named after the Monongahela River Valley, which served as the core of their homeland.

Despite the many benefits of the Agricultural Revolution, the Indians' new village and farm-centered lifestyle had a dark side. Although overall populations rose due to the greater reliability of food, average life spans and health declined. Paleopathologists who study prehistoric human remains

suggest that this trend is attributable to several factors. One problem faced by the new agrarian societies was communicable diseases. The advent of village life brought increasing numbers of people into close proximity. By 1492, it appears that tuberculosis and syphilis may have become endemic. The new agrarian societies also experienced increasing amounts of tooth decay and dental infections due to the high levels of starch in a corn-based diet. Not only did starch promote the growth of oral bacteria, but corn meal itself often contained tiny grits of enamel-eroding stone left over from the grinding process. Rising population densities may have contributed to increased physical conflict over living space





Eastern Woodland Indians often used wooden mortars to pound corn kernels into meal. Meadowcroft Rockshelter and Historic Village.

and resources. This conflict is evidenced by the trauma seen in many pre-1492 skeletal remains. Examples of trauma include concussions, bone fractures, and cut marks on skulls indicative of being scalped with a stone knife. When considered as a whole, perhaps only two percent of the population survived to the age of 50.<sup>15</sup>

### The Death and Rebirth of Native Western Pennsylvania

The Monongahela cultural tradition existed in southwestern Pennsylvania from about A.D. 900 until about 1635, when it ended abruptly. The disappearance of the American Indians is somewhat of a mystery although solid theories exist regarding their fate. While

no direct contact between the Monongahela and European colonists is known to have taken place, the presence of glass beads and European brass at some village sites confirms that at least indirect contact occurred. It is theorized that Susquehannock Indians from the Chesapeake Bay area may have carried the beads and brass across the mountains on hunting expeditions. Unfortunately, they also may have inadvertently introduced European diseases to the Monongahela villages.<sup>16</sup> Never having been exposed to microbes such as smallpox and measles, the death toll would have been very high. Additional turmoil befell the Monongahela world when warfare erupted between them and the Seneca over the control of

a prehistoric seashell trade network that may also have involved the beginnings of the beaver skin trade. By 1635, the Seneca had defeated the Monongahela. Some Monongahela survivors may have been adopted into Seneca communities while others went east to live among the Susquehannock.<sup>17</sup> Thus, after inhabiting Western Pennsylvania for over half a millennium, the Monongahela cultural tradition disappeared from the earth.

The disappearance of the Monongahela left Western Pennsylvania devoid of a resident native population.<sup>18</sup> After 16,000 years of occupation, the forests of the region fell silent. Occasional travelers and hunters surely passed through the area, but no one is known to have



... the Mingo were descendants of Iroquois hunters and diplomats who had taken up residence in the Three Rivers region. It was these recent arrivals whom colonial settlers, fur traders, and Fort Pitt soldiers interacted with during the middle of the 18th century.

lived there. The lack of significant archaeological evidence from the region immediately following the demise of the Monongahela testifies to the emptiness of the land. The Meadowcroft Rockshelter contains only one post-Monongahela American Indian artifact. Archaeologists found small pieces of European glass that may have been from a rum bottle. The glass showed evidence that someone had sat inside the Rockshelter and “flint knapped” it presumably into a glass arrowhead.

The former Monongahela territory remained a veritable no man’s land for almost a century. Starting in the early 1720s, bands of refugee Shawnees and Lenapes from eastern Pennsylvania began to re-occupy portions of what had once been the homeland of the

Monongahela. Also living among them were the so-called “Mingo,” or Ohio Iroquois. Although not a tribe *per se*, the Mingo were descendants of Iroquois hunters and diplomats who had taken up residence in the Three Rivers region. It was these recent arrivals whom colonial settlers, fur traders, and Fort Pitt soldiers interacted with during the middle of the 18th century. By the outbreak of the Revolutionary War, however, these Indians too were gone. The relentless pressure of European colonization had pushed them further west.

