



Archeology Program

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Archeology in the Parks > Research in the Parks >

High Elevation Archeological Survey in Pacific Northwest Mountain Ranges

Long before boundaries of national parks were established, Native Americans traveled widely and used many resources found in the mountain ranges of the Pacific Northwest. Archeologists had little information about the sites created by people hunting, harvesting, and camping and decided to survey for sites in the high altitude regions of Olympic, Mount Ranier, and North Cascades National Parks in Washington. Collecting and organizing the data across parks allows collaboration among researchers who can integrate results into a picture of precontact life in the region.

Background

The paucity of information on prehistoric use of sub-alpine and alpine landscapes in the Pacific Northwest reflects the absence of regional archeological data on site distribution, chronology, function, and condition in these habitats. In the absence of these basic data, the effects of visitor use on sites in alpine and sub-alpine areas of national parks remain largely unknown, rendering management decisions poorly informed. Lack of inventory data also confounds attempts to place the parks' archeological records into a regional cultural context, leaving issues of interpretation of ancient uses of mountainous habitats in the Pacific Northwest largely speculative.

To address this gap in knowledge about park resources, archeologists in Olympic (OLYM), Mount Rainier (MORA), and North Cascades (NOCA) National Parks have cooperated to develop and implement an archeological site survey and recording protocol to explore spatial, temporal, and formal aspects of prehistoric archeological sites in three national parks that span the Northwest Coast and Plateau culture areas. Prior to the project, less than 5% of high elevation terrain in the three parks had been surveyed for archeological resources. The multi-park approach allowed the archeologists to:

1. integrate results into a regional picture of precontact history;
2. provide collaborative expertise to move the study beyond a single park perspective;
3. develop common data sets; and
4. using the archeological record from high elevation settings, contribute new information about the long involvement of indigenous populations with Pacific Northwest montane landscapes.

Methods

The data collection components of the project focused on development of a common research database and site documentation protocol, to be integrated into each park's GIS system and made accessible on-line; and development of high elevation, field survey and inventory protocols via a three-park team approach. Planning and site survey were carried out jointly by cultural resource staff from each park. The collaborative format enhanced the quality of the inventory and database structure, and ensured that the acquired information is useful for a range of park management, interpretation, and research goals.

Results

Existing high elevation site data for all parks were recorded in the data base. This activity yielded the first ever compilation of decades of archeological research data from the region's three large parks. During three seasons of field survey at NOCA, OLYM, and MORA park archeologists walked hundreds of miles, spent over 40 days in the field and surveyed more than 500 acres of sub-alpine and alpine terrain. This fieldwork resulted in the documentation of 32 previously unknown prehistoric or multi-component sites, 2 historic sites, and 5 prehistoric or historic isolated finds. While not yet confirmed by subsurface testing, surface remains on prehistoric sites suggest that a wide variety of site types were identified, including short-term resource procurement camps (hunting, berry picking, plant collecting), travel sites, tool-stone quarrying sites, and longer duration base camps.

This project has allowed us to measure quantitatively important variability in the archeological record among the three parks. Key findings include significant differences in lithic raw material use and procurement as well as significant variability in site density (sites recorded per square kilometer surveyed) that can be correlated with different geological



Archeologists review survey plans at North Cascades NP, August 2004 (NPS photo)

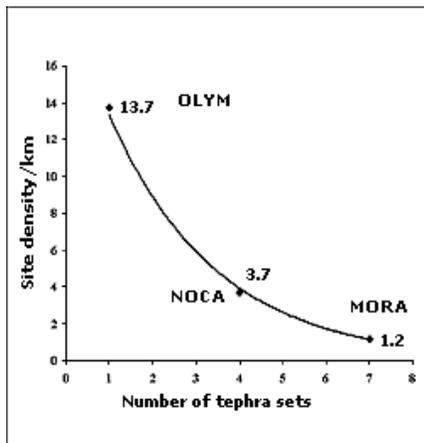


Figure 2: Archeological site discovery as a function of number of tephra sets

histories. Each park possesses a different history of volcanic ash (tephra) deposition; MORA experienced many depositional episodes of thick ash layers, OLYM experienced only one, and several were identified at NOCA. Because volcanic ash layers can obscure precontact-age cultural remains, we were able to demonstrate a relationship between the number of volcanic ash layers on a local landscape and identified site density, as indicated in Figure 2.

Results of this project, demonstrating the importance of montane landscapes to indigenous peoples in the Pacific Northwest and enhancing our perceptions of prehistoric use of these landscapes, are being disseminated through a variety of park, public, and professional presentations.

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