

Appendix 5. Percentages of Major Pollen Types in Core LSL-B.

Pollen type	Percentages at the given sample depth (cmbf) and age (cal.yr BP)																
	100	150	208	250	308	350	396	450	502	552	602	649	710	750	810	830	850
	1289	1933	2680	3222	3969	4510	5103	5956	6764	7540	8317	9047	9995	10616	11548	11858	12169
<i>Abies</i>	0	0.8	0.6	0	0	0.2	0	0.3	0	0.4	0	0	0	0.6	0.6	0	0
<i>Acer</i>	0.3	0.3	0	0.3	0.2	0.2	0	0	0.2	0.2	0.8	0.2	0.7	0.2	0	0	0
<i>Betula</i>	7.1	9	6.9	6.7	8.4	15.9	14.1	9.4	3.4	4.7	1.2	2.3	16.8	6.1	1.2	2.8	2.4
<i>Carya</i>	0	0	0	0	0	0	0	0.1	0	0	0	0	0.3	0	0	0	0.6
<i>Celtis</i>	0	0	0	0	0	0	0	0.1	0	0.2	0	0	0	0.4	0	0	0
Cupressaceae	3.8	5.7	3.6	1.6	2.5	4.5	9.4	4.2	8.9	3.7	4.8	5.4	5.2	13.8	29.1	6	13.1
<i>Fraxinus nigra</i>	0.3	0.5	0.9	0.3	0.7	3.1	0.9	1.3	0.5	1.7	1.4	0.8	0.9	2.2	0	0.4	0.6
<i>Fraxinus pennsylvanica</i>	0.3	0	0.9	0.3	0.6	0	0.5	0	0.5	1.9	0.3	0.2	0.3	0	0.5	0	0
<i>Juglans</i>	0	0	0	0	0	0	0.2	0.4	0	0	0.3	0	0.3	0	0.2	0	0
<i>Larix</i>	1.5	0.5	1.4	1.9	1	1.1	0.2	0	0.2	0.2	0.3	0.8	1.5	4.6	1.4	0	0.6
<i>Ostrya</i>	0.3	2.1	1.9	1.9	1.3	4	1.6	1.1	0.9	2.7	1.4	0.8	0.8	0.9	0	0	0
<i>Picea</i>	2.1	0.8	1.4	0.8	0.7	0.2	0	0.5	0	0.8	0.3	0.4	3.8	28	12	24	26.4
<i>Pinus resinosa</i>	3.6	7.7	3.1	4	3.9	0.7	1.8	3.6	3.5	2.2	2.9	6.4	17.4	1.5	0.2	0.4	0.6
<i>Pinus strobus</i>	6.8	7.2	4.1	13.4	17.9	5.4	2.5	3.5	1.2	1	2	2.1	0.3	0	0	0	0
<i>Pinus undifferentiated</i>	17.8	21.6	24.2	19.6	27.9	13.9	10.4	7.2	8.7	5.7	8.8	11.1	12.5	3.4	10.1	6.8	7
<i>Platanus</i>	0	0	0	0	0	0	0	0	0.2	0.3	0	0	0	0	0	0	0
<i>Populus balsamea</i>	0	0.8	0.9	1.6	0.5	3.4	3.7	0.3	0.4	0.3	0.5	0.6	3	3.9	0.9	0.4	1.2
<i>Populus tremuloides</i>	0.9	0.3	0.2	0.3	0.2	0	0.5	0.1	0.2	0.3	0.6	0	0.3	0.6	0.5	0.8	0.6
<i>Quercus</i>	1.5	2.3	3.5	4	3.1	11	9.7	19.5	5.3	14.7	10.7	2.1	0.9	0.2	0.2	0	0.3
<i>Tilia</i>	0	0	0	1.1	0.9	0.2	0.7	0	0.2	0.2	0.2	0	0	0	0.2	0	0
<i>Tsuga</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	0	0
<i>Ulmus</i>	0	1.8	1	1.1	0.9	3.1	1.6	1.3	0.9	1	3	2.1	5.5	3.1	0.2	0.8	0.3
<i>Alnus</i>	4.1	7.2	4	4.8	4.4	2.9	6.9	8.5	5.3	2.9	2	2.1	0.5	0.9	0.5	0	0.9
<i>Corylus</i>	0.3	0.5	0.3	1.1	0.2	1.1	2.1	0.9	0.4	2.9	1.5	0.8	1.2	1.1	0	0.8	0.3
