

Supplemental Table S3

Radiocarbon Age (¹⁴ C years BP)	δ ¹³ C (‰)	¹⁴ C Dating Method ^a	Laboratory Number ^b	Location	Site No. (Table S1)	Unit Dated	Material Dated	Stratigraphic Context and Notes	Reference
Above (minimum ages)									
9,650 +/- 250		BC	W-5575	Snyder Ridge bog	60	G	Gyttja containing coniferous wood fragments	40-50 cm above tephra	Carrara (1989)
9,920 +/- 120		BC	W-5187	Glacier Route 7 bog	32	G	Peat and conifer (<i>Pinus sp.</i>) cone	0-100 cm above tephra	Carrara (1989)
10,260 +/- 110		BC	WIS-1840	Emerald Lake	128	B?	Bulk sediment?	100-110 cm above tephra	Whitlock (1993)
10,270 +/- 80		AMS	AA-29547	Burnt Knob Lake	8	G?	Conifer needles	18 cm above tephra	Brunellea et al. (2005)
10,280 +/- 80		AMS	CAMS-4973	Yellowstone Lake Core FD2-92	134	B	Wood	1.2 m above tephra	Tiller (1995); Theriot et al. (2006)
10,305 +/- 40		BC	USGS-3550	McCall fen	13	G	Peat	90-100 cm above tephra	Doerner and Carrara (2001)
10,340 +/- 830		BC	WSU-760	Bison rockshelter	6			~20-40 cm above tephra	Swanson (1972)
10,350 +/- 90		BC	USGS-2777	Dailey Lake bog	82	G?	Bark fragments	50-60 cm above tephra	D.J. Christensen in Carrara and Trimble (1992)
10,460 +/- 320		BC	TX-2226	Big Meadows lake	72	G?	Bulk sediment or wood	~3 cm above tephra	Mack et al. (1978a)
10,570 +/- 110		BC	WIS-1845	Mariposa Lake	132	B?	Bulk sediment?	100-110 cm above tephra	Whitlock (1993)
10,630 +/- 250		BC	W-5348	Howe Lake bog	35	G	Wood (possibly <i>Picea sp.</i> or <i>Larix sp.</i>)	85 cm above tephra	Carrara (1989)
10,660 +/- 120		BC	WSU-3850	Williams Lake Fen	121	B & G	Bulk sediment?	39-45 cm above B	Foit et al. (1993)
10,680 +/- 100		BC	TX-3659	Tepee Lake	61	G?	Gyttja?	~35 cm above tephra	Mack et al. (1983)
10,690 +/- 100		BC	WIS-2182	Pintlar Lake	55	G?	Bulk sediment	5 cm above tephra	Brunellea et al. (2005)
11,030 +/- 125		BC	WSU-4158	Wildcat Lake	120	B & G	Bulk sediment?	23-33 cm above B	Foit et al. (1993)
11,100 +/- 130		AMS	AA-36943	Baker Lake	21	G?	Conifer needles	7 cm above tephra	Brunellea et al. (2005)
11,130 +/- 110		BC	WIS-1842	Lily Lake Fen	131	B?	Bulk sediment?	48-58 cm above tephra	Whitlock (1993)
11,230 +/- 50		AMS	Beta-156698	Marmes rockshelter	97	?	Bird bone	Above tephra that may correlate to Glacier Peak (ID unconfirmed)	Hicks (2004); Huckleberry and Fadem (2007)
11,130 +/- 40		AMS	WW-2148 (CAMS-)	Poison Lake	15	G	Gyttja	Immediately above tephra	Doerner and Carrara (1999)
11,300 +/- 230		BC	WSU-1554	Lost Trail Pass bog	48	B & G ?	Gyttja	3-8 cm interval above G	Mehring et al. (1977); Blinman et al. (1979); Foit et al. (1993)
11,350 +/- 60		AMS	Beta-66788 (CAMS-9441)	Orondo	103	B, M, & G	Charcoal	75 cm above B	Gough (1995)
11,500 +/- 60		AMS	Beta-61557 (CAMS-5833)	Chelan Falls	76	B, M, & G	Charcoal	95 cm above B	Gough (1995)
11,510 +/- 70		BC	USGS-355	McCall fen	13	G	Peat	0-10 cm above tephra	Doerner and Carrara (2001)

