

**AN UPDATED SUMMARY STATEMENT OF
THE ARCHEOLOGY OF THE
NORTH CASCADES NATIONAL PARK SERVICE COMPLEX**

D R A F T

**North Cascades National Park Service Complex
Sedro Woolley, Washington**

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Introduction

In the early 1980s, the National Park Service (NPS) initiated more systematic and thorough archeological studies than ever before, of its park units in the Pacific Northwest. The main purposes of these studies were to inventory and assess archeological resources for which NPS was given management responsibility through federal legislation, most particularly the National Historic Preservation Act of 1966 and its subsequent amendments. These studies have resulted in the acquisition of new and sometimes surprising information about Native American habitation of mountainous parks, including North Cascades National Park Service Complex (NOCA), Olympic National Park, and Mt. Rainier National Park. As yet, much of this information is in technical reports, management documents, and agency records, eventually to be utilized by NPS interpretive staff to tell the story to the interested public of Northwest mountain prehistory. However, we are only beginning to find the archeological evidence of this story, with new information added yearly. Furthermore, this information serves first to implement NPS' mandate to protect and conserve important archeological sites. In the meantime, interested groups and individuals, aware of exciting new insights into the earliest inhabitants of the mountains, frequently request this information in a nontechnical, general format. These groups and individuals represent the interests of writers of popular books, school teachers, Native American tribes, NPS exhibit designers and interpretive staff, government offices, and outdoor and environmental education organizations, among others.

The purpose of this summary statement is to provide a general overview of what has been learned recently about the prehistory of NOCA. This overview is general and park-wide in scope, and is intended to serve the various interests noted above until a more thorough treatment of the subject is possible. This statement was prepared by Robert R. Mierendorf, park archeologist, North Cascades National Park Service Complex, Marblemount, Washington.

Research History

The first professional archeological investigations in NOCA, beginning in the early 1970s, were surveys conducted to find and document archeological sites. Few archeological sites were found, as artifacts and other remains of the first people proved difficult to find in dense forests and rugged mountainous terrain. With little hard evidence to go by, it was generally thought that Native American people and their ancestors made little if any use of the Cascade Mountain interior, except to pass between interior and coastal regions for purposes of trade. These views were held in spite of the references of Native elders to the use and knowledge of high elevation resources.

Beginning in the early 1980s, under the direction of Mr. Jim Thomson, at the time NPS regional archeologist in Seattle, the NPS began to systematically gather field and archival data relating to the earliest human uses of NPS lands in the Pacific Northwest. Beginning in 1984, NOCA has conducted annual archeological projects to inventory and assess the significance of prehistoric sites. This has resulted in the rapid accumulation of a large body of archeological

data. Thus for example, in 1984 only 17 archeological sites had been inventoried within NOCA; today there are 260 inventoried sites (237 prehistoric and 23 historic). Although on-going, archeological research and inventory at NOCA are still in their infancy, and only about 5% of the total 684,000 acres of the park complex has been surveyed to date. Though it will be a long time before the complete story of human use of the North Cascades can be told, the following sections describe what we have learned from recent archeological studies in this most scenic and rugged of Washington's mountainous landscapes.

Overview of Prehistoric Use of NOCA

The lands in today's park complex were occupied by human groups for at least the last 8,400 years, based on radiocarbon dated archeological sites within the park complex. Distinctive styles of a few spear points, though they offer less certainty than the radiocarbon dates, suggest that humans may have utilized the North Cascades for the last 10,000 or so years. It is most probable that these people were the ancestors of today's Coast Salish and Interior Salish-speaking peoples, most particularly the various bands of today's Upper Skagit, Sauk-Suiattle, Nooksack, Chilliwack, Nlakapamux (Lower Thompson), Chelan, Methow, Entiat, and Similkameen tribes.

Most of the archeological sites in NOCA consist of the below-ground remains of camps and resource use areas where Indian people processed and cooked food, collected specific kinds of rocks and minerals for tools, and hunted, fished, and collected plants. Some sites have above-ground remains, and appear as rockshelters, rock art, bark-stripped trees, rock alignments and piles, and pits dug into the ground.

These sites are found throughout all environmental and elevational zones of the park complex, from the densely forested valley bottoms to above where trees can grow, in the alpine tundra. Because some of these locations are so remote and so interior to the steepest portions of the mountains, it is clear that prehistoric people were more than just traveling through; rather, they explored all portions of the mountains and used the locally available resources during their stay. However, some parties traveled across the mountains for purposes of trade and social relationships, which lent great significance to the lowest passes, such as Cascade Pass, as these provided the main travel routes across the range.

