

Supplemental Table 4. Raw Pollen data																																																
Sample code	Sample depth from surface (m)	Cyperaceae	Sphagnum	Drosera	Equisetum	Myriophyllum	Nuphar	Sagittaria	Typha	Picea	Abies	Pinus	Betula	Fraxinus	Carpinus/ostrya	Acer	Tilia	Juglandaceae	Tsuga	Fagaceae	Alnus	Salix	Larix	Populus	Poaceae	Asteraceae	Amaranthaceae	Ericaceae	Laminaceae	Lycopodium	Polygonaceae	Ranunculaceae	Selaginella	Cornaceae	Corylus	Cupressaceae	Sarcobatus	Osmunda	Polypodiaceae	Pteridophytina	Unidentified (broken, corroded, obscured on slide)	Percent of herb, arboreal, shrub that are unidentified	Lycopodium markers counted on slide	Lycopodium markers added to 1ml sample	Pollen conc (grains / ml)	Keep pollen count?	Pedicular noted in sample	
115-21-002-PM1	0.8	10	4													1	2					2	2	3	1										2				4		10	24.9902439	717	35140	2009.400279	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).		
115-21-002-PM2	1	26	8									2	5			1	12					11	1	3						2						7				3	10	11	10.78431373	2069	35140	1732.373127	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).	
115-21-002-PM3	1.2	21	12							3		3				1	5		1			3	1	1	6	1									3	4		1	6	12	13.63636364	1565	35140	1975.923323	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).			
115-21-002-PM4	1.3	10	1														3				1	2	1		1										1	1		1	3	6	14.63414634	1656	35140	870.0120773	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).			
115-21-002-PM5	1.4	4								2		1			1										1	1													1	1	1	2	10.52631579	1256	35140	531.5764331	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).	
115-21-002-PM6	1.5	9	1							1							1					3		1	4											1			6	5	15.15151515	625	35140	1855.392	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).			
115-21-002-PM7	1.6	5								1												2																2		4	22.22222222	1383	35140	457.3535792	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).			
115-21-002-PM8	1.9	6	1										2									1			1														4	2	11.11111111	1188	35140	532.4242424	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).			
115-21-002-PM9	6.1	1	2							1							1				1				1	2											1		11	50	900	35140	858.9777778	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).	Yes			
115-21-002-PM10	6.3	20	8							2		2	1				2				1			1			1											2	9	18.36734694	1843	35140	934.2702116	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).	Yes			
115-21-002-PM11	6.5	7	6							5		3				1					1																	2	6	19.35483871	862	35140	1263.735499	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).	Yes			
115-21-002-PM12	6.7	2	3							3	1													1															1	9.090909091	488	35140	792.0901639	No. Low pollen concentration (<5000 grains/ml).	Yes			
115-21-002-PM13	6.9	7	3																																				7	41.17647059	372	35140	1605.860215	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).				
115-21-002-PM14	7.1	8	11							10	1	3										1																1	1	1	21	36.20689655	1169	35140	1743.473054	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).		
115-21-002-PM15	7.3	1	4							10	1	1	1									1																	1	6	23.07692308	405	35140	2255.901235	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).	Yes		
Rosseau PM 22 - 1	9.25	236	103		2					27	1	8	41			1	17				1	25	1	4	3									1	1	1	1	18	2	108	2.903225806	170	35100	128011.7647	Yes.			
Rosseau PM 22 - 2	9.65	1	1																			1																1	1	20	135	35100	1300	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).				
Rosseau PM 22 - 3	9.9	1	2							1					1																								1	2	22.22222222	202	35100	1563.861386	No. Greater than 10% unidentified grains and low pollen concentration (<5000 grains/ml).	Yes		
Rosseau PM 22 - 4	10	2																							2	1														1	16.66666667	27	35100	7800	No. Greater than 10% unidentified grains.	Yes		
Rosseau PM 22 - 5	10.1	3	6							1		3													2	1	1												1	4	15.38461538	150	35100	6084	No. Greater than 10% unidentified grains.	Yes		
Rosseau PM 22 - 6	10.2	58	28		1			1	1	27		10	13			1	2				5	24	1	5	42	8	7								2	1	2	1	9	18	6.741573034	575	35100	16298.6087	Yes.	Yes		
Rosseau PM 22 - 7	10.3	33	19	1	1	1				26	1	10	13				1	1			6	19	1	1	42	10	7			5	1	1					2	8	2	18	7.75862069	2016	35100	4039.285714	Yes. Concentration is less than the recommended 5000 grains/ml, but this sample is retained to compare with the adjacent sample.	Yes		
Rosseau PM 22 - 8	10.4		2							3			1											2																3	27.27272727	35	35100	11031.42857	No. Greater than 10% unidentified grains.	Yes		
Rosseau PM 22 - 9	10.5	5	1							5		1				1						1			4	1	2											1	7	24.13793103	28	35100	36353.57143	No. Greater than 10% unidentified grains.	Yes			
Rosseau PM 22 - 10	10.6	3	2							3	1	2											1	3		1												2	6	23.07692308	179	35100	5098.324022	No. Greater than 10% unidentified grains.	Yes			