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11,540 +/- 70		AMS	WW-443 (CAMS-19138)	Van Wyck bog	20	G	Spruce cone	Immediately above tephra	Doerner and Carrara (1999)
11,725 +/- 140		AMS	AA-4522	Slough Creek Pond	133	B?	Wood (<i>Picea sp.</i>)	2 cm above tephra	Whitlock (1993)
11,780 +/- 70		AMS	TO-5279	Friday	136	G?	Gastropod shells (<i>Stagnicola sp.</i>)	70 cm above tephra	Vreeken (1999)
11,800 +/- 190		BC	PITT-0554	Cygnets Lake Fen	126	B?	Bulk sediment	~8-23 cm above probable Glacier Peak tephra	Whitlock (1993)
11,840 +/- 110		BC	WIS-1863	Divide Lake	127	B?	Bulk sediment	28 cm above tephra	Whitlock (1993)
11,950 +/- 200		BC	TX-2663	Waits Lake	119	G?	Gyttja	30-50 cm above tephra; Contamination suspected by Mack et al. (1978c)	Mack et al. (1978c)
12,000 +/- 910		BC	WSU-155	Lower Grand Coulee, east wall	95	B	Mollusc shells	Above tephra	Fryxell (1965), Mehringer et al. (1984)
12,070 +/- 120		BC	WIS-1932	Fallback Lake	129	B?	Bulk sediment?	31-41 cm above tephra	Whitlock (1993)
12,130 +/- 150		AMS	Beta-21579	Fallback Lake	129	B?	Wood	1-2 cm above tephra	Whitlock (1993)
Bracketing or Between									
10,660 +/- 185		AMS	Beta-21580	Cub Creek Pond	125	B or G	Plant debris	Bracketing both tephras	Whitlock (1993)
11,125 +/- 130		BC	Beta-4951	Indian Creek	40	G?	<i>Equisetum sp.</i>	Bracketing; In reduced (bluish) sediments	Davis (1984); Davis and Grieser (1992); Davis (personal communication 2007)
11,180 +/- 150		BC	WSU-2668	Sheep Mountain Bog	59	G?	Bulk sediment?	5 cm interval above and 5 cm interval below tephra	Mehringer et al. (1984); Foit et al. (1993)
11,240 +/- 150		BC	WSU-4239	Wildcat Lake	120	B & G	Bulk sediment?	From 12 cm below B to 2 cm below G	Foit et al. (1993)
11,730 +/- 130		BC	WSU-4260	Marys Frog Pond (core 1)	51	B & G	Bulk sediment	From 6 cm below B to 2 cm below G	Foit et al. (1993); Mehringer (1985)
11,950 +/- 140		BC	WSU-3866	Marys Frog Pond (core 2)	51	B & G	Bulk sediment?	2 cm interval between B & G	Foit et al. (1993)
11,980 +/- 60		BC	USGS-2779	Dailey Lake bog	82	G	300 g of dark brown fibrous peat	4 cm interval from 2 cm above to 2 cm below tephra	Carrara & Trimble (1992)
14,360 +/- 400		BC	W-2780	Cub Creek Pond	125	B	Organic silt	Just above and below the tephra; Whitlock (1993) suspects that age is too old because of the high carbonate content of the sediment	Waddington & Wright (1974)