Although large and permanent villages have yet to be found in the park complex, remnants of these are likely to exist along the lower valleys of the largest rivers. Most of the camps that have been found represent short-term or seasonal occupation by relatively small groups of people. Some of these same camps have been occupied recurrently for thousands of years. The geographic distribution of camps within interior valleys shows a clear settlement pattern: not unexpectedly, camps are asymmetrically located in mountain valleys and tend to cluster in those parts of a valley offering maximum solar insolation and minimum exposure to avalanche slopes. This pattern is most clearly expressed in the Skagit River valley and Stehekin River-Lake Chelan valley.

New Results from Recent Park Archeological Studies

The information provided in this section concerns a series of archeological problems that are typically addressed by archeological research in the Pacific Northwest, but in this case, reflecting the specific needs of North Cascades National Park, given its particular history of research and the research needs as outlined in the park's 1986 archeological research design and overview. The data that addresses these problems is necessarily technical and is derived from detailed study and analysis of about 50 archeological sites from across the park complex.

1. **Radiocarbon Chronology.** The chronology of prehistoric use of the park complex is based on a sample of 52 radiocarbon dates. The oldest of these sites is a chert quarry in the Skagit River valley dated to 8,400 years old (calibrated using dendrochronology); the youngest is a fishing encampment dated at 170 years old. These radiocarbon dates are not uniformly spread across the last 8,400 years. Instead, they cluster into three distinct time periods: the earliest period is 5,000 to 3,500 years ago, the next is 2,000 to 1,000 years ago, and the most recent is 600 to 200 years ago. The exact significance of these clusters is currently unknown. Generally, we can conclude that the park complex was used more or less continually over the last 8,400 or more years, but with three periods of more intensive activity.
2. **Tephrochronology (volcanic ash dating).** As with other geographic regions of the Pacific Northwest, Native populations coped with the frequent eruption of Cascade volcanos. Ash deposits from some of these eruptions are prominent within archeological sites or the deposits below them. To date, four chemically distinct ash layers have been securely identified from within the park complex. These include Mt. St. Helens J (~12,000 years old), Mt. Mazama O (6,800 years old), Mt. St. Helens Y (3,500-2,900 years old), and St. Helens W (500 years old). Two additional ash layers have been found, but their source is unknown. Mt. Baker or Glacier Peak, the two closest volcanos to the park, may be the source of one or both of these ashes. The effects of all these ash falls on the lives of Native populations is uncertain, but there is nothing in the archeological evidence so far to indicate any effect at all.
3. **Prehistoric Artifact Types.** A wide array of tools types and features have been found in archeological sites. Chipped stone tools include: spear, dart, and arrow points; knives; scrapers; drills; graters; microblades and microblade cores; and simple flake tools. Stylistically, these suggest that Native groups in the North Cascades maintained direct or indirect relationships with groups widespread in the foothills and non-mountainous lands surrounding the northern Cascade Range. Ground stone tools include: adz blades; slate knives; soapstone pipe bowls, effigies, and decorative pieces; pestles and manos; and grinding tools and hammerstones. A few broken bone awl or harpoon tips have been found at one site.

Other remains, called "features" by archeologists, include living floors at camps, food-cooking pits and hearths, sweat lodges, salmon smoking and drying sites, vision quest

locations, hunting blinds, and food storage locations. The oldest dated feature in the park complex is a subalpine campfire area dated at 5,400 years old (calibrated using dendrochronology). Overall, the combined inventory of artifacts and features indicates extensive use of mountain landscapes for hunting, gathering, and fishing purposes, including the processing, cooking, and working of a wide variety of local resources.

With few exceptions, the artifact assemblages from throughout the park complex are dominated by utilitarian remains, the evidence of procurement, manufacturing, and processing the numerous locally-derived resources provided by the mountain environment. Compared to artifacts from archeological assemblages from non-mountainous environments, one is left with the impression that people in the North Cascades wasted little and tended to discard tools only after they had become worn out. These early people certainly traveled light by today's standards, and without the maintained trail systems of the present, while experiencing climatic episodes and events that we are only now becoming aware of, they moved freely across all parts of the mountain landscape.

- 4. Faunal and Floral Remains.** Often in the excavation of archeological sites, the remains of animals and plants used by the sites' inhabitants are found. Due to the moist, maritime climate, which accelerates decay processes, and the acidic mountain soils, organic remains are rarely preserved. To date, the best preservation environment, surprisingly, is in cooking hearths and other features where organic remains become charred, but not completely burned. Like charcoal, such charred remains are chemically quite stable and can remain in the soil for thousands of years.

Animals, used for food and utilitarian purposes, have been recognized from remains found in a few hearths. These include beaver (*Castor canadensis*), mountain goat (*Oreamnos americanus*), elk (*Cervus*), and deer (*Odocoileus hemionus*). Other animal remains cannot be identified to the species level, but to a more general taxonomic level. Thus, we have found numerous bones from birds, small mammals, and fish. One site that marks a fish smoking and drying location, dated 660 to 170 years old, contains thousands of bones (spines, vertebrae, and teeth) of Salmonids of as yet unknown species.

