

Foraging in a New Land

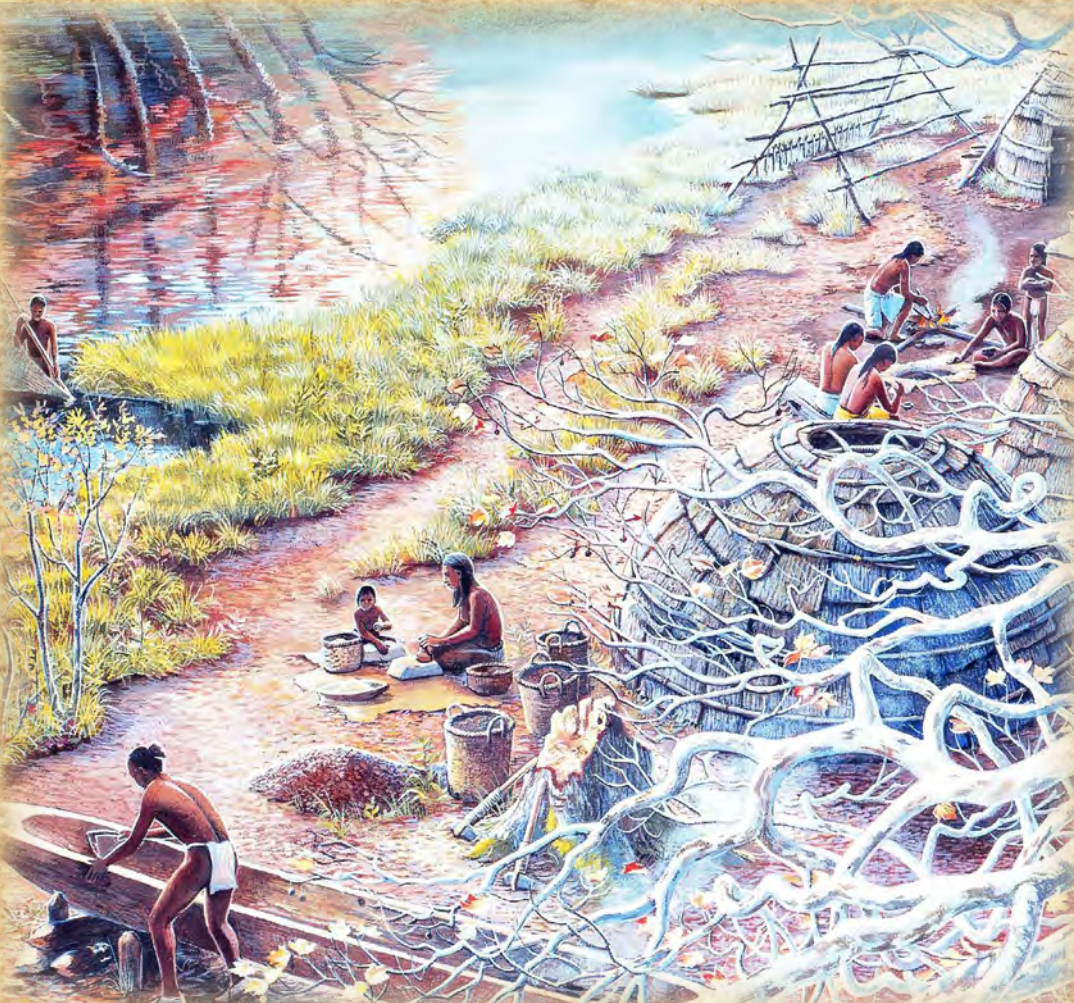
Archaic Period - 8000 B.C to 1000 B.C.



A Forested Land

By 8000 B.C., the people of the Americas faced new challenges. Deciduous trees replaced pine forests as the climate warmed. Oak, hickory, and other nut-bearing trees became more numerous. The nuts not only provided food for humans, they also attracted deer, bears, and other animals that could be hunted or trapped. Along the edges of the woods there were edible plants such as wild berries.

Seasonal Camps



Camps were set up in different habitats during each season, by a river during fish runs, in a forest for fall nut gathering, or in the hills for hunting in winter.

Gathering Nuts

Hickory and other nuts were gathered and stored, to be eaten throughout the winter. They were roasted and eaten, or shelled and ground into flour.



Seasonal Movement

Indians of this time -- called the Archaic Period by archaeologists -- continued to live by hunting and gathering everything they needed. After the Ice Age, the rivers began to support large quantities of fish and shellfish. People took advantage of seasonal fish runs in the major streams. They may have dried and smoked fish on racks over big fires to store them for winter.

Hunting with an Atlatl



Archaic people used atlatls, or spear throwers, to hunt. The atlatl sent the spears farther and with much more force.

Territories

Families likely came together to form bands, sharing a territory that would have included a variety of habitats, such as nut tree groves, good fishing spots, and wetlands. As the population gradually increased, the size of each band's territory grew smaller. Within a territory, people still moved seasonally to take advantage of various foods and other resources as they became available. Larger groups may have come together when food was abundant, and split into smaller families to hunt and gather separately during lean times of the year. Their shelters were probably made of sapling frames covered by hides, bark, or reed mats.

The Earliest Gardens

By 2000 B.C., Archaic people were experimenting with new foods and inventing new tools. Some people began to grow a type of gourd in small gardens. Dried gourds would have been used as containers or fishnet floats, while fresh gourds provided edible, oil-rich seeds. Plants with nutritious seeds such as sunflower were added to the gardens towards the end of the Archaic Period. The need to collect, store, or cook new foods eventually led to the production of stone bowls and, by 1500 B.C., the use of pottery. The spread of these new inventions accompanied an increase in trade between groups of people.

Domesticating Plants

Sunflowers and gourds were the earliest domesticated plants grown in central Pennsylvania.



Hunting and Gathering

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Excavation



Penn State students excavate the Milesburg Site.

The Milesburg Site is at the junction of Spring Creek and Bald Eagle Creek. Penn State students working there in 1975 found several cooking hearths and numerous stone tools. People who lived at the site could fish in the creeks and also collect plants and hunt animals in diverse habitats in Bald Eagle and Nittany Valleys. This site could also have been a stopping point for people traveling along the stream to other regions.

