

**Table S1.** Information for the combined layers of McDonald Point peat deposition included in the analysis. Based on [8, 46].

Layer Number	Layer, cm	Depth, cm	Age (cal. yrs BP)	$\delta^{15}\text{N}$ , ‰	Degree of Decomposition of Plant Material, %
1	0-3	1.5	16	2.0	NA
2	3-6	4.5	41	0.5	NA
3	65-75	70.0	678	2.7	31.6
4	144-164	154	1993	4.1	19.5
5	235-240	237.5	3876	14.2	59.9
6	240-245	242.5	3999	14.1	51.9
7	265-270	267.5	4756	8.2	10.7
8	285-296	290.5	5928	NA	NA
9	296-300	298.0	6283	4.7	NA
10	300-305	302.5	6544	NA	NA
11	305-310	307.5	6799	NA	4
12	318-320	319.0	7393	0.8	14.6
13	320-340	330.0	7848	0.4	13.6
14	340-345	342.5	8358	0.0	12.5
15	350-360	355.0	8834	-0.5	25.7
16	360-385	372.5	9330	-0.7	16.2

NA – data not available.

**Table S2.** Information for the layers age carried out using Bchron package for R environment [27,44,45].

Depth, cm	2.5%	10%	50%	90%	97.5%
0	-4	-2	-1	0	0.025
1	1	3	7	31.1	126.0
2	3	7	16	62	190.025
3	5.975	11	24	89	218.1
4	8	15	33	110.5	244.125
5	10	19	41	128	254.075
6	12	23	50	145	261.125
7	14	27	58	163	265.15
8	17	31	66	175	270.075
9	19	34.9	75	186	
10	21	39	83	194.2	275.075
11	23	43	91	206.1	287.05
12	25	46.9	99	214.1	294.0
13	28.975	50	108	221.1	305.025
14	32.925	54.9	116	231	309.025
15	34.925	59	124	240.1	314.05
16	37.9	63.9	132	247.1	320.1
17	40.875	67.9	140	252.1	327.075
18	41.925	72	148	258.1	336.05
19	42.95	76	156	266	347.025
20	43.975	80	164.5	273.1	352.025
21	45	84	173	278.1	357.025
22	52.875	89.9	181	286.2	362.0
23	55.85	95	189	293	366.025

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24	57.875	99	197	303.1	373.025
25	59.975	104	206	308	380.025
26	63.925	108	214	314.1	383.025
27	67	112	222	323	391.025
28	69.975	116	230	328	393.1
29	73	121.9	238	335.1	400.025
30	77.95	125.9	246.5	340.1	405.05
31	84	132	254	345	416.025
32	87.975	138	262	353	421.025
33	90.975	145.8	269	358	428.0
34	95	153.9	276	367	430.1
35	101.925	157.8	283.5	375	436.025
36	107	166.9	291	383.1	444.025
37	112	174.9	299	394	452.075
38	114.95	181.9	306	401	462.025
39	117.925	191.9	314	409	470.0
40	124	203	322	419.1	474.025
41	127	210.9	330	429	481.0
42	132.95	224	337.5	437.1	483.05
43	142.9	236	346	446	485.1
44	148	247.9	354	452.1	493.0
45	161.925	257.9	363	461	500.0
46	178.9	269.9	375	471	504.15
47	199.975	282	385	481.1	512.075
48	220.875	296	397	492	521.025
49	253.975	308.9	409	506	532.0
50	273.95	319.9	421	518.2	560.025
51	293.975	334	436	533	597.025
52	309.975	348	453	547	619.125
53	326.95	365	469	561	629.1
54	342	380.9	482	573.1	652.025
55	355	392	494	588	660.025
56	363	408	506	604	669.05
57	374.925	421	519	617	685.0
58	384	433	531	627	696.025
59	397	447	545	637.1	706.05
60	408.925	460	557.5	651	713.025
61	417.95	473	571	662	721.0
62	425	484	582	674	729.05
63	432.975	495	594	685	740.025
64	439.975	506.9	606	698.1	747.125
65	446.975	517.9	620	712	754.05
66	454.975	530.9	632	724	763.075
67	462.975	543.9	643.5	735	776.025
68	470	554	655	746	784.025
69	481	563	666.5	758	794.0
70	494.875	574.9	678	769	801.0
71	498.975	585.9	690	781	807.0
72	507.95	596.9	702	793	817.05

