Scientists uncover a wealth of information about Illinois' unwritten past by studying the artifacts of ancient cultures.

Unearthing Illinois' History

Story By Mike Wiant

As dusk settles, the group around the campfire is busy: cooking, repairing tools, and talking about the day's hunt and the prospects for tomorrow. They have come to this place overlooking the stream valley for generations. When dawn breaks, they will assemble their weapons, pack pouches with dried meat and nutmeats, and move on to another favored hunting spot.

Accompanied by a domesticated dog, an Early Archaic period (9000 B.C.) hunter used a spear thrower, or atl atl, to kill his prey. (Illustration by Andy Buttram.)

An 8,500-year-old campfire was unearthed at the Koster Site in the lower Illinois River valley. (Photo by Carol Goland.)

Millennia later a farmer cultivating a field overlooking the stream valley spots a pointed stone. Climbing down from the tractor he discovers a stone spear point. Expanding his search, he finds flakes of stone, a scraper and several other tools. Curious about the point, he talks with an archaeologist at a nearby museum and is surprised to discover the point is more than 9,000 years old. They agree that further exploration is warranted, and in the fall student archaeologists excavate a few holes, discovering more stone tools, bits of animal bone, fire-reddened earth and charcoal.

Unlike the last three centuries of Illinois history, there are no eyewitness accounts of what happened in the distant past. To explore ancient human history, archaeologists interpret artifacts; they study the material, shape, color and other characteristics of each specimen. By doing so, they learn where people collected material for tool making, how the tools were made, how and when they were used, and many other things.

The development of new technology enables archaeologists to discover increasingly more detail about artifacts. For example, using high-powered microscopy, they can observe traces of wear on the edge of a stone tool, revealing that someone used the tool to scrape an animal hide, cut meat, or drill bone or wood. An analysis of elements in the stone sheds light on its source and contributes information to an understanding of how people acquired raw material. DNA recovered from a piece of dogs' bone allows us to trace their lineage back to wolves and chronicle the story of their domestication. By assembling data from each object found during their excavation, archaeologists bring the past to life.

Technology allows archaeologists to conclude that the spear point found in the farmer's field was made of stone found only in northwestern Indiana, indicating that these hunters traveled widely or exchanged material with people familiar with the source of the stone. Closer examination of the point's edge shows traces of wear consistent with cutting. Evidently, the point was used for hunting and butchering. The bones of a white-tailed deer were found scattered around and in an area of burned earth, testimony to the success of the hunt. The absence of some of the bones suggests that the hunters also carried away some meat. Pieces of charcoal are identified as walnut shell suggesting that the hunters camped here sometime in the fall. An assay of radioactive carbon in the nutshell provides an age of 9,300 years ago, roughly 7,300 B.C.

Illinois archaeological discoveries include Early Archaic period spear points dating to 9000 B.C. (Photo by Michael Brohm.)

For more than 150 years, archaeologists have searched for past civilizations in Illinois, and they have made world-class discoveries. More than 50,000 artifact locations have been documented. Hundreds of these locations have been studied and now assemble our current understanding of human history in Illinois—from the arrival of the first Native Americans to the workings of steel mills in Joliet.

Although we have learned much about the unwritten past, there is a sense of urgency among archaeologists as our culture expands across the landscape. While each site may provide some information about the past, some sites are particularly important and deserve protection or, if avoidance is not possible, scientific exploration.

An Early Archaic period dog burial was found at the Koster Site. (Photo by Del Baston.)

More than 10,000 years ago, Paleo Indians hunted mastodons and roamed the land now known as Illinois. (Illustration by Andy Buttram.)

As a result, fieldwork is no longer limited to the summer; archaeologists now search year-around for artifacts. Their travels often lead them to the kitchen of a farmhouse to study artifacts picked up a generation ago while cultivating fields. Like their predecessors, today's archaeologists are motivated by a thirst for knowledge about the past and the quenching excitement of discovery that occurs while walking the next field row, examining a bucket of artifacts found on a nearby farm or studying an artifact collection.

Artifact Identification Days

Events take place throughout the year where the public can bring collections of Native American artifacts, rocks, fossils or animal bones for identification by museum and guest archaeologists, geologists and zoologists.

Such an event is scheduled from 10 a.m. to 4 p.m. on Feb. 27, 2005 at Dickson Mounds Museum at Lewiston. Hands-on activities for children offered and a special archaeology lecture will take place at 2 p.m. Call (309) 547-3721 for information.