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Stone Tool Workshop

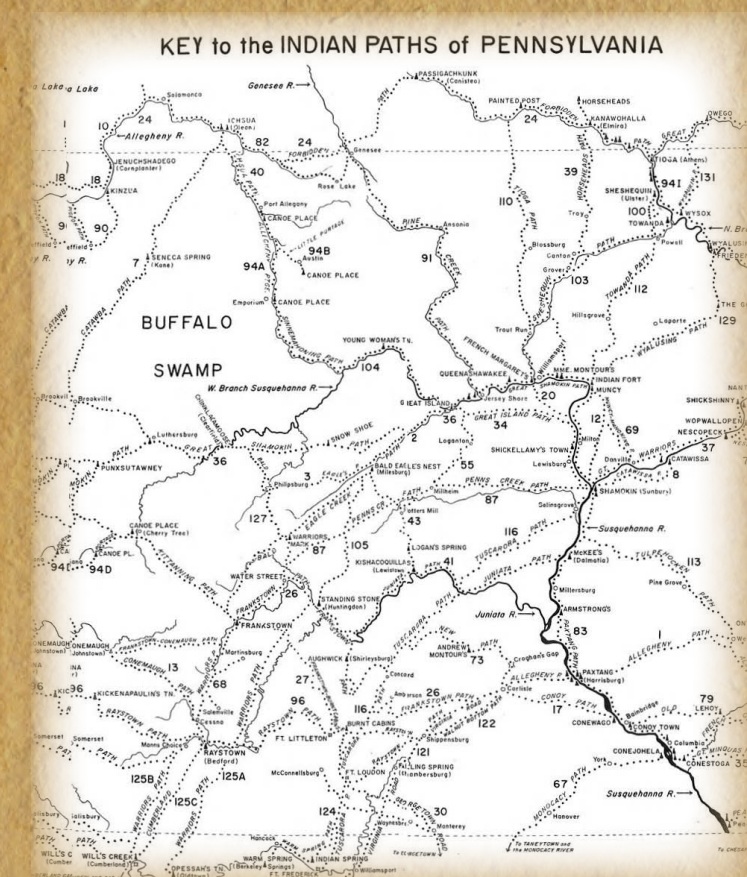


Archaic people camped near this stream when quarrying stone to make their tools.

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The Arrival of European Settlers

Contact Period - 1600 to 1780 A.D.



Indian Paths

The footpaths used by Native Americans were followed by European settlers. Some paths have developed into modern roads.

Who Were The Native Americans?

Archaeological investigations have revealed much about the Native American way of life in Centre County up to A.D. 1600. Not known with certainty is the identity of the modern tribe they were most closely related to. European diseases, like smallpox and measles, spread to the native people here and elsewhere. Many died even before their first contact with Europeans. Indian trails, abandoned villages and a few artifacts were all that remained as evidence of the people who had, for centuries, called Central Pennsylvania their home.



Tilden Centre County 1861 Map

Pushing the Frontier West

In 1681 the first European settlers arrived with William Penn to establish Pennsylvania. It was nearly 100 years later before Central Pennsylvania opened up for settlement. By signing the 1754 Albany Purchase and the 1768 Treaty of Fort Stanwix, Native Americans sold Centre County land to the colonial government. The Native Americans encountered by the local settlers were groups like the Shawnee and the Delaware who had left their homelands because of the advancement of the eastern settlements.

Potter Discovers an Empire

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The Final Chapter

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First Arrivals

Paleoindian Period - 15,000 B.C. to 8000 B.C.



Migration



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The New World

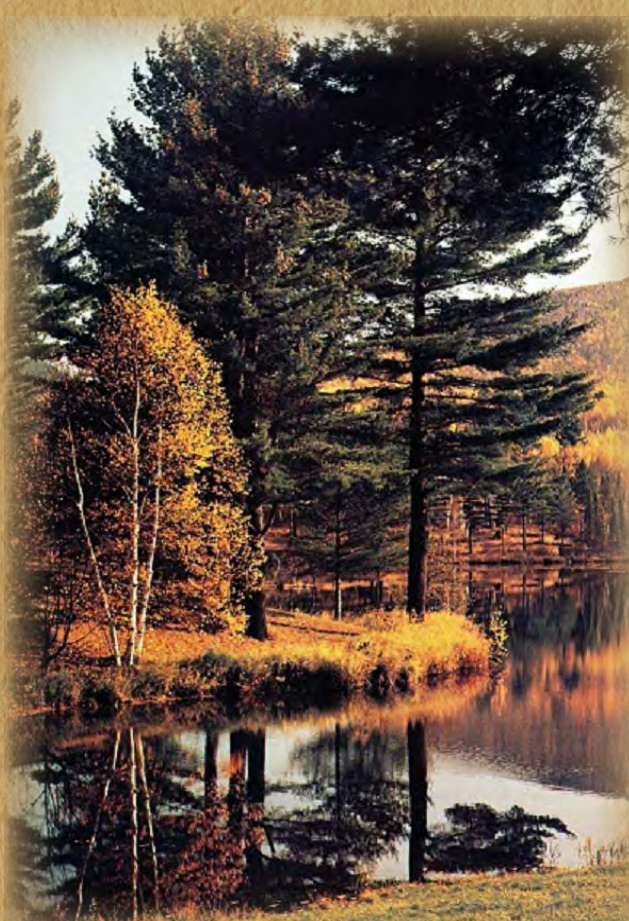
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Entering Pennsylvania

By about 15,000 B.C., these first people – called Paleoindians by archaeologists – spread south into North and South America. Evidence from Meadowcroft Rockshelter in southwestern Pennsylvania suggests that people were there about 14,000 B.C. The first evidence of Paleoindians in central Pennsylvania is the presence of Clovis spearpoints that date to about 9000 B.C., although some may have been here earlier.

Hunting Big Game

Paleoindians hunted Ice Age animals such as mammoth and mastodon with long stone-tipped spears. Although these huge animals provided critical meat and hides, people also hunted caribou, deer, elk, and birds; fished; and gathered wild edible vegetation. Only their stone tools survive, but they would have used hides, bone, wood, and grasses to make other tools, clothing, and shelters. Because they lived by hunting and gathering resources, they moved frequently in search of food, living in temporary shelters made of sapling frames covered by hides, or using natural rockshelters.



