

CHRONOLOGY OF POSTGLACIAL POLLEN PROFILES IN THE PACIFIC NORTHWEST (U.S.A.)

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ABSTRACT

Composite pollen profiles from many peat sections in the Pacific Northwest showing Postglacial forest sequences are correlated in Table I with radiocarbon-dated pumice and ash. The "thermal interval" is shown from 8,000 to 4,000 years ago. A bibliography is added of papers by the author which are relevant to this subject.

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TABLE I

POSTGLACIAL POLLEN PROFILES IN THE PACIFIC NORTHWEST CORRELATED WITH RADIOCARBON-DATED PUMICE AND ASH¹ (AFTER HANSEN, 1961)

1000 Years B.P.	P.N.W.	East. U.S.	G. Basin	P.N.W.	Puget Sound	South Central B.C.	Eastern Washington	Willamette Valley	Oregon Cascades	Lower Klamath Lake	Northern Klamath Lake	Volcanic Ash Pumice	Radiocarbon Dates (Years)	1000 Years B.P.
1			MEDITERRANEAN	COOLER-WETTER	Hemlock Predominance	Lodgepole Douglas Fir Spruce	Yellow Pine Maximum White Pine Lodgepole Cooler Moist	Douglas Fir Oak Hemlock Fir	Hemlock Lodgepole White Pine Fir	Lodgepole White Pine Yellow Pine	Lodgepole Yellow Pine			1
2					Douglas Fir Fir White Pine							Newberry Pumice	2054	2
3					Cooler Moist	Cooler Moist	Cooler Moist		Yellow Pine		Grasses Composites			3
4			ANTER'S ALTTHERMAL	THEMAL INTERVAL	Douglas Fir Decline	Yellow Pine Maximum Thermal Interval Volcanic Ash	Grasses Chenopods Composites Volcanic Ash Thermal Interval	Pumice Elephant Bones Oak Maximum		Grasses	Grass Chenopod Composite Maximum	Willamette Pumice		4
5					Hemlock Increase Volcanic				Yellow Pine Maximum	Yellow Pine Maximum		Mount Mazama Pumice	6453	5
6					Ash Douglas Fir Maximum							Washington Ash	6750	6
7			DEEVEY'S HYPOTHERMAL	THEMAL INTERVAL										7
8			ANATHERMAL	WARMING	Douglas Fir Increase Lodgepole Predominance and Maximum	Lodgepole White Pine Douglas Fir Spruce	Warming Drying White Pine Lodgepole Yellow Pine	Warming Drying Douglas Fir Hemlock Spruce Fir Lodgepole Maximum	Yellow Pine Douglas Fir Lodgepole Maximum	Yellow Pine White Pine Lodgepole	Yellow Pine White Pine Lodgepole		Fl. Rock Sandals	8
9														9
10														10
11													Puget Lowland Peat	11

¹ On the basis of petrographical and chemical data, POWERS and WILCOX (1964) believe that the Washington ash and the Mazama pumice are one and the same, with the source from Crater Lake, Oregon. The eruption of Glacier Peak in north-central Washington was apparently much earlier and may have occurred near the end of the Vashon Glaciation.

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