The Owl Ridge Trails Project:

Location and Documentation of Primary Travel, Trade, and Resource Use Trails of the Santiam Molalla in the South Santiam River and Blue River, Oregon Headwaters, from 1750 to 1850



Final Report by Dr. Bob Zybach Program Manager, Oregon Websites and Watersheds Project, Inc.

Prepared for David Lewis, Cultural Resources Director, and the Tribal Council of the Confederated Tribes of Grand Ronde

June 30, 2008



Mission Statements of Confederated Tribes of Grand Ronde

The mission of the **Confederated Tribes of Grand Ronde staff** is to improve the quality of life for Tribal people by providing opportunities and services that will build and embrace a community rich in healthy families and capable people with strong cultural values. Through collective decision making, meaningful partnerships and responsible stewardship of natural and economic resources, we will plan and provide for a sustainable economic foundation for future generations.

The mission of **Site Protection** is to manage our cultural resources in accordance with our traditions, applicable laws, regulations, and professional standards, wherever they occur on our tribal lands, our ceded lands, and within our traditional usual and accustomed gathering places.

The **Cultural Collection** program's mission is to preserve and perpetuate the cultural heritage of the original tribes of the Grand Ronde community by acquiring, managing, and protecting tribally affiliated collections through exhibition, loan, and repatriation.

The *Cultural Education* program's mission is to preserve and perpetuate the cultural and linguistic heritage of the original tribes of the Grand Ronde community.



Mission of Oregon Websites and Watersheds Project, Inc.

Oregon Websites and Watersheds Project, Inc. shows students how to use Internet communications and scientific methodology to help manage Oregon's natural and cultural resources. Students are encouraged to use computer technology, historical documentation, scientific reasoning, community outreach, environmental enhancement projects, and effective long-term monitoring strategies to help make decisions, which affect Oregon's quality of life.

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Bob Zybach, Springfield, Oregon June 30, 2008

Cover: Three elders at Gordon Meadows during camas bloom. Bob Tom and Don Day of the Confederated Tribes of Grand Ronde, and Wayne Giesy, Oregon Websites and Watersheds Project, Inc. Photographed by report author, June 18, 2007.

Owl Ridge Trails Project

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Executive Summary

Owl Ridge is a key landscape feature of an ancient 250,000-acre or larger camas prairie, berry patch, beargrass meadow, old-growth conifer, summer home, hunting grounds, campground, wetland, beaver marsh, fishing hole, and ridgeline trail complex that dates back millennia before white discovery and occupation. The well-defined patterns of land use, management, and occupation were likely maintained by Santiam Molalla, Blue River Molalla, Santiam Kalapuya, Calapooia Kalapuya, Klamath, Wasco, Paiute, and Cayuse families and communities and their predecessors, ancestors, friends and neighbors for perhaps 2,000 to 3,500 years, or even longer.

These attractive and highly productive lands drew travelers, hunters, traders, basketweavers, cooks and food gatherers since time immemorial, for extended periods of time in the same places, often with the same families, year after year. Today the land is mostly managed by the USDA Forest Service, from the Sweet Home, Sisters, and Blue River Ranger Districts of the Willamette and Deschutes National Forests. These lands were once occupied and managed by ancestors of the Confederated Tribes of Grand Ronde. Tribal members today, and their generations in the future, bear a special relationship to these ancestral lands.

Project Purpose. The primary purpose of this project is to learn more about the geography, ecology, and life-ways of the Molallan families who lived and worked in the South Santiam River and Blue River headwaters during late precontact and early historical time (1750-1850). The principal method used to achieve this result was to locate and document relict evidence of plant and trail use by these people during the 1750-1850 time period. Products created by this project, including maps, reports, GIS layers, photographs, and websites, are intended to have educational, recreational, and cultural value, and to be used for purposes of resource preservation and restoration.

Project Funding. This project was made possible by a generous contract agreement provided by the Grand Ronde Confederated Tribes ("the Tribe") to Oregon Websites and Watersheds Project, Inc. ("ORWW"). Additional project resources have been provided by NW Maps Co., USFS Sweet Home Ranger

District, Cascade Timber Consulting, Inc., Phoenix Reforestation, Inc., and the US Army Corps of Engineers.

Project Background and Description. This report is the final product of the Owl Ridge Trails Project, which began with the coincidence of a planned ORWW September 8-10, 2006 conference on historical Kalapuyan resource management in the Willamette Valley, and an August 3, 2006 Albany newspaper picture of Gordon Meadows in full bloom with camas (Paul 2006). Camas was needed for the conference, and public land seemed a good place to get it. A trip to the meadow and a brief automobile exploration of the surrounding landscape helped us realize that Gordon Meadows was only one portion of a landscape-scale pattern of relict prairies, berry patches, and old-growth groves hundreds of years old. This landscape strongly reflected the actions of past cultures -- of which very little is known.

Shortly thereafter I contacted Grand Ronde Tribal member Pat Allen, who arranged a meeting with the Grand Ronde Tribal Council. After hearing about the Owl Ridge area, the Council formed a committee to learn more about the land, and to develop recommendations for its possible care and use. The committee was headed by David Lewis, Director of the Grand Ronde Cultural Resources Department, and included Wayne Giesy, a director of ORWW. Over the course of the next several months, a contractual agreement was developed between the Tribe and ORWW to complete the work summarized in this report. Field work was started by members of Phoenix Reforestation, Inc. (see Table 2) on August 4, and completed September 20, 2007.