Changing Environment

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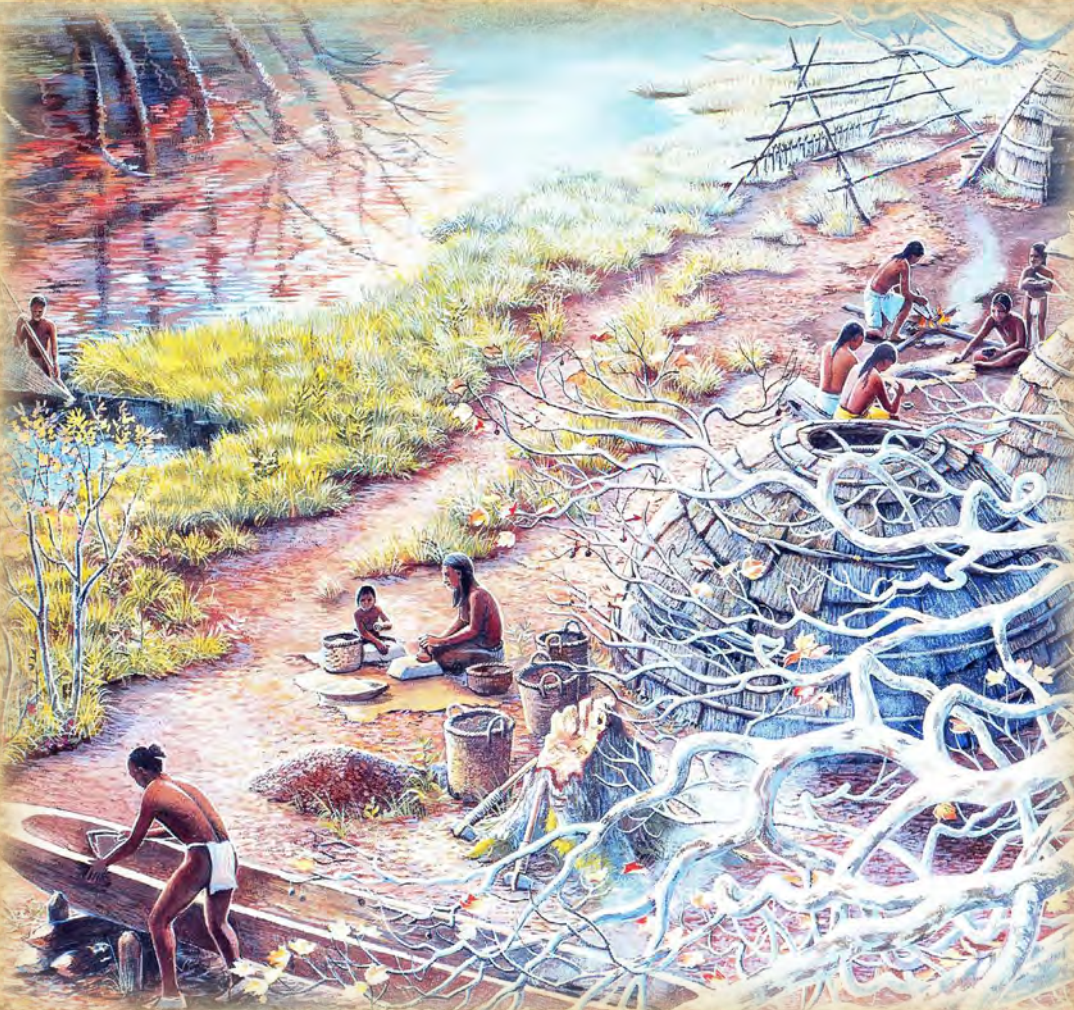
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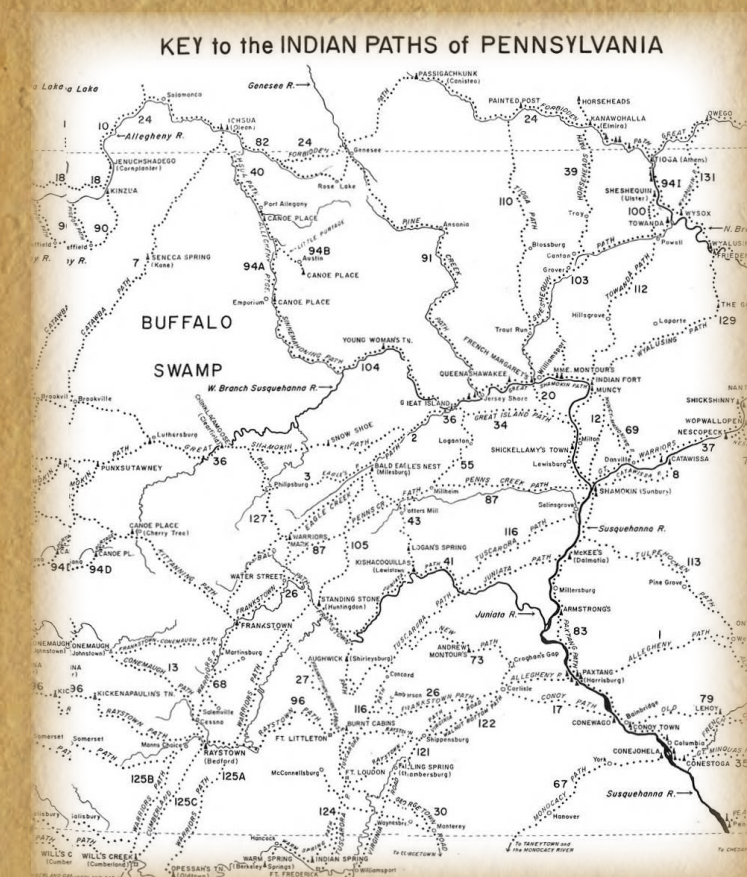


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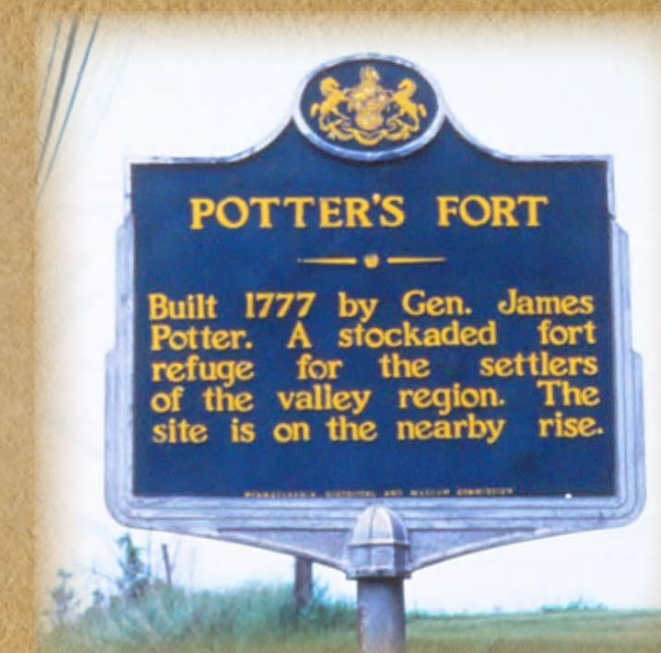
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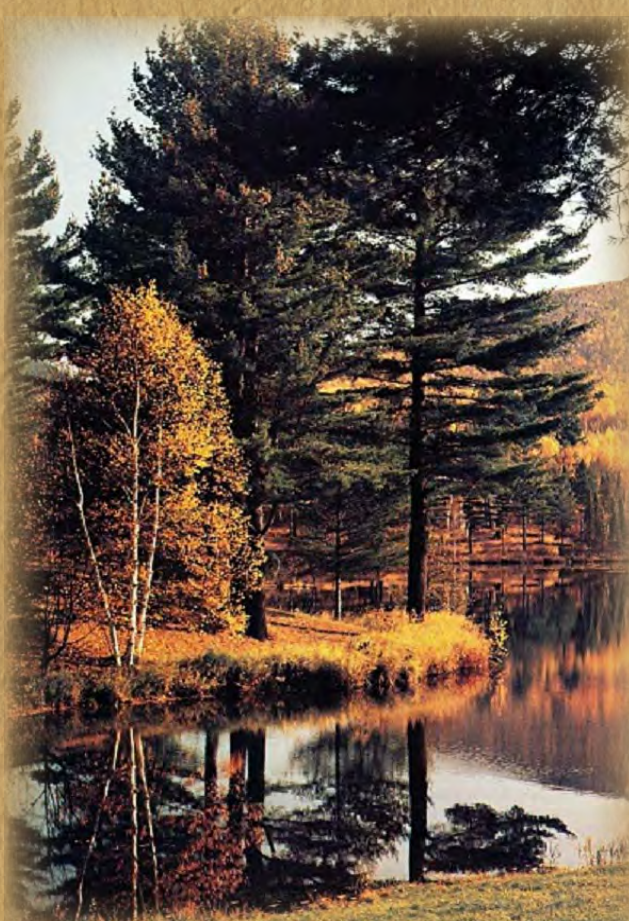
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Hunting Big Game

