ARCHAEOLOGY OF THE RODNEY CLARK SITE

An archaeological study was conducted before the Cedar Creek Bridge was built on what had been the Clark family farm in the village of Rothschild, Wisconsin. Prehistoric mounds and campsites had been reported on the Clark property, and many important artifacts were recovered during the archaeological investigations at the Rodney Clark site. The following information explains the known prehistory of central Wisconsin, how natural resources were used by early people in Wisconsin, and what was found during the archaeological investigations.

General Prehistory

Nortl	North-central Wisconsin Archaeology Time Line (in thousands of years):													
В.С											JA.D			
10	9	8	7	6	5	4	3	2	1	0	1		2	
Pale	o-India	n	Archaic							Woodl	and	O n e o t a	H s t o r i c	



Paleo-Indian Tradition

Paleo-Indian Tradition

Paleo-Indian people are the earliest known inhabitants of north-central Wisconsin. These nomadic hunters arrived as the last glacial ice was retreating from the region, around 12,000 years ago. Paleo-Indians explored Wisconsin's landscape identifying essential resources such as sources of flint stone. They survived on the natural resources, which at that time included mammoths, mastodons and other large animals.

Archaic Tradition

Artifacts recovered from the Rodney Clark site indicate use during the Archaic and Woodland Traditions, long after the glaciers had melted. The Archaic people hunted deer, elk and other small game, and harvested a variety of wild plant foods such as nuts and berries. Ground stone axes and copper tools were manufactured at this time. Population increases would have limited group mobility and led to the establishment of regional territories. Wide ranging trade networks also developed as indicated by artifacts made from imported materials at some Archaic sites.



Archaic Tradition

Woodland Tradition

The Woodland Tradition is characterized by a series of important innovations. "Woodland" is marked by the introduction of pottery, burial in earthen mounds, and horticulture beginning 2,500 years ago. The bow and arrow was adopted by local Woodland groups toward the end of this period, and greatly enhanced hunting capabilities. This also corresponds to a period of population increase, tighter social territories, resource stress, and ultimately increased warfare. These factors, along with influences from new population centers in southern Illinois, contributed to the transition from Woodland hunter-gatherers to the agriculturally based Oneota culture around 800 years ago.



Woodland Tradition



Oneota Tradition

Oneota culture sites are recognized by distinctive shell-tempered pottery and evidence for more intensive corn-based agriculture. While Woodland sites have been found across Wisconsin's landscape, Oneota villages are clustered in specific localities, and nearly all of the Wisconsin River Valley was virtually unoccupied during this period.

Oneota Tradition

Historic Period

During the French, British and American regimes, the central Wisconsin River Valley was visited by a number of tribes. Principal among these were the Menominee, Ho-Chunk, Ojibwa and Potawatomi. No evidence for historic Native American use of the Rodney Clark site has been found, although tribal peoples undoubtedly used the general area, and some are likely descendants of the Archaic and Woodland people who utilized the site between 1,000 and 3,000 years earlier.

MAKING STONE TOOLS

Stone tools such as spear points were made through a process called *flintknapping*. This involves breaking flint stone (glass-like rock) in a controlled manner to chip off flakes and form tools such as spear tips, arrowheads, knives, hide scrapers and drills. There are many kinds of flint stone such as chert, silicified sandstone, and quartz. In central and northern Wisconsin, chert and silicified sandstone are very rare, but quartz is common. Quartz is a relatively low grade flint stone and often occurs as small cobbles. Large nodules of relatively high-quality quartz exists near Wausau, and this was the primary stone that was flintknapped at the Rodney Clark site.



Outcrop of quartz nodules at the DuBay Boulder site.



Smashing quartz with a hammerstone results in many shattered flakes. Forming tools from these flakes is very difficult.

There are two basic ways to flintknap quartz. Cobbles were often crushed on an anvil stone, by smashing with a hammer stone. This process is called *bipolar* technology and produces many small shatter flakes, which are difficult to further shape into formal tools. Another technique, which is more common for higher quality cherts and silicified sandstones, involves removing flakes from two sides of a core, creating a preform called a *biface*. The larger quartz nodules available in the Wausau Locality were suitable for bifacial flaking, and several quartz bifaces were recovered at the Rodney Clark site.



Bifaces recovered from the Rodney Clark site.



Antlers were often used as hammers to thin bifaces into tools.

Finishing chipped-stone tools involves thinning the biface by using softer hammers such as antler or hardwood batons, and final shaping by pressing off small flakes with the tip of a deer antler. This final stage is called pressure flaking and was used to create straight cutting edges and notching projectile points for attachment onto wooden shafts.

Shafts were made by cutting straight pieces of wood with a stone axe or chopper and peeling the bark with a sharp tool such as a chipped-stone spoke shave. The shaft would be cured to dry and straightened by heating over a fire to warp the shaft or by running it through grooved sandstone bars called abraders. One end of the shaft would have been split or notched to insert the chipped-stone projectile point, perhaps using a natural glue such as pine pitch. The spear or arrow tip would have been lashed to the shaft using tough, thin fiber such as sinew.