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14,860 +/- 140		BC	WIS-1770	Guardipee Lake	34	two G beds?	Bulk sediment	17 cm interval bracketing tephra; Barnosky (1989) suspects that the dated sediment incorporated older carbon from lignite and other deposits in the area	Barnosky (1989)
Below (maximum ages)									
10,540 +/- 660		BC	WSU-2679	Tepee Lake	61		Peat?	3 cm below tephra	Mack et al. (1983)
10,740 +/- 220		AMS	TO-7351	Lower Salmon river, SR- 26	12	G?	Charred wood	~15 cm below <i>redeposited</i> tephra	Davis et al. (2002)
11,165 +/- 170		BC	WSU-3167	Kearns basin	43	B & G (three beds?)	Bulk sediment?	2-5 cm below G, 0-3 cm below possible third bed	Foit et al. (1993)
11,200 +/- 100		BC	WSU-1548	Lost Trail Pass bog	48	B & G	Gyttja	2-5 cm interval below G	Mehringner et al. (1977a); Foit et al. (1993)
11,320 +/- 90		AMS	TO-7352	Lower Salmon river, SR- 26	12	G?	Charred wood	~30 cm below <i>redeposited</i> tephra	Davis et al. (2002)
11,340 +/- 140				Northeast Oregon		B & G	Bison skull (fraction dated unknown)	In paleosol below G	Palmer et al. (1990)
11,630 +/- 80		AMS	Beta-58201 (CAMS-4623)	Chelan Falls	76	B, M, & G	Charcoal	Immediately below G	Gough (1995)
11,645 +/- 110		BC	WSU-3168	Kearns basin	43	B & G (three beds?)	Bulk sediment?	5-10 cm below G, 3-8 cm below possible third bed	Foit et al. (1993)
11,770 +/- 120		BC	WSU-3867	Williams Lake Fen	121	B & G, MSH J	Bulk sediment	2-7 cm below G and immediately below MSH J	Foit et al. (1993)
11,780 +/- 180		AMS	CAMS-119176	Thunder Lake	115	G?	Sedge fragment	2 cm below tephra	Spooner and Brubaker (2007)
11,820 +/- 50	-27.9	AMS	CIAMS-40062	Marias Pass	49	G, MSH J	twig fragment	~100 cm below G; 0-10 cm below MSH J	This paper
11,905 +/- 50	-26.7	AMS	CIAMS-40063	Marias Pass	49	G, MSH J	twig fragment	~100 cm below G; 0-10 cm below MSH J	This paper
11,922 +/- 83		AMS	AA-32532	Burnt Knob Lake	8	G?	Conifer needles	8 cm below tephra	Brunellea and Whitlock (2003); Brunellea et al. (2005)
12,020 +/- 60		BC	USGS-2780	Dailey Lake bog	82	G, MSH J	320 g of dark brown fibrous peat and gyttja	~5 cm below G, 4 cm interval bracketing MSH Jy	Carrara and Trimble (1992)
12,080 +/- 70		AMS	WW-965	McCall fen	13	B?	Peat	40-50 cm below tephra	Doerner and Carrara (2001)

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12,194 +/- 145		AMS	AA-9530	Marias Pass	49	G, MSH J	Wood	~100 cm below G; 10 cm below MSH J	Carrara (1995)
12,370 +/- 120		BC	WIS- 1843	Lily Lake Fen	131	B or G	Bulk sediment?	60-75 cm below tephra	Whitlock (1993)
12,700 +/- 400		BC	WSU-3150	Wildcat Lake	120	B & G ?	Bulk sediment?	43-53 cm below G	Binman et al. (1979); Foit et al. (1993)
12,780 +/- 190		BC	WSU-389	Williams Lake Fen	121	B & G, MSH J	Bulk sediment?	14-24 cm below G; 12-22 cm below MSH J	Foit et al. (1993)
14,490 +/- 700		BC	PITT-0459	Cygnat Lake Fen	126	B or G	Bulk sediment?	31-51 cm below tephra	Whitlock (1993)
15,640 +/- 160		BC	WIS-1933	Fallback Lake	129	B? (or G?)	Bulk sediment?	16-28 cm below tephra	Whitlock (1993)
Stratigraphic context unclear									
11,320 +/- 60				Marias River valley near Lake Elwell	50	G? or MSH J?	Bone	"near" the tephra; Date reported as 11,260-11,375 14C BP	Hill (2002)
12,750 +/- 350		BC	W-1644	Diversion Lake	26	G	Gastropod shells	Shells from silt associated with thin pods of tephra	Ives et al. (1967), Mudge (1967)

^a BC indicates conventional radiocarbon by beta-counting, AMS indicates accelerator mass spectrometry

^b Laboratory number prefixes refer to AA-, University of Arizona AMS Laboratory; Beta-, Beta Analytic Inc.; CAMS-, Center for Accelerator Mass Spectrometry at Lawrence Livermore National Laboratory; CIAMS-, Keck Carbon Cycle AMS Laboratory at the University of California, Irvine; PITT-, University of Pittsburgh; TO-, IsoTrace Laboratory at University of Toronto; TX-, University of Texas; USGS-, U.S. Geological Survey, Menlo Park; W- U.S. Geological Survey, Reston; WIS-, University of Wisconsin-Madison; WSU-, Washington State University; WW- sample prepared at U.S. Geological Survey, Reston then run at AA or CAMS