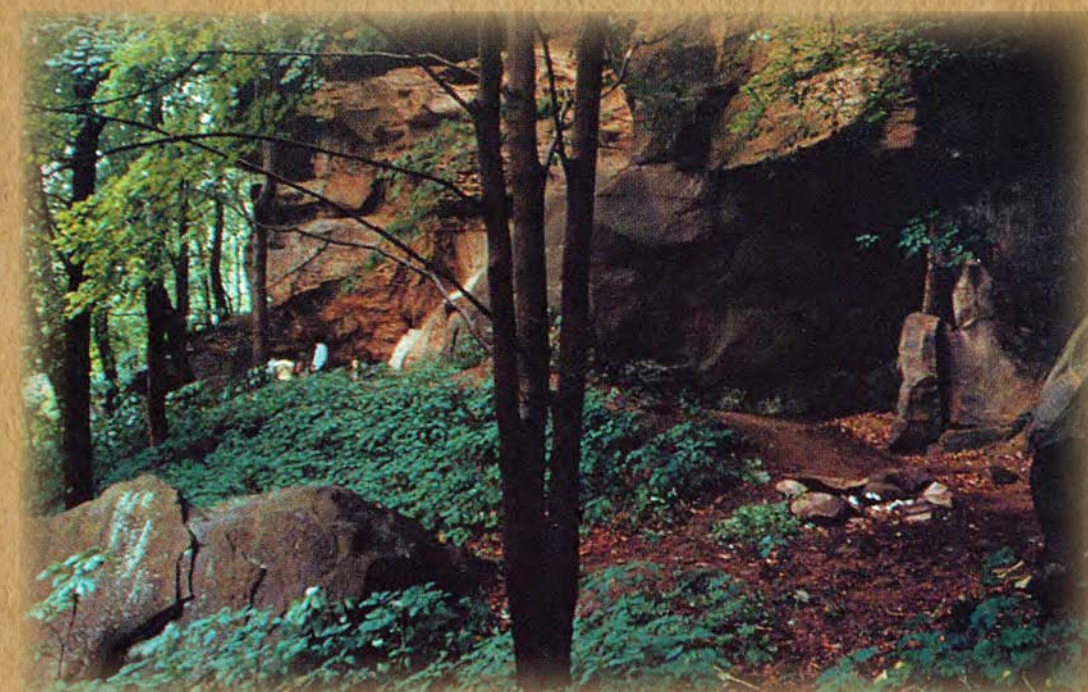
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First Farmers

Woodland Period - 1000 B.C. to A.D. 1600



Settling Down

The way of life of people in Pennsylvania did not change much for 1500 to 2000 years after 1000 B.C., the beginning of the Woodland Period as defined by archaeologists. Native Americans continued to move seasonally in search of food. However, groups of families may have stayed together longer at places where there was abundant wild food and where gourds, sunflowers, and other plants with nutritious seeds could be cultivated. They continued making pottery, learning how to make it thinner and more durable.

Pottery



Clay pots made cooking stews easier and were good storage containers.

Bow and Arrows



Using a bow and arrow made hunting in the woods easier, because the hunter did not need to get close to deer or other animals.

Changing Technology

Woodland Indians began using the bow and arrow about A.D. 600. Small triangular stone points became the standard tips for arrows. As in earlier times, other tools were made from stone, bone, antler, and wood. Woodland people also continued using plant fibers to make cordage, which was used for making things such as nets, bags, sandals, and coarse woven material.

Growing Corn

Gradually, Woodland Indians began to grow non-native domesticated plants that were introduced through trade---first squash, then corn, and later beans. Corn was widely grown in this region by A.D. 1000 and became a staple in the diet. When beans were added to the diet about A.D. 1300, gardens and fields would have included corn, beans, squash, as well as domesticated sunflower and goosefoot. Wild fruits, seeds, berries, and plant tubers were also gathered and eaten. Tobacco was grown and smoked in stone or ceramic pipes.

Gardens



Gourds and sunflowers were among the first crops to be planted in Pennsylvania. Later corn, beans, and squash, often grown together, became the most important food crops.

Woodland Settlements



After the harvest, families would gather in a large hamlet or village to spend the winter.

Village Life

By A.D. 800, people lived along rivers and streams where they could fish and plant their gardens in fertile soil. At first, they settled in small family farmsteads or in hamlets of several families. After A.D. 1250, they established larger villages consisting of small houses or several large longhouses, sometimes surrounded by a stockade. Some families moved out of the village during the growing season to cultivate land along smaller streams. Occasionally, small groups of people would set out on short trips to hunt, gather, collect special stone to make tools, or trade with their neighbors. Archaeologists believe that there were no villages in Centre County. Only small campsites, farmsteads, and hamlets have been discovered.

Ancient Farmers

Woodland Period - 1000 B.C. to A.D. 1600

Nearly seventy Woodland period sites have been found in Centre County. Most of these sites date from A.D. 800 to 1600 when farming had become central to the way of life of many Native Americans. These sites were small hamlets, single farmsteads, or small camps that people set up while they were tending their crops, hunting and gathering, or quarrying for stone to make tools. Larger groups of people lived in more permanent hamlets or villages along the Susquehanna West Branch and the lower reaches of Bald Eagle Creek near Mill Hall.

Archaeologists have excavated portions of two hamlets. In the 1970s, Penn State archaeologists worked at the **Fisher Farm Site** on the banks of Bald Eagle Creek near Unionville. A second hamlet, called the **Shuey Site**, is located along Spring Creek on the western edge of Bellefonte. The Bald Eagle Archaeological Society worked there in the 1990s with the kind permission of the landowners.

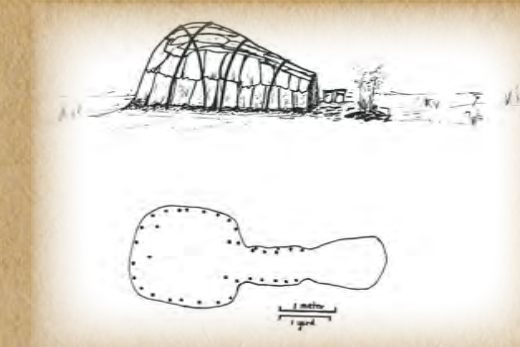
At both sites, archaeologists first discovered stone artifacts and pieces of pottery in the plowed topsoil. Once they dug below this plow zone, they identified dark areas of soil that marked various activities of Woodland Native Americans. Circular or oval patterns of postholes are the remains of small houses. People placed poles from saplings into the earth to build a house frame. They probably covered the frame with large pieces of bark, hides, or grass mats.

Woodland Pottery Styles



Both the shape of ceramic pots and the types of decoration changed over time. Different styles can be dated to different periods.

Smokehouse



These small buildings with low entrances were often found near houses. They show evidence of fires, which may have been used to dry or smoke foods.

