

Supplemental Data

Table S1: Zonal and full-core (GB-SL-09) descriptive statistics for Stella Lake sediment geochemical measures %C, %N, C/N, $\delta^{15}\text{N}$, $\delta^{13}\text{C}$.

% C	Zone 1	Zone 2	Zone 3	Zone 4	GBSL09
max	14.00	13.97	11.76	19.02	19.02
min	8.26	8.53	2.81	8.25	2.81
μ	10.79	10.69	7.53	14.00	11.46
σ	1.69	1.52	3.20	3.00	3.39
CV	0.16	0.14	0.42	0.21	0.30

% N	Zone 1	Zone 2	Zone 3	Zone 4	GBSL09
max	1.24	1.25	0.96	2.81	2.81
min	0.80	0.79	0.17	0.71	0.17
μ	0.96	0.96	0.55	1.42	1.07
σ	0.16	0.15	0.29	0.65	0.53
CV	0.16	0.16	0.53	0.46	0.50

C:N	Zone 1	Zone 2	Zone 3	Zone 4	GBSL09
max	12.58	12.24	22.53	14.43	22.53
min	10.18	10.21	11.47	6.60	6.60
μ	11.25	11.22	14.95	10.83	11.70
σ	0.70	0.58	3.35	2.25	2.46
CV	0.06	0.05	0.22	0.21	0.21

$\delta^{15}\text{N}$	Zone 1	Zone 2	Zone 3	Zone 4	GBSL09
max	0.94	2.14	3.94	3.03	3.94
min	0.42	0.55	1.89	1.12	0.42
μ	0.67	1.42	2.72	1.90	1.73
σ	0.14	0.60	0.46	0.42	0.78
CV	0.20	0.42	0.17	0.22	0.45

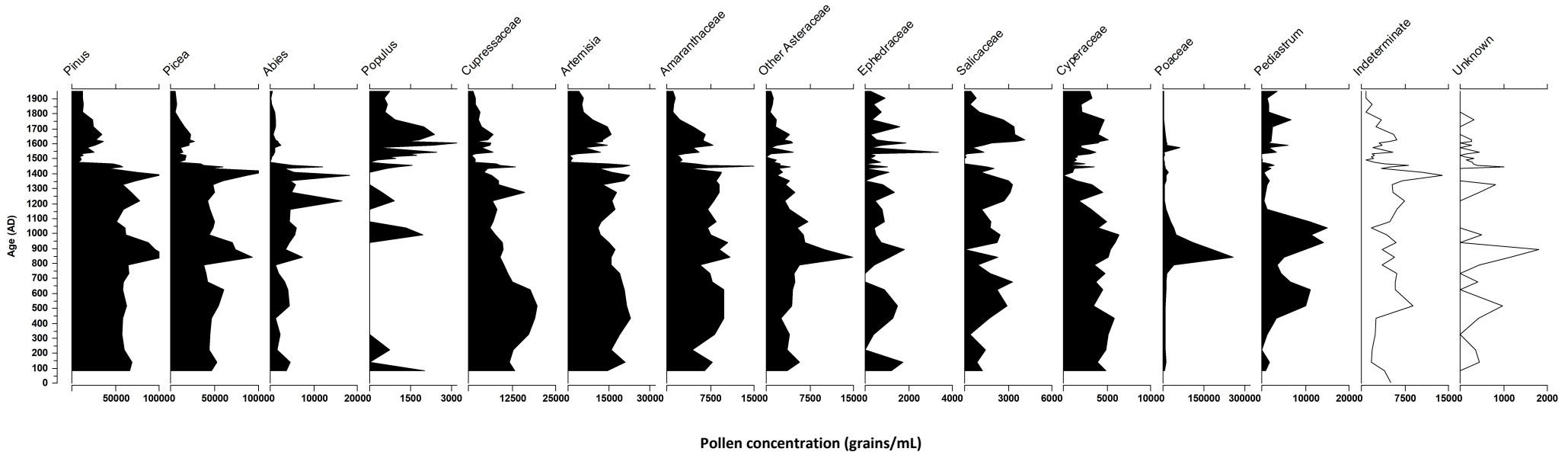
$\delta^{13}\text{C}$	Zone 1	Zone 2	Zone 3	Zone 4	GBSL09
max	-18.74	-17.03	-16.93	-15.98	-15.98
min	-19.86	-18.68	-23.60	-19.08	-23.60
μ	-19.15	-17.90	-19.99	-17.21	-18.28
σ	0.30	0.58	2.62	0.86	1.62
CV	-0.02	-0.03	-0.13	-0.05	-0.09

