

Relationships among cyanobacteria, zooplankton and fish in sub-bloom conditions in the Sulejow Reservoir

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S1 Dataset. Dataset of the abiotic and biotic parameters measured and analyzed at the Sulejow Reservoir, Central Poland.

Site	Data	Temperature (°C)	Oxygen (mg dm ⁻³)	pH	NO ₃ ⁻ (mg dm ⁻³)	NO ₂ ⁻ (mg dm ⁻³)	NH ₄ ⁺ (mg dm ⁻³)	PO ₄ ³⁻ (mg dm ⁻³)	MCs concentration (µg dm ⁻³)	MCs biological activity (µg dm ⁻³)
1	2013-07-16	21.1	9.21	8.00	0.85	0.02	0.04	0.61	38.65	3.11
2	2013-07-16	21.0	9.83	7.70	0.91	0.00	0.01	0.20	9.87	2.95
3	2013-07-16	20.9	7.90	8.03	1.08	0.01	0.02	0.15	9.33	2.94
4	2013-07-16	20.7	7.43	8.06	1.17	0.02	0.01	0.13	3.84	2.69
5	2013-07-16	20.7	7.52	8.08	1.19	0.02	0.04	0.03	3.27	2.65
6	2013-07-16	20.6	7.02	7.96	1.22	0.02	0.01	0.04	1.36	2.03
7	2013-07-16	20.6	7.05	7.98	1.26	0.00	0.04	0.04	1.94	2.37
8	2013-07-16	20.6	6.85	7.85	1.28	0.02	0.01	0.01	2.33	2.39
9	2013-07-16	20.5	6.92	7.92	1.22	0.03	0.02	0.23	1.79	2.24
10	2013-07-16	20.5	6.41	7.85	1.30	0.02	0.01	0.01	1.19	1.20
11	2013-07-16	20.4	6.44	7.83	1.51	0.03	0.02	0.02	0.81	0.64
12	2013-07-16	20.5	6.55	7.81	1.37	0.05	0.04	0.04	0.96	1.13
13	2013-07-16	20.4	6.27	7.74	1.52	0.02	0.01	0.02	0.90	0.92
14	2013-07-16	20.3	6.11	7.74	1.46	0.06	0.01	0.02	0.89	0.90
1	2013-07-18	21.8	9.52	8.55	0.85	0.01	0.04	0.02	8.67	0.87
2	2013-07-18	22.2	9.58	8.41	1.00	0.02	0.01	0.02	5.69	2.48
3	2013-07-18	22.0	9.57	8.49	1.02	0.04	0.01	0.02	8.12	2.13
4	2013-07-18	21.6	8.04	8.30	1.17	0.01	0.02	0.01	4.36	0.77
5	2013-07-18	22.2	8.99	8.30	1.18	0.03	0.01	0.04	4.40	2.20
6	2013-07-18	21.7	8.29	8.11	1.13	0.02	0.04	0.05	3.22	0.62
7	2013-07-18	21.1	6.81	8.00	1.25	0.01	0.01	0.04	1.67	2.23
8	2013-07-18	21.1	6.51	8.13	1.41	0.03	0.01	0.02	1.60	2.22
9	2013-07-18	21.1	7.03	8.03	1.34	0.02	0.03	0.03	0.74	2.61
10	2013-07-18	21.1	6.20	8.05	1.42	0.04	0.01	0.04	1.93	2.69
11	2013-07-18	21.6	7.36	7.98	1.54	0.03	0.05	0.02	0.79	2.64