One type of building left a keyhole pattern of posts. Archaeologists believe that these were igloo-shaped structures where food was smoked or dried and stored. Large dark stains in the soil are the remains of hearths for cooking or heating, while others were the traces of food storage pits.

In some of these pits and structures, archaeologists found seeds of corn, squash, sunflower, beans, and other plants. Some of these plants were probably being grown near the houses. Most of the animal bones found at the Shuey site were from deer, showing how important deer were for providing food, hides for clothing, and bone for tools. The inhabitants may have only stayed at sites like Shuey and Fisher Farm during the growing season, returning to larger villages where their harvest could be stored for the winter.

Fire Pits



Background Image:
Shuey Site Aerial

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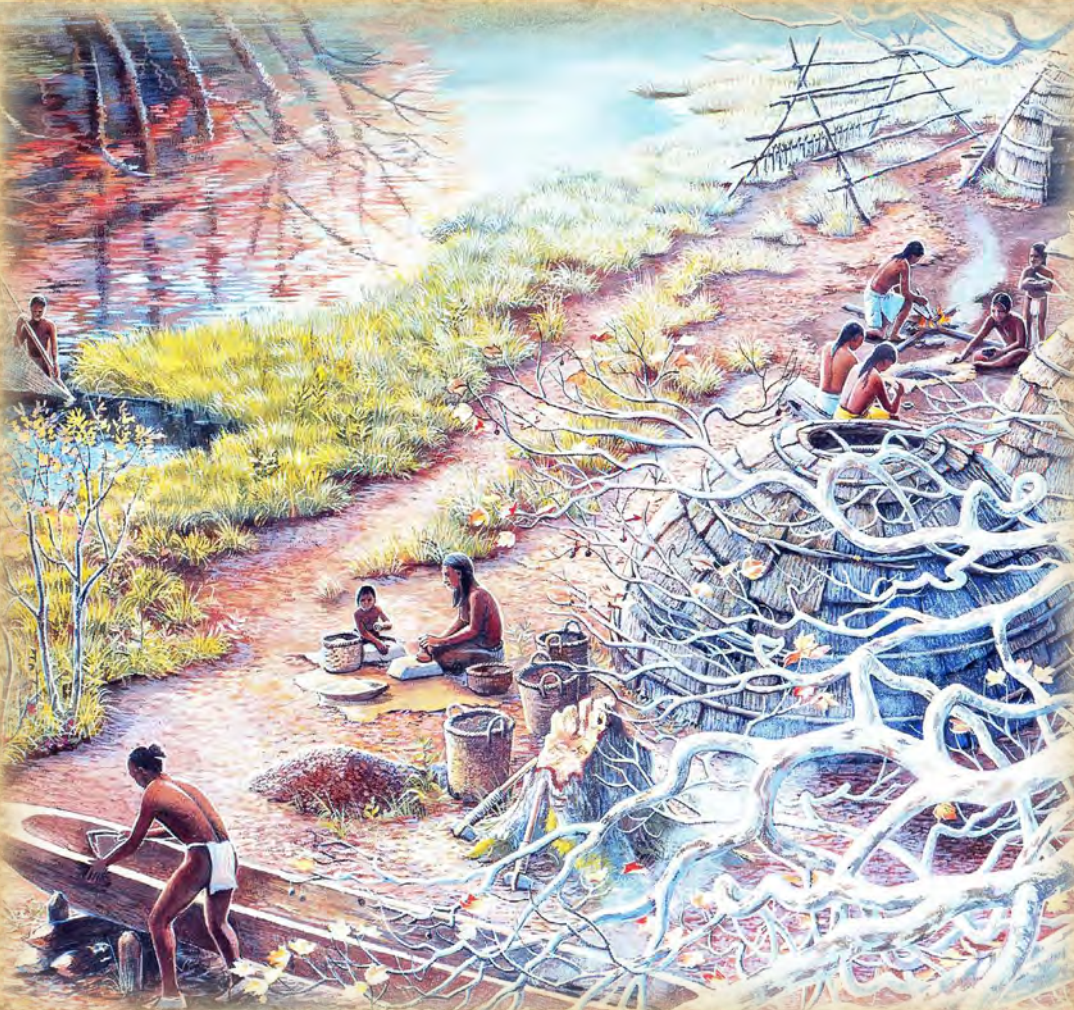
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Families likely came together to form bands, sharing a territory that would have included a variety of habitats, such as nut tree groves, good fishing spots, and wetlands. As the population gradually increased, the size of each band's territory grew smaller. Within a territory, people still moved seasonally to take advantage of various foods and other resources as they became available. Larger groups may have come together when food was abundant, and split into smaller families to hunt and gather separately during lean times of the year. Their shelters were probably made of sapling frames covered by hides, bark, or reed mats.

The Earliest Gardens

By 2000 B.C., Archaic people were experimenting with new foods and inventing new tools. Some people began to grow a type of gourd in small gardens. Dried gourds would have been used as containers or fishnet floats, while fresh gourds provided edible, oil-rich seeds. Plants with nutritious seeds such as sunflower were added to the gardens towards the end of the Archaic Period. The need to collect, store, or cook new foods eventually led to the production of stone bowls and, by 1500 B.C., the use of pottery. The spread of these new inventions accompanied an increase in trade between groups of people.

Domesticating Plants

Sunflowers and gourds were the earliest domesticated plants grown in central Pennsylvania.



Hunting and Gathering

Archaic Period - 8000 B.C. to 1000 B.C.

Most of us who live in Centre County today are unaware of the archaeological riches beneath our feet. In fact, there are nearly 200 known sites in the county that date to the Archaic Period, most between 3000 and 1000 B.C. The large number of sites from late in the Archaic Period suggests that the population here had substantially increased since 8000 B.C. Most of these sites are small, temporary camps. Some sites are larger, either because they were revisited often over time or because larger groups camped there. Several Centre County sites where Late Archaic people lived have been partially excavated.

Excavation



Penn State students excavate the Milesburg Site.

The Milesburg Site is at the junction of Spring Creek and Bald Eagle Creek. Penn State students working there in 1975 found several cooking hearths and numerous stone tools. People who lived at the site could fish in the creeks and also collect plants and hunt animals in diverse habitats in Bald Eagle and Nittany Valleys. This site could also have been a stopping point for people traveling along the stream to other regions.

The Jacks Mill Site lies along Spring Creek near Boalsburg. Archaeologists from the Bald Eagle Archaeological Society and Penn State excavated the site in the early 1980s, before houses were built there. They found hearths, pits, and numerous artifacts. Some stone spear points date as early as 7500 B.C. However, radiocarbon dates and the majority of the spear points indicate that more groups camped there between 3500 and 1000 B.C. Many of the pits contained charred walnut, hickory and other nut shells. Late Archaic people may have settled at the site in the fall to gather and process these nuts for use during the winter. They would also have hunted deer, dried and smoked venison, and worked hides.

Storage Pits

Deep pits dug into the ground were used to store nuts or other foods for winter. Other pits may have been used to roast meat and other foods, wrapped in leaves.