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73	515.95	608.9	715	806	826.025
74	531.95	626	727	819	836.075
75	546.925	643	740	833	850.05
76	556.95	658	754.5	846.1	863.0
77	581.975	674	768	862	875.025
78	598.95	687	781	878	889.0
79	647.875	700	797	895	905.0
80	672.975	715	813	909	927.0
81	696	733	829	924	946.075
82	711	753	845	938	978.1
83	723.975	763	857	955	1028.15
84	737.95	776	871	969	1076.325
85	748	787	882.5	986	1115.025
86	759	798.9	895	1003.1	1132.075
87	767	806.9	906	1019.2	1149.05
88	777.975	819	915	1034	1169.025
89	789	828	925	1053	1181.05
90	798.975	839.9	935	1072	1194.05
91	805.95	848.9	947	1082.4	1205.025
92	813.925	858	957	1099.3	1216.025
93	819.95	866	969	1112	1222.05
94	825.975	874.9	980	1120.1	1231.025
95	830	882	992	1131.1	1240.025
96	832.95	889	1003	1141	1248.025
97	836.95	897.9	1015	1149	1262.075
98	845.95	905	1026	1161.1	1268.0
99	851.925	910	1037	1170	1271.075
100	855.925	916	1048	1180.1	1283.0
101	861.925	923.9	1058.5	1189	1288.075
102	866.875	931	1069	1196	1297.025
103	871.9	941.9	1080	1205.1	1298.15
104	883.825	949.9	1091.5	1216	1303.1
105	889.8	958	1103	1228	1311.025
106	895.95	967	1113	1236.1	1316.05
107	897.975	976	1125	1246.1	1323.025
108	904	986	1136	1259.1	1328.05
109	910.95	992.9	1146	1268.1	1331.15
110	915.875	1000.9	1157	1278.1	1342.125
111	923.95	1011.9	1169	1288.1	1356.025
112	930	1022	1181	1299.1	1363.025
113	940.95	1033.9	1192	1309	1371.025
114	952.975	1046	1202	1318	1380.05
115	962.975	1056	1212.5	1330	1389.025
116	970	1068.6	1223	1342	1402.0
117	983.875	1083	1234	1354.1	1416.0
118	994	1090.9	1244	1368.1	1430.0
119	1012.925	1101.9	1255	1384.1	1444.0
120	1029	1115.9	1266.5	1398.1	1457.0
121	1040.975	1133	1277.5	1413	1469.025

