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Early Holocene Occupation at the West Lost River Site, Klamath County, Oregon

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slot, and their edge grinding approximates its depth. Likewise, the hole drilled in the antler socket is 44.49 mm long, while the corresponding 44 mm portion of the bone rod has been deliberately modified by longitudinal shaving, which produced a taper that is only slightly wider than the Indiana specimen. It is significant that the blunt portion of the bone rod is free of scoring along the 44 mm length which presumably seats within a socket. Just beyond the socket, scored lines circumscribe the rod for a length of c. 85 mm, presumably as a hafting device.

An AMS date of the insoluble portion of extracted collagen from the antler socket by Robert Hedges, Oxford University, is 7,990 ± 120 yr B.P. (OxA-5008). Dr. Hedges suggests that contamination may be present and may have affected this date by up to 1 ka. He states that it is safe to say the antler is older than 7,000 yr B.P. and is unlikely to be as old as 10,000 yr B.P.

Although this particular socket postdates Clovis, the hafting technology of which it is part may be very long-lived in North America, and I propose that Clovis people may have used a similar system.

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References Cited

Lahren, L., and R. Bonnichsen 1974 Bone Foreshafts from a Clovis Burial in Southwestern Montana. *Science* 186:147–150.

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Excavations at the West Lost River Site (35KL972) provide new insights on early-Holocene occupation of southwestern Oregon. Situated on the west bank of the Lost River, 35KL972 is approximately 17 km east of Klamath Falls and was found in May 1991 during a survey for Northwest Pipeline Corporation's Klamath Falls Natural Gas Replacement Line (Fagan et al. 1991:128). It was tested in November and December 1991, with supplemental testing and data recovery in August and September 1992 (Wilson 1996). A total of 86 m^2 (68.4 m^3) from 33 1x1-m test units and six excavation blocks (53 m^2) was hand-excavated. Three backhoe trenches exposed strata to search for subsurface features.

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While no materials suitable for ^{14}C dating were obtained, the antiquity of the site is established through geochronological inference, diagnostic artifacts, and obsidian hydration results. The majority of artifacts recovered from the site were found directly above, lodged within, and below a well-developed duripan (between 40 and 80 cm below surface) that appears to date to the late Pleistocene or early Holocene. Further west, the duripan pinched out and two paleosols were identified. These paleosols probably formed in overbank deposits associated with an old channel or slough of the Lost River, and the lower one (approximately 1 m below surface) contains artifacts that appear to be contemporaneous with the ones associated with the duripan.

The few diagnostic projectile-point fragments recovered from the site are representative of Windust, Cascade, or Northern Side-notched types. The tool assemblage is extremely limited in number and variety of tools, consisting primarily of projectile points, preforms, bifaces, scrapers, and expedient flake tools. Given the types of tools present, combined with the results of the debitage analysis, lithic-reduction activities at the site apparently were geared to the production of large, extremely thin bifacial tools, probably projectile points, from large flake blanks, and the resharpening and rejuvenation of these tools. This debitage profile is similar to the Paleoindian Western Stemmed complex component at the Dietz site, 180 km to the northeast of 35KL972 (Fagan 1988). No postholes, pits, or other features were identified at 35KL972, and there is little indication that use of the site changed much through time.

Obsidian X-ray fluorescence and hydration analyses were conducted on 8 bifaces, 193 pieces of debitage, and 3 small natural obsidian nodules found on the site. The majority of the obsidian samples (n = 108) were from the Drews Creek/Butcher Flat source, which is found approximately 80 km to the east. Other identified sources were Spodue Mountain (n = 55), which the analysis of the natural obsidian nodules determined is a local source; Medicine Lake Highlands sources from northern California, including the "Grasshopper Group" (Grasshopper Flat, Lost Iron Well, Red Switchback, and East Medicine Lake (n = 17)) and Cougar Butte (n = 1); and other sources found to the east and northeast: Buck Mountain (n = 3); Rainbow Mines (n = 2); Sugar Hill (n = 5); Blue Mountain (n = 1); and Coglan Buttes (n = 1). In contrast to obsidian use documented for the middle- to late-Archaic periods at other nearby sites, the Spodue Mountain source was not as frequently used at 35KL972 as the Drews Creek/Butcher Flat obsidian, possibly because the locally available nodules are too small for the production of the large bifacial tools that were the focus of reduction activities at the site.