Stone Tool Workshop

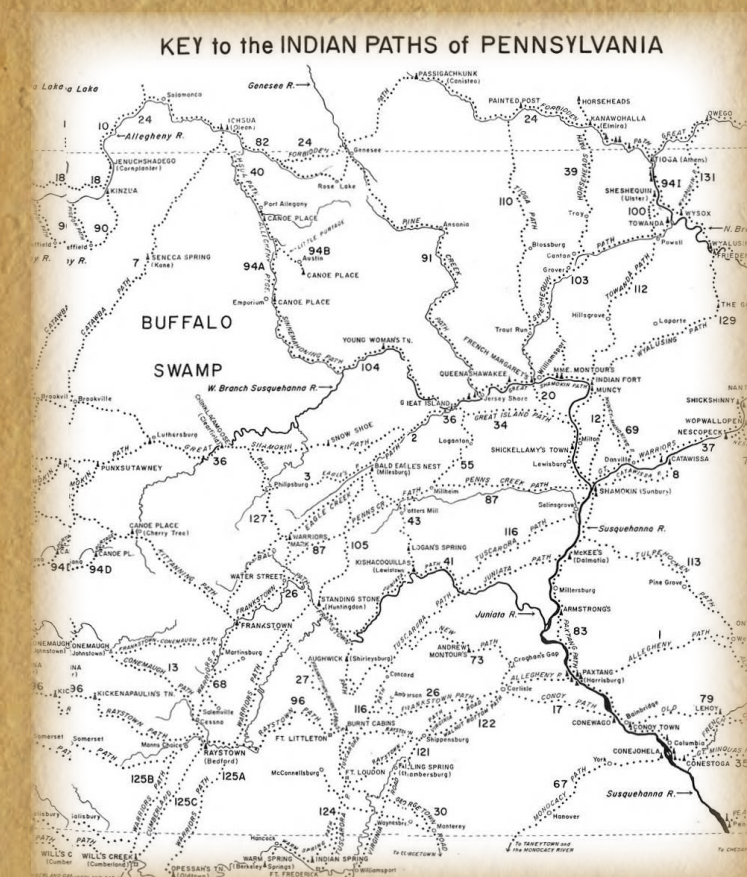


Archaic people camped near this stream when quarrying stone to make their tools.

The Mackey Run Bridge Site in Linden Hall was recently excavated by archaeologists from Heberling Associates. People camped along this small stream so they could extract stone for tools from nearby quarries. Based on stone tool styles and radiocarbon dates, people periodically visited the quarries between 4000 and 1500 B.C. Late Archaic people also performed other chores when camping there. Microscopic studies of the edges of stone tools found there showed that they were used for working bone, wood, antler, fresh meat, and animal hides. Wood had been planed, sawed, bored, wedged, grooved, and whittled. Hides had been cleaned, scraped, cut, and pierced. These activities probably took place at many Archaic sites.

The Arrival of European Settlers

Contact Period - 1600 to 1780 A.D.



Indian Paths

The footpaths used by Native Americans were followed by European settlers. Some paths have developed into modern roads.

Who Were The Native Americans?

Archaeological investigations have revealed much about the Native American way of life in Centre County up to A.D. 1600. Not known with certainty is the identity of the modern tribe they were most closely related to. European diseases, like smallpox and measles, spread to the native people here and elsewhere. Many died even before their first contact with Europeans. Indian trails, abandoned villages and a few artifacts were all that remained as evidence of the people who had, for centuries, called Central Pennsylvania their home.



Tilden Centre County 1861 Map

Pushing the Frontier West

In 1681 the first European settlers arrived with William Penn to establish Pennsylvania. It was nearly 100 years later before Central Pennsylvania opened up for settlement. By signing the 1754 Albany Purchase and the 1768 Treaty of Fort Stanwix, Native Americans sold Centre County land to the colonial government. The Native Americans encountered by the local settlers were groups like the Shawnee and the Delaware who had left their homelands because of the advancement of the eastern settlements.

Potter Discovers an Empire

In 1759, James Potter, an officer in the French and Indian War, was on an expedition to find locations for stockade forts. He also was a farmer who was seeking to open former Indian territories to settlement. When Potter looked down from Nittany Mountain, he is said to have exclaimed, "By heavens Thompson, I have discovered an empire." Potter established three stockade forts in Penns Valley and, in the 1770s, returned to build his own home near Old Fort.

"We rode through a wild Wilderness twenty Miles up Bald Eagle Creek without the Sight of a single House - We saw many 'Indian Camps,' small crotched Sticks covered with thick Bark - some of them were lately left - On the Bank of a Brook which ran into the Creek. At length, we came to a Fire, some Indians or others had encamped there last night; near the Fire and over the very Road, hung half a Deer; the two hind Quarters, which were yet warm . . ."

Soon after we had dined, two Indian Boys bolted in . . . with several large Fish - One would weigh two Pound - in Return Mr. Boggs gave them Bread, & a Piece of our Venison . . ."

-Reverend Philip Fithian

First European Settlers

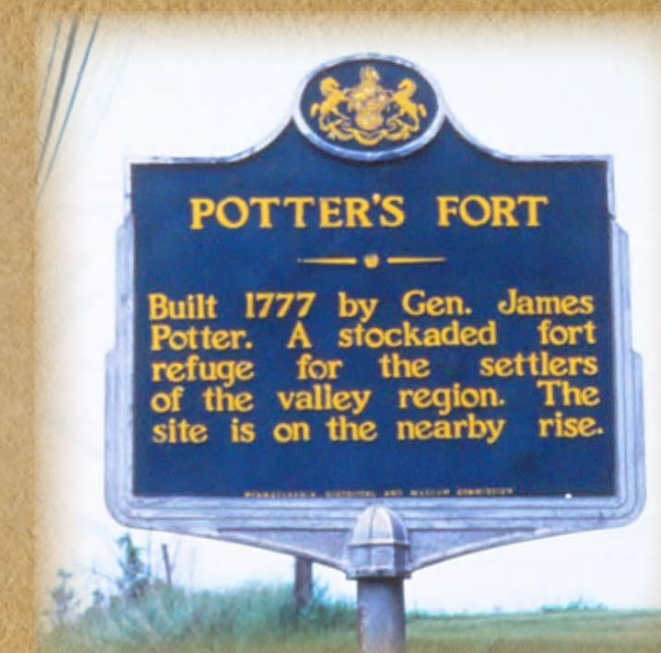
Before Potter returned, another European, Andrew Boggs, had settled in what is now Boggs Township along Bald Eagle Creek. The creek was named after a Delaware Indian who lived near its confluence with Spring Creek. Boggs built a cabin in 1769 at Bald Eagle's Nest (Milesburg); his nearest neighbor was 25 miles away. Reverend Philip Vickers Fithian, a new Presbyterian missionary, provided a brief account six years later as he traveled in the Susquehanna River Valley, stopping first at Boggs's, and then at Potter's new home near Old Fort.



"The Treaty of Penn with the Indians"
An oil painting by Benjamin West

Old Fort

Marker Text: Built 1777 by Gen. James Potter. A stockade fort refuge for the settlers of the valley region. The site is on the nearby rise.



