North American Paleoindian Database—An Update

Michael K. Faught, David G. Anderson, and Anne Gisiger

An earlier paper in CRP presented information on the distribution of diagnostic Paleoindian projectile points in the eastern United States (Anderson, 1990a). Since that time, additional data have been compiled, including information from the central and western states assembled by Faught.

We present this information in two formats. Figure 1 represents the distribution of points tallied in each of the 3,075 counties in the coterminous United States, standardized to points per 1000 square miles. This CAST using data provided by Anderson and Faught is accomplished by GRASS GIS software. Values were area by the number of fluted points recorded published and unpublished sources. Figure 1 is the same data. This map was contoured with a base of each county as data points, with zeroing of shelves and/or the glacial boundaries of 11,000–877.

These maps are based on a sample of 10,195 points included just over 9,000 fluted and 1,095 Paleoindian diagnostics. The sample reported points, including Clovis, Folsom, Debert, Cattaraugus, Simpson’s, and Qua, which are included and neither fluted and unfluted variants, were not included. The Clovis fluted points is intended to render the same data east to west, and to extend the possible temporal resolution. While this is a better controlled sample and the problems remain. Although information exists that we have not incorporated it into the mapping and no reporting (i.e., Illinois, Louisiana, Oregon), others either no systematic reporting exists or the version (i.e., Colorado, Wyoming, North and South Dakota). These data have a number of important implications.

Michael K. Faught, Department of Anthropology, University of Arizona, Tucson, AZ 85721.
Anne Gisiger, Center for Advanced Spatial Technologies, 15 Ozark Hall, University of Arkansas, Fayetteville, AR 72701.
States, standardized to points per 1000 mi$^2$. This map was prepared by Gisiger at CAST using data provided by Anderson and Faught. The mapping was accomplished by GRASS GIS software. Values were estimated by dividing county area by the number of fluted points recorded for that county from both published and unpublished sources. Figure 2 is a contour map showing the same data. This map was contoured with SURFER software, using the centroids of each county as data points, with zeroing of areas outside the continental shelves and/or the glacial boundaries of 11,000 years ago (Dyke and Prest, 1987).

These maps are based on a sample of 10,198 points. In the 1990 CRP article the sample included just over 9,000 fluted and nonfluted early- and middle-Paleoindian diagnostics. The sample reported here is restricted to fluted points, including Clovis, Folsom, Debert, Guaymas, and other variants. Daltons, Skeevers, Simpson, and Quads, which have both fluted (or basally thinned) and unfluted variants, were not included. The inclusion of other than classic Clovis fluted points is intended to render the sample more comparable from east to west, and to extend the possible temporal base.

While this is a better controlled sample and the data set continues to grow, problems remain. Although information exists from some Canadian provinces, we have not incorporated it into the mapping routines. Also, some states have spotty reporting (i.e., Illinois, Louisiana, Oregon, and New Mexico), while for others either no systematic reporting exists or the data were unavailable for this version (i.e., Colorado, Wyoming, North and South Dakota, Minnesota, Iowa). These data have a number of important implications for the study of early Paleoindian cultures.
human occupation in North America. Immediately evident is the apparently much higher density of fluted points in the East than in the West. If this pattern continues to hold when factors such as missing data from the Plains, geomorphological visibility, agricultural practices, and collector population density are considered, then a number of additional observations follow.

First, fluted points are distributed unevenly across the landscape, with pronounced concentrations in some areas. This suggests that human populations were unevenly distributed and that, if fluted points are indeed evidence for initial human settlement, that the colonization of the region more closely resembles a leapfrog than a wave-of-advance pattern (cf Anthony, 1990; Martin, 1973).

Second, these concentrations may hold clues to the subsequent emergence of discrete cultural traditions (e.g., Anderson 1990b; Willig and Aikens, 1988). Third, several concentrations are located near the continental shelf, suggesting possible locations of inundated sites (Dunbar et al, 1992; Faught, 1988). Fourth, if movement during initial colonization proceeded down the ice-free corridor or along the Pacific Rim, this movement did not leave a strong signal. Of course, additional data from these areas could change this picture.

We are continuing to assemble and compile data on Paleoindian artifacts and assemblages, and welcome information of this kind. To date, attribute data on some 6,000 diagnostics have been collected and compiled by Anderson, primarily from the East. Comparable data from the West are needed. The kinds of data that are particularly useful include state or province compilations (compiled to the county level or equivalent) (e.g., Brown and Logan, 1987; and Largent et al, 1991). Send information to either Anderson or Faught (in hard, reprint, and/or electronic format) and we will incorporate it into the database. The database is available upon request in either Macintosh or DOS format on 3.5” diskettes.

The authors wish to thank all those people who have contributed so far in the construction of this database, and encourage others to join in.

References Cited


Reinvestigations at the San Jon Site, New Mexico

Matthew Glenn Hill, Vance T. Holliday and Dennis J. Stanford

The San Jon site (LA 6437) is a little-known multicomponent archaeological locality situated on the northern rim of the Llano Estacado in Quay County, New Mexico. The site is in a small (1 km wide) dry lake basin or "playa." Archaeological materials were buried by basin fill consisting of lacustrine, slopewash, and aeolian sediments. The human-occupation debris is now being exposed along deep arroyo tributaries of a canyon that cut into the High Plains escarpment. Excavations directed by Frank Hibben in 1940 and Frank H. H. Roberts in 1941 provided evidence that Paleoindian and Archaic hunters repeatedly used the site to procure and process bison (Judson 1953; Roberts 1942). However, recent fieldwork and reanalysis of the extant San Jon collection curated at the Smithsonian Institution shed new light on this important locality. Preliminary research suggests at least one Cody Complex component exists at San Jon as well as two Archaic occupations. A late-Prehistoric occupation is also known.

Roberts's excavations focused on three areas (I–III) of the site (Roberts 1942, Fig. 1), and four stratigraphically distinct prehistoric occupations were identified (Judson 1953; Roberts 1941, 1942). Three of the components are thought to represent bison kill-butchery episodes. Two quartzite flakes and several pieces of fragmentary bone were recovered at the Area I excavations (Roberts 1941). In Area II, an Alibates dolomite Cody Complex projectile point (Roberts 1942, Fig. 2a; Wormington 1957) was found in association with bison identified as *Bison taylori antiquus*. This is the earliest documented occupation of the site, although in 1941 an Alibates dolomite Folsom point was collected approximately 150 m north of Area II eroding out of a similar stratigraphic unit. A second Cody Complex projectile point manufactured from Edward's chert (Roberts 1942, Fig. 2c) was collected at the "Hibben" bison bonebed (Roberts 1941). Two Clear Fork points manufactured from Dakota (Roberts 1942, Fig. 2b) and Morrison Formation quartzites were excavated in situ with the bison.

Matthew Glenn Hill, Department of Anthropology, University of Wyoming, Laramie, WY 82071.
Vance T. Holliday, Department of Geography, University of Wisconsin, Madison, WI 53706.
Dennis J. Stanford, Department of Anthropology, Smithsonian Institution, Washington, D.C. 20560.