THE BEAR CREEK SITE - 45KI839

Paleoarchaic Settlement of the South Salish Sea during the Late Pleistocene-Holocene Transition

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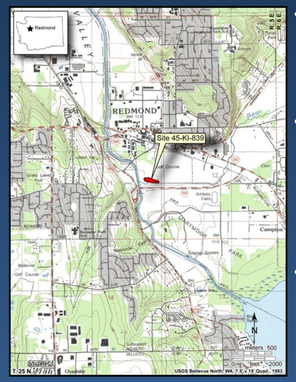
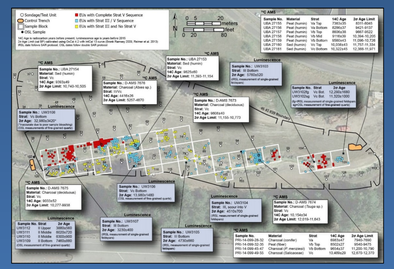
Introduction

The Bear Creek site (45KI839) in Washington State's central Puget lowland is among the earliest lithic artifact-bearing, professionally excavated archaeological sites on the Pacific coast between Haida Gwaii and the Santa Barbara Channel. Data recovery excavations in 2013 provided an unprecedented view of Native American settlement in a rapidly changing coastal lowland setting during the Late Pleistocene-Holocene (LPH) transition. We summarize the results of these excavations and attendant analyses and address some broader implications of the research to date, including the settlement of the earliest peoples in western North America, patterns of land-use in the Pacific Northwest's dynamic post-glacial environment, and rethinking regional culture-historical sequences. The Bear Creek LPH component contains a lithic assemblage akin to the Western Stemmed Tradition in the interior although it also shows elements of continuity with later regional technological traditions. The lithic assemblage and other contextual data meet expectations derived from models of WST settlement of the interior Pacific Northwest which originated from a Pacific coastal migration.

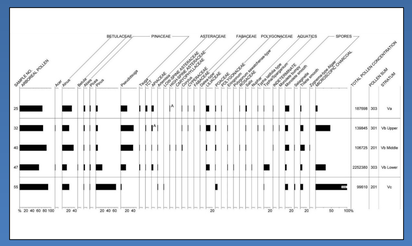


- The site was first identified in 2008 and further explored in 2009 as part of a habitat restoration project by the City of Redmond along the channelinzed lower creek (Kopperl et al. 2015).
- Data recovery in 2013 resulted in excavation of 425 one-square meter units (Kopperl et al. 2016). The intact LPH component, designated Stratum Vc, was relatively thin (5-10 cm) throughout the site, a portion of which was cut by a later channel that filled with alluvium and artifacts in secondary context (Stratum III).
- Stratum Vc yielded several thousand chipped stone artifacts from several discrete lithic reduction areas (see Beck and Taylor 2017, this symposium); no features such as hearths or structural remains were identified despite horizontally extensive excavation.

Bear Creek Site and Its Environment During the LPH



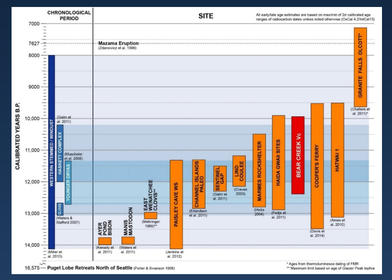
- AMS radiocarbon and luminescence dates from the Stratum Vc deposit are generally within an interval between ca. 12,500 and 10,000 cal BP.
- Bayesian modeling of chronometric and stratigraphic data more firmly place the Stratum Vc occupation during the LPH (see Johnson 2017, this symposium).

