Proposed Title

Paleoethnobotany in Interior Alaska

Abstract

Vegetation and plant resources can impact forager mobility and subsistence strategies. However, misconceptions about the preservation of organics in archaeological contexts and underestimations of the importance of plant resources to foraging societies limit paleoethnobotanical research in high-latitude environments. This research draws on concepts from optimal foraging and risk management theory to explore research questions relating to site mobility, plant resource use, taphonomy, and deposition and taphonomy. The model developed in this thesis establishes expectations of seasonal archaeobotanical assemblage characteristics for Late Pleistocene and Holocene sites in Alaska. This research analyzes macroremains found in anthropogenic features from components 1 and 2 (approximately 13,300 and 11,500 CalBP, respectively) at the Upward Sun River site in the Tanana River basin, central Alaska.

Site-specific methods included bulk sampling feature matrix in the field, subsampling in the laboratory, and wet sieving for analysis. Measures of density, diversity, and ubiquity tied together the regional model expectations and the results from the Upward Sun River site. The dominance of common bearberry in the component 1 assemblage [illegible] expectations of a late summer/early fall occupation in interior Alaska. This [illegible] site occupants may have focused on mitigating the risk of starvation by focusing foraging efforts on seasonally abundant and predictable resources that could be stored for future use. The variability resulting from the component 2 features could indicate long-term occupation that extended from the summer into early fall, with site occupants opportunistically foraging for [illegible] targeting predictable plant resources such as low-bush cranberry, blueberry, [illegible]

This thesis contributes to previous research at the Upward Sun River site and suggests that Late Pleistocene and Early Holocene foragers had a broad diet based on [illegible] that included large and small [illegible] plant resources. This research illustrates the [illegible] resources in interior Alaska and draws attention to aspects of human behavior that are difficult to address with lithic or faunal datasets alone, such as the gendered division of labor.