

Intrasite and Intersite Interpretations of Faunal Patterning at the Rock Creek Shelter Site, Southcentral Oregon

Andrew Frierson, James W. Brown, Dominic Bush, William J. Damitio, Nichole A. Fournier, Samantha L. Fulgham, Emily L. Whistler, Shannon Tushingham, and Colin Grier

Abstract

This poster reports on results of an analysis of the faunal assemblage from the Rock Creek Shelter (35LK22) in the Warner Valley region of the northern Great Basin. The site is a stratified rockshelter with dated cultural deposits that range from ca. 7490 B.P. to 780 B.P. We identified and quantified the taxa and elements represented in the assemblage ($n = 994$), and recorded cultural (cut marks, burning) and taphonomic bone modifications (rodent gnawing, weathering). We present an intrasite analysis focused on variation in faunal assemblage characteristics among the three trenches excavated at the site to infer the organization of activities both within and immediately outside the rockshelter. We also consider site function, addressing the degree to which the overall faunal assemblage conforms to expectations derived from different settlement/subsistence patterns posited for the region. With the extensive time span represented, we also consider change through time in the use of the rockshelter.

Methods and Materials

Osteological analysis of the sample ($n = 994$) was conducted at the Washington State University Zooarchaeology Laboratory. This analysis utilized the laboratory's comparative collection as well as an assortment of faunal manuals (Gilbert 1990; Gilbert, Martin and Savage 1996). Data were recorded using a coding system based upon Schaffer and Baker's (1992) system.

Site Location & Ecology

Broadly, the regional ecology is typical of much of the Great Basin which is characterized as a dry desert environment covered by sagebrush and perennial grasses. However, unlike many parts of the Great Basin where fresh water sources are few and far between, the Warner Valley region possesses numerous lakes surrounded by wetland marshes that run north to south. In the uplands to the east, the region can be characterized as a high desert ecological zone, though in the higher elevations a distinct line of juniper trees dot the landscape and it is in this area where other game such as pronghorn, deer, and a significant amount of rabbits were likely hunted during prehistory (Weide 1968; Aikens 2011).



Figure 1. Map showing the location of the Rock Creek Shelter site in the northern Great Basin.

Research Questions

- What taxa are represented at the Rock Creek Shelter and how do they reflect the diet and subsistence strategies of the past occupants?
- Is there spatial patterning of taxa and taphonomic modifications within and outside the shelter?
- Is there evidence of marrow processing?
- What evidence is there for natural and cultural deposition?

Results: Subsistence

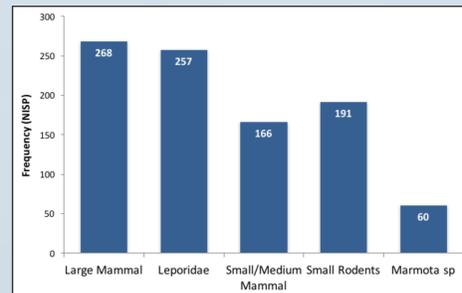


Figure 2. This bar chart shows the NISP of the top five taxa used in this analysis. Large mammals represent the single most common category at this site, closely followed by Leporidae. Other small mammals constitute most of the remainder of the assemblage.

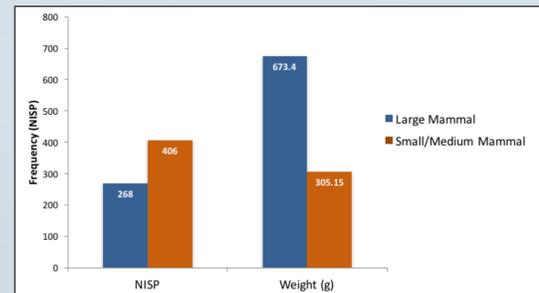


Figure 3. This chart compares the NISP and weights of large and small mammals from the entire assemblage. As expected, patterns differ when looking at counts versus weights due to the differential sizes of the animals included in these categories.

