

Table 1. Physical and chemical characteristic of water in the investigated lakes (mean values for summer period 2008)

Lake	SD, m	pH	Conductivity, $\mu\text{S cm}^{-1}$	Total suspension, mg dm^{-3}	Chlorophyll <i>a</i> , $\mu\text{g dm}^{-3}$	Dissolved oxygen, mg dm^{-3}	Total P, mg dm^{-3}	P-PO ₄ , mg dm^{-3}	N-NH ₄ , mg dm^{-3}	N-NO ₃ , mg dm^{-3}
Sumin	0.85	8.10	410	4.23	8.45	12.83	0.097	0.005	0.348	0.182
Syczyńskie	0.45	8.20	536	19.65	132.10	11.41	0.381	0.155	0.189	0.504

Table 2. Characteristics of fish species found in Sumin and Syczyńskie Lakes

Family	Species	R	A	K	T	Sumin	Syczyńskie
<i>Cyprinidae</i>	White bream – <i>Blicca bjoerkna</i> (L.)	Phyto-litophylous	E	LC	I	X	
	Bream – <i>Abramis brama</i> (L.)	Phyto-litophylous	E	LC	I	X	
	Roach – <i>Rutilus rutilus</i> (L.)	Phyto-litophylous	E	LC	O	X	X
	Bleak – <i>Alburnus alburnus</i> (L.)	Phyto-litophylous	E	LC	I	X	X
<i>Percidae</i>	Ruffe – <i>Gymnocephalus cernuus</i> (L.)	Phyto-litophylous	E	LC	I	X	
	Perch – <i>Perca fluviatilis</i> (L.)	Phyto-litophylous	E	LC	I/P	X	X
	Pikeperch – <i>Sander lucioperca</i> (L.)	Phytophilous	E	LC	P	X	
<i>Ictaluridae</i>	Brown bullhead – <i>Ictalurus nebulosus</i> (Lesueur)	Phytophilous	E	A	O	X	X
Species richness (range)						4 (2–4)	8 (6–8)

R – classification of species to reproduction guilds (after Balon [1975]); A – habitat preferences (after Schiemer and Waidbacher [1992]), E – eurytopic fish; K – IUNC categories after Witkowski *et al.* [2009]; LC – least concern species, A – alien species; T – affiliation to a trophic group: I- feeding on invertebrates, O – omnivorous, P – predatory

Table 3. Characteristics of total length (TL), body mass (W) and coefficient of condition (C) of fish from investigated lakes

Species Lake	Brown bullhead		Perch		Roach		Bleak	
	Number of fish (N)							
Sumin	107		28		34		86	
Syczyńskie	10		497		20		2609	
Total length (TL) (in cm)								
	Mean ±SD	Range	Mean ±SD	Range	Mean ±SD	Range	Mean ±SD	Range
Sumin	13.96 ^B ±2.85	10.00–20.50	13.20 ^A ±2.09	10.00–17.60	12.11 ^B ±1.73	9.00–15.40	10.81 ^A ±1.05	8.00-12.70
Syczyńskie	20.25 ^A ±2.04	18.00–23.80	11.90 ^B ±2.84	4.7–23.20	14.03 ^A ±2.67	9.00-17.20	6.12 ^B ±0.49	5.00-9.00
Body mass (W) (in g)								
	Mean ±SD	Range	Mean ±SD	Range	Mean ±SD	Range	Mean ±SD	Range
Sumin	36.07 ^B ±22.76	11.00–104.00	28.11 ±13.96	12.00–63.00	17.76 ^B ±7.36	7.00-39.00	9.48 ^A ±2.63	4.00-15.00
Syczyńskie	153.20 ^A ±52.54	85.00–252.00	24.37 ±24.20	1.00–192.00	34.75 ^A ±15.03	9.00-54.00	1.89 ^B ±0.34	1.00-5.50
Coefficient of condition (C)								
	Mean ±SD	Range	Mean ±SD	Range	Mean ±SD	Range	Mean ±SD	Range
Sumin	1.20 ^B ±0.14	0.88–1.60	1.14 ±0.05	1.05–1.22	0.97 ^B ±0.15	0.49-1.14	0.74 ^B ±0.12	0.50-1.17
Syczyńskie	1.78 ^A ±0.16	1.46–1.91	1.17 ±0.14	0.80–1.66	1.17 ^A ±0.09	1.06-1.37	0.83 ^A ±0.13	0.54-1.76

^{A, B} for each species means of characteristics designated by the letters in columns differ significantly at $p \leq 0.05$