

A Possible Clovis-age Quartzite Workshop (5GN149) in Gunnison County, Colorado

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5GN149 is a lithic workshop in the Gunnison Basin, Colorado. The site is composed of an extensive scatter of chipping debris (6,800 m²) dispersed across the surface of a bench (2,420 m a.s.l.) overlooking the Gunnison River 125 m below. The site was used multiple times throughout prehistory, as indicated by point types spanning the late Paleoindian to the late Prehistoric. Although no diagnostic Clovis artifacts have been recovered, 5GN149 has yielded manufacturing debris reminiscent of Clovis technology (Figure 1).

Surface collecting and near-surface excavation from 2002 to 2004 at 5GN149 produced approximately 5,000 lithic artifacts, though this represents only a fraction of the entire assemblage. Four clusters with well-defined boundaries have been identified within the larger debitage scatter and probably mark discrete manufacturing events. Upon refitting a portion of the assemblage derived from Cluster 1 (sample includes 1372 artifacts; 160 refit pairs were

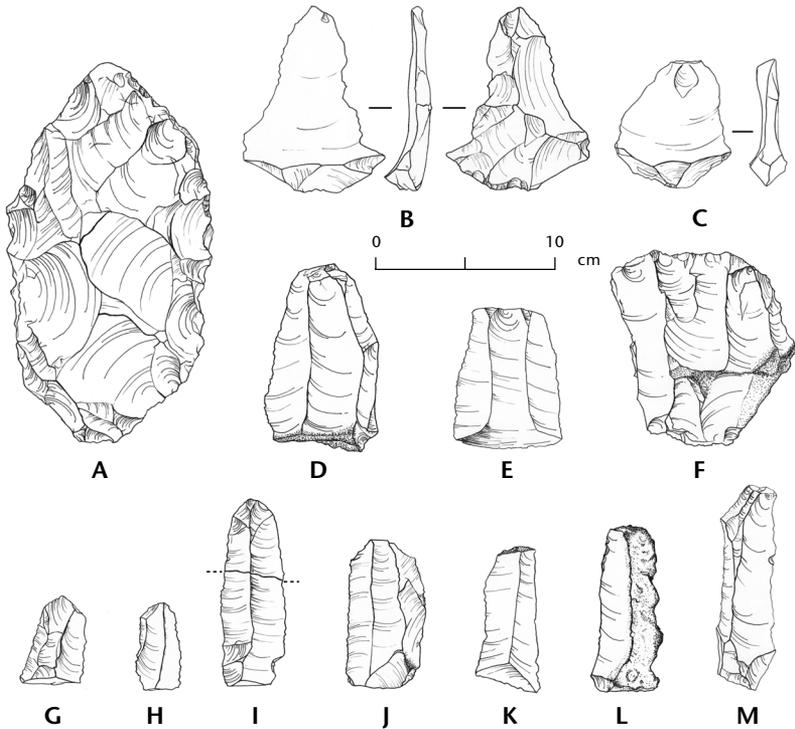


Figure 1. Quartzite artifacts from 5GN149. **A**, biface; **B** and **C**, overshot flakes; **D** and **E**, blade core trimming flake; **F**, blade core; **G–M**, blades and blade fragments.

identified), 77 percent of refits were separated by less than 1 m, suggesting that, although the site is unburied, the horizontal component has not undergone significant post-depositional movement. Quartzite makes up 97 percent of the 5GN149 assemblage, followed by welded tuff (2 percent) and chert (< 1 percent). Quartzite is locally available and might derive from a nearby outcrop source (5GN1), or down-slope of the site, where eroding quartzite cobbles are found. While the full reduction sequence is represented at 5GN149, much of the debitage is large (average weight equals 10 g) and a quarter of the assemblage retains cortex, indicating the earlier stages of production.

Numerous bifaces ($n = 158$) in various stages of reduction were recovered, suggesting biface production was a primary on-site activity during at least one of the occupations. Among the 5GN149 bifaces are large, thin foliate-shaped bifaces, similar to those found in Clovis contexts (Bradley 1993), though because 90 percent of the bifaces are broken, it is difficult to quantify their original dimensions. Biface-thinning flakes ($n = 277$) are common and on average are more than 5 cm long, also attesting to the production of large bifaces. Approximately 60 percent of biface-thinning flakes at 5GN149 exhibit ground platforms, a feature diagnostic of Clovis biface reduction (Bradley 1993:254). The site also yielded eight *outré passé* flakes (Figure 1B–C), often

cited as a hallmark of Clovis biface thinning (Bradley 1982:207–08, 1993:253; Bradley and Stanford 2004:461; Collins 1999:46; Sellet 1998:67; Tankersley 2004:55; cf. Straus et al. 2005:511). A number of prismatic blades (n = 153) were recovered (Meltzer and Cooper, this volume), along with at least one blade core and seven blade core trimming flakes.

Viewed singly or as a suite, the above artifact types cannot be unequivocally assigned to Clovis, since they also certainly occur in non-Clovis contexts (Collins 1999; Straus et al. 2005). The Clovis projectile point is the only unambiguous indicator of Clovis, but this is problematic because projectile points tend to be preferentially plucked from the archaeological record by collectors. Further, because 5GN149 is dominated by the earlier stages of manufacture, finished projectile points might never have been deposited at the site. What's more, early-stage Clovis localities are rarely identified in the archaeological record (Bradley 1993), particularly where quartzite dominates, thus leaving no Clovis analog with which to compare 5GN149. Absent a projectile point, it is therefore impossible to establish Clovis affiliation at 5GN149.

That said, the co-occurrence of large bifaces and biface-thinning flakes, *outré passé* flakes, blades, and blade-manufacturing debris is at least suggestive of Clovis. Although Clovis is not well represented in the Gunnison Basin, isolated Clovis point finds in the vicinity of the site demonstrate their presence in the area (Stiger 1980).

Many acknowledge that the Clovis toolkit varies greatly by site (Collins 1999; Meltzer 1993; Tankersley 2004). Without a projectile point or radiometrically datable materials, this begs the question, Would known Clovis sites ever have been recognized? Clearly, if Clovis affiliation hinges on the presence of projectile points, then numerous sites will go unrecognized. This is especially true for earlier-stage reduction sites, where projectile points have less of a chance of being deposited. If we focus solely on sites with Clovis projectile points, which represent only a fraction of the products of Clovis technology, we bias our interpretations of Clovis behavior. Equivocal sites like 5GN149 emphasize the need to better define the non-projectile component of the Clovis toolkit.

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