

**Table S2.** Abundance of species, and environmental variables' values recorded in June (J), July-August (J-A) and September (S), 2019 in lakes (L) and streams (S) in the present study. Lowercase a, b and c display the multiple samplings in a lake. Abbreviations: Str, station code; M, months; Elev, elevation (m asl.); Tw, water temperature (°C); EC, electrical conductivity (µS/cm); DO, dissolved oxygen (mg/L); Co, *Cypria ophthalmica*; Cv, *Cypridopsis vidua*; Cp, *Cypris pubera*; Fb, *Fabaeformiscandona balatonica*; Hi, *Heterocypris incongruens*; Hs, *H. salina*; lb, *Ilyocypris bradyi*; Id, *I. decipiens*; Ig, *I. gibba*; Im, *I. monstifrica*; Li, *Limnocythere inopinata*; Ls, *Limnocytherina sanctipatricii*; Nn, *Neglecandona neglecta*; Pk, *Physocypris kraepelini*; Pn, *Plesiocypris newtoni*; Pf, *Potamocypris fallax*; Pp, *P. pallida*; Ps, *P. similis*; Pu, *P. uncaudata*; Pv, *P. variegata*; Pz, *P. zschokkei*; Pa, *Pseudocandona albicans*; Po, *Psychrodromus olivaceus*; Pr, *P. robertsoni*; Sf, *Stenocypris fischeri*; Tc, *Trajanocypris clavata*; Ts, *T. serrata*; Fp1, *Fabaeformiscandona* sp.1 and Fp2, *Fabaeformiscandona* sp.2.

Strn	M	Elev	Tw	pH	EC	DO	Co	Cv	Cp	Fb	Hi	Hs	Ib	Id	Ig	Im	Li	Ls	Nn	Pk	Pn	Pf	Pp	Ps	Pu	Pv	Pz	Pa	Po	Pr	Sf	Tc	Ts	Fp1	Fp2	
L1a	J	2343	23.5	9.83	7540	4.01											13																			
L1b	J	2346	22.7	10.1	8700	4.01											44																			
L1c	J	2343	23.8	9.52	9650	4.01											54																			
L2	J	1803	24.8	9.61	21650	8.14											4																			
L2	J-A	1803	23.1	9.55	19380	7.15																														
L2	S	1803	19.6	9.64	20150	7.15											4	2																		
L3	J	1768	28	8.22	455	4.51								3			3																			
L4	J	1658	26	9.4	5090	8.18																														
L4	J-A	1658	28.1	9.55	4570	7.14																														
L4	S	1658	21	9.64	4710	5.7											1																			
L5a	J	1646	22.3	9.83	24000	10.2											3																			
L5a	J-A	1646	23.2	9.65	22705	8.15											10	1																		
L5a	S	1646	20.1	9.29	26300	7.88																														
L5b	J	1646	22.3	9.36	25810	10.2											1	1																		
L5b	J-A	1646	22.4	9.59	23310	7.11											11	3																		
L5b	S	1646	19.6	9.28	26400	7.77																														
L6a	J	1816	28.8	8.05	351	9.68																														
L6a	J-A	1816	24.4	9.15	248	8.75																														
L6a	S	1818	19.8	8.44	226	6.9											11																			
L6b	J	1816	27.1	8.01	361	9.71																														
L6b	J-A	1817	23.3	9.37	265	7.4					66																									
L6b	S	1816	19.8	8.89	321	6.45					1						8																			
L7	J	2126	19.1	8.69	207	10.3			11												14														2	
L7	J-A	2126	21.3	8.91	161	9.11			50												35						13									
L7	S	2126	17.1	8.51	174	9.4			7												2						2									
L8	J	1959	19.1	8.51	150	7.45							320																					4		
L9	J	1798	20.4	8.82	1019	9.14																														
L9	J-A	1798	23.3	8.84	875	8.11																														
L9	S	1798	19.9	8.94	920	7.45											1								1											
L10	J	1467	23	7.53	90.2	8.18			4																											
L10	J-A	1467	21.1	8.49	87	7.4																														
L10	S	1467	16.8	7.51	116	8.15			3												1															
L11	J	1887	20	8.26	355	9.18			8							30																	9			
L12	J	2358	15	8.17	54.4	9.18	20																													
L12	J-A	2357	17.8	9.21	148	9.18	26							1																						
L12	S	2358	14.4	7.81	151	9.18	12																													

Table S2 (continued)