THE RODNEY CLARK SITE

The Rodney Clark site is located in the central Wisconsin River Valley at the intersection of several geographical regions, connected by the Wisconsin River. To the north, the glaciated land is based upon Precambrian bedrock that is billions of years old, and produced scattered quartz cobbles. This Northern Highland region was forested for much of the last 10,000 years. To the south is the unglaciated Driftless Area, including the flat sandy portion of central Wisconsin which was the bed of Glacial Lake Wisconsin. That region is based upon 500-300 million year old sandstone and limestone bedrock, which contain chert and silicified sandstones. The Driftless Area supported a mixture of prairie and oak savannah. Near the Rodney Clark site are several Precambrian bedrock hills, such as Rib Mountain and Mosinee Hill, which were uniquely not glaciated, and contain large nodules of high quality quartz.



The Rodney Clark site is located between the glaciated Northern Highland geographic region and the unglaciated Driftless Area.

Archaeological study was undertaken in advance of the construction of the Cedar Creek Bridge that was located on the former Clark farm within the Village of Rothschild, Wisconsin. Archaeologists had recorded mounds and camp finds from the Clark farm for nearly 100 years, as well as documenting the Clark family collection of artifacts.

Archaeologists systematically surveyed the proposed right-of-way to verify if artifacts existed within the project. Shovel testing was used to survey the area along Cedar Creek, which was vegetated. Shovel testing involves digging small holes every 50 feet and screening the soil to look for artifacts before refilling the holes. The shovel test holes are mapped, and those that produce artifacts indicate the size of a site. At the Cedar Creek Bridge project, the shovel testing found a concentration of quartz flakes on a terrace along the south side of the creek. Further small-scale hand excavations verified that much of this site was undisturbed. Based on the finding of a few fragments of pottery, a broken spear tip, and a copper awl it appeared that the site had been occupied during both the Archaic and Woodland Traditions. Archaeologists also noticed the remnants of a nearby mound that had been originally reported decades earlier.



Phase II Test Excavations at the Rodney Clark site (47Mr146). Shaded areas indicate Phase III excavations.

Consultations were undertaken with interested tribes, and a plan was developed to preserve the mound. The adjacent quartz workshop area could not be avoided, and full scale excavations were required to recover irreplaceable information before construction. Those excavations were undertaken in 2005 and consisted of hand excavation of a series of squares that formed a large block.



A series of squares were individually excavated during the Phase III recovery. Note the terrace edge in the background, overlooking Cedar Creek.



The Mississippi Valley Archaeology Center excavated the Rodney Clark site in 2005.

Each square was excavated with shovels and trowels, and all dirt was sifted through 1/4 inch screens. Excavators stopped every 10 cm (about 4 inches) to map and photograph the soils and any artifacts that were visible. This process continued to depths of about two feet, where no more artifacts were found.

FINDINGS AT THE RODNEY CLARK SITE

The excavations found that the primary use of the Rodney Clark site was for flintknapping high quality quartz that was collected from nearby sources. Numerous broken quartz nodules and thousands of flakes were found. Several clusters of quartz flakes likely represent places where flintknappers worked. Analysis of the recovered quartz indicates that bifacial rather than bipolar reduction techniques were used. This is very unusual for quartz and reflects the large size and high quality of quartz sources in the Wausau Locality.



Quartz flakes litter the floor of this unit, indicating a flintknapping (stone tool-making) site.



Known locations of high quality quartz and quartz workshops in the Wausau Locality.

Some broken tools made of chert, silicified sandstone, and rhyolite were recovered; and these can be traced to source areas in southwestern and eastern Wisconsin. The copper awl probably originated from Lake Superior sources to the north. These tools are utilitarian rather than ceremonial, suggesting that they were brought to the site by people traveling through the Central Wisconsin River Valley rather than as traded items. Many of the tools made from the non-local materials are broken, which suggests that they were thrown away here and replaced with new tools made of quartz before the people moved on.

The projectile points are distinctive of at least two time periods. The earliest ones date to the end of the Archaic Tradition around 3,000-5,000 years ago and include a series of small notched spear points. The oldest of these is made of a greenish chert that was obtained near Green Bay, and was re-sharpened into a square knife. The later Archaic spear points are made of silicified sandstones, chert, and quartz. A few very small triangular points were also found, and these are made of locally available quartz. Small points such as these represent arrow tips, and date to the end of the Woodland Tradition, around 1,000 years ago.



Spearheads and arrowheads recovered from the Rodney Clark site in 2005. A - H represent the Late Archaic period. I and J are Late Woodland.

- A: Raddatz Side-Notched
- B: Table Rock
- C-G: Durst Stemmed
- H: Durst/Kramer Stemmed
- I: Small Corner-Notched
- J: Madison Triangular (serrated)

The excavations also recovered numerous pottery fragments, including rim sherds that are decorated with cord-twist impressions. That decorative style also represents the Late Woodland period. The presence of the fragile pottery and the locally made arrow tips suggest that Late Woodland people used the Rodney Clark site as a camp.



Exterior (left) and Interior (right) view of Point Sauble Collared rim sherds recovered at the Rodney Clark site.

In summary, the Rodney Clark site was used primarily by Late Archaic and Late Woodland peoples, first as a workshop for high quality locally available quartz, and later as a camp. These cultures existed at a time when populations were expanding to occupy nearly all niches on the Wisconsin landscape, and immediate preceded revolutionary changes. The end of the Archaic marks the beginning of the Woodland Tradition, where pottery was introduced, horticulture began, mounds were constructed and an extensive trade system developed. The end of the Woodland Tradition saw the rise of agriculturally based Oneota cultures in specific localities from Door County to the Mississippi River. That transition was inspired in part by cultural influences from hundreds of miles to the south, and also involved elaborate exchange in both objects and ideologies. Some of these are retained by Native populations to this day.

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