12	2013-07-18	21.2	6.62	8.09	1.50	0.05	0.02	0.01	1.57	2.91
13	2013-07-18	21.1	6.55	7.98	1.55	0.02	0.02	0.02	2.83	2.80
14	2013-07-18	21.3	6.54	7.81	1.70	0.02	0.01	0.04	0.83	2.93
1	2013-09-23	15.5	9.55	8.59	0.20	0.00	0.12	0.30	4.63	3.00
2	2013-09-23	15.4	9.77	8.61	0.28	0.01	0.11	0.13	4.24	3.01
3	2013-09-23	15.5	9.55	8.43	0.21	0.00	0.31	0.11	4.42	2.99
4	2013-09-23	15.4	9.28	8.54	0.19	0.00	0.27	0.28	3.41	2.91
5	2013-09-23	15.2	9.30	8.46	0.53	0.00	0.24	0.17	3.09	2.86
6	2013-09-23	15.3	8.93	8.52	0.23	0.00	0.09	0.22	2.87	2.83
7	2013-09-23	15.3	9.28	8.41	0.32	0.00	0.01	0.17	3.10	2.86
8	2013-09-23	15.2	9.12	8.43	0.60	0.01	0.11	0.19	2.47	2.78
9	2013-09-23	15.3	8.92	8.28	0.21	0.00	0.08	0.26	2.41	2.76
10	2013-09-23	15.2	9.06	8.62	0.30	0.00	0.16	0.23	2.57	2.71
11	2013-09-23	15.1	9.00	8.52	0.32	0.00	0.04	0.29	2.52	2.80
12	2013-09-23	15.0	9.03	8.41	0.84	0.01	0.04	0.51	2.09	2.55
13	2013-09-23	15.0	8.94	8.39	1.08	0.01	0.03	0.20	2.08	2.62
14	2013-09-23	15.0	8.97	8.39	0.96	0.01	0.11	0.16	2.12	2.60
1	2013-09-25	14.9	10.11	8.62	0.34	0.00	0.09	1.00	3.40	2.86
2	2013-09-25	14.8	11.29	8.61	0.62	0.02	0.07	0.53	2.67	2.74
3	2013-09-25	14.7	9.81	8.59	0.43	0.01	0.10	0.47	2.76	2.57
4	2013-09-25	14.8	10.08	8.51	0.55	0.01	0.18	0.67	3.47	2.75
5	2013-09-25	14.7	9.69	8.51	0.56	0.01	0.02	0.35	3.07	2.67
6	2013-09-25	14.7	9.35	8.48	0.58	0.00	0.02	0.39	2.92	2.74
7	2013-09-25	14.7	8.82	8.48	0.57	0.01	0.13	0.34	1.87	2.57
8	2013-09-25	14.7	9.16	8.52	0.63	0.01	0.20	0.46	2.10	2.53
9	2013-09-25	14.6	8.67	8.45	0.35	0.01	0.16	0.55	2.33	2.64
10	2013-09-25	14.8	8.93	8.48	0.54	0.00	0.02	0.30	2.00	2.60
11	2013-09-25	14.6	8.83	8.40	0.64	0.01	0.12	0.33	1.60	2.19
12	2013-09-25	14.6	9.34	8.40	0.82	0.01	0.15	0.12	1.38	1.91
13	2013-09-25	14.5	8.93	8.39	0.88	0.01	0.03	0.17	1.81	2.43
14	2013-09-25	14.5	9.12	8.26	1.03	0.01	0.04	0.22	1.63	2.09

