

Archaeology In The Forest

Fifteen thousand years ago the hardwood forests of Indiana did not exist. In their place stood a landscape dominated by a barren arctic tundra with scattered pockets of spruce and fir. The hardwood species had been pushed south during the last glacial period. As the Wisconsin glacier retreated to the north, the hardwood forests also migrated northward, slowly filling in throughout Indiana and the Great Lakes Region. By 12,000 years ago the hardwood species had just begun entering into the state. Human populations also began moving into the area as the glacier retreated, and by 10,000 B.C. a distinctive cultural manifestation known as the Paleoindian period is recognized. The Paleo period (ca. 10,000-8,000 B.C.) is characterized by highly mobile hunter/gatherers who primarily resided in small family units and migrated large distances across the landscape. Paleo sites are often represented by small, short-term encampments with a light density of stone tools or debris and are often identified along major rivers and tributaries or near sources of high quality chert, a stone material used in tool manufacturing (Jones and Johnson 2016; Stafford 1997; Whitehead 1997).



View of the Ohio River from an upland precontact site.



Scraper from an Early Archaic site in Brown Co.

By 6,000 B.C. the open, spruce, fir, and sedge parkland disappeared and was replaced by a closed canopy pine and birch forest with hardwood species such as oak, hickory, maple, elm, ash, sycamore, and walnut quickly following. By 7,500 B.C. the pine populations had dramatically decreased, and hardwood forests dominated the Indiana landscape. At this time, changes within the cultural manifestations signified the beginning of the Archaic period. The Early Archaic period (ca. 8,000-6,000 B.C.) is characterized by highly mobile populations that used a wide range of environmental settings, including upland ridges, narrow stream valleys, and the broad floodplains of major rivers and streams. During the Middle Archaic (ca. 6,000-3,500 B.C.) heavy use of the drier uplands occurred with a focus on nut processing. At this time the Midwest experienced a general drying and warming trend during which the prairie pushed into northern Indiana from the west. Sites appeared along major drainages that were used over longer periods, which suggest less mobility and an increased sedentism. By the Late Archaic period (ca. 4,000-1,500 B.C.) larger sites were being developed, including semi-permanent villages with shell middens and cemeteries. By this time the climate had begun to cool and became more typical of what is recognized today. The prairies retreated back to the west, and riverine systems converted from carrying the glacial melt waters to the meandering drainages that we see today. During the Late Archaic period, larger villages that housed growing populations were established along major river channels while the uplands were primarily used as areas to extract desired resources (Jones and Johnson 2016; Stafford 1997; Whitehead 1997).



Late Archaic projectile point.



Rockshelter in southern Indiana.

By the beginning of the Woodland period, around 1,000 B.C., Indiana was predominately covered in hardwood forests, with pockets of prairie and northern relict species such as hemlock and pine scattered across the state. However, species composition was constantly changing with beech and maple often vying with oak and hickory for dominance in the forest canopy. The Early Woodland period (1,000-100 B.C.) saw the widespread development of pottery and the intensive use of earthen mounds for burial of the dead. Evidence of horticulture and plant selection also appeared during the Early Woodland period. The Middle Woodland period (100 B.C.-A.D. 500) witnessed an increase in social complexity, pottery development, and horticulture. Numerous

ceremonial and earthwork sites have been documented dating to Early and Middle Woodland periods; however, few habitation sites have been studied. The village sites that have been excavated indicate long-term occupations housing nearly 100 individuals at any given time. Although both Early and Middle Woodland period sites have been identified within almost any landform, most sites, particularly the more recognized earthworks, are located near major rivers valleys. The Late Woodland period (A.D. 500-1000) saw a collapse of trade, social complexity, and earthwork construction; however, at this time there was an increased focus on horticulture with maize, beans, and squash becoming important elements in the diet of these groups. The bow and arrow also emerged during the Late Woodland period, replacing the spear and atlatl. Late Woodland village sites tend to be smaller and more dispersed than the preceding period with most sites centered along major streams and rivers, which contributed to the development of intensified horticultural practices (Jones and Johnson 2016; Stafford 1997; Whitehead 1997).

Although some Late Woodland cultures persisted until contact, particularly in northern Indiana, by A.D. 1000 the Mississippian culture (A.D. 1000-1600) had manifested in southern Indiana and throughout the southeastern United States. The environment during the Mississippian period was similar to the preceding time period, with hardwood forests covering the majority of the state. Beech, in decline from its former maximum frequency that occurred around 200 A.D., was being replaced by more mesic species. Mississippian people had a strong focus on agriculture and developed large towns centered around a central plaza with large earthen mounds and palisades enclosing the complex, indicating that warfare was also common during this period. Most Mississippian villages were located near major rivers where



Late Woodland projectile point.

intensive, large-scale agricultural could occur. Large fields were cleared in order to grow enough food to feed the town's inhabitants, often numbering into the thousands of individuals who resided both within the larger towns and the inter-related outlying villages (Jones and Johnson 2016; Stafford 1997; Whitehead 1997).



Sandstone foundation of a mid-19th to mid-20th century farmstead.

European settlement began in earnest in the 18th and 19th centuries, at which time beech-maple forests covered the majority of central Indiana with oak-hickory and western mesophytic forests concentrated in the southern portion of the state. Northern Indiana contained a mix of dry prairies, wetlands,



Headstone in a historic cemetery.

oak-hickory savannas, and beech-maple forests. The settlement patterns of the Euro-American settlers differed significantly from the previous time periods. Farms and homesteads emerged upon the rugged upland ridgetops as well as in the fertile valleys. In addition to homesites and farmsteads one also sees the emergence of diverse sites such as mills, tanneries, blacksmith shops, lime and brick kilns, etc. Towns were often located along natural drainages or major travel routes (i.e., canals, railroads, highways) where goods could easily be transported. Euro-American populations cleared much of the beech-maple and oak-hickory forests that covered the state in order to prepare the ground for settlement

and farming. Between 1800 and 1900 Indiana's forestlands dropped from 23 million acres to less than 2 million acres. Although the amount of forestland has more than doubled within the past century to roughly 4.5 million acres, the majority of Indiana still remains cleared for agriculture and urban centers (Whitehead 1997).



Late 19th century limekiln.

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