The Lime Ridge Clovis Site: Old and New Data

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Cedar Mesa is well known for its rich evidence of early agricultural societies and late Puebloan components. Few, however, realize the great depth of human history that is contained by Cedar Mesa and its surrounding landscapes. Indeed, several locations yield evidence of human occupation during the Clovis period, a span of time that reaches back more than 13000 years.

In 1985, Abajo Archaeology of Bluff, Utah, conducted archaeological investigations at the Lime Ridge Clovis Site, which is located just southeast of Cedar Mesa. The site, designated 42Sa16857, is the first known Clovis site on the northern Colorado Plateau to be documented with chronologically distinctive artifacts.

The Lime Ridge Clovis Site consists of a fairly light, dispersed artifact scatter that measures about 80 x 110 m. The site is situated on a high finger-ridge that offers an uninterrupted 360-degree view and, notably, overlooks a canyonhead nearby. Drainages such as these were probably corridors for the movement of animals between the Lime Ridge upland and the lower riparian ecozone of the San Juan River.

The present vegetation in the vicinity consists of desert scrub species dominated by blackbrush on the ridge slopes, and sparse grasses and low sagebrush on the ridge top and valley floors. In dramatic contrast, the late Pleistocene environment was more likely subalpine, with limber pine, Douglas fir, juniper and blue spruce dominating the landscape. Pleistocene mammals, including Shasta ground sloth, mammoth, Harrington's mountain goat, shrub-ox, bison and possibly giant short-faced bear and camel were also present during the Pleistocene on the northern Colorado Plateau. A nearby rock art panel along the San Juan River, arguably includes images of paleofauna such as mammoth and bison or shrub-ox.

Because of cooler summer temperatures and a greater percentage of precipitation at lower elevations during the late glacial period of the Pleistocene, excellent aquifers such as the Navajo Sandstone had perennial springs in almost every alcove. Wet alcoves and streamsides would have supported blue spruce and a host of riparian elements such as red-osier dogwood, rose and waterbirch. Such conditions may have supported a population of mammoths and other large game in the Lime Ridge vicinity, thereby attracting Clovis hunters to the area.

At the time it was recorded, the Lime Ridge artifact assemblage yielded about 300 lithic artifacts. With the exception of a few stone flakes recovered during subsurface testing, all artifacts were recovered from the surface. It seems likely that this surface assemblage has not been seriously disturbed or mixed with later cultural materials. The assemblage is further characterized by a high ratio of tools and implements to debitage.

Formal tools include projectile point fragments, bifaces, end scrapers, unifacial tools, notched flake tools and wedges. Several of the Clovis projectile points are bases made from a gray, fine-grained orthoquartzite (silicified sandstone) and are bifluted. These specimens also exhibit basal and lateral edge grinding. As with most PaleoIndian scrapers, those from the Lime Ridge Site are quite standardized. All of the end scrapers were made on expanding flake blanks, generally thicker toward the distal end. Use-wear patterns on eight of the nine end scrapers display extreme crushing, abrasion, and step-flaking, which are suggestive of bone, antler or wood working.

At the time of the initial analysis, we determined that all lithic materials were of local origin. We also concluded that the assemblage was less specialized than those reported from kill and butchering sites. The low ratio of debitage to tools might suggest a special-use site, but the composition and character of the tool assemblage does not indicate butchering activity. Nearly all of the debitage is wastage from hard-hammer core

reduction and unifacial tool manufacture and retouch. Based on our observations, we suggested that the site was occupied briefly as an encampment, perhaps used as a hunting stand.

Recently, Meghann Vance re-examined the Lime Ridge artifact collection. In contrast to our 1989 study, Vance found considerable evidence for biface manufacture, in addition to evidence for the discard of true blade tools. Like us, she identified numerous informal flake tools likely used in cutting, scraping, and graving activities perhaps associated with tool repair. In regards to material types, Vance noted that a astounding minimum of 18 raw material types in the assemblage. While the majority of these materials are commonly found throughout southeastern Utah, Vance also identified "Pigeon Blood agate" (perhaps found in central Utah) and a material known as "Wonderstone rhyolite" (found in northern Nevada and possibly Vernon, Utah).

Vance concluded her thesis with the overall impression that the Lime Ridge assemblage was one of tool replenishment, a stop-off perhaps related to a successful hunt in which projectile points, cutting tools, and scrapers were broken in the hunt itself and in later butchering and hide processing activities. The small size of the assemblage and discrete nature of the knapping loci indicate Lime Ridge was occupied for only a short period of time (perhaps a week or less).

There are several other known hints of the Clovis period in the vicinity of Cedar Mesa. These include a few isolated finds of Clovis points or Clovis point fragments. We are also currently working to document an apparent Clovis period component that is part of a larger, multi-component artifact scatter on the western margins of Cedar Mesa. Precious remnants of the far human past, perhaps even single-component sites such as the Lime Ridge Clovis Site, may yet be identified and studied on Cedar Mesa's vast landscape.

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