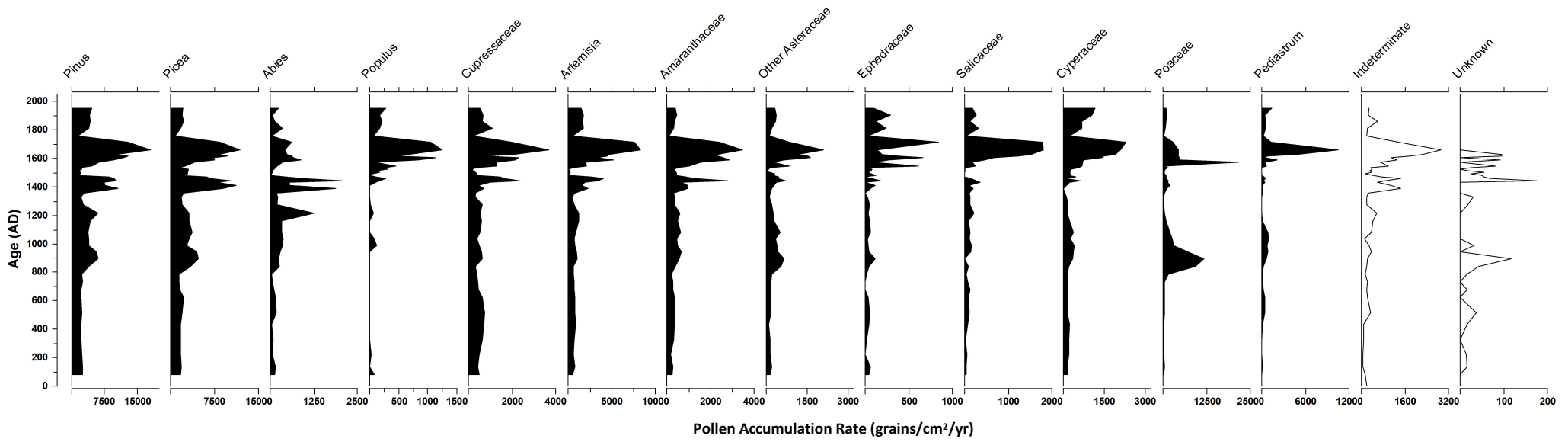
Supplemental Figure Captions

Figure S1: Diagram of pollen concentrations (grains/mL) observed in the Stella Lake core. Concentrations were calculated using the method of Stockmarr (1971).

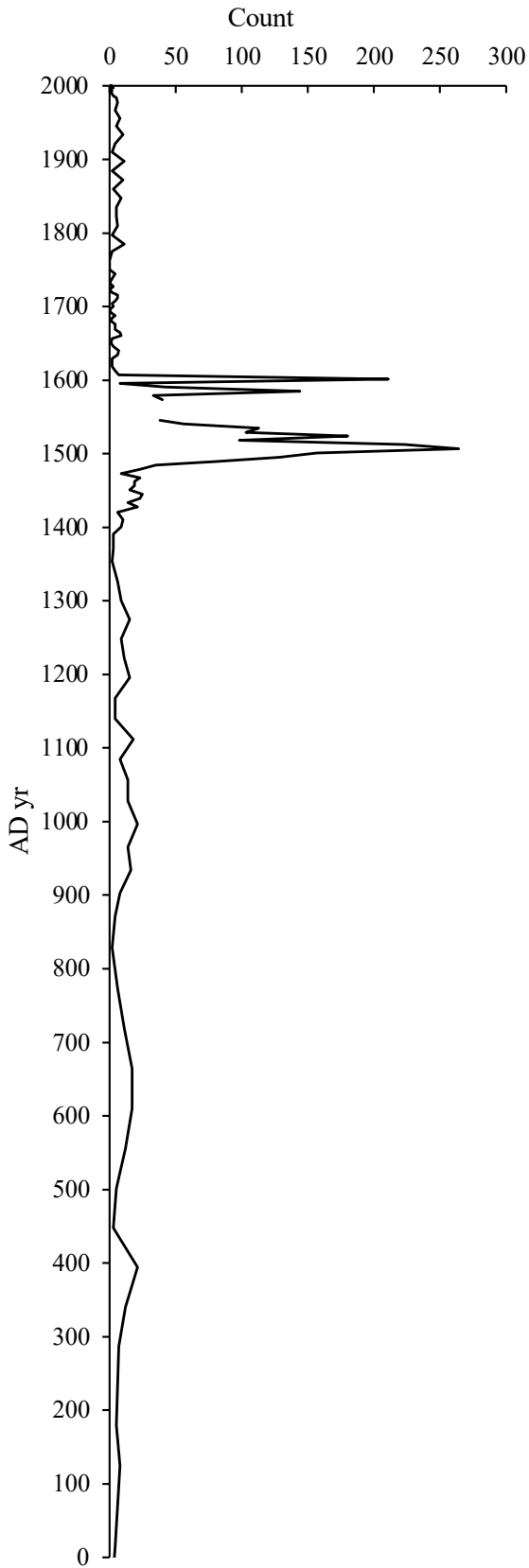
Figure S2: Diagram of pollen accumulation rates (grains/cm²/year) observed in the Stella Lake core.

Figure S3: Graph describing the amount of woody and non-woody (lattice and grass) charcoal pieces (counts) found throughout the Stella Lake 2009 core. Age was determined by converting midpoint cal yr BP ages (calibrated using IntCal13) to AD yr.





Woody Charcoal



Non-woody Charcoal

