ΤΟΝΤΟ

OVERVIEW

The Hidden Ridge **Archaic Site**

The Hidden Ridge site (TONT00068) was discovered within the boundaries of Tonto National Monument in 2006. The site, which dates primarily to the Middle Archaic period (3,500-5,500 years ago), is a rare example of a place on the landscape that attracted people for thousands of years - the site is also the only one of its type known within the Monument, and few other examples have been located anywhere in the Tonto Basin overall.

Discovery of the Site

The Hidden Ridge site was discovered in 2006 during a project designed to map the later-period Salado sites contained within the Monument. Located on a heavily vegetated alluvial fan, the site was visible only in patchy clearings, on the surface of which lay stone flakes, tools, and projectile points indicating the presence of a prehistoric culture previously unknown to have lived within the boundaries of what is now Tonto National Monument. Excited by the opportunity to explore this new site, the Monument partnered with Bruce Huckell and the Maxwell Museum of Anthropology in New Mexico to conduct a series of investigations at Hidden Ridge. These investigations were carried out during two field seasons (2009 and 2010), and included surface mapping, on-site and laboratory analysis of the artifacts, and limited excavation of the site to test for intact subsurface deposits.

Results of the Investigations

The Hidden Ridge site contains a remarkably large and dense accumulation of Archaic artifacts, along with wood charcoal, plant remains, and materials dating to the later Salado occupations of the region. Although mixed stratigraphically because of natural processes such as erosion and plant growth, the investigating archeologists were able to determine use-history of the site, the primary period of occupation (Middle Archaic), and also some indication of past environmental conditions in and around the site

Use-History

Investigations at the Hidden Ridge site revealed 1,350 artifacts spanning some 8,000 years of prehistory. The earliest dated artifacts consist of Paleoindian projectile points of the Western Stemmed variety (one, pictured above, was found



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A Western Stemmed point base found near the Hidden Ridge site.

just outside of the site boundaries). These points were made perhaps as early as 11,000 years ago, but are commonly ascribed a date range between 10,000 and 8,000 BP (years before present). Points of this type may also have been made as recently as 6,800 years ago, the commonly accepted end date for the manufacture and use of Jav-type points, which are similar in form.

Artifact Type	Surface Count (2009)	Testing Count (2010)	
Flaked Stone			
Debitage	463	797	
Cores	6	4	
Bifaces	15	0	
Gravers	2	0	
Drills	2	1	
Microdenticulate	2	0	
Projectile Point	24	1	
Retouched Flake	6	7	
Scraper	9	2	
Ground Stone			
Metate	3	2	
Cobble Mano	0	2	
Ceramics		·	
Salado sherds	0	3	
T : (.)	532	818	
lotai	1,350		





Point Type	Count	Material
Western Stemmed	2	1 dacite, 1 unknown
Bajada	1	Dacite
San Jose/Pinto	14	7 Windy Hill chert, 4 dacite, 2 gran chert, and 1 jasper
Gypsum	2	One definite (Windy Hill chert) an one possible (dacite)
Cortaro	1	Dacite
San Pedro	1	Dacite
Cienega	1	Cream-colored chert
Unknown	3	1 dacite, 1 Windy Hill chert, 1 generic chert
Total	25	

The site also yielded a Bajada point base. Points of this type, which are ascribed to the Early Archaic period in the Southwest, are generally limited to the Colorado Plateau to the north. This rare find most likely dates between 5,000 and 6,000 BP, but may fall anywhere in the range of 4,000 to 7,000 years old.

The majority of the Hidden Ridge artifacts appear to date to the Middle Archaic, including 14 San Jose/Pinto points. These points date between 5,200 and 3,800 BP in the Southwest. A single feature consisting of burned rocks and a metate fragment located some 60 cm below the surface also likely dates to this period, but its age could not be confirmed through radiocarbon dating.

Later period artifacts include a Cortaro point (4,300 - 3,500 BP), a San Pedro point (3,500 - 2,500 BP), and a Cienega point (2,700 to 1,800 BP), the latter of which corresponds with the Early Agricultural period in the Southwest. Also present were limited ground stone artifacts, few of which can be assigned to a time period, and several ceramic sherds dating to the more recent Salado occupations of adjacent sites.

