Jester Park Nature Center Lithic & Historic Artifact Catalog



Summary

Private collections of lithic (rock) and historic artifacts have been donated to Polk County Conservation (PCC) from families and individuals. The combined collections include over 600 artifacts collected in or around what is now Yellow Banks Park in SE Polk County. Artifacts include a wide variety of projectile points, axes, celts, mauls, pottery sherds, grinding slabs, and a rare banner stone. The artifacts represent four distinct indigenous cultures spanning over 13,000 years of human inhabitance in the area.

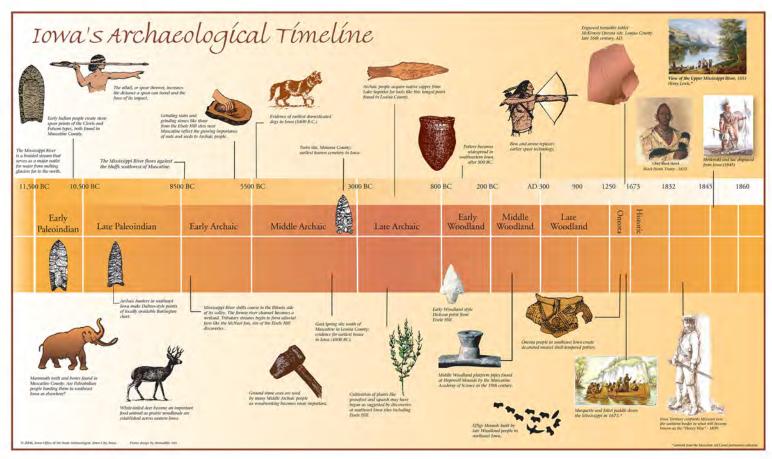


Image Courtesy of: University of Iowa, Office of the State Archaeologist (OSA)

Paleo

People during the Paleoindian period were the first to inhabit this area about 13,500 years ago. They lived in small bands and hunted now extinct species of bison, mammoths, and mastodons. Some of the artifacts from this period include leaf-shaped spear points, stone knives, and hide scrapers. These tools were used for hunting, butchering game, and dressing hides.

Archaic

Around 10,000 years ago, the Paleoindian period began transitioning into the Archaic period. People from this period were hunters and gatherers. They hunted modern species including bison and deer and collected a variety of plant foods such as hickory nuts and hackberries. Stone axes were made for cutting trees and doing woodworking. The atlatl, a long hooked stick which allowed hunters to throw spears farther with greater impact, was commonly used during this period. Two rare artifacts from this time period include an atlatl weight called a butterfly banner stone and an impressive large 3/4 grooved axe.

Woodland

The Archaic time period eventually gave way to the Woodland period beginning 3,000 years ago. During this period, people began domesticating a variety of native plants and growing them in small gardens. They also continued to gather wild plant food. Bows and arrows with one-inch points were used for hunting as well as spears. Another innovation first appearing during this period was pottery. The clay used to construct the pots had grit or sand added as a tempering agent. The outside of the pots were often decorated with cord markings. Burial mounds are also associated with the Woodland period. These large earthworks were usually built on a bluff top overlooking a river. The mounds were often circular or conical in shape. Human remains, stone tools, and pottery were often placed in the mounds.

Late Ancestral American Indian

Beginning 1,000 years ago, people during this period spent their time hunting, fishing, collecting plants, and planting large fields of corn, beans, squash, sunflowers, and other crops. They lived in villages of bark-covered longhouses located along major rivers. Distinct cultural and diagnostic artifacts like shell-tempered pottery are associated during this period.

Historic

Occupation by people during the early historic period is also represented in the collection. Sherds of crockery, glass, porcelain, iron hinges, a musket ball maker, clay marbles, buttons, buckles, and clasps are just a few of the artifacts representing this time period. The age of these items range from the 1850s to the early 1900s.

Polk County Conservation would like to express sincere gratitude to the families and individuals that generously donated these artifacts. Without their thoughtfulness, this cultural and historic resource would not have been possible. Artifacts such as these educate and inform our community about Iowa's archaeological past and the Indigeous people who called this land home long before it was called Iowa.

Artifact donations from

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Lithic (stone) Artifacts

Abrader: A course grained sandstone or pumice-like rock, which bears one or a series of longitudinal grooves. Archaeologists believe some abraders were used in pairs as arrow shaft straighteners and smoothers. Other abraders were used to sharpen bone tools and grind edges on chipped stone tools. (Alex 59)

Adze: a cutting tool that has a thin arched blade set at right angles to the handle and is used chiefly for shaping wood. (Merriam-Webster)

Archeology: the scientific study of material remains (such as tools, pottery, jewelry, stone walls, and monuments) of past human life and activities. (Merriam-Webster)

Archaeologist: a person who studies human history and prehistory through the excavation of sites and the analysis of artifacts and other physical remains. (Oxford Languages)

Artifact: Portable remains which show signs of human manufacture or modification. (Alex 27)

Axe: A fine grained rock which has a sharp cutting edge created by the convergence of two pecked and ground edges. (Alex 59)

Full groove axe: The groove extends around the entire axe.

3/4 groove axe: The groove only extends 3/4 of the way around the axe.

