

Anderson et al. Supplementary Data

Carbon, nitrogen and biogenic silica content (BSi), C/N ratio and isotopic composition from the five-study lake sediment cores. BSi is only available for lakes Perfect and Efficient.

Perfect (core 2)							
Depth (cm)	Date (mid)	d15N (‰)	d13C (‰)	%N	%C	C/N	Bsi (mg/g)
0.5	1999	4.14	-30.35	1.48	12.56	9.92	26.48
1.0	1995	4.01	-29.75	1.55	13.49	10.13	23.68
1.5	1991	3.95	-29.71	1.28	11.74	10.67	22.60
2.0	1986	4.06	-29.64	1.24	12.05	11.33	20.69
2.5	1981	4.14	-29.43	1.26	12.55	11.64	18.69
3.0	1975	4.11	-29.48	1.15	11.98	12.16	15.85
3.5	1968	3.87	-29.32	1.08	11.57	12.49	14.66
4.0	1961	3.93	-29.20	1.03	11.38	12.86	13.15
4.5	1953	3.76	-29.05	0.99	11.04	13.04	12.35
5.0	1944	3.60	-28.81	0.85	9.76	13.37	11.74
5.5	1935	3.59	-28.45	0.73	8.59	13.80	9.70
6.0	1926	3.57	-28.74	0.92	10.75	13.64	9.54
6.5	1917	3.49	-28.30	0.93	11.07	13.87	8.96
7.0	1908	3.46	-28.09	0.95	11.39	14.02	8.59
7.5	1899	3.40	-27.73	0.75	9.14	14.18	8.67
8.0	1890	3.38	-27.68	0.94	11.51	14.23	8.90
8.5	1878	3.41	-27.53	0.87	10.66	14.23	9.32
9.0	1864	3.41	-27.33	0.80	9.72	14.17	8.32
9.5	1852	3.28	-27.10	0.82	10.12	14.42	8.31
10.0	1840	3.27	-27.04	0.95	11.95	14.63	7.80
11.0	1816	3.24	-26.82	0.77	9.48	14.42	6.97
12.0	1793	3.38	-26.88	0.75	9.09	14.18	7.28
13.0	1769	3.40	-27.11	0.78	9.43	14.09	7.45
14.0	1744	3.36	-27.20	0.78	9.47	14.17	7.06
15.0	1721	3.21	-26.92	0.78	9.63	14.46	6.79
16.0	1697	3.12	-26.54	0.87	10.90	14.65	6.91
17.0	1676	3.44	-26.47	0.99	12.25	14.37	5.80
18.0	1651	3.35	-26.50	0.96	11.56	14.03	5.10
19.0	1628	3.43	-26.39	1.04	12.43	13.99	6.11
20.0	1597	3.06	-26.55	0.61	7.20	13.70	4.93

Supplementary Table 1 (continued).

Efficient (core 3)							
Depth (cm)	Date (mid)	d15N (‰)	d13C (‰)	%N	%C	C/N	Bsi (mg/g)
0.5	1999	1.28	-31.3	2.48	20.65	9.71	85.60
1.0	1995	1.20	-31.1	2.35	19.44	9.63	82.62
1.5	1990	1.15	-31.0	2.18	18.45	9.86	67.94
2.0	1984	1.18	-30.7	2.29	20.09	10.25	57.10
2.5	1978	1.43	-30.8	2.07	19.25	10.86	45.92
3.0	1972	1.50	-30.5	1.92	18.72	11.40	40.23
3.5	1965	1.54	-30.2	1.87	18.83	11.73	39.33
4.0	1959	1.53	-30.1	1.81	18.48	11.93	39.52
4.5	1952	1.60	-29.8	1.76	18.29	12.11	41.67
5.0	1945	1.57	-29.8	1.74	17.96	12.04	42.53
5.5	1937	1.52	-29.7	1.83	18.96	12.07	45.28
6.0	1927	1.62	-29.5	1.67	17.45	12.20	46.08
6.5	1917	1.67	-29.3	1.67	17.74	12.36	42.75
7.0	1907	1.58	-29.1	1.62	17.39	12.50	42.81
7.5	1897	1.58	-29.1	1.58	17.09	12.63	39.40
8.0	1887	1.50	-28.9	1.61	17.55	12.72	35.02
8.5	1877	1.44	-28.7	1.60	17.42	12.74	36.78
9.0	1866	1.39	-28.6	1.70	18.44	12.63	38.88
9.5	1851	1.33	-28.6	1.66	17.77	12.52	39.65
10.0	1829	1.33	-28.6	1.58	16.89	12.46	41.53
11.0	1806	1.32	-28.5	1.51	16.18	12.53	41.09
12.0	1779	1.42	-28.5	1.51	16.54	12.79	45.52
13.0	1749	1.50	-28.5	1.47	15.86	12.62	49.92
14.0	1718	1.54	-28.6	1.42	15.33	12.58	46.16
15.0	1684	1.77	-28.8	1.34	14.42	12.59	41.19
16.0	1649	1.91	-29.1	1.30	14.12	12.65	34.63
17.0	1613	2.00	-29.0	1.32	14.41	12.70	30.59
18.0	1577	2.20	-29.0	1.31	14.16	12.61	27.20
19.0	1541	1.80	-28.9	1.29	14.44	13.02	23.53
20.0	1504	1.80	-28.9	1.36	14.88	12.81	28.46

Supplementary Table 1 (continued).

