

ARCHAEOLOGY IN THE FOREST



View of the Ohio River from an upland prehistoric site

Fifteen thousands 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 northward, the hardwood forests also migrated north, 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 north 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 utilized in tool manufacturing (Jones and Johnson 2003; Stafford 1997; Whitehead 1997).

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 hardwoods 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 utilized 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 utilization 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 time the prairie pushed into northern Indiana from the west. Sites also appeared along major drainages that were utilized over longer periods, which suggest less mobility and an increased sedentism. By the Late Archaic period (ca. 4,000-1,500 B.C.) larger



Scraper from an Early Archaic site in Brown Co.



Late Archaic projectile point

sites were being developed including semi-permanent villages with shell middens and cemeteries. By this time the climate had begin to cool and became much 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 this time larger villages that housed the growing population were established along major river channels while the uplands were primarily utilized as areas to extract desired resources (Jones and Johnson 2003; Stafford 1997; Whitehead 1997).



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 white pine scattered across the state. However, the forest 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 during the 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 collapsed 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 at this time, 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 2003; 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 their 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. Large fields were cleared in order to grow enough food to feed the town's inhabitants. Most Mississippian villages were located near major rivers where intensive, large-scale agricultural could occur to support the larger populations, often into the 1000s, that resided in the towns and inter-related outlining villages (Jones and Johnson 2003; Stafford 1997; Whitehead 1997).



Late Woodland projectile point



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 that state. Northern Indiana contained a mix of dry prairies, wetlands, and oak-hickory 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).



Headstone in a historic cemetery



Late 19th century limekiln

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Indiana Department of Natural Resources

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