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122	1056	1155	1291	1429	1485.025
123	1076.95	1175	1305	1444	1497.075
124	1098.85	1192	1322.5	1467	1511.0
125	1122.95	1210.9	1346	1500.1	1540.075
126	1160.925	1235	1368.5	1543.4	1637.175
127	1177.975	1260	1395	1599.1	1790.05
128	1205.975	1282	1423.5	1666.5	1927.375
129	1232.925	1306.8	1446	1735.3	2009.9
130	1248.975	1324	1469.5	1802.1	2142.0
131	1266.95	1340	1492.5	1866	2199.2
132	1281.825	1358.9	1519	1920.3	2253.025
133	1296.95	1373.9	1539	1975.1	2276.175
134	1309.85	1387.9	1563.5	2008.1	2334.075
135	1323.85	1402	1587.5	2059.3	2362.375
136	1339.95	1417	1609.5	2092.1	2421.15
137	1351.95	1432	1631	2142.2	2451.175
138	1363.9	1450.8	1651.5	2177.2	2501.15
139	1371.925	1460	1674	2203	2518.05
140	1383.925	1474.9	1693.5	2235	2537.85
141	1391.95	1488.8	1716.5	2266.3	2583.35
142	1400.95	1498	1738.5	2294	2611.85
143	1408.975	1510.8	1758.5	2323.1	2668.025
144	1417.95	1519	1778.5	2346.4	2680.175
145	1426.975	1532	1798.5	2360	2704.75
146	1435	1545	1821.5	2393.3	2752.125
147	1443	1556.9	1845.5	2420.9	2772.1
148	1452.975	1566.7	1868	2442.4	2786.1
149	1462.95	1576.8	1885.5	2455.2	2803.5
150	1471.925	1590.7	1905.5	2472.5	2834.0
151	1477.975	1598.9	1927	2494.1	2845.025
152	1486	1608.9	1949.5	2509.2	2855.025
153	1493.95	1618.9	1971	2534.1	2865.025
154	1498	1635.9	1993	2548.2	2875.025
155	1507.925	1645	2015.5	2562.9	2896.025
156	1517.85	1653.9	2035.5	2589.1	2908.05
157	1523.9	1664.7	2058	2616.1	2920.525
158	1528.975	1675.8	2074.5	2628.9	2944.05
159	1539.925	1689.6	2094.5	2651.1	2950.425
160	1551.875	1703	2115.5	2665.1	2980.0
161	1563.95	1714	2138.5	2689.1	2988.15
162	1570.925	1724.8	2159	2716.1	2997.35
163	1575.875	1734	2178	2736.2	3019.325
164	1578.975	1747.6	2197.5	2756.6	3026.4
165	1587.9	1754.9	2218	2774.5	3033.475
166	1600.875	1774.8	2237.5	2788.2	3045.425
167	1610.925	1787.8	2256.5	2815.2	3073.025
168	1617.925	1793.9	2280	2832	3090.325
169	1628.875	1812.8	2299.5	2846.2	3099.2
170	1634.875	1822.9	2323.5	2862.1	3108.025

171	1640.925	1833	2346.5	2877.2	3117.05
172	1649.925	1850	2368	2889.2	3126.45
173	1656	1864.7	2390.5	2902.1	3134.425
174	1665.925	1879.8	2409.5	2911.1	3158.275
175	1679	1900.4	2431	2930.2	3170.175
176	1695.85	1915.8	2450	2946.5	3183.125
177	1703.85	1932.4	2472.5	2979.1	3189.15
178	1713.975	1946.8	2495	2995.2	3196.1
179	1722	1960.8	2519.5	3008.1	3205.175
180	1733	1976.3	2538.5	3023	3218.0
181	1746.975	1985.5	2560	3031.1	3224.175
182	1758.925	2010.5	2584	3041.3	3230.225
183	1765.975	2029.3	2604.5	3053.2	3236.225
184	1773.9	2047.9	2627.5	3066.1	3244.175
185	1781.975	2065.4	2649	3079.1	3254.075
186	1789	2076	2670	3091	3263.025
187	1796.95	2088.9	2691.5	3103	3269.05
188	1807.925	2106.4	2713.5	3116.1	3276.025
189	1828.7	2121.7	2734.5	3133.5	3285.05
190	1847.725	2137	2756.5	3147.1	3295.225
191	1854.725	2150.6	2776.5	3156	3304.25
192	1882.5	2179.9	2801	3171.2	3320.125
193	1890.5	2192	2823	3184	3323.275
194	1910.9	2200	2845	3205.1	3332.2
195	1933.95	2219.3	2864.5	3216	3345.0
196	1942.875	2233.9	2886	3231	3357.15
197	1950.825	2250.9	2907	3246.2	3367.05
198	1960.9	2269	2927	3263.1	3376.025
199	1987.95	2290.6	2948.5	3281	3383.1
200	2005.75	2318.3	2970.5	3292	3394.025
201	2019.9	2338.8	2990	3303.1	3406.125
202	2053.925	2367.9	3015	3313.3	3417.1
203	2094.225	2396	3034.5	3323	3428.05
204	2105.9	2423.8	3055.5	3330.3	3439.025
205	2136.6	2449.8	3077	3343.1	3451.1
206	2163.55	2468.6	3097.5	3353.5	3462.075
207	2184.7	2491	3118	3367.1	3474.0
208	2224.275	2520.6	3139	3384.1	3484.025
209	2248.85	2540.9	3158	3397.2	3496.0
210	2266.95	2594.8	3179.5	3411	3503.025
211	2298.975	2619.8	3198.5	3422	3510.0
212	2323.825	2652.3	3223	3433.2	3516.125
213	2350.65	2681.9	3242	3449.1	3529.025
214	2387.775	2719.6	3263.5	3461	3544.025
215	2427.925	2770.8	3283	3478	3557.1
216	2515.575	2833.5	3304	3494	3572.025
217	2558	2885.9	3326	3506.2	3590.025
218	2589.625	2941.7	3347	3527.2	3604.0
219	2610.825	3006.4	3369	3544.3	3616.025