Cyanobacterial chlorophyll a concentration ($\mu\text{g dm}^{-3}$)	Chlorophyll a concentration ($\mu\text{g dm}^{-3}$)	16s rRNA (copies mm^{-3})	<i>Mcy</i> (copies mm^{-3})	Small filterators (mg dm^{-3})	Large filterators (mg dm^{-3})	Fish number (fish ha^{-1})	Fish biomass (kg ha^{-1})	Average fish weight (g)
60.26	72.31	393350.70	36499.11	0.50	1.80	272.63	82.71	303.39
12.82	19.05	94279.97	16792.16	0.38	0.00	739.73	1052.82	1423.24
10.81	15.70	44302.85	6024.08	2.00	27.00	879.06	890.00	1012.44
2.89	6.99	29825.49	3406.57	1.25	18.00	297.25	25.20	84.78
3.87	8.84	10940.69	3103.94	2.38	9.00	2305.28	778.83	337.84
1.30	5.10	4054.28	1702.55	10.75	7.20	185.97	180.83	972.40
0.74	4.91	12549.47	3347.73	2.25	5.40	360.25	411.18	1141.37
1.03	5.28	6903.01	1124.76	1.25	5.40	3496.03	3454.71	988.18
1.34	5.34	7554.88	3747.86	2.25	19.80	196.71	20.82	105.83
0.17	4.19	16554.97	10055.26	4.75	3.60	198.71	206.77	1040.57
0.14	3.96	4783.98	1999.58	4.75	52.20	414.42	74.78	180.44
0.22	4.31	6403.41	2400.52	4.75	12.60	251.38	239.12	951.24
0.00	3.70	4676.55	3409.35	2.13	18.00	269.74	65.70	243.56
0.67	4.67	25016.00	6238.56	0.38	61.20	47.96	179.84	3750.05
12.59	20.59	44222.39	39150.25	7.38	4.63	568.36	366.11	485.51
7.37	14.58	52392.69	6585.64	19.38	7.25	56.48	17.47	309.37
13.13	20.99	234828.83	27321.38	13.63	1.63	1080.24	714.75	661.66
4.54	11.64	53807.34	11965.24	7.63	6.63	290.16	323.20	1113.87
4.77	15.36	42078.52	16223.26	13.44	4.00	398.53	97.84	245.49
4.04	8.72	168640.20	14950.70	20.19	8.00	117.81	48.65	412.91
1.54	6.17	4546.25	618.21	13.94	4.38	238.72	740.54	3102.18
1.89	8.54	61353.30	11993.21	13.13	5.50	730.04	1207.26	1653.71
0.51	5.39	2401.11	0.00	22.00	5.75	64.57	58.55	906.77
1.51	6.40	57872.20	541.46	29.88	5.00	120.65	507.04	4202.47
0.03	5.23	3963.14	43.94	36.13	6.50	189.23	62.11	328.24
2.58	10.98	17494.20	165.47	15.75	0.00	160.50	462.08	2879.09
1.92	6.99	35149.19	270.79	42.63	2.25	97.78	183.59	1877.56

0.72	7.26	4543.13	28.31	92.06	7.50	258.57	723.37	2797.56
14.30	17.20	28504.95	500.68	6.63	24.25	30.68	9.58	312.12
11.30	15.06	23287.93	188.44	3.31	6.63	126.39	69.03	546.18
12.23	15.09	38790.39	499.20	4.00	31.50	17.89	8.81	492.50
17.29	20.24	23814.48	407.47	4.50	11.25	95.95	63.49	661.70
11.16	13.88	12648.15	18.10	2.25	4.25	596.70	294.67	493.83
6.60	8.61	6310.54	37.10	4.75	30.50	42.20	10.45	247.55
10.90	13.78	6743.63	6.57	5.50	19.50	34.86	192.35	5518.56
5.86	7.74	15858.52	203.35	8.88	23.00	82.52	79.12	958.81
6.09	7.63	11667.65	41.29	7.00	15.75	37.80	21.43	566.95
9.29	11.15	16492.98	142.17	9.31	15.38	61.79	50.62	819.17
6.63	8.53	6900.79	12.41	4.25	10.88	98.51	68.85	698.93
6.38	8.47	15270.63	31.61	7.06	17.38	29.06	20.12	692.40
5.52	7.89	16166.19	88.72	5.69	10.13	33.50	30.21	1409.83
5.25	6.92	16492.31	169.00	6.88	12.63	29.63	15.74	531.32
21.10	23.06	17260.58	214.34	1.50	4.13	106.01	33.38	314.88
23.41	25.20	32849.83	337.83	1.00	22.25	47.05	8.48	180.33
10.80	12.17	35742.89	399.23	4.13	13.00	78.24	38.07	486.57
16.30	18.36	33268.74	204.40	0.69	2.00	137.94	129.44	938.41
22.59	24.72	5614.27	296.46	1.38	3.63	1498.20	475.42	317.33
8.17	9.61	5739.06	567.40	8.63	11.50	221.41	122.16	551.73
6.20	7.28	1495.38	365.41	6.00	20.50	304.82	140.01	459.33
8.50	10.06	3469.82	124.53	4.25	13.25	159.76	66.72	417.61
4.69	5.21	1849.65	69.95	10.63	20.00	135.18	47.57	351.87
6.33	7.69	5309.94	124.52	6.38	10.25	202.53	64.12	316.59
6.86	7.44	3220.01	244.04	2.63	6.50	123.12	69.44	563.99
10.54	12.18	2636.44	372.60	5.13	6.25	100.57	48.37	480.97
4.58	6.33	1011.58	2.10	10.25	9.25	261.90	103.33	394.52
5.80	7.24	738.53	72.37	7.50	10.75	38.81	19.31	497.38