The project study area includes the headwaters of the South Santiam River and Blue River, a 120 square mile rectangle (see Map 1) including more than 130,000 acres of forestland. We documented native trails, berry fields, camas meadows and other land uses at nearly 500 GPS points and with more than 1500 photographs. Local historical information, photographs, and QTVR files detailing native plants and wildlife found in the South Santiam River basin have been placed online at the ORWW educational website.

General Findings. The following list of research findings is based on information acquired through archival and field survey methods used on this project, and on subsequent analyses of documentation acquired through those means:

1) The theoretical ridgeline trail network model used to produce the project's predictive map proved vital to the success of this project. Such maps can likely be developed and used with confidence for similar purposes in other forested areas of the region.

2) All contiguous locations in the study area are less than 25 miles distance by trail from one another; meaning that, in the absence of snow, everyplace could be reached by walking in a day's time or less.

3) Most of the study area is high elevation and inaccessible due to snow for much of the year.

4) There are a significant and widespread variety of edible berries, seeds, nuts, and bulbs in the study area that ripen across diverse aspects and elevations throughout the entire summer.

5) Most areas of historical human food production have become noticeably smaller in the past 50 years, and appear to have been diminishing in size for several centuries.

6) The evidence of greater human land use levels in the past may have encouraged much larger populations of deer and elk in those times.

7) Local and anadromous fish were probably not sufficiently abundant in numbers or large enough in size to form a regular staple of Santiam Molalla diets.

8) Large amounts of commercial-grade weaving materials could be found at all elevations, but prized beargrass could only be obtained above the 3,000 foot level.

9) Woody fuels can be readily found within several minutes walk in almost every part of the study area.

10) Freshwater can be found easily in almost all parts of the study area, during all seasons, at most elevations.

11) The mainstem South Santiam River and McKenzie River corridors, leading from the Willamette Valley to the Santiam Pass and eastern Oregon, were strategic holdings for Santiam Molalla.

Research Questions. This data is intended to be used for educational and resource management purposes. The following questions are examples of the types of uses of this material that can be developed as hypotheses in academic settings for educational or research purposes. Answers to these types of questions can also provide good information for better managing these resources in the future.

a) Were Molallans the dominant culture in the study area during late precontact time? Had they lived in the area for many generations, or were they more recent arrivals? Did they live in the area year-round, or just visit seasonally?

b) If the Molalla only arrived in the western Cascades sometime after 1750, who were the previous occupants? What became of those people, and when did it happen, to allow such free access to the Molallans?

c) If the Molallans have actually lived in the western Cascades for hundreds or thousands of years, what caused them to mostly abandon the once-largely agrarian huckleberry, beargrass, and camas fields throughout the study area? Were their numbers reduced by disease, famine, or warfare? Did they simply develop more efficient methods of survival?

Conifer tree populations have apparently expanded their range and population densities over the course of the past 300 to 500 years within the study area, a pattern that seems common throughout much of the Douglas-fir Region.

a) If so, is this a function of climate change or some other natural, nonhuman, phenomenon?

b) If so, is this a reflection of changing human populations, market values, resource management methods, politics, or other human-related cause? Are conifer expansions related to human population declines in some way?

Huckleberry fields, old-growth trees, ridgeline prairies, brakes and wildflower meadows have all been seemingly reduced in size and numbers during the past 50-250 years.

a) If so, should efforts be made to restore these trees and lands to past conditions? How and why?

b) Should this be a concern of government, Tribes, or private citizens?

Recommendations. The value of these findings and questions is directly related to the uses to which they are put. The primary purpose for gathering this information is to provide information of cultural, educational, and resource management value to the Confederated Tribes of Grand Ronde. The following recommendations are made with that purpose in mind:

1. Trails Research. Continue and expand this type of ancestral land use research and documentation on the public lands of western Oregon. Partner with BLM, the US Forest Service, US Fish & Wildlife Service, and/or USDI National

Park Service for purposes of funding, information sharing, and collaborative resource management opportunities.

2. GIS Mapping. Field data from this project has been gathered and transformed into discrete GIS layers by the Grand Ronde Mapping Department. This data has already been used for a number of useful GIS mapping products. Other uses can include recreational trails and road maps, educational maps and tables, and archaeological inventory and predictive maps.

3. Gordon Meadows Restoration. Gordon Meadows is a secluded camas prairie surrounded by huge 350-year old conifer trees and fields of blue mountain huckleberries and wild strawberries. It is contained in a subbasin of about 2,000-acres that can serve for demonstration and experimental purposes. Information resulting from experimental findings and demonstration projects such as this would be very helpful for future cultural and natural resource management, restoration, interpretation, and protection purposes. *[NOTE: see Zybach 2008 for additional information on this recommendation.]*

4. Public Education. Information discovered and documented during the course of this research can be put to excellent use for purposes of public education regarding Oregon history and geography, Santiam and Blue River Molalla life-ways, Cascades wildflowers and wildlife, cultural resources protection, meadow restoration, and a wide range of related topics.