220	2643.85	3064.6	3390	3565	3627.025
221	2719.725	3136.6	3414	3582	3644.025
222	2797.525	3197.7	3440	3606	3668.0
223	2942.525	3257.6	3466	3628	3681.1
224	3086.975	3331	3498	3657	3710.0
225	3169.95	3373	3528	3689	3753.125
226	3287	3408.9	3558	3733.1	3831.3
227	3372.925	3449	3591.5	3770.1	3917.25
228	3403.975	3476.9	3621.5	3815	4030.075
229	3440.9	3503	3648	3859.1	4068.1
230	3464.875	3530.9	3674	3897	4114.05
231	3476.95	3557	3699	3917.4	4167.2
232	3487.95	3578	3722	3965.4	4226.1
233	3503.975	3603.9	3748.5	3996	4243.15
234	3528.925	3625.9	3775	4025	4260.05
235	3548.875	3647	3801	4070	4277.075
236	3563.95	3669	3826	4092.4	4295.125
237	3583.85	3685.9	3850	4121.2	4310.05
238	3601.825	3706	3876	4146.2	4324.025
239	3614	3725.9	3902	4169.1	4346.25
240	3630.925	3744.9	3929	4194.5	4381.025
241	3645	3761.9	3952	4216.1	4392.075
242	3657.975	3777	3975	4234	4412.1
243	3670.925	3801	3999	4259.3	4427.0
244	3682.9	3820.9	4023.5	4287.1	4436.175
245	3695.95	3850.9	4051	4307.2	4453.075
246	3709.9	3866.9	4077.5	4327.1	4466.2
247	3717.975	3884	4104.5	4340	4486.1
248	3731.925	3900.7	4128.5	4357.1	4500.125
249	3739.925	3920.7	4154	4375.3	4515.05
250	3751.9	3931.8	4180	4397	4531.0
251	3766.925	3961	4205	4416.1	4544.05
252	3782.8	3991.8	4233	4432.1	4557.025
253	3802.8	4014.8	4258.5	4450.3	4566.075
254	3831.55	4033.7	4284	4471	4583.025
255	3842.85	4049	4308.5	4493.1	4601.0
256	3894.725	4076.3	4332.5	4518.1	4614.0
257	3925.8	4105.4	4357	4543.1	4628.05
258	3948.975	4139	4381	4573.1	4645.025
259	3972.9	4184.7	4408	4599.1	4663.0
260	4018.95	4228	4434	4625.1	4683.025
261	4055.65	4270	4462	4650	4701.125
262	4086	4304	4487	4678.1	4723.0
263	4110.85	4348.9	4521	4709.1	4745.025
264	4215.825	4382.9	4558	4757	4777.075
265	4315.975	4426	4597.5	4815.1	4841.075
266	4381.95	4464	4647.5	4907	5027.275
267	4438	4501	4702	4993.1	5285.375
268	4476.975	4554	4756	5113.2	5561.5