Today, Pennsylvania is one of the few states that contains no state or federally recognized American Indian tribal governments. By no means, however, does this imply that no American Indians currently live within the commonwealth. On the contrary, the 2010 federal census revealed that 26,843 Pennsylvania residents identify themselves as either being American Indian or an Alaskan Native. An additional 54,249 Pennsylvanians identified themselves as having partial American Indian ancestry.<sup>19</sup> Even though the Monongahela and their ancient Paleoindian ancestors may be gone, the rich heritage of America’s First Nations lives on within the native families, communities, organizations, and annual powwows of our region. Meadowcroft Rockshelter and Historic Village celebrates the long history of native people in Western Pennsylvania with its annual American Indian Heritage Weekend, which is held during the third weekend of every September.

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<sup>1</sup> James Adovasio, “Insider’s Tour of the Meadowcroft Rockshelter,” lecture at Meadowcroft Rockshelter and Historic Village, Avella, PA (6 October 2012).

<sup>2</sup> Adovasio, “Insider’s Tour” (3 November 2012).

<sup>3</sup> J. M. Adovasio and Jake Page, *The First Americans: In Pursuit of Archaeology’s Greatest Mystery* (New York: Modern Library, 2003), 178.

<sup>4</sup> K.A. Cushman, “Floral Remains from Meadowcroft Rockshelter, Washington County, Southwestern Pennsylvania,” in *Meadowcroft: Collected Papers on the Archaeology of Meadowcroft Rockshelter and Cross Creek Drainage*, ed. R.C. Carlisle and James Adovasio (1982), 218.

<sup>5</sup> Adovasio, “Insider’s Tour” (3 November 2012).

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Robert L. Kelly and David Hurst Thomas, *Archaeology: Down to Earth*, 4th ed. (Belmont, CA: Wadsworth, 2011), 156.

<sup>9</sup> Ruth Selig, “A Quiet Revolution: Origins of Agriculture in Eastern North America,” *National Museum of Natural History Bulletin for Teachers* 15 (1993).

<sup>10</sup> R.F. Fryman, “Prehistoric Settlement Patterns in the Cross Creek Drainage” in *Meadowcroft: Collected Papers on the Archaeology of Meadowcroft Rockshelter and Cross Creek Drainage*, ed. R.C. Carlisle and James Adovasio (1982), 65.

<sup>11</sup> Conrad E. Heidenreich, “Huron,” in Northeast, vol. 15, *Handbook of North American Indians*, ed. Bruce G. Trigger (Washington, D.C.: Smithsonian Institution, 1978), 380.

<sup>12</sup> Ibid., 381.

<sup>13</sup> Modern farmers using genetically engineered hybrid seeds and chemical fertilizers achieve corn yields in excess of a hundred bushels per acre.

<sup>14</sup> Daniel K. Richter, *Native Americans’ Pennsylvania* (University Park, PA: Pennsylvania Historical Association, 2005), 21.

<sup>15</sup> Douglas H. Ubelaker, “Patterns of Disease in Early North American Populations,” in *A Population History of North America*, ed. Michael R. Haines and Richard H. Steckel (Cambridge: Cambridge University Press, 2000), 59, 62, 64, 67-68, 80-83.

<sup>16</sup> Stanley W. Baker, “Neale’s Landing Site Ceramics: A Perspective on the Protohistoric Period from Blennerhassett Island,” *West Virginia Archeologist* 40 (Fall 1988), 49-50; Michael B. Barber and Eugene B. Barfield, “Native Americans on the Virginia Frontier in the Seventeenth Century: Archaeological Investigations along the Interior Roanoke River Drainage,” in *Diversity and Accommodation: Essays on the Cultural Composition of the Virginia Frontier*, ed. Michael J. Puglisi (Knoxville: University of Tennessee Press, 1997), 148; Francis Jennings, “Susquehannock,” in Northeast, vol. 15 *Handbook of North American Indians*, ed. Bruce G. Trigger (Washington, D.C.: Smithsonian Institution, 1978), 364.

<sup>17</sup> William C. Johnson, “The Protohistoric Monongahela and the Case for an Iroquois Connection,” in *Societies in Eclipse: Archaeology of the Eastern Woodland Indians, A.D. 1400-1700*, ed. David S. Brose et al (Washington: Smithsonian Institution Press, 2001), 75-82.

<sup>18</sup> Fryman, “Prehistoric Settlement Patterns,” 65.

<sup>19</sup> United States Census Bureau, *The American Indian and Alaska Native Population: 2010* (January 2012).