Banner Stone: Ground stone tools of various shapes which are believed to have served as primarily weights on spear throwers. (Alex 59)

Biface: An artifact having flakes removed from two sides or faces to form a cutting edge. Through microscopic study archaeologist often determine that bifaces were used as knives. (Alex 58)

Chert: a hard, dark, opaque rock composed of silica (chalcedony) with an amorphous or microscopically fine-grained texture. It occurs as nodules (flint) or, less often, in massive beds. (Oxford Languages)

Celt: Narrow wedge-shaped tools possibly used as adze and axes. (Alex 59)

Flake: The smaller piece or chip struck off a core or another flake. Unmodified flakes are those showing no signs of further retouch or use. (Alex 58)

Granite: a very hard, granular, crystalline, igneous rock consisting mainly of quartz, mica, and feldspar and often used as a building stone. (Oxford Languages)

Hammerstone: A pebble or cobble which has pecking marks on its edges, resulting from its use as a striking implement. (Alex 59)

Heat Treated: In archaeology, heat treatment is the intentional transformation of stone (normally sedimentary silica rocks) by fire to produce materials with improved fracture properties. (Oxford Research Encyclopedia)

Knife River Flint: Knife River Flint is a dark brown, siliceous lithic material found throughout west-central North Dakota. (Ware)

Lithic: Stone artifact. (Alex 27)

Mano: A hand-sized cobble showing a smooth or pecked surface which results from its use as a rubbing and grinding stone against a metate. (Alex 59)

Metate: A rock showing a smooth or depressed surface resulting from having been rubbed with a mano in the crushing and pulverizing of seeds and nuts. (Alex 59)

Obsidian: A hard, dark, glasslike volcanic rock formed by the rapid solidification of lava without crystallization. (Oxford Languages)

Projectile Point: A bifacial artifact which usually has a tip or point at one end created by the convergence of two retouched edges. Archaeologists interpret most projectile points and spear or dart points as arrowheads. (Alex 58)

Scrapers: Unifacially worked flakes, flat on one side, believed to have functioned in scraping hides, skins, wood, or plant material. (Alex 58)

Utilized Flake: A flake showing secondary flaking as a result of its use. (Alex 59)

Waste Flake: Discarded waste flake bearing no evidence of further use. (Alex 58)

Ceramic (pottery) Artifacts

Body Sherd: The main portion of the vessel including the area of maximum diameter. It is the portion of the pot to which the rim and base are attached. (Alex 84)

Ceramic Artifact: Those made out of fired clay. (Alex 77)

Cord: Paddle used in ceramic making were sometimes wrapped with cordage. It may be that a plain piece of wood became damp from the clay and tended to stick to the vessel walls. Cord wrapping may have prevented this. (Alex 78)

Incising: Refers to the scratching, cutting, or grooving of a line design onto the vessel surface. (Alex 85)

Pottery Sherd: Ceramics most commonly occur as potsherd, or simply sherds (sometimes spelled shards), the fragmentary pieces or remains of broken pottery. (Alex 77)

Rim Sherd: On a vessel with a defined neck, this is usually the area between the lip and the point of maximum constriction. (Alex 82)

Slipping: A decorative treatment found on some Late Prehistoric Iowa vessels. A slip is a liquid wash composed of colored clay and water which fills the pores with paste and creates a smooth, evenly colored surface. (Alex 80)

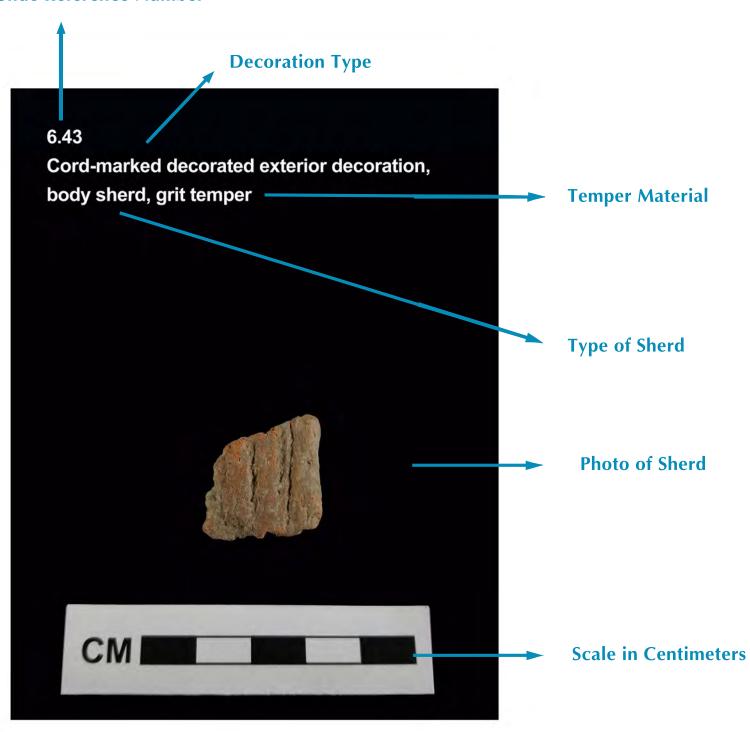
Temper: An ingredient which prevents the vessel from cracking during the drying and firing process as the clay expands. Prehistoric temper was made of grass or plant fiber; sand; or crushed stone, bone, shell, and other potsherds (referred to as grog). (Alex 78)

Glossary References

- 1. Alex, Lynn, Exploring Iowa's Past: A Guide to Prehistoric Archaeology, University Iowa Press, 1980
- 2. Merriam-Webster, Merriam-Webster.com Dictionary, 2021
- 3. Oxford Languages, languages.oup.com, Oxford University Press, 2021
- 4. Oxford Research Encyclopedias, oxford.com, 2020
- 5. Ware, Ryan, A Hole is more than the Sum of its Parts: Recent Investigations in the Knife River Flint Quarry Area. National Park Service, 2017

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