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269	4515.95	4595	4806.5	5207.5	5737.325
270	4536.95	4640.9	4856	5343.7	5848.125
271	4563	4681	4905	5453.3	5945.975
272	4590	4723.9	4959	5535.5	6013.05
273	4610.95	4763.9	5009	5631.5	6108.0
274	4632.925	4795.9	5056.5	5678.5	6154.5
275	4652	4825.9	5106	5770.7	6244.025
276	4670.925	4852	5155.5	5824.7	6284.025
277	4691.95	4877.9	5206	5879.2	6334.05
278	4714	4909.8	5259	5943.8	6387.275
279	4737.9	4934.6	5310	6024.3	6461.6
280	4757.875	4964.8	5361.5	6090.1	6482.55
281	4779.725	4988	5415.5	6135.2	6546.025
282	4800.725	5013.8	5465.5	6181.3	6570.025
283	4811.975	5042.7	5517.5	6231.1	6601.15
284	4831.975	5066	5571.5	6294.2	6622.925
285	4849.85	5091	5622.5	6332.2	6683.05
286	4865.85	5118.8	5673.5	6371	6709.075
287	4895.8	5151.3	5725	6402.2	6732.075
288	4916.875	5179.9	5776.5	6440.1	6757.325
289	4937.675	5210.9	5825.5	6479.2	6792.075
290	4964.85	5240.9	5875.5	6508.2	6811.075
291	4980	5279	5928	6543.1	6837.5
292	4997.925	5315.8	5980	6574.4	6872.225
293	5013.9	5349.6	6032	6616.2	6890.2
294	5030.85	5378.8	6084	6649.1	6916.25
295	5072.775	5409	6133	6681.3	6943.35
296	5087.95	5455.5	6186.5	6709	6969.3
297	5142.3	5487.1	6234	6737.2	6995.225
298	5179.75	5527.9	6283	6767.1	7018.1
299	5200.85	5567	6335.5	6804.3	7031.1
300	5231.75	5623.9	6388	6830.4	7053.55
301	5259.4	5682.3	6437.5	6863.1	7084.025
302	5281.5	5739.4	6492	6892	7099.05
303	5302.95	5810.7	6544	6923.1	7110.1
304	5323.775	5856.9	6595.5	6953.2	7127.225
305	5337.8	5924.6	6648	6985.3	7148.425
306	5361.7	5993.7	6696.5	7023.3	7169.325
307	5392.875	6025	6748	7049.1	7190.175
308	5458.95	6097	6799	7089.1	7212.175
309	5516.65	6152.5	6849	7128.3	7232.075
310	5562.7	6207.8	6898.5	7161.2	7253.0
311	5631	6313.4	6947.5	7198	7279.1
312	5665.85	6393	6995.5	7235.1	7315.025
313	5724.775	6531.9	7045	7276.2	7347.025
314	5878.725	6630.6	7096	7314.5	7386.025
315	5993.65	6733.4	7148.5	7359	7418.1
316	6215.575	6844.6	7202	7406.2	7465.0
317	6435.375	6968.7	7263	7463.1	7517.025

