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FLOW OF THE PEOPLE: HOW OBSIDIAN ARTIFACTS REVEAL STRATGIES OF MOBILITY IN THE PREARCHIAC GREAT BASIN

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Movement across the landscape was an essential trait that characterized the behaviors of past human cultures. Based on evidence from archaeological data, ethnographic accounts, and paleoenvironmental reconstructions, it is apparent that highly mobile hunter gatherer groups occupied North America in the Prearchiac time period. This project examines the patterns and strategies of mobility employed by Prearchiac people living in the Central Great Basin. By using X-Ray Fluorescence chemical analysis, it is possible to compare the distance between the archaeological site and the source of the artifact. By using published sourcing data coupled with new data produced from the Geochemical Research Laboratory, spatial and statistical analysis were performed to determine mobility patterns and strategies. By producing a median confidence ellipse, lithic conveyance zones were generated based on the correspondence of site to source. Two sites located on Gilbert pluvial lake, Knudtsen and 26LA443, were found to belong to two different conveyance zones despite their close proximity. The Knudtsen site corresponded with the Central Conveyance Zone, and site 26LA4434 corresponded with the Eastern Conveyance Zone. Ninety-seven percent of the artifacts sampled from 26LA4434 came from one obsidian source, Brown's Bench in Southern Idaho/Oregon, calculating to a distance of approximately 312 kilometers one way from 26LA4434. These results broadly reflect on a wide subsistence strategy in which large distances travelled were motivated by food and toolstone resources. However, the Brown's Bench source is not proximal to any pluvial lakes limiting the subsistence opportunities for the site, suggesting that the significant conveyance demonstrated in 26LA4434 was primarily driven by motives toolstone procurement, not subsistence. The Central Conveyance Zone contains a great deal more lakes, explaining the larger span of raw sources shown in the Knudtsen site. This means subsistence strategies may have dominated mobility strategies at Knudtsen, while toolstone procurement drove mobility for the occupants 26LA4434. The significant distinction between procurement ranges of these two sites reflect on the adaptability and variance in Prearchiac life.

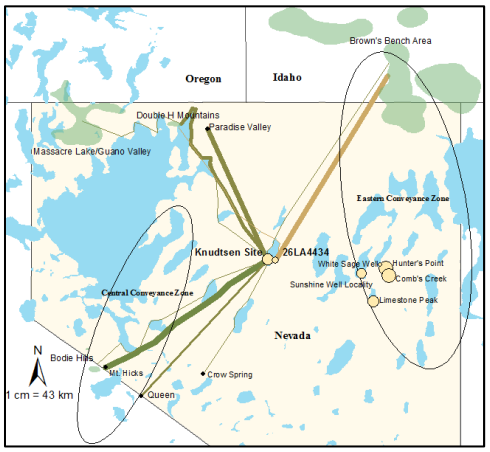

Figure 1: Map representing routes from site to source, with thickness representing artifact frequency. Eastern Conveyance Zone and Central Conveyance Zone are represented as ellipses.