
In his article, “Strategies of Indian Burning in the Willamette Valley,” Robert Boyd outlines the environmental setting of the Willamette valley before moving into his discourse on fire use in Kalapuya subsistence activities. He first includes a review of historical documentation of the pre-contact microenvironments. The most significant change that Boyd points to is the transformation of the grasslands and savannas of the Willamette valley into more woody areas. He argues this is due to the cessation of regular burning of the areas by the native Kalapuya people.

Boyd quotes various first hand accounts from early settlers of the region concerning vegetation and environmental conditions of the area. Oak savanna communities have existed for at least 6000 years in the Willamette valley, and according to this paper, continued to exist even when climatic changes made a full canopy forest viable. This evidence supports the idea that savannas were maintained by intentional fire. Thus if a frequent fire regime is not present the Garry oak are replaced by Douglas fir and maple.

Boyd discusses the culture, economy and plant use of the Kalapuya people. The historical evidence for burning is reported in quotes of various trading and settler expeditions. The first evidence he shows is from 1826, and the accounts continue through 1845, based on quotes from journals, diaries and trip documents. The Kalapuya used burning directly and indirectly for subsistence. Outlined uses are hunting of deer, gathering tarweed and acorns, grasshopper collection, tobacco cultivation and burning to promote growth of early successional food crops and root plants. Boyd also references these methods with quotes from first hand accounts.

Critique

This document on the whole seems well researched and a good combinations of general information on the natural history of the Willamette valley combined with more specific research. I like that Boyd sticks to analyzing mostly primary sources and uses extended quotes, which adds to their credibility. It does not seem as though the conclusions of his paper are biased to fit a certain predetermined outcome; instead it seems as though Boyd recognizes that the historical information is extremely incomplete and relying on historical accounts can lead to inferential data gathering.

This source gives a good overview of the Kalapuya history in the area as well as identifying important ecological components of the Willamette Valley that have changed since the arrival of white traders and settlers in the area. It is valuable also in the specificity of discussion on different plant and animals affected by prescribed burning. I find it helpful that in the footnotes discuss various theories that do not come up in the paper itself, which add to the depth of the topic. Still, there are a few issues with this resource.
I am skeptical of the use of evidence from other Pacific Northwest tribes and areas that he uses as almost interchangeable with the Willamette valley case study. This puts doubt on the credibility of the entire paper in my mind. Also, Boyd does not thoroughly address the issue of greatest debate in its area of study, the question of what scale of environmental alteration was caused by human behavior as compared to non-anthropogenic causes. There are other articles that claim that the emphasis that is put on the fire regime as being the sole factor in maintaining an oak savanna community ignores the large impact that climate and soils have/had.