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318	6832.9	7060	7333	7533	7567.05
319	7009.975	7165.4	7393	7604	7646.0
320	7053.9	7204	7442	7691	7813.2
321	7085.8	7248.8	7488	7752.4	8032.05
322	7101.95	7286	7532	7835.1	8208.125
323	7139.925	7310	7576	7913	8315.275
324	7157.875	7337.9	7616.5	7988.3	8405.575
325	7188.7	7364.9	7661	8070.3	8502.475
326	7207.8	7393.9	7698	8126.5	8557.2
327	7234.875	7427.6	7734	8184.1	8629.575
328	7251.95	7447	7772	8245.2	8691.175
329	7273.85	7473.9	7812.5	8323.1	8779.125
330	7302.95	7495.9	7848	8369.4	8830.2
331	7327.975	7521	7889.5	8410.1	8855.6
332	7342.95	7545.8	7930.5	8456.5	8928.1
333	7358.875	7572.9	7967	8515.4	8973.2
334	7368.95	7600	8008	8579.1	9018.375
335	7386.825	7625.5	8046	8634.4	9086.4
336	7397.975	7644.4	8084.5	8693.5	9140.075
337	7407	7669.4	8121	8753.3	9188.6
338	7432.7	7690.7	8158.5	8816.1	9267.8
339	7443.775	7719.6	8201	8867.3	9347.175
340	7461.675	7745	8237.5	8912.1	9399.15
341	7477.725	7769.3	8276	8967.5	9445.275
342	7484.975	7793	8318	9033.1	9492.275
343	7503.875	7813.7	8357.5	9077.4	9553.05
344	7538.575	7835.9	8398	9119.2	9601.225
345	7552.675	7863.6	8437	9174.2	9632.45
346	7559.95	7885.9	8479.5	9227.4	9697.325
347	7576.975	7909.8	8516	9275.1	9737.275
348	7585.975	7933.4	8554.5	9335.5	9809.125
349	7609.85	7963.9	8598.5	9395.6	9884.075
350	7623.975	7993.9	8635.5	9457.2	9966.025
351	7654.675	8027.9	8673.5	9520.5	10035.225
352	7669.775	8061.9	8712	9577.8	10099.575
353	7684.875	8101.9	8753	9657.7	10174.225
354	7698.925	8138.7	8792	9759.3	10243.5
355	7734.6	8179.9	8833.5	9839.6	10309.1
356	7747.75	8209.8	8876	9902.6	10393.85
357	7758.95	8239	8920.5	9967.1	10454.3
358	7775.825	8284.8	8970.5	10035.1	10527.275
359	7815.075	8327.6	9021	10157.6	10622.15
360	7918.45	8388.5	9084	10342.8	10719.3
361	7973.875	8459.6	9164.5	10591.5	10879.15
362	8059.875	8519.7	9240	10745.3	11024.65
363	8142.2	8595.8	9330	10836.1	11174.025
					11324.1

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**Table S3.** Species found with their ecological preferences. Based on [51,52,54].

Taxa	General Environment	Habitat	Trophic state	pH	Nitrogen Uptake Metabolism	Oxygen Requirements	Saprobity	Moisture
<i>Amphora</i> sp.	nd	B	nd	nd	nd	nd	nd	nd
<i>Aulacoseira canadensis</i>	F	P	nd	nd	nd	nd	nd	nd
<i>Aulacoseira crassipunctata</i>	F	P	nd	nd	nd	nd	nd	nd
<i>Aulacoseira italica</i>	F/B	P-B	ME	C	2	2	βM	3
<i>Caloneis</i> sp.	nd	B	nd	nd	nd	nd	nd	nd
<i>Caloneis</i> sp. 4	nd	B	nd	nd	nd	nd	nd	nd
<i>Cavinula cocconeiformis</i>	F/T	P-B	OM	C	1	1	O	3
<i>Cavinula cocconeiformis</i> f. <i>elliptica</i>	F/T	nd	nd	nd	nd	nd	nd	nd
<i>Cavinula davisiae</i>	F/T	B	O	C	nd	nd	nd	nd
<i>Cavinula pseudoscutiformis</i>	F/T	B	ME	Alph	1	2	βM	3
<i>Chamaepinnularia krookii</i>	F/T	nd	nd	C	nd	nd	O	3
<i>Chamaepinnularia krookii</i> formis	U	nd	nd	C	nd	nd	O	3
<i>Cocconeis</i> cf. <i>californica</i>	M/F	B	nd	nd	nd	nd	nd	nd
<i>Cocconeis</i> cf. <i>islandica</i>	M	B	nd	nd	nd	nd	nd	nd
<i>Cocconeis</i> cf. <i>scutellum</i>	M/B	B	nd	nd	nd	nd	nd	nd
<i>Cocconeis costata</i>	M	B	nd	nd	nd	nd	nd	nd
<i>Cocconeis placentula</i> s.l.	F/B	B	H	Alph	2	3	βM	2
<i>Coscinodiscus</i> sp.	nd	nd	nd	nd	nd	nd	nd	nd
<i>Cymbella mexicana</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Cymbopleura</i> sp.	nd	B	nd	nd	nd	nd	nd	nd
<i>Diadesmis mochalovae</i>	F/T	B	nd	Acph	nd	nd	nd	nd
<i>Diadesmis</i> sp.	nd	nd	nd	nd	nd	nd	nd	nd
<i>Diploneis interrupta</i>	B/F	B	nd	Alb	nd	nd	nd	3
<i>Diploneis krammeri</i>	F	B	O	Alb	nd	nd	nd	nd
<i>Diploneis ovalis</i>	F/B	B	nd	Alph	1	1	O	4
<i>Diploneis pseudovalis</i>	B	B	nd	nd	nd	nd	nd	nd
<i>Encyonema minutum</i>	F/B	B	OM	C	nd	nd	nd	nd
<i>Encyonema silesiacum</i>	F/B	B	OE	C	2	3	αM	1