<i>Dryas</i>	0	0	0	0	0	0	0	0	1.1	0.3	0.2	0	0.5	0	0	0	0
Ericaceae	0	0	0.2	0	0.5	0.2	0	0	0.5	0.2	0.2	0	0	0	0	0	0.9
<i>Iva</i>	0	0.3	0.3	0.8	0.7	0.4	0.7	1.7	1.4	1.2	0.2	0	0	0	0	0	0
<i>Myrica</i>	0.6	0	0	0.3	0	0	0.5	0.1	0.4	0.2	0.2	0.4	0.1	0.4	0	0	0
Rosaceae	0.9	0.3	0.2	0.5	0.8	0.4	1.8	0.8	1.4	2.4	2.3	0.2	0.3	0.4	0.7	2	1.8
<i>Rubus</i>	0	0	0	0.5	0.2	0	0	0	0	0.2	0	0	0	0	0	0	0
<i>Salix</i>	0.9	1	0.5	0.3	0.7	0	0.5	1.5	1.2	0.3	2.4	1	0.4	1.7	0.2	2	1.8
<i>Sambucus</i>	0	0	0	0	0.1	0.2	0	0.4	0	0	0	0	0	0	0.5	0	0.3
<i>Taxus</i>	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	1.2	0	0
<i>Ambrosia</i>	0	0.8	0.2	0.3	1.1	1.1	0.5	0.5	0.5	5.9	3.8	10.5	1.3	1.1	0.2	0	0.3
<i>Amorpha</i>	0	0	0	0	0	0	0	0.5	0.5	0	0	0	0	0	0	0	0
<i>Artemisia</i>	2.1	1.5	1	2.4	2.6	2.5	3	4.9	10.8	12.3	13.1	15.1	3	4.4	5.6	6	3
Asteraceae	0.3	0	0.2	0	0.3	0.7	0.7	0.7	2.3	1.2	1.8	0.8	0.1	0	0.2	0	0
Caryophyllaceae	0	0	0.2	0	0	0.2	0	0	0.5	0	0.3	0.2	0	0	0	0	0
Chenopodiaceae	0	0.5	0.2	0.3	0.8	1.3	0.5	1.6	1.2	2.2	3.6	3.7	1.2	0.2	0.5	1.2	0
Cyperaceae	16	8.2	9	5.4	4.6	6.5	6	8.1	10.6	6.9	9.4	9.7	15.6	13.6	16.4	24.8	17.9
<i>Humulus</i>	0	0	0.3	0	0.3	0.9	0.5	0.4	0	0	0	0	0	0.6	0	0	0
<i>Hypericum</i>	0	0	0	0	0	0	0.5	0.4	0	0	0	0	0	0.2	0	0	0
<i>Impatiens</i>	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poaceae	14.5	10.3	20.4	18.2	7	8.3	6.9	7.8	15.2	9.8	12.2	15.5	2.6	2.4	4.9	1.6	1.8
Ranunculaceae	0	0.5	1.9	0.8	0.1	0	0.5	0.9	0.5	0.8	2.1	0.2	0.4	1.3	0	1.2	2.4
<i>Rumex</i>	0	0.5	0	0	0.1	0.4	0	0	0	0.2	0	0	0.4	0	0.5	0.4	0
Saxifragaceae	0.3	0	0.3	0	0.1	0	0.5	0	0	1.7	0.8	0	0	0	0	0.4	0.3
<i>Thalictrum</i>	0	0	0	0	0.2	0	0.2	0.4	1.6	0.8	0.2	0	0.3	0.2	0	0.4	0.3
Tubuliflorae	0.9	0	0.3	0	0.2	0.2	0	0.5	0.7	0	0.5	0.4	0	0.2	0.2	0.4	0.3
<i>Urtica</i>	0	0	0	0	0	0.2	0.2	0	0	0	0.5	0.2	0	0	0.2	0	0.3
<i>Xanthium</i>	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0
<i>Cryptopteris</i>	0	0	0	0.3	0	0.2	0	0	0.2	0	0.2	0	0	0.2	0	1.2	0.3
<i>Dennstaedtia</i>	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	1.2
<i>Dryopteris</i>	1.2	2.3	0.7	1.1	0.6	0.2	1.2	0	0.5	0	0.3	0.8	0.3	0.2	1.4	0	0.6
