

Knox, Margaret A. *Ecological Change in the Willamette Valley at the Time of Euro-American Contact ca. 1800-1850*. 2000. University of Oregon Masters Thesis. (Reviewed by Alexis Steinberg)

The Kalapuya Indians are generally thought to have maintained the Willamette Valley's oak savanna environment through regular land burning. The burning could have contributed to species diversity and ultimately been a vital subsistence practice for the Kalapuya. Early Euro-American trappers', explorers', and settlers' journal entries have primarily supported this idea. Such writings, as argued by Margaret Knox, have not always been properly used within context or understood within their inherent social biases by later theorists studying the Kalapuya. In other words, it is possible that a small sample of selective and often biased evidence has been used to support the theory that the Kalapuya intentionally and regularly burned land in the Willamette Valley.

In her master's thesis, Margaret Knox re-examines several Euro-American journal accounts, including those by explorers Lewis and Clark (1805), botanist David Douglas (1826), and others from the early 1800s. These journal entries focus on the Willamette Valley landscape and Native Americans and are used by Knox to address several questions: 1) What was the extent of fire use by the Kalapuya to maintain the oak savanna? 2) What environmental factors contributed to vegetation patterns in the Valley? 3) How did early Euro-Americans impact the Valley's environment? In examining these questions, Knox also utilizes information from paleoecological studies of the Willamette Valley, including soil samples indicating prehistoric charcoal and pollen levels. She also discusses the historical role of Oregon white oak and other important plants of the Willamette Valley. And while these studies do not end up providing enough strong data to confirm a conclusion, Knox does make an effort to include various sources of evidence to support her thesis.

In assessing various Euro-American journal entries, Knox takes several complexities into account. These include the time and context of the journals, perspectives of the writer, the rapid decimation of the Kalapuya from smallpox and malaria and possible hostile relations between the Native Americans and Euro-Americans. She argues that Kalapuya fires could have acted as counter-resistance measures against the increasing expansion of Euro-Americans into the valley. Other possible uses of fire could have been for defense, warfare, and hunting. Knox also notes that many recorded fires after the 1820s were the “accidental” responsibility of Euro-Americans.

Knox concludes that the earliest Euro-American accounts (1805-1826) record no land burning but that these entries were taken before disease and Euro-American settlement decimated and displaced the Kalapuya. Later journal accounts (1826...) record much land burning but over half the Kalapuya were already dead from diseases by 1841. Knox's conclusions seem to support her initial hypothesis. However, there does not yet seem to be a definite answer to the extent and/or purpose of Kalapuya land burnings.

Critique

I really enjoyed reading Margaret Knox's thesis because she utilizes multiple levels of evidence (ecological and historical) to provide a more accurate picture of the complexities involved in historic questions. While her conclusions are not very strong, she provides an intriguing and convincing argument. Knox's work is credible and valuable. There are a few issues that she does not address however. One issue involves the huge lack of knowledge about Native American use of fire in warfare, especially after increased Euro-American expansion into the West. While we can propose many reasons why the Kalapuya used fire, our assumptions, as of now, are limited exclusively to evidence from Euro-American documents. This is definitely a problem. It seems that more paleoecological studies and investigation of other possible ethnohistoric sources would benefit the Kalapuya question.

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