Stn	M	Elev	Tw	pH	EC	DO	Co	Cv	Cp	Fb	Hi	Hs	Ib	Id	Ig	Im	Li	Ls	Nn	Pk	Pn	Pf	Pp	Ps	Pu	Pv	Pz	Pa	Po	Pr	Sf	Tc	Ts	Fp1	Fp2		
L13	J	2146	12.6	9.26	63.2	7.65																															
L13	J-A	2150	15.6	8.59	70	9.01													1				29			2										5	
L13	S	2147	13.9	7.96	65	9.61																						1							2		
L14	J	1535	23.8	7.34	25	6.48		4												2										19							
L15	J	2210	19.3	7.12	139	8.18			5							6														4	1						
L16	J	1007	20.3	7.91	370	8.18		7																			1			1							
L16	J-A	1007	20.2	8.91	249	8.62									5										6												
L16	S	1007	20.6	7.67	324	8.78																															
<b>Average</b>		<b>1824.1</b>	<b>21.1</b>	<b>8.79</b>	<b>5863.8</b>	<b>7.91</b>	<b>all lake data</b>																														
<b>Average</b>		<b>1876.9</b>	<b>20.4</b>	<b>8.76</b>	<b>5578.6</b>	<b>7.77</b>	<b>lake data with only living species</b>																														
S1	J	1920	21.6	8	459	9.87					1																								1		
S1	J-A	1919	28	8.71	389	10.9					5		22														1										
S1	S	1920	23	8.96	451	8.15						13	49																								
S2	J	2340	22.3	8.29	356	10.4																															
S2	J-S	2340	24.7	8.75	291	6.88					1		3									18					1										
S2	S	2340	21	8.64	305	7.4					1		2									10															
S3	J	2225	22.3	8.21	307	10.2					2		2																							4	
S3	J-A	2225	24.2	9.1	249	6.71					3	4	1																							17	
S3	S	2225	20.3	8.78	261	7.15							110									3														44	
S4	J	1956	23.7	7.46	359	9.68		1																	2												
S4	J-A	1956	24.3	8.65	340	6.17							30												2											1	
S4	S	1956	20.1	8.44	358	7.45						9	90																							3	
S5	J	2220	17.3	7.52	54.5	10.8																															
S5	J-A	2220	20	8.57	54.2	6.88																														1	
S5	S	2220	14.5	7.24	59.2	7.47																														6	
S6	J	2060	19.1	8.23	412	8.68																	1														
S6	J-A	2060	24.2	8.29	495	6.41																															
S6	S	2060	18.7	6.79	586	7.48							42																								
S7	J	1971	17.8	7.73	162	8.68																														1	
S8	J	1730	11.9	8.02	156	9.75																															
S8	J-A	1732	23.8	8.92	226	6.39																															
S8	S	1731	15.1	7.91	285	8.4							3																								
S9	J	1924	13.6	7.68	229	7.65																	1														
S9	J-A	1928	22.1	8.69	312	6.84							1																								
S9	S	1929	17.2	9.84	349	8.63							11										8													1	
S10	J	1798	13.9	8.28	526	9.65																														1	
S11	J	2233	13.4	8.62	253	10.1							2																								
S11	J-A	2233	20.1	8.36	234	6.45							2										9														2
S11	S	2238	15.4	8.51	268	7.9							1																							2	

Table S2 (continued)

Stn	M	Elev	Tw	pH	EC	DO	Co	Cv	Cp	Fb	Hi	Hs	Ib	Id	Ig	Im	Li	Ls	Nn	Pk	Pn	Pf	Pp	Ps	Pu	Pv	Pz	Pa	Po	Pr	Sf	Tc	Ts	Fp1	Fp2				
S12	J	1510	18	6.59	101	10.2																																	
S12	J-A	1510	23.7	7.43	105	6.55													1			1																	
S12	S	1517	15.4	7.8	110	7.44													6			7														2			
S13	J	1671	18.2	7.79	109	6.48																															2		
S13	J-A	1671	24.9	8.81	100	6.61																																	
S13	S	1672	16.4	8.66	110	8.15																																	
S14	J	2047	16	8.51	71.2	9.18																		8															
S14	J-A	2048	19.2	8.73	64.6	6.81					3								1					53													32		
S14	S	2046	13.4	8.56	72.8	9.18													6					59													11		
S15	J	1840	14	8.17	26.6	10.3																															5		
S15	J-A	1840	16.3	7.93	27.3	7.81																															4		
S15	S	1840	14.1	8.15	26.1	9.18																																	
S16	J	1888	16.6	9.32	36.9	8.65																																	
S16	J-A	1886	20.4	8.96	42.5	7.42					6																												
S16	S	1886	19.8	7.95	71.4	8.15																																2	
S17	J	1880	16.5	8.5	27.5	9.45																																	
S17	J-A	1880	19.1	8.6	30.9	6.97																																	
S17	S	1880	16.7	8.41	31	7.9																																	
S18	J	1870	9.4	7.93	42.7	10.3																																	
S18	J-A	1870	16.8	7.99	43.9	7.4							1																									6	
S18	S	1870	13.5	8.57	53.1	8.15																																2	
S19	J	1664	4.7	7.86	59.6	10.6																																	
S20	J	1880	9.1	7.65	38.3	10.7																																	
S20	J-A	1880	18	8.7	43.6	7.19									1																							1	
S20	S	1880	15.1	8.38	62.4	7.85																																	
S21	J	1950	9.5	8.54	40.9	8.54																																7	
S21	J-A	1951	16.6	8.2	50	7.54																																	
S21	S	1951	14	8.59	56.9	7.88																																	1
S22	J	1610	18.5	8.16	156	10.7																																	1
S23	J	1881	16.6	7.86	32.4	10.3																																	
S23	J-A	1880	18	8.16	49.4	7.18																																	3
S23	S	1880	15.3	8.73	64.1	7.98																																	15
S24	J	2212	13.6	7.91	286	10.1							1																										
<b>Average</b>		<b>1941.1</b>	<b>17.76</b>	<b>8.28</b>	<b>177.89</b>	<b>8.35</b>	<b>all stream data</b>																																
<b>Average</b>		<b>1971.4</b>	<b>18</b>	<b>8.29</b>	<b>198.65</b>	<b>8.24</b>	<b>stream data with only living species</b>																																