The Final Chapter

Settlers continued to arrive and conflicts over land increased, while at the same time colonists were seeking their independence from England. Native Americans divided their loyalties between the English and French during the French and Indian Wars (1754-1763) and later between the English and the colonies during the Revolutionary War. Iroquoian warriors allied with the English raided settlements in central Pennsylvania. In the Great Runaway of 1778, settlers living in Penns Valley and along the Susquehanna West Branch retreated to Fort Augusta at Sunbury for protection. At the war's end, almost all Native Americans left the territory of Pennsylvania. Many moved west to Ohio and later as far as Wisconsin and Oklahoma.



"Council at Slippery Rock Creek"
An oil painting by Robert Griffing

First Arrivals

Paleoindian Period - 15,000 B.C. to 8000 B.C.



Migration



Some Paleoindians used an ice-free corridor to reach the center of the continent, while others traveled down the coast in simple boats.

The New World

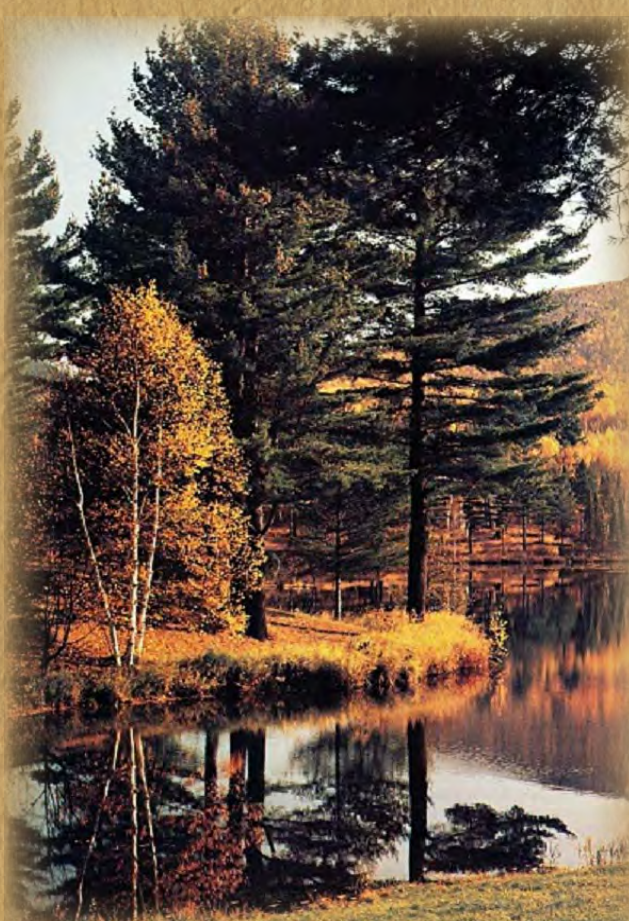
If you visited North America on a time machine around 25,000 B.C., there would have been no one to greet you. It was the last Ice Age! Much of North America was covered by huge ice sheets, sometimes over a mile thick. An ice sheet covered much of northern Pennsylvania, although it never reached Centre County. Ocean levels were much lower than now because so much water was captured in ice. Because this sea level drop exposed land under the Bering Sea, people living in eastern Siberia finally crossed into Alaska around 20,000 B.C.

Entering Pennsylvania

By about 15,000 B.C., these first people – called Paleoindians by archaeologists – spread south into North and South America. Evidence from Meadowcroft Rockshelter in southwestern Pennsylvania suggests that people were there about 14,000 B.C. The first evidence of Paleoindians in central Pennsylvania is the presence of Clovis spearpoints that date to about 9000 B.C., although some may have been here earlier.

Hunting Big Game

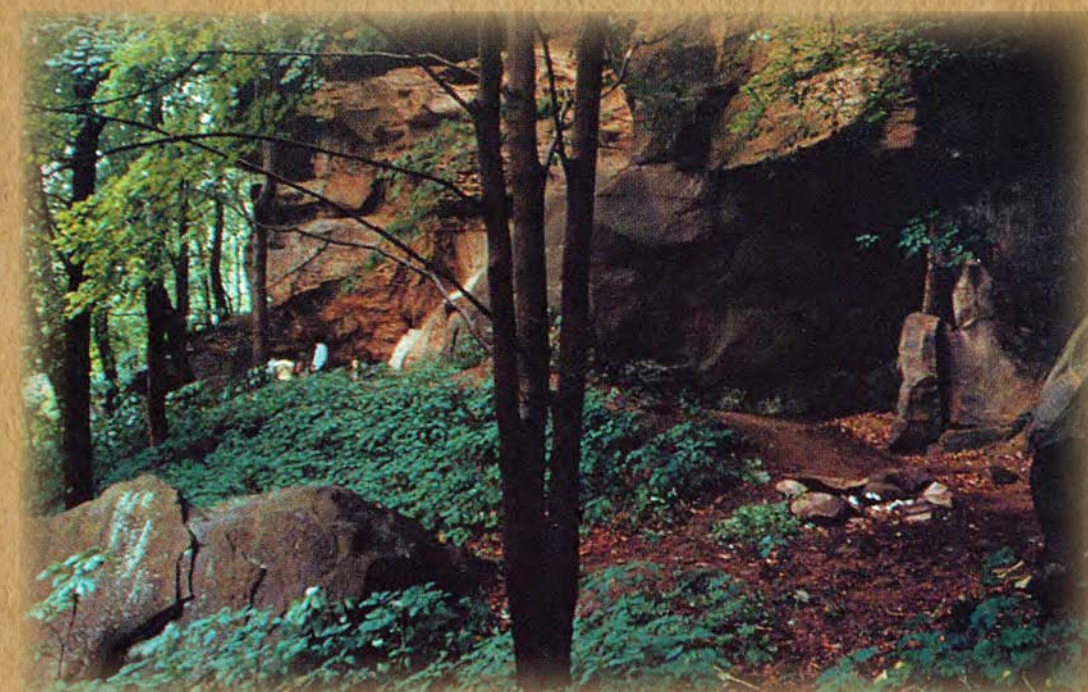
Paleoindians hunted Ice Age animals such as mammoth and mastodon with long stone-tipped spears. Although these huge animals provided critical meat and hides, people also hunted caribou, deer, elk, and birds; fished; and gathered wild edible vegetation. Only their stone tools survive, but they would have used hides, bone, wood, and grasses to make other tools, clothing, and shelters. Because they lived by hunting and gathering resources, they moved frequently in search of food, living in temporary shelters made of sapling frames covered by hides, or using natural rockshelters.



Changing Environment

As forests replaced the open tundra-like environment in Pennsylvania, the mammoths and other Ice Age animals died out.

Meadowcroft Rockshelter



Caves and shallow rockshelters provided natural camp sites.

Hunting



Paleoindians lived in small family groups or bands, working together to hunt large animals, or collecting plants and smaller game.

End of the Ice Age

By around 10,000 B.C., Paleoindians were confronted with a rapidly changing world. Within hundreds of years, the tundra vegetation of grasslands and shrubs was replaced by forests of spruce and pine trees, grassy meadows, and clusters of deciduous trees along streams. By 9000 B.C., most of the Ice Age fauna, including the mammoths, mastodons, saber-toothed tigers and giant beavers, became extinct. These early people of the New World had to change to survive in a very different environment.

