

*Article supplementary material*

## **Relationship between morphological characteristics and quality of aquatic habitat in mountain streams of Slovakia (supplementary material)**

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**Table S1.** Basic characteristics of the data set: 364-day discharge ( $Q_{364d}$ ), catchment area to the last profile of the reference reach ( $A_p$ ), maximum value of the water depth in the reference reach ( $d_{max}$ ), average maximum depth from all cross-sections ( $d_{am}$ ), average longitudinal slope of the water level ( $i_p$ ), average number of fish covers (microhabitats) per 100 m of reach ( $n_{100}$ ), average value of the area weighted suitability for the monitored fish covers ( $AWS_{Cov}$ ), Area weighted suitability for the monitored reach ( $AWS_{Rch}$ ), fish cover length in the flow direction ( $L_{Cov}$ ), fish cover width ( $W_{Cov}$ ), length of the reach in the flow direction ( $L_{Rch}$ )

ID	Stream	River basin	Latitude N	Longitude E	$Q_{364d}$ ( $m^3 \cdot s^{-1}$ )	$A_p$ ( $km^2$ )	$d_{max}$ (m)	$d_{am}$ (m)	$i_p$	$n_{100}$ ( $pcs \cdot 100m^{-1}$ )	$AWS_{Cov}$ ( $m^2 \cdot m^{-1}$ )	$AWS_{Rch}$ ( $m^2 \cdot m^{-1}$ )	$L_{cov}$ (m)	$W_{cov}$ (m)	$L_{Rch}$ (m)
1	Biela	Dunajec	49.22150	20.46927	0.095	91.20	0.10	0.10	0.013	7.143	0.054	0.047	12.0	1.56	56
2	Čierna voda	Dunajec	49.176943	20.447209	0.021	35.48	0.46	0.18	0.005	5.941	0.730	0.556	12.8	1.60	101
3	Hagánsky potok	Dunajec	49.06660	20.18972	0.042	10.45	0.39	0.25	0.013	4.762	0.805	0.473	12.3	1.46	63
4	Kamienka	Dunajec	49.34575	20.60368	0.003	19.50	0.54	0.54	0.020	1.408	5.091	0.502	7.0	5.84	71
5	Kežm. Biela Voda	Dunajec	49.15458	20.41431	0.003	27.28	0.24	0.24	0.004	3.226	1.568	0.607	12.0	1.74	31
6	Lipník 1	Dunajec	49.38138	20.43957	0.077	76.05	0.27	0.26	0.011	1.672	1.305	0.382	17.5	1.39	120
7	Lipník 2	Dunajec	49.37398	20.47093	0.046	37.01	0.19	0.19	0.017	2.941	1.964	0.289	5.0	2.40	34
8	Mlynica	Dunajec	49.05335	20.11843	0.049	39.76	0.48	0.30	0.009	5.195	1.270	0.549	8.3	2.11	77
9	Skalnatý potok	Dunajec	49.12423	20.35177	0.085	33.74	0.16	0.14	0.015	5.063	0.576	0.452	15.5	1.14	79
10	Teplica 2	Dunajec	49.05190	20.25945	0.010	3.53	0.65	0.32	0.009	7.576	0.484	0.286	7.8	0.89	66
11	Toporský potok	Dunajec	49.25245	20.50053	0.025	22.80	0.30	0.15	0.009	4.808	0.453	0.170	7.8	1.18	104
12	Vesník	Dunajec	49.07380	20.14383	0.040	3.96	0.18	0.16	0.021	6.897	0.418	0.166	5.8	0.81	58
13	Bacúšsky potok	Hron	48.86665	19.80567	0