Equisetum-type	0.3	0.5	0	0	0	0	0.2	0.3	0.4	0.7	0.2	0.2	0.1	1.8	0.9	0	0
<i>Lycopodium complanatum</i>	0	0	0	0	0	0.4	0	0	0.2	0.3	0.2	0.2	0.3	0.2	0.9	0.4	1.2
<i>Pteridium aquilinum</i>	0	0	0	1.1	0.2	0.2	0.5	0.1	0.2	1	1.1	1.2	0	0	0.5	0	2.4
<i>Selaginella rupestris</i>	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0.4	0.7	0	0
<i>Selaginella selaginoides</i>	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0.5	0	1.2
<i>Sphagnum</i>	0.3	0.3	0.7	0.5	0.6	0	0.5	0	0.2	0.5	0.5	0	0.1	0.4	0.2	0.8	0.9
<i>Botryococcus</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	0	0
<i>Brasenia</i>	0	0.5	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0.3
<i>Myriophyllum alterniflorum</i>	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0.4	0	0.8	0.6
<i>Nuphar</i>	0	0	0	0	0.1	0.2	0.2	0	0.2	0	0	0	0	0.4	1.4	1.2	0
<i>Pediastrum</i>	0.9	0.5	0.3	0.3	1.6	0.9	6	1.1	1.8	0.8	0.3	0.8	0.8	2	24.4	4.8	7.9
<i>Potamogeton natans</i>	0	0.5	0	0.5	0.1	0.2	0.7	0.3	0	0.5	0	0.2	0.3	2.2	0	2	3.3
Sparganiaceae	0.6	0	0.2	0.3	0.1	0	0	0.1	0	0.2	0	0.2	0.3	0.2	0	0.4	0.3
<i>Typha latifolia</i>	0	0.3	0.9	1.3	0.3	0.4	0.5	0.8	0.2	0.8	0.3	0.6	0.5	1.3	0.2	0.4	0.3
Sum Herbaceous Types	34.9	23.2	34.7	28.2	17.9	24	20.5	28.3	47.2	44.1	50	57.9	26	24.7	29.8	37.6	28.3
Sum Shrub Types	7.1	9.3	5.5	8.6	7.9	5.6	12.7	14.5	12.2	11	8.9	4.7	3.1	4.8	3	4.8	6.4
Sum Tree Types	46.2	61.3	54.5	58.7	70.7	67	57.8	53	35.3	42.4	39.3	35.3	70.5	69.3	58	42.4	53.8
Sum Aquatic Types	1.5	2.3	2.2	2.7	2.9	1.8	7.8	2.3	2.3	2.5	0.8	2.1	2.1	6.8	28.4	9.6	12.8
Sum Spore Types	2.7	3.9	1.6	3.8	2.2	2.7	2.8	0.4	2.1	2.7	2.4	2.5	0.8	3.3	5.4	3.2	9.1
Sum Indeterminate Types	11.8	6.2	5.2	4.6	3.5	3.4	9	4.2	5.3	2.5	1.8	2.1	0.4	1.3	9.1	15.2	11.6
pre-Quaternary Types	3	2.6	1.5	1	3.5	3.5	4.2	2.2	3.8	3	2.7	2.1	2.2	3.9	15.4	24.8	13.3
Pollen Percentage (Major Type)	93.1	91.7	94.9	93	91.9	92.3	86.6	95.3	92.2	92.2	94.3	93.6	95	87.3	63.2	66.7	71.1
Total Pollen Grains Counted	363	423	609.5	401	954	483	501	790	612	642.5	702	518	784	622.5	674.5	375	462.5

cmbf = centimeters below lake floor

cal yr BP = Calendar years before present