

Geochemical Sourcing of Five Crescents from the Alvord Desert of Southeastern Oregon

Patrick O'Grady, Chuck Morlan, Scott Thomas, Craig E. Skinner and Jennifer J. Thatcher

Crescents collected in the Alvord Desert and Catlow Valley of southeastern Oregon were recently made available for scientific study by a local artifact collector (Figure 1 and Table 1). Five of the crescents thought to be made from obsidian were submitted to Northwest Research Obsidian Studies Laboratory in Corvallis, Oregon, for X-ray fluorescence and measurement of hydration rims (Skinner and Thatcher 2008). The results of their analysis are provided here. Specimen CM-203 appears to be a "Winged, or Butterfly" crescent, the others are lunate in form (Tadlock 1966). Crescents were utilized from 11,000 to 7,000 years ago and they are regularly associated with stemmed point sites.

The five pictured below were submitted from a collection of 117 crescents amassed in the Alvord and Catlow valleys over a 20-year period. The crescents were collected from the surface, commonly found on margins of exposed lakebeds and playas that lay between semi-stabilized dunes. They were subjected to a variety of conditions over millennia, including repeated wetting and drying, temperature extremes, and wind/sand bombardment. Continued "sand-blasting" weathered all surfaces (Figure 1). As a result of the weathering, none of the artifacts produced measureable hydration rims. Other obsidian crescents recovered during Burns District BLM surveys have produced hydration rims ranging from 4.3 – 10.3 microns, with a mean of 7.3 microns.

Geochemical analysis reveals three sources for the tool stone. Specimen CM-203 is from the Venator source, centered near the community of Venator east of Malheur Lake. Access to the Alvord Desert from the Venator source would involve a

Table 1. Metric attributes of Alvord Desert crescents (measurements are in millimeters, weight in grams).

Sample #	Length	Width	Thickness	Weight	Geochemical Source	Hydration
CM-201	38.0	17.5	6.7	4.26	Unknown FGV ²	Not Measurable
CM-202	40.9	14.8	4.4	3.17	Hawks Valley	Not Available
CM-203	39.8 ¹	25.3	6.2	6.47	Venator	Not Available
CM-204	24.1 ¹	18.5	6.2	3.08	Hawks Valley	Not Available
CM-205	34.1 ¹	18.2	5.1	3.73	Hawks Valley	Not Available

¹measurement affected by break

²FGV = fine-grained volcanic tool stone

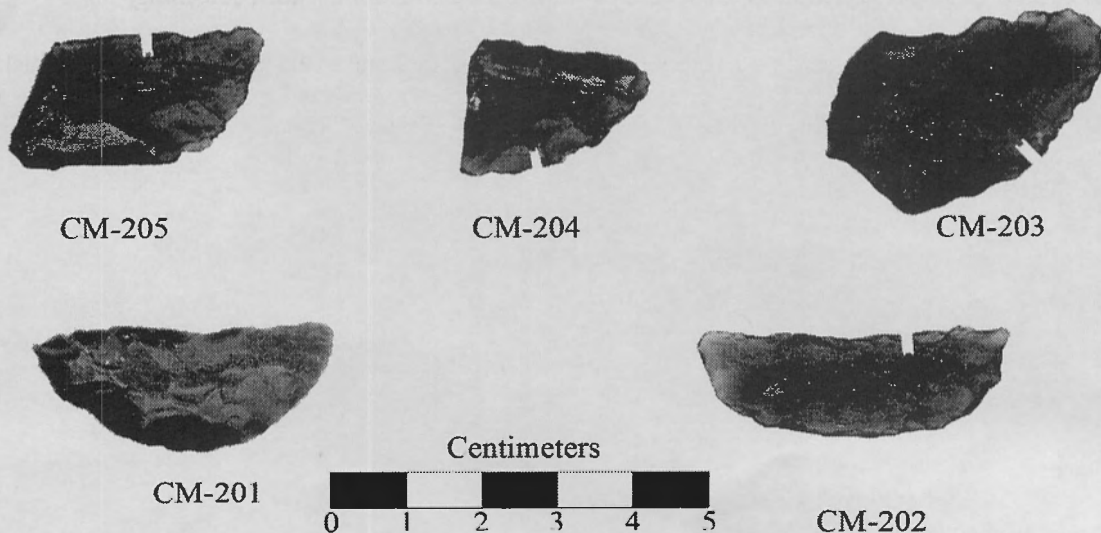


Figure 1. Alvord Desert crescents.

straight passage down “the slot” through Folly Farm Flat and past Tencent Lake, Fifteencent Lake, Juniper Lake, and Mann Lake on the east side of Steens Mountain. Coyote Flat, a known Paleoarchaic locality from which 84 crescents were collected (Butler 1970), is situated to the east of the Alvord Desert and certainly figured in the passage of people between Venator and points south. The Hawks Valley source (CM-202, CM-204, CM-205) is at the southern terminus of Catlow Rim, offering direct access northward to either Catlow or Alvord valleys. The fine-grained volcanic material utilized for CM-201 is glassy in appearance and originates from a source that is currently unidentified.

Preparations are being made for a comprehensive evaluation of the 117 crescents in the collection that will include metric and use-wear analysis, identification of CCS tool stone sources, and the distributions of these artifacts in relation to local and regional land forms. The results of the evaluation will also be incorporated into a context document for early Holocene archaeological sites on Burns District BLM lands. For additional information, please contact Pat O’Grady (pogrady@uoregon.edu) or Chuck Morlan (sunring@wildblue.net).

References Cited

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The Stevens Family Pioneer Cemetery at RiverBend, Lane County

Tom Connolly, Chris Ruiz, Jeanne McLaughlin, Guy Tasa, and Elizabeth Kallenbach
University of Oregon Museum of Natural & Cultural History

In late May 2008, human remains were encountered during construction at the PeaceHealth Sacred Heart RiverBend Hospital property in Springfield, Oregon. Law enforcement officials were immediately contacted. PeaceHealth was referred to the State Historic Preservation Office and the Oregon Commission on Historic Cemeteries (OCHC) who approved immediate recovery. During the course of that effort (Burial 1, an approximately 22-35 year old male), the outline of a nearby infant-sized coffin (Burial 2) was located, and wood fragments possibly representing coffin fragments from a third grave (#3) was identified. In addition, the partial femur of a young child was recovered from backdirt screening.

The presence of three burials indicated a cemetery rather than an isolated grave, the size and scope of which remained unknown. Background research linked the cemetery to a local family, and descendants were located. After consulting with SHPO, the OCHC, and family members, a plan for further exploration and removal of the additional burials was approved. A mechanically-aided exploratory effort was undertaken in late July/early August. Twelve graves were ultimately identified (including the original three), all are oriented more-or-less east and west, and arranged in two north-south rows.

Historic Context

The cemetery is located on what was once the donation land claim of William M. and Hixey Stevens, the first Euroamericans to settle between the Willamette and McKenzie rivers. Their claim was located a short distance across the Willamette from the recent claim of Eugene Skinner.

The Stevens arrived in Oregon with ten children (the eldest subsequently staked their own claims near that of their parents). In 1849, the family’s youngest, Mandely Caroline, was born; their only child born in their new Oregon home. The Stevens’ claims were situated along what was becoming an important travel route. The 1853 GLO map notes the “Road from Oregon City to the Mines,” a principal route between the Willamette Valley and the recently discovered California/southern Oregon gold fields, passing through the claims of William Stevens and that of his son Ashley. Stevens (sources differ as to