

# A Flattop Chalcedony Clovis Biface Cache from Northeast Colorado

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The CW Cache of Clovis bifaces was discovered during the 1990s by two private individuals near an upland playa lake and has been named for the discoverers. This is the second Clovis cache from northeast Colorado, the Drake Cache being the first (Stanford and Jodry 1988). The cache comprises 14 artifacts, which were found in a tight surface concentration in a cultivated field. Freshly broken surfaces indicate that some of the bifaces were damaged by agricultural practices.

The CW Cache consists of nine complete or nearly complete bifaces, two partial bifaces, and three large flakes. All artifacts are made from Flattop chalcedony, a variety of White River Group cryptocrystalline silicates that outcrops 160 km from the cache. The original upward surfaces of all the artifacts are heavily patinated to the degree that the original light purple color is almost completely obscured. The undersides have accumulated scattered deposits of pedogenic calcium carbonate ranging up to 1 mm thick.

Eleven of the artifacts are categorized as either late-stage bifacial cores or early-stage projectile point preforms (Figure 1). Technologically, the bifaces exhibit a generally ovoid outline form with rounded to flat bases that are very consistent with outline forms of bifaces from the Anzick, Fenn, and Simon caches (Frison and Bradley 1999; Wilke et al. 1991; Woods and Titmus 1985). The CW Cache bifaces have broad, flat flake scars that occur in serial collateral, slight diagonal, and more random patterns that are also morphologically consistent with the flake scar patterns on bifaces from the Anzick, Fenn, and Simon caches. Thinning flakes on the CW Cache bifaces frequently end in wide spatulate terminations, often traveling across the midline, and were most probably made with soft hammer percussion. Longitudinal thinning flakes are present on some pieces but none is technically fluted. Lengths for complete pieces range from 11.1 to 14.0 cm with a mean of 12.6 cm; widths range from 5.8 to 8.0 cm and average 6.7 cm; and thicknesses range from 1.1 to 1.6 cm with a mean of 1.3 cm. Compared with point preforms and bifacial cores from the Fenn Cache, the CW Cache bifaces are slightly wider with very similar width:thickness ratios.

Our preliminary interpretation is that the CW Cache represents a collection of utilitarian tools consisting of bifaces that are either late-stage bifacial cores or early-stage projectile point preforms. Functionally, caching this type of biface assemblage would provide some flexibility for Clovis peoples in that one

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more round of thinning flakes could be removed to provide a variety of blanks for flake tools, the bifaces themselves could be turned into other types of bifacial tools that are not on a projectile point trajectory, and if needed, at least 11 large projectile points could easily be made from the bifaces. Furthermore, length:width and width:thickness measurements indicate these artifacts form a tight cluster with small standard deviation. This standardization in manufacture and the fact that the cache is made of a single high-quality lithic material may indicate that the cache was produced by a single individual.



9 **Figure 1.** A Clovis biface from the CW cache. Note the calcium carbonate concretions attached to the face.

### References Cited

- Frison, G. C., and B. Bradley 1999 *The Fenn Cache: Clovis Weapons and Tools*. One Horse Land and Cattle Company, Santa Fe.
- Stanford, D. J., and M. A. Jodry 1988 The Drake Clovis Cache. *Current Research in the Pleistocene* 5:21–22.
- 7 Wilke, P. J., J. Flenniken, and T. L. Ozburn 1991 Clovis Technology at the Anzick Site, Montana. *Journal of California and Great Basin Anthropology* 13:242–272.
- Woods, J. C., and G. L. Titmus 1985 A Review of the Simon Clovis Collection. *Idaho Archaeologist* 8:3–8.