Clovis Blade Manufacture: Preliminary Data from the Carson-Conn-Short Site (40Bn190), Tennessee

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Excavations at the Carson-Conn-Short (CCS) site in Tennessee have revealed an in situ Clovis horizon yielding over 226 blade cores and 1956 blades and tools made on blades (Broster and Norton 1990, 1993; Broster et al. 1994, 1996; Nami et al. 1996). Since few specific data have been published on the CCS blade technology, this paper provides results of a preliminary analysis of a small reference collection stored in the Smithsonian Institution (NMNH), Washington D.C.

The reference collection contains two "wedge-shaped cores"[1] (cf. Collins 1999) and three sub-conical cores (Figure 1B)[2], all made of locally available sub-rectangular cobbles eroded from the Buffalo River Fort Payne Formation. Flintknappers selected cobbles with natural surfaces suitable for initial core platforms and corners needed to produce primary blades. When necessary, horizontal or oblique flakes were removed to regularize the vertical edge to ensure successful production of long, straight guide blades. Secondary corner blades, identified by cortex on one side of the dorsal surface, were removed sequentially from either side of the guide blade facet. Cortical surfaces remain on the posterior face of the cores, denoting blade production only on the anterior face and sides, and producing a "D," or hoof-shaped, cross section. Platforms for blade production were prepared by removing centripetal flakes from the dorsal surface of the core. Both negative bulbs and blade scars on the core faces are the result of final-stage removals of small blades. Diving blades that truncated the core length terminated blade production on the sub-conical cores in our sample. These cores are 72–82 mm long and 50–70 mm wide.

The largest blade in this collection retains cortex and natural facets on the dorsal face, suggesting it was a primary crest blade removed from an unmodified cobble corner. This blade is 188 mm long, 52 mm wide, and 24 mm thick. Five other blades are 81–164 mm long, 22–52 mm wide, and 8–29 mm thick.

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[1] We use the term "wedge-shaped core" after Collins (1999). They should not be confused with Arctic wedge-shaped cores.

[2] We thank Marsha Bakry for the illustrations.

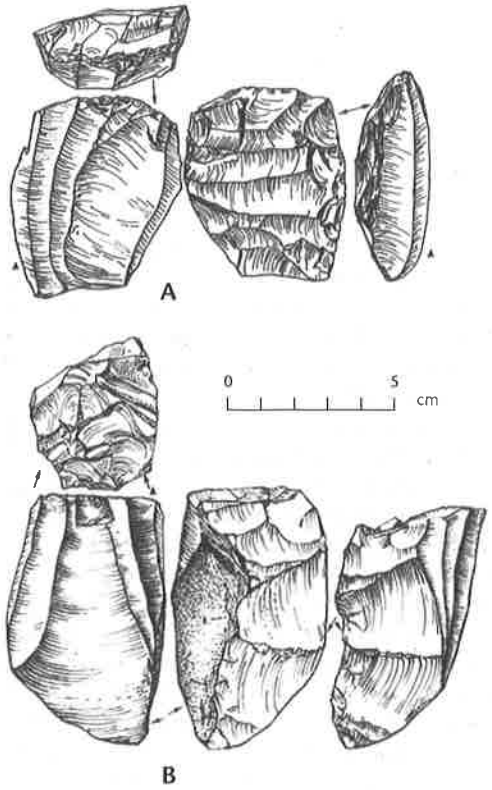

Figure 1. Conical and wedge-shaped cores from the Carson-Conn-Short site (40Bn190), Tennessee.

All primary blades are strongly curved longitudinally, while secondary blades are relatively flat. The blades are triangular to trapezoidal in cross section. The scar patterns observed on the blades and core faces suggest that the CCS flintknappers used a unipolar technique for blade removals.

One of the wedge-shaped cores was possibly modified for tool use (Figure 1A). After bladelets were removed from its anterior face , the core was rotated 90° and thinned by striking additional bladelets from the posterior face. Two of the intersecting acute edges were heavily crushed, suggesting its use as a tool such as an adz. The bladelet scars on this core are 39–59 mm long and 9–15 mm wide.

Although the CCS assemblage fits well within the Clovis assemblages illustrated by Collins (Collins 1999:Table 6.1; Collins and Lohse 2004), further *chaîne opératoire* studies are necessary to assess the complexity and characteristics of the larger sample of Clovis blade cores represented at Carson-Conn-Short.

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Clovis Macro Blades from the Topper Site, 38AL23, Allendale County, South Carolina

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Because of annual excavations beginning in 1998, the Topper site has provided a wealth of both Clovis and pre-Clovis archaeological data (Goodyear 2005). As of the 2005 season, a total of 444 m^2 of Holocene-age sediments have been excavated. The Clovis occupation lies in the bottom of the deposit dated by two OSL ages of 13.6 ka taken from two different locations. Clovis artifacts have been found in every area of the Topper site including the terrace, hillside, hilltop, and even the Savannah River, where chert was also available (Goodyear et al. 2005). In the 2004 and 2005 seasons, excavations were concentrated on the hill overlooking the terrace, revealing an extraordinarily dense and extensive Clovis lithic assemblage. Several excavation units with Clovis artifacts still in place were viewed during a tour as part of the 2005 Clovis in the Southeast conference (www.clovisinthesoutheast.net). In a previous article (Goodyear and Steffy 2003), we reported on the typological evidence of Clovis points at Topper. Since Topper is a quarry-related site, few Clovis points have been found. However, numerous point preforms in various stages of reduction have been found throughout the site. The recent hilltop excavations have recovered over a dozen point preforms, along with overshot flakes and other artifacts such as prismatic blades, end- and sidescrapers, denticulates, and utilized flakes. These flake tools indicate that craft activities related to habitation were also taking place and not just lithic extraction.

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