Relaxing (core 3)						
Depth (cm)	Date (mid)	d15N (‰)	d13C (‰)	%N	%C	C/N
0.5	2000	2.35	-30.0	2.15	23.18	12.58
1.0	1999	2.15	-29.5	2.03	21.77	12.52
2.0	1996	1.48	-28.8	2.29	27.39	13.94
3.0	1993	1.89	-28.7	2.21	27.48	14.54
4.0	1991	1.34	-28.2	2.26	26.83	13.87
4.5	1987	1.80	-28.1	2.24	27.30	14.24
6.0	1980	1.84	-28.6	2.01	23.56	13.69
7.0	1975	2.11	-28.3	1.98	24.12	14.20
8.0	1971	2.02	-28.0	2.07	25.99	14.62
9.0	1959	1.77	-27.7	2.05	25.99	14.80
10.0	1949	1.72	-27.2	2.14	27.05	14.74
11.0	1939	1.97	-27.4	2.07	26.18	14.75
12.0	1927	2.14	-28.2	2.03	25.47	14.60
13.0	1916	2.38	-28.4	2.04	25.28	14.42
14.0	1906	2.63	-28.3	1.85	22.69	14.33
15.0	1893	2.47	-28.1	1.98	24.62	14.52
16.0	1878	2.45	-28.0	1.92	23.82	14.50
17.0	1868	2.41	-27.6	1.89	23.45	14.44
18.0	1861	2.35	-27.7	1.94	23.60	14.17
19.0	1853	2.61	-27.7	1.84	21.96	13.91
20.0	1845	3.00	-27.8	1.81	22.05	14.18
21.0	1837	3.12	-27.8	1.82	22.06	14.14
22.0	1827	2.91	-27.9	1.68	20.24	14.05
23.0	1810	2.81	-27.8	1.80	21.11	13.69
24.0	1798	2.95	-27.8	1.73	20.54	13.82
25.0	1785	2.85	-27.7	1.72	20.12	13.65
27.0	1761	2.82	-27.9	1.70	19.55	13.45
28.0	1747	2.88	-27.7	1.70	19.76	13.58
29.0	1733	2.84	-27.8	1.76	19.99	13.28
30.0	1719	2.47	-27.8	1.76	20.49	13.58
32.0	1693	2.84	-27.9	1.63	18.81	13.43

Supplementary Table 1 (continued).

Forgetful (core 3)						
Depth (cm)	Date (mid)	d15N (‰)	d13C (‰)	%N	%C	C/N
0.5	1998	5.36	-30.4	0.78	9.40	14.00
1.0	1993	5.04	-30.8	0.78	8.85	13.21
1.5	1987	4.87	-30.7	0.79	8.89	13.20
2.0	1979	4.78	-30.5	0.76	8.77	13.48
2.5	1970	4.75	-30.4	0.68	7.87	13.58
3.0	1960	4.86	-30.3	0.65	7.66	13.82
3.5	1945	4.76	-30.3	0.63	7.30	13.59
4.0	1928	4.75	-30.1	0.59	6.79	13.53
4.5	1912	4.55	-30.0	0.57	6.55	13.33
5.0	1897	4.49	-29.7	0.55	6.26	13.34
5.5	1880	4.29	-29.5	0.52	6.12	13.80
6.0	1861	4.29	-29.4	0.54	6.46	14.01
6.5	1843	4.43	-29.5	0.51	6.20	14.13
7.0	1826	4.34	-29.3	0.51	6.19	14.20
7.5	1808	4.10	-29.2	0.52	6.32	14.32
8.0	1793	4.23	-29.1	0.52	6.24	14.03
8.5	1781	4.32	-29.0	0.54	6.65	14.28
9.0	1762	4.19	-28.9	0.54	6.61	14.35
9.5	1748	4.31	-29.0	0.54	6.59	14.36
10.0	1733	4.30	-29.0	0.60	7.29	14.30
11.0	1698	4.42	-29.3	0.55	6.23	13.12
12.0	1657	4.53	-29.3	0.53	5.86	12.83

Supplementary Table 1 (continued).

Surprise (core 1)						
Depth (cm)	Date (mid)	d15N (‰)	d13C (‰)	%N	%C	C/N
2.0	1997	-1.08	-31.2	1.30	13.32	11.99
3.0	1993	-1.19	-31.3	1.25	12.78	11.98
4.0	1989	-0.84	-31.3	1.17	12.29	12.26
5.0	1984	-0.93	-31.0	1.08	11.72	12.68
6.0	1978	-0.83	-30.4	1.13	12.27	12.71
7.0	1971	-0.62	-30.8	0.94	10.79	13.44
8.0	1962	-0.67	-30.9	0.94	10.65	13.27
9.0	1952	-0.47	-30.6	0.88	10.11	13.43
10.0	1942	-0.02	-30.3	0.92	10.63	13.55
11.0	1933	0.02	-30.4	0.95	10.88	13.32
12.0	1921	-0.39	-30.4	0.91	10.60	13.63
13.0	1908	-0.35	-30.2	0.71	7.98	13.16
14.0	1893	-0.11	-30.0	1.05	12.23	13.54
15.0	1878	0.17	-30.2	1.13	12.35	12.81
16.0	1863	0.71	-29.9	1.33	14.38	12.60
17.0	1847	0.66	-30.1	1.11	12.36	12.95
18.0	1827	0.46	-30.0	1.05	12.03	13.34
19.0	1809	0.20	-29.6	0.91	10.71	13.78
20.0	1792	0.05	-29.6	0.97	11.79	14.14
21.0	1771	-0.05	-29.6	0.97	11.66	14.10
22.0	1747	0.02	-29.5	0.92	11.05	14.05
23.0	1728	0.19	-29.7	1.02	12.17	13.91
24.0	1709	0.31	-29.7	1.02	12.02	13.75