Results: Intrasite Variation

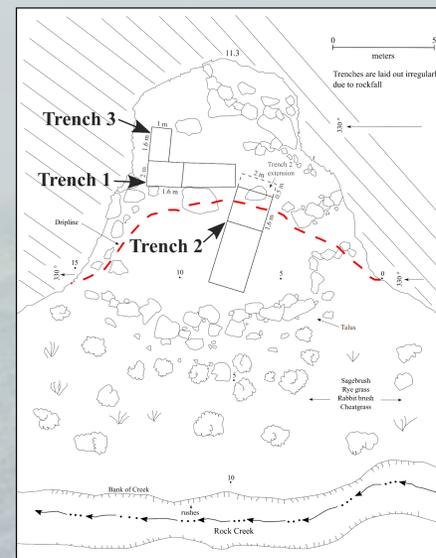


Figure 4. Plan map of the Rock Creek Shelter illustrating the site dimensions, as well as the locations of the two interior trenches and one exterior trench. The dashed red line demarcates the drip line dividing the interior and exterior of the rockshelter.

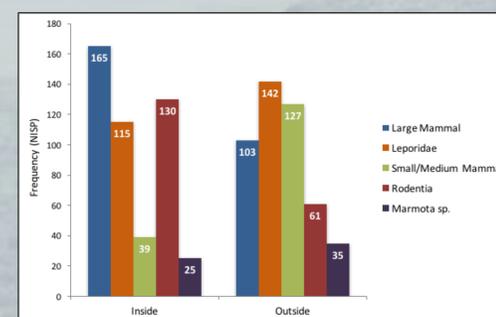


Figure 5. This chart compares taxa prevalence from inside and outside contexts.

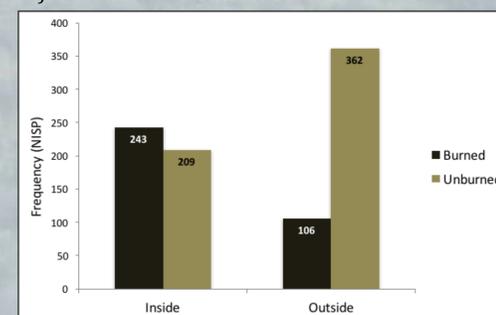
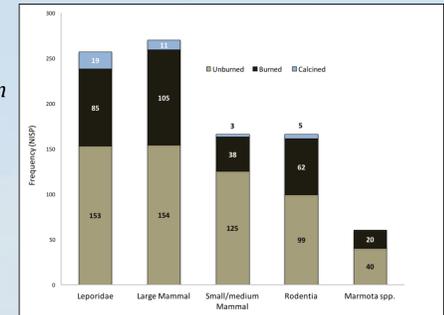


Figure 6. This chart compares taxa prevalence from inside and outside contexts.

Results: Burning

Figure 7. Of the top 5 faunal categories, none exhibited more burned specimens than unburned specimens. In these categories, less than 50% of the specimens were burned, while unburned comprised the majority of the assemblage. Large mammal exhibited the largest amount of burned specimens compared to all other faunal categories.



Natural vs. Cultural Deposition

- Small number of rodents and lizards identified as intrusive.
- Rodent disturbances cut through excavated trenches.
- No evidence of rodent or carnivore gnawing on bones
- Hearth areas, matting, and processing of bone in addition to other artifacts are evidence of cultural use of site.

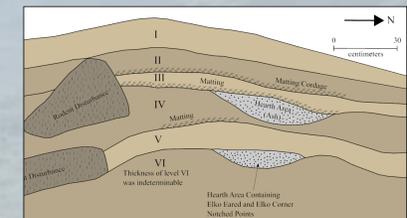


Figure 8. Stratigraphic profile of Trench 2, West Wall

Conclusion

- Taxa represented include large mammals (deer, pronghorn, etc.) and small mammals (particularly rabbits and marmots) while birds are largely deemphasized. Therefore, inhabitants of this site had a subsistence strategy based on terrestrial fauna.
- The distribution of taxa varies across contexts (Figure 5). Interior trenches demonstrate a predominance of large mammal. Leporidae and other small mammals dominate the exterior trench (Figure 5). Burning also varies across contexts (Figure 6), suggesting that these taxa were differentially processed. The relatively large amount of rodent in the inside contexts is the result of non-anthropogenic intrusions (Figure 8).
- 90% of the Trench 1 bones demonstrated some amount of burning whereas 100% on Trench 2 and 3 bone was burned.
- Conchoidal fractures found on long bone fragments suggest that bones were split to retrieve marrow. Color was present on the inside and outside in almost all burned bones, which is suggestive of fragmentation before heating.

References Cited

Available upon request.

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