First Farmers

Woodland Period - 1000 B.C. to A.D. 1600



Settling Down

The way of life of people in Pennsylvania did not change much for 1500 to 2000 years after 1000 B.C., the beginning of the Woodland Period as defined by archaeologists. Native Americans continued to move seasonally in search of food. However, groups of families may have stayed together longer at places where there was abundant wild food and where gourds, sunflowers, and other plants with nutritious seeds could be cultivated. They continued making pottery, learning how to make it thinner and more durable.

Pottery



Clay pots made cooking stews easier and were good storage containers.

Bow and Arrows



Using a bow and arrow made hunting in the woods easier, because the hunter did not need to get close to deer or other animals.

Changing Technology

Woodland Indians began using the bow and arrow about A.D. 600. Small triangular stone points became the standard tips for arrows. As in earlier times, other tools were made from stone, bone, antler, and wood. Woodland people also continued using plant fibers to make cordage, which was used for making things such as nets, bags, sandals, and coarse woven material.

Growing Corn

Gradually, Woodland Indians began to grow non-native domesticated plants that were introduced through trade---first squash, then corn, and later beans. Corn was widely grown in this region by A.D. 1000 and became a staple in the diet. When beans were added to the diet about A.D. 1300, gardens and fields would have included corn, beans, squash, as well as domesticated sunflower and goosefoot. Wild fruits, seeds, berries, and plant tubers were also gathered and eaten. Tobacco was grown and smoked in stone or ceramic pipes.

Gardens



Gourds and sunflowers were among the first crops to be planted in Pennsylvania. Later corn, beans, and squash, often grown together, became the most important food crops.

Woodland Settlements



After the harvest, families would gather in a large hamlet or village to spend the winter.

Village Life

By A.D. 800, people lived along rivers and streams where they could fish and plant their gardens in fertile soil. At first, they settled in small family farmsteads or in hamlets of several families. After A.D. 1250, they established larger villages consisting of small houses or several large longhouses, sometimes surrounded by a stockade. Some families moved out of the village during the growing season to cultivate land along smaller streams. Occasionally, small groups of people would set out on short trips to hunt, gather, collect special stone to make tools, or trade with their neighbors. Archaeologists believe that there were no villages in Centre County. Only small campsites, farmsteads, and hamlets have been discovered.

Ancient Farmers

Woodland Period - 1000 B.C. to A.D. 1600

Nearly seventy Woodland period sites have been found in Centre County. Most of these sites date from A.D. 800 to 1600 when farming had become central to the way of life of many Native Americans. These sites were small hamlets, single farmsteads, or small camps that people set up while they were tending their crops, hunting and gathering, or quarrying for stone to make tools. Larger groups of people lived in more permanent hamlets or villages along the Susquehanna West Branch and the lower reaches of Bald Eagle Creek near Mill Hall.

Archaeologists have excavated portions of two hamlets. In the 1970s, Penn State archaeologists worked at the **Fisher Farm Site** on the banks of Bald Eagle Creek near Unionville. A second hamlet, called the **Shuey Site**, is located along Spring Creek on the western edge of Bellefonte. The Bald Eagle Archaeological Society worked there in the 1990s with the kind permission of the landowners.

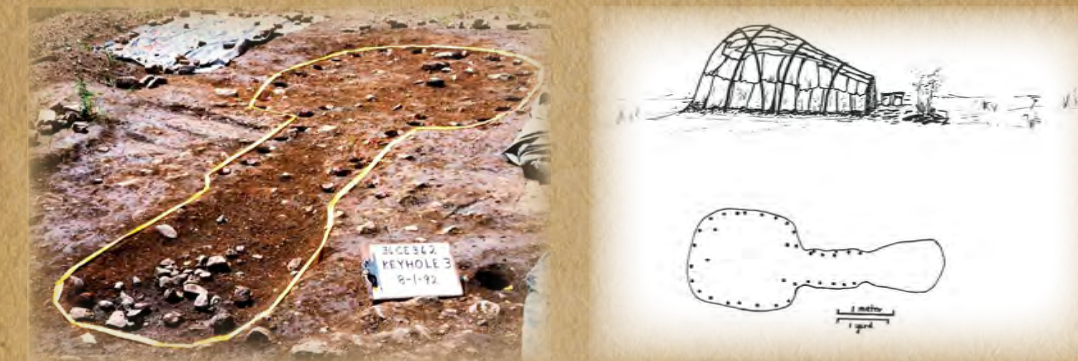
At both sites, archaeologists first discovered stone artifacts and pieces of pottery in the plowed topsoil. Once they dug below this plow zone, they identified dark areas of soil that marked various activities of Woodland Native Americans. Circular or oval patterns of postholes are the remains of small houses. People placed poles from saplings into the earth to build a house frame. They probably covered the frame with large pieces of bark, hides, or grass mats.

Woodland Pottery Styles



Both the shape of ceramic pots and the types of decoration changed over time. Different styles can be dated to different periods.

Smokehouse



These small buildings with low entrances were often found near houses. They show evidence of fires, which may have been used to dry or smoke foods.

One type of building left a keyhole pattern of posts. Archaeologists believe that these were igloo-shaped structures where food was smoked or dried and stored. Large dark stains in the soil are the remains of hearths for cooking or heating, while others were the traces of food storage pits.

In some of these pits and structures, archaeologists found seeds of corn, squash, sunflower, beans, and other plants. Some of these plants were probably being grown near the houses. Most of the animal bones found at the Shuey site were from deer, showing how important deer were for providing food, hides for clothing, and bone for tools. The inhabitants may have only stayed at sites like Shuey and Fisher Farm during the growing season, returning to larger villages where their harvest could be stored for the winter.

Fire Pits



Background Image:
Shuey Site Aerial

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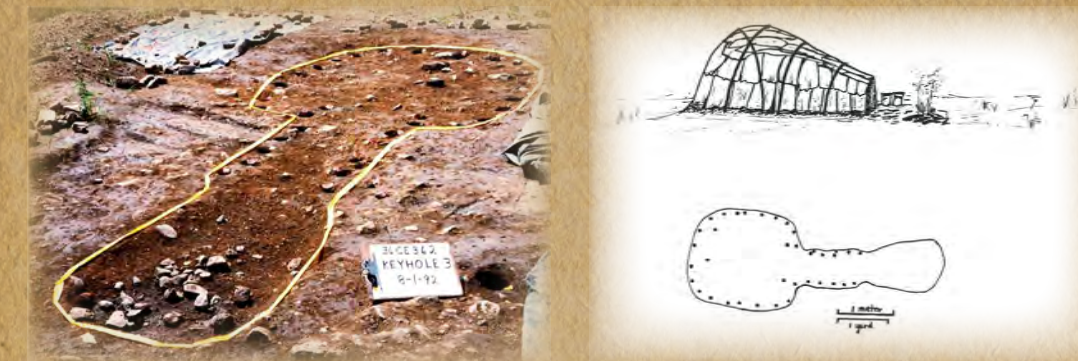
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