S2 Dataset. Table of the frequency (number of fish) of length classes of fish species caught in multimesh gillnets at Sulejow Reservoir, Central Poland.

Species	Length class (cm)	Location of gillnets (station number)			
		9	3	12	5
Silver bream <i>Blicca bjoerkna</i>	6.1-8.0			1	
	8.1-10.0			1	
	10.1-12.0				
	12.1-14.0	1			
	14.1-16.0		1		
	16.1-18.0	8	4	2	
	18.1-20.0	2		4	
	20.1-22.0	2	1	3	
	22.1-24.0			1	1
	24.1-26.0	4		1	
	26.1-28.0			1	
	28.1-30.0			1	
	30.1-32.0			1	
	32.1-34.0	1			1
Common bream <i>Abramis brama</i>	18.1-20.0			1	1
	20.1-22.0				
	22.1-24.0	1		1	1
	30.1-32.0	1			
	32.1-34.0	6		2	
	34.1-36.0	1		3	4
	36.1-38.0			1	1
	38.1-40.0	1			
	40.1-45.0	1	1	1	1
	45.1-50.0	3	1	1	
50.1-60.0	4	1			
Roach <i>Rutilus rutilus</i>	6.1-8.0				
	8.1-10.0	5			
	10.1-12.0	4			
	12.1-14.0			4	
	14.1-16.0	3		1	
	16.1-18.0	4		7	
	18.1-20.0	5		4	
	20.1-22.0	5		5	
	22.1-24.0	11		2	
	24.1-26.0	16			
	26.1-28.0	7		8	1
	28.1-30.0	10		11	
	30.1-32.0	3		8	2
	32.1-34.0	1		6	1
	34.1-36.0	3		1	
	36.1-38.0	1		1	1
	Bleak <i>Alburnus alburnus</i>	10.1-12.0	1		18
12.1-14.0		1		12	
14.1-16.0		1		8	
16.1-18.0				8	
Asp <i>Aspius aspius</i>	30.1-32.0			1	
	34.1-36.0			1	
	45.1-50.0	1		1	
	60.1-70.0	1			
Ruffe <i>Gymnocephalus cernua</i>	6.1-8.0		2		

	8.1-10.0		2	
	10.1-12.0		2	
Eurasian perch <i>Perca fluviatilis</i>	6.1-8.0			1
	8.1-10.0			2
	16.1-18.0	1		
	22.1-24.0	3		
	24.1-26.0			3
	26.1-28.0			1
	32.1-34.0	1		
Pikeperch <i>Stizostedion lucioperca</i>	18.1-20.0		1	
	28.1-30.0	1		
	32.1-34.0			1
	34.1-36.0			1
	36.1-38.0			1
	50.1-60.0			1
