Archeology RESOURCE BRIEF

Importance

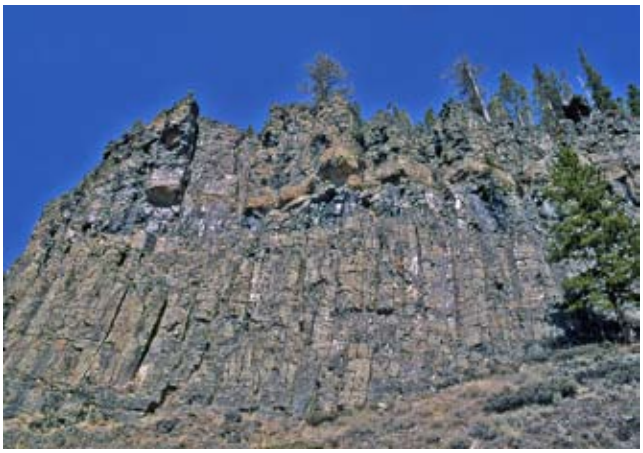
Archeological resources are the primary, and often the only, source of information about humans in Yellowstone for most of the time people have been in the area. Archeological evidence indicates that people began traveling through and using the area that was to become Yellowstone National Park more than 12,000 years ago. Because the intensity of use varies through time as environmental conditions become more or less favorable for humans, archeological resources provide a means for interdisciplinary investigations of past climate and biotic change.

Many thermal areas contain evidence that early people camped there. At Obsidian Cliff, a National Historic Landmark, volcanic glass was quarried for the manufacture of tools and ceremonial artifacts that entered a trading network extending from western Canada to the Midwest. These remnants of past cultures must be preserved as they are invaluable in our understanding of early people in the area. More modern archeological sites in Yellowstone include the remains of early tourist hotels and Army soldier stations.

Status in Yellowstone

Although the number of documented sites has increased to more than 1,500 since the archeology program began in 1995, only about 3% of the park has been surveyed. Most documented sites are in developed areas because archeological evidence has been discovered there inadvertently or as part of National Historic Preservation Act compliance related to construction activities and hazard fuel reduction projects. Salvage efforts have been made at some sites where archeological remains are especially vulnerable to disturbance or loss through erosion or illegal collecting. The earliest intact cultural deposits in the park have been found at a site on the shore of Yellowstone Lake that was excavated because it was at risk of erosion. Evidence was found of a 9,350-year-old camp where several families appear to have spent time seasonally at Yellowstone Lake.

Nomination papers for the National Register of Historic Places have been prepared for five recently discovered sites along the Yellowstone River that have buried projectile points, scrapers, other tools, and concentrations of burned and butchered bone; many other sites are considered eligible for nomination.



Obsidian Cliff

Discussion

Radiocarbon dating is used to establish the age of organic artifacts such as charcoal or bone. Organic materials (wood, bone, basketry, clothing) rarely persist in the Yellowstone environment, so most evidence of human presence in the area before Europeans arrived is in the form of stone artifacts. Most of the diagnostic tools that can be associated with a particular culture are projectile points. At the Malin Creek site, campsites from five periods of indigenous use over thousands of years are stacked upon each other starting at five feet below the surface, revealing which stones each group used for tools and the food they were eating.

The earliest evidence of humans in Yellowstone is a Clovis point found near Corwin Springs, 12 miles north of the park, that was made out of obsidian from Obsidian Cliff about 13,500 years B.P. (Obsidians from different lava flows can be chemically fingerprinted using x-ray fluorescence.) The number of distinctive point types, such as Agate Basin and Hell Gap which date to about 10,000 years B.P., increases over time and this is taken as evidence of an increasing and more diverse population in the Yellowstone area. Most documented sites in the park are from the Archaic period (8,000 to 1,800 years B.P.), suggesting that it was the most intense period of use by prehistoric people. Only a few sites have been identified from the Little Ice Age (A.D. 1450–1850), and distinguishing between use by different ethnic groups or tribes during this period has not been possible.

Agate Basin point