<i>Encyonema</i> sp.	nd	nd	nd	nd	nd	nd	nd	nd
<i>Encyonopsis</i> sp.	nd	B	nd	nd	nd	nd	nd	nd
<i>Epithemia sorex</i>	F/B	B	E	Alb	1	2	βM	2
<i>Eunotia</i> cf. <i>bidens</i>	F	B	OM	Acph	1	1	O	3
<i>Eunotia curtagrunowii</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Eunotia diadema</i>	F	B	O	Acph	1	1	O	3
<i>Eunotia minor</i>	F	B	nd	Acph	nd	nd	O	4
<i>Eunotia</i> sp.	F	B	nd	nd	nd	nd	nd	nd
<i>Eunotia tetraodon</i>	F/T	B	O	Acph	1	1	O	3
<i>Fragilaria mesolepta</i>	F/B	P-B	nd	Alph	nd	nd	nd	nd
<i>Frustulia</i> sp.	F	B	nd	Acb	nd	nd	nd	nd
<i>Grammatophora</i> sp.	M	nd	nd	nd	nd	nd	nd	nd
<i>Hantzschia amphioxys</i>	F/B/T	B	OE	C	2	2	αM	4
<i>Humidophila laevis</i>	F/T	B	nd	Acph	nd	nd	nd	nd
<i>Luticola arctica</i>	F/T	B	nd	nd	nd	nd	nd	3
<i>Luticola</i> cf. <i>mutica</i>	B/F/T	B	E	C/Acb	2	1	αM	4
<i>Luticola</i> cf. <i>gaussii</i>	F/T	B	nd	nd	nd	nd	nd	nd
<i>Navicula eidrigiana</i>	B/F	B	nd	nd	nd	nd	nd	nd
<i>Navicula pseudotenelloides</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Navicula rhynchocephala</i>	F/B	B	OE	Alph	2	4	βM	2
<i>Navicula</i> sp.	nd	B	nd	nd	nd	nd	nd	nd
<i>Neidium</i> sp.	nd	B	nd	nd	nd	nd	nd	nd
<i>Pinnularia arkadii</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Pinnularia borealis</i>	F/B/T	B	OM	C	2	1	βM	4
<i>Pinnularia</i> cf. <i>islandica</i>	F	B	O	nd	nd	nd	nd	nd
<i>Pinnularia</i> cf. <i>renata</i>	F/T	B	nd	nd	nd	nd	nd	nd
<i>Pinnularia divergens</i>	F	B	O	C	nd	nd	O	3
<i>Pinnularia inconstans</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Pinnularia intermedia</i>	F	nd	OE	C	nd	nd	O	4
<i>Pinnularia lagerstedtii</i>	F	B	O	C	nd	nd	O	4
<i>Pinnularia lata</i>	F/T	B	O	Acph	nd	1	O	5
<i>Pinnularia obscura</i>	F/B	B	nd	C	1	1	O	4