Tool Stone and Mobility

The most common artifacts found at the Hidden Ridge site are by far flaked stone, with materials consisting of a range of cherts, jasper, chalcedony, quartzite, metamorphosed sediment, petrified wood, obsidian, dacite, and basalt. Of all the raw materials used to make stone tools at the Hidden Ridge site, however, archaeologists were able to determine the source for only two.

The first is Windy Hill, located approximately 3 km from the site and the source of an opaque white to gray chert with oolitic inclusions (concentrically layered spheres), microfossils, and occasional red or brown dentritic (branching) inclusions.



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Identifying the sources of raw tool stone aids archaeologists in investigating the mobility of prehistoric people. While the Windy Hill chert is local to the Hidden Ridge site, at least some of the dacite and basalt artifacts found at the site appear to have originated on Hardscrabble Mesa, near Strawberry, Arizona, some 90 km away.

Dating the Site

During the test excavations conducted in 2010, four charcoal samples, all identified *Prosopis* (mesquite), were collected and submitted for radiocarbon dating. The samples came from levels in which there were large quantities of artifacts, but unfortunately, returned dates inconsistent with the deposits themselves, and overall, far too young.

Although these radiocarbon dates do not help with dating the Hidden Ridge site, they do provide insight on the natural processes that have affected the site over time, including erosion,



Timeline for the Hidden Ridge Archaic site, using the projectile types found at the site. Accepted date ranges are in black, with potential extensions depicted in gray. The primary use of the site was during the Middle Archaic (3,500-5,500 years ago).

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Lab No.	Species	¹⁴ C Age Range
AA-94119	Prosopis	$356 \pm 34 \text{ BP}$
AA-94120	Prosopis	1962 ± 39 BP
AA-94121	Prosopis	$2842 \pm 36 \text{ BP}$
AA-94122	Prosopis	287 ± 33 BP

bioturbation (churning of the soil by insects, rodents, and vegetation), and wildfires, the latter of which now seems the more likely origin for the charcoal samples submitted in 2010.

At present, therefore, dating of the Hidden Ridge site relies on the artifacts found within the site, and primarily on those diagnostic projectile points discussed above.

Prehistoric Activities

The people that camped at Hidden Ridge during the Archaic period were seasonably mobile, with a preference for higher quality tool stone and a relative abundance of projectile points and other stone tools indicating that game procurement (hunting) was an important part of daily life.

Plant processing also occurred at Hidden Ridge, and may have included collecting and grinding *Descurainia* (tansy mustard), Poaceae (grasses), *Sambucus* (elderberry), *Sphaeralcea* (globe mallow), and perhaps *Celtis* (hackberry) for use in food and medicines.

The elderberry and hackberry may also provide a clue as to why prehistoric people were drawn to Hidden Ridge, as these species may indicate a wetland environment, one that was perhaps fed by the same seep still flowing at the north end of the site. The Salt River would also have been an important resource, as was a chert source (Windy Hill) located roughly 3 km away. In all, Hidden Ridge would have provided an ideal convergence of resources for prehistoric people.

Easy access to water and upland resources would have been doubly important during the Middle Archaic (the period for which the majority of the Hidden Ridge site appears to date), as this period in the Southwest was one of prolonged aridity (dryness) and desert conditions at lower elevations. Middle Archaic sites in the Southwest are so rare, that for many years, researchers thought people had moved out of the region entirely during this period; the Hidden Ridge site, therefore, was likely a well-known and important place in the lives of Middle Archaic people living in the Tonto Basin.

Summary

The Hidden Ridge site is a rare example of a place on the landscape that attracted people for thousands of years and the only one currently known within Tonto National Monument. In all likelihood, the availability of water in the form of a seep is the principal reason for the location and intensity of the Archaic period occupations found here. Coupled with its setting in a productive environment and the ease of access to quality tool stone at Windy Hill and along the Salt River, Hidden Ridge would have offered an unique combination of the resources necessary for hunting-gathering groups living in a very arid Southwest.

References

Huckell, Bruce B., Christopher Merriman, and Matthew J. O'Brien

- 2011 Archaeological Assessment of the Hidden Ridge Site (TONT00068) in Tonto National Monument: 2010 Investigations. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.
- 2010 Archaeological Assessment of the Hidden Ridge Site (TONT00068), An Archaic Occupation in Tonto National Monument. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.



Feature 1 of the Hidden Ridge site. The feature was found some 60 cm beneath the modern ground surface and consisted of burned rocks and a metate fragment.