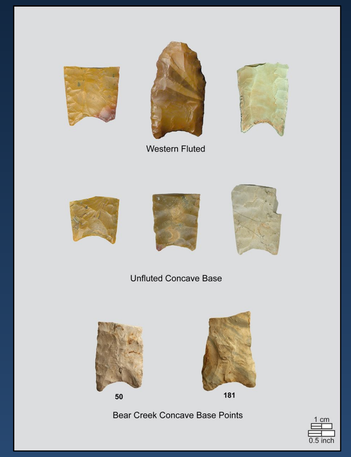


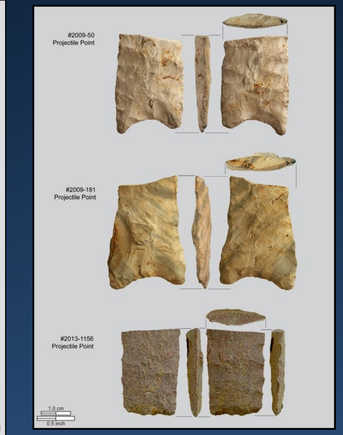
- The landscape of lower Bear Creek and the northern Lake Sammamish basin looked quite different than it does today (see Hodges, and Rinck, 2017, this symposium), On a regional scale, Douglas fir forest was beginning to succeed pioneer vegetation communities at this time, The lower Bear Creek valley near the site was a mosaic of dry areas and wetlands along the north margin of Lake Sammamish, gradually becoming inundated.
- Evidence of the animals inhabiting the landscape is scarce at the site, but protein residue analysis on stone tools and sparse calcined bone include artiodactyl, bison, mountain or bighorn sheep, and salmonid fish were available for use during the LPH.

Bear Creek as a Western Stemmed Tradition Component

- The Bear Creek Site is a maritime, western Washington State manifestation of the WST, which appears to have been a co-tradition at least partially contemporary with Clovis and bearing a Paleoarchaic technology not derived from the Paleoindian technological complex of Clovis.
- Comparative analysis of the Bear Creek site assemblage with several other WST assemblages in Washington State concludes that differences among them are primarily consequences of variation of local toolstone availability and that there were broad technological similarities despite the variation in projectile point form.

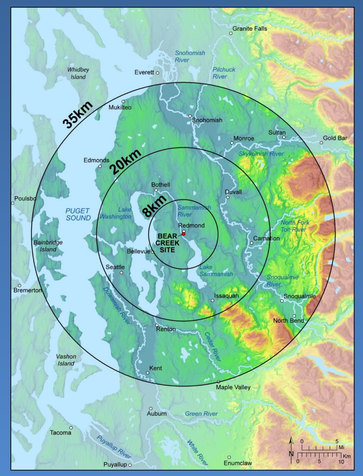






People on the South Salish Sea LPH Landscape

The place of Bear Creek in LPH mobility strategies in the Salish Sea region is a major research issue for this project. Bear Creek is a single site and there is no supporting local sample of other contemporary sites that could help place the site into a hypothetical mobility strategy. It is possible, however, to productively place it into conceptual and comparative frameworks to gain insights into the role the Bear Creek site may have had; these frameworks can be tested and refined as more sites of its age are found and excavated.



Placing what is more firmly known about the site, including its age and range of artifact classes, within the broader theoretical context of hunter-gatherer land use patterns during the LPH suggests that the people who created the Stratum Vc archaeological assemblage may have been a small, task-oriented group.

That group was part of a larger residential community that likely moved its central residence fairly frequently, but also used logistical task groups to move around the landscape to hunt, fish, and gather food, find suitable raw material for tools, and interact with other groups of people who shared the landscape of the Salish Sea region.

A highly mobile and aquatic- and terrestrial-oriented residential group of several extended families—perhaps 20–30 people—is hypothesized based on theoretical expectations, and that group interacted with a total population throughout the Salish Sea region on the order of 1,000 at any one time.

Conclusions

An examination of the Bear Creek site in a theoretical framework allows modeling of its role in LPH land use patterns in the Salish Sea region, its relationship with other cultural manifestations in the region, and its potential contributions to our understanding of the peopling of the Americas. The combination of analyses of empirical data sets and theory-based modeling of the Bear Creek site within the regional LPH archaeological framework highlights the significance of the site. Data recovery has provided an unprecedented picture of how people lived in Lower Bear Creek at the end of the Ice Age and what their environment was like. The discovery of additional sites of this age in the Puget Lowland will build on the lessons learned from this investigation.

Acknowledgements

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References Cited

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