Most of the obsidian specimens from 35KL972 contained hydration rinds between 5 and 8 microns thick. Employing the Nightfire Island hydration rate for Grasshopper Group obsidian (Basgall and Hildebrandt 1989:196-198), occupation of 35KL972 was between about 5,500 yr B.P. and 8,250 yr B.P. The Drews Creek/Butcher Flat specimens and the Spodue Mountain specimens tend to contain thicker rinds than the Grasshopper Group specimens, often thicker than 7 microns. As the Grasshopper Group and Spodue Mountain sources probably hydrate at about the same rate (see Pettigrew and Lebow [1987:9.10–9.18, 10.23–10.27]), the most intensive occupation of the site likely

occurred towards the earlier periods (c. 8,000 yr B.P.). A Western Stemmed complex occupation of the site is also supported by comparisons with other sites where hydration-rind thicknesses of between 8 and 12 microns have been associated with fluted Clovis points, basally thinned, concave-base points, and wide-stemmed projectile point forms (see Layton [1972a, 1972b]; Willig and Aikens [1988:11]).

Faunal remains attributed to the prehistoric occupation, include both large-sized (*Odocoileus*[deer], *Cervus*[elk]) and small-sized mammals (*Citellus beldingi* [Belding's ground squirrel]). Avifaunal remains suggest use of migratory waterfowl. Surprisingly, fish remains are not associated with the prehistoric occupation, suggesting that fish may not have been an important subsistence resource at this early period.

References Cited

Basgall, M. E, and W. R. Hildebrandt 1989 *Prehistory of the Sacramento River Canyon, Shasta County, California: Excavation at CA-Sha-1176, Sha-1175, Sha-1169, Sha-476.* Far Western Anthropological Research Group, Inc. Center for Archaeological Research at Davis, Publication No. 9. University of California, Davis.

Fagan, J. L. 1988 Clovis and Western Pluvial Lakes Tradition Lithic Technologies at the Dietz Site in South-central Oregon. In *Early Human Occupation in Far Western North America: the Clovis-Archaic Interface,* edited by J. A. Willig, C. M. Aikens, and J. L. Fagan, pp. 389–416. Nevada State Museum Anthropological Papers Number 21, Carson City, Nevada.

Fagan, J. L., C. L. Armitage, C. B. Hemphill, J. Reese, and J. Witherow 1991 *Northwest Pipeline System Expansion Project: Cultural Resources Assessment Report, Oregon Segments: Phase 1: Survey, Inventory, and Preliminary Assessment.* Archaeological Investigations Northwest, Inc. Report No. 15, Portland, Oregon. Submitted to Northwest Pipeline Corporation, Salt Lake City.

Layton, T. N. 1972a A 12,000 Year Obsidian Hydration Record of Occupation, Abandonment and Lithic Change from the Northwestern Great Basin. *Tebiwa* 15(2):22–28.

Layton, T. N. 1972b Lithic Chronology in the Fort Rock Valley, Oregon. *Tebiwa* 15(2):1–21.

Pettigrew, R. M., and C. G. Lebow 1987 *Data Recovery at Sites 35JA27, 35JA59, and 35JA100, Elk Creek Lake Project, Jackson County, Oregon,* 2 Vols. Infotec Research Inc. Report No. PNW87-7, Eugene, Oregon. Prepared for U.S. Army Corps of Engineers, Portland District, Portland, OR, Contract No. DACW57-86-C-106.

Willig, J. A., and C. M. Aikens 1988 The Clovis-Archaic Interface in Far Western North America. In *Early Human Occupation in Far Western North America: the Clovis-Archaic Interface,* edited by J. A. Willig, C. M. Aikens, and J. L. Fagan, pp. 1–40. Nevada State Museum Anthropological Papers Number 21, Carson City, Nevada.

Wilson, D. C. 1996 *Data Recovery for the West Lost River Site, 35KL972. In Northwest Pipeline Corporation System Expansion Phase I: Phase 3—Data Recovery and Site Treatment Reports for Oregon Segments,* Volume III, Klamath Basin Area. Edited by J. L. Fagan, pp. 2-1 to 2-56. Archaeological Investigations Northwest, Inc. Report No. 50, Portland, Oregon. Submitted to Northwest Pipeline Corporation, Salt Lake City. (In review).