Assessing Typology of Pre-Mazama Corner-Notched Points in the Northern Great Basin
Shelby G. Saper, Richard L. Rosencrance, Katelyn N. McDonough, and Dr. Dennis L. Jenkins

1. Department of Anthropology, University of Oregon, 2. Museum of Natural and Cultural History, University of Oregon, 3. Department of Anthropology, Texas A&M University

Research Questions
1. Is the Elko long-chronology hypothesis supported in the northern Great Basin?
2. Are we able to classify the pre-Mazama corner-notched projectile points from each of these three sites in the northern Great Basin?
3. Are these early comer-notched points morphologically distinguishable from late Holocene corner-notched points?

Site Backgrounds
Conley Caves
- Located in the Fort Rock Basin of central Oregon
- Evidence of intermittent human occupation over the past 12,700 years
- Expediently excavated by Stephen Bedwell in the 1960s
- The University of Oregon field school returned to the caves to conduct further excavations of the site (2000, 2001, 2014-2019).
- All projectile points measured for this project are from Cave 5.

Skull Creek Dunes Locality
- Located in the Catlow Valley of Harney County, Oregon
- Excavated by the Steens Mountain Prehistory Project in 1979.
- Active sand dune with evidence of human occupation over 7,000 years.
- Corner-notched points found in and below Mazama ash layer (~7600 cal BP).

Cougar Mountain Cave
- Located in the Fort Rock Basin of central Oregon 20 km north of the Conley Caves.
- Unsystematically excavated by amateur, John Cowles in 1958.
- Human occupations of the site from the Terminal Pleistocene into the late Holocene.

Methods
- We took metrics of both the pre-Mazama and post-Mazama corner-notched from the three study sites.
- The next step was to use multiple Great Basin projectile point typological schemes to classify each point. This includes the Mount Monitor Key (Thomas 1981), Bagsha and Hall (2000), and Vaughn and Warren (1987).
- To confirm the antiquity of some of the pre-Mazama corner-notched points found at the Conley Caves, we obtained three radiocarbon dates on charcoal from an associated hearth feature.

Chronology
Four corner-notched points in direct association with hearth feature 15AH/1 are dated to ~8,500 cal BP. The Cougar Mountain Cave points are similar in age to those found in pre-Mazama deposits at the Conley Caves based on estimates using Layton’s (1972) obsidian hydration measurements and our own from Conley Caves. Corner-notched points come from above Mazama tephra and below Mazama tephra at Skull Creek Dunes. The former are ~7600 cal BP and the latter ~7600 cal BP.

Classifications

1. Most of the pre-Mazama points keyed out to Elko Eared and Elko Series.
2. 37 out of the 26 pre-mazama corner-notched points were consistently classified as Elko Series using all three keys. Points keyed out to multiple typologies, making them inconclusive.
3. 2 of the pre-Mazama corner-notched points conclusively keyed out to Pinto

Morphological Results
We found that there are three notable morphological differences between pre- and post-Mazama corner-notched points: Distal Shoulder Angle, Length-To-Width Ratio, and Basal Width Maximum. In general, the average measurements for pre- and post-Mazama corner-notched points are similar.

Conclusions
- Pre-Mazama corner-notched points from the northern Great Basin key out as Elko Series based on established keys.
- Pre- and post-Mazama corner-notched points are morphologically similar, though there are some metric differences.
- Based on the radiocarbon dates, we know that corner-notched points date to ~8400 years old in the northern Great Basin, which supports a long-chronology.
- The application of new methods and the re-examination of typological schemes in the northern Great Basin may be necessary to truly determine the typology of these points.

References


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