Introduction

In the past two years, Archaeology Southwest and the University of Arizona have managed a field school that seeks to understand the native inhabitants of the Dinwiddie site, a Cliff phase (A.D. 1300-1450) Salado site. The site is located in the Upper Gila region of New Mexico, approximately 30 km from the Mule Creek obsidian source. Data collected from the site include numerous bifaces and projectile points, and various types and raw materials are represented.

Evidence of On-Site Production

Early-stage (top) and late-stage (bottom) bifaces.

Bifaces and projectile points represent two-thirds of the tools from Dinwiddie, and the recovered artifacts indicate that tool production was an important activity at the site. Core reduction flakes were shaped through pressure flaking, and several early-stage and late-stage bifaces and preforms in the assemblage reflect the progression of manufacturing stages. Other bifaces include knives and drills. Bilateral flaking flakes occur in low but consistent numbers, and varying degrees of tool production are evident among features and roomblocks.

Raw Materials

A variety of raw material is present in the projectile point and biface assemblages. Residents clearly preferred obsidian for formal tool production, followed by locally available chalcedony and chert.

Obsidian Sources

Eleven percent of the entire Dinwiddie flaked stone collection is made up of obsidian, and 58 percent of all bifaces and points are of this material. Results of X-Ray Fluorescence analysis (XRF) show that almost all of the obsidian is from the Mule Creek source area, with even amounts from the Mule Mountains and Antelope Creek localities (Shackley 2014). The small number of other sources identified includes Cow Canyon and the distant Superior source, which is located over 200 km west of Dinwiddie.

Comparisons with other Sites

The frequency of Mule Mountain obsidian at Dinwiddie is not surprising due to its proximity to the site. However, a different pattern is seen at the nearby contemporaneous Ormand Village and Villareal II sites where Antelope Creek is the dominant material (Shackley 2012). Despite being farther from the Mule Creek source, a higher rate of obsidian is also represented at Ormand Village (Wallace 1996). One possible explanation for this difference is that the inhabitants of Ormand Village had stronger social ties with groups living near the Antelope Creek source during the Cliff phase.

Discussion

The Dinwiddie projectile point assemblage is dominated by small unnotched triangular points that are common after A.D. 1150 throughout the region. The residents of Dinwiddie were manufacturing projectile points rather than relying on exchange, although at least one point was imported to the site. Obsidian was procured from the closest locality, the Mule Mountains, and from Antelope Creek, which is located several kilometers farther away. The differences in obsidian procurement patterns at nearby sites are of interest because they reflect varying relationships with groups living close to the Mule Creek source area. Although procurement patterns may differ, similar projectile point types are seen at Cliff phase sites in the Upper Gila region.

Projectile Points

Thirty-seven points were recovered during the 2013 and 2014 field school seasons at Dinwiddie.

Small side-notched points are the next most frequently occurring. Two points exhibit basal notches, a trait that is seen throughout Arizona and in southwestern New Mexico after A.D. 1150 (Moore 1999, Silva 2006).

The single corner-notched arrow point from the site is unique in form and material type. Made from Cow Canyon obsidian, the point is similar to those found in east-central Arizona that were introduced during the Basketmaker III period (ca. A.D. 900-1100) and in use through the Pueblo period (ca. 1275) (Fagg 1994). The style and material of this point suggest it was imported from the west.

Archaic dart points were occasionally curated by the people at Ormand Village (ca. 3500-5400 B.C.). Made from local chalcedony, this dart point was found in one of two floors in a Cliff phase room.

Projectile Point and Biface Production at the Dinwiddie Site, Southwestern New Mexico

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