Plant remains are preserved in sites as charred fragments or sometimes complete specimens. At one site dated 475 years old, dozens of charred red elderberry seeds (*Sambucus racemosa*) were identified from a cooking hearth. Most of the charred remains from archeological features appear to be woody parts of trees and shrubs used for fuel.

Shell remains are rarely found from park complex sites, the single exception being a complete *Dentalium* shell recovered from one site. *Dentalium* is a seashell found in sand and mud habitats under 6 to 500 feet of water along the Pacific coast. It was highly valued by Native peoples and was used throughout the Pacific Northwest as a form of

currency.

5. Stone Procurement and Use

The North Cascades provided an incredible array of stone raw materials that were used by Native groups for tools and other utilitarian needs. These stone materials include varieties of quartz called "chert", slate, argillite, serpentine, quartz crystal, soapstone, and obsidian.

In the northern portion of the North Cascades, numerous chert quarries have been found, marking the places where chert fragments were hammered from bedrock outcrops and glacial boulders. Artifacts made of this Hozomeen chert have been found as far east as Lake Chelan and as far west as Puget Sound. In another part of the park complex, far removed from the chert quarries, are found alpine and subalpine obsidian quarries. Although generally poor in quality, this distinctive material has been used for at least the last 5,300 years, and we are beginning to find it in archeological sites far removed from its source.

Other varieties of high quality obsidian appear in archeological sites of the park complex. Chemical analysis of these varieties indicates that they are derived from sources far to the south, in today's northern California and Oregon. We can now say with certainty that Native inhabitants of the North Cascades participated in a broad, intra-regional trade network, through which they procured high quality obsidians from such volcanic terrains as Newberry Crater, Glass Butte, and the Three Sisters, all located in central Oregon.

Interpretive Exhibits

A small display of prehistoric artifacts from the park complex is available to the public at the North Cascades Visitor Center, located a short distance south of Hwy. 20, just before Newhalem. The display shows original artifacts from eastern, western, and subalpine landscapes of the North Cascades, as part of a larger exhibit explaining the natural history of the park complex.

Presently, none of the archeological sites in the park complex are open to public visitation. However, NOCA staff are presently planning for interpretive visitation to a small prehistoric rockshelter located not far from the visitor center. This project includes building of a handicap-accessible interpretive trail to a viewing deck that will overlook the rockshelter floor. Interpretive panels will describe the significance of the rockshelter from archeological and Native perspectives. The shelter itself will be closed to visitation in order to maintain the site and the surrounding forest in its natural condition. The trail and viewing deck will be open to the public, and will serve as the locus for guided ranger programs about the first inhabitants of the North Cascades.

Native use of this shelter is radiocarbon-dated to 1350 years ago, with occupation as recent as 250 years ago. This shelter was used to cook a variety of local food resources, and it may have served as a short-term camp for a small group of people. Most of the remains from the shelter are associated with hunting activities, and include small stone arrow points and mountain goat bones. Other artifacts from the site indicate that most of the stone tools were manufactured somewhere else and brought to the site, where they were repaired and resharpened. Some of the animals brought to the site were butchered there, and the abundance of charcoal associated with small pit features indicates that food animals were cooked or smoked, and were probably consumed at this location.

The completion date for this project is presently uncertain. Detailed project plans are currently being prepared and NOCA is consulting with the Skagit tribes in their development. At this time, NOCA is seeking funding support for development of this project. Within the next few years, we hope to have this interpretive facility open to public use. Please check at the park complex headquarters in a few years for the official word on this facility.

Site Protection

The National Park Service and North Cascades National Park Service Complex are committed to the protection of the archeological resources under its jurisdiction. These resources are protected under the Archeological Resources Protection Act of 1979 and its amendments, and other federal regulations and guidelines. It is illegal to remove, destroy, disturb, or deface artifacts, to dig in archeological sites, or to disturb or deface Indian burials or rock art. Annually, such activities result in the irretrievable loss of the Nation's heritage. To assure that this does not become a problem at North Cascades, the specific locations of archeological sites is confidential.

Future Directions

Archeological inventories and assessments of archeological site significance in NOCA are on-going. If information gained in the next few decades is comparable to the accomplishments of last two, we expect that many new understandings about the past will be acquired. Increasingly, this information will be offered to the interested public through a variety of NPS interpretive programs and publications.

For more detailed information on some of the archeological studies conducted in NOCA, the selected list of publications below are available to interested readers at the NOCA library, located at the park headquarters in Sedro Woolley.

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