<i>Pinnularia pseudoparva</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Pinnularia</i> sp. 1	nd	B	nd	nd	nd	nd	nd	nd
<i>Pinnularia</i> sp. 4	nd	B	nd	nd	nd	nd	nd	nd
<i>Pinnularia</i> sp. 5	nd	B	nd	nd	nd	nd	nd	nd
<i>Pinnularia viridiformis</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Placoneis</i> sp.	nd	B	nd	nd	nd	nd	nd	nd
<i>Planothidium frequentissimum</i>	F/B	B	OE	Alph	2	3	$\alpha$ MP	nd
<i>Platessa lutheri</i>	F/T	B	O	Acph	1	1	O	4
<i>Psammothidium</i> sp.	F	B	nd	nd	nd	nd	nd	nd
<i>Pseudostauroforma</i> sp.	nd	nd	nd	nd	nd	nd	nd	nd
<i>Pseudostaurosira brevistriata</i>	F/B	P-B	OE	Alph	1	1	O	2
<i>Rexlowea navicularis</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Stauroforma exiguiformis</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Stauroneis</i> sp.	F	B	nd	nd	nd	nd	nd	nd
<i>Staurosira construens</i>	F/B	P-B	ME	Alph	1	1	$\beta$ M	1
<i>Staurosira construens</i> var. <i>venter</i>	F/B	P-B	ME	Alph	2	1	$\beta$ M	1
<i>Staurosira construens</i> var. <i>exigua</i>	F/B	P-B	ME	Alph	2	1	O	1
<i>Staurosirella lapponica</i>	F/B	P-B	nd	Alph	nd	nd	nd	2
<i>Staurosirella martyi</i>	F	B	nd	nd	nd	nd	nd	nd
<i>Staurosirella minuta</i>	F	B	nd	nd	nd	nd	nd	nd

Note: nd – no data. Abbreviations meaning for columns: **General environment:** F– fresh, B – brackish, M – marine, T – terrestrial, U – ubiquitous species; **Habitat:** B – benthos, P – plankton; **Trophic state:** O – oligotraphentic, OM – oligo-mesotraphentic, ME – meso-eutraphentic, E – eutraphentic, H – hypereutraphentic, OE – oligo-to eutraphentic (hypereutraphentic); **pH:** Acb – acidobiontic, Acph – acidophilous, C – circumneutral, Alph – alkaliphilous, Alb – Alkalibiontic; **Nitrogen uptake metabolism:** 1 – nitrogen-autotrophic taxa, tolerating very small concentrations of organically bound nitrogen, 2 – nitrogen autotrophic taxa, tolerating elevated concentrations of organically bound nitrogen; **Oxygen requirements:** 1 – continuously high (about 100% saturation), 2 – fairly high (above 75% saturation), 3 – moderate (above 50% saturation), 4 – low (above 30% saturation); **Saprobity:** O – oligosaprobous,  $\beta$ M –  $\beta$ -mesosaprobous,  $\alpha$ M –  $\alpha$ -mesosaprobous,  $\alpha$ MP –  $\alpha$ -meso-/polysaprobous; **Moisture:** 1 – Never, or only very rarely, occurring outside water bodies, 2 – mainly occurring in water bodies, sometimes on wet places, 3 – mainly occurring in water bodies, also rather regularly on wet and moist places, 4 – mainly occurring on wet and moist or temporarily dry places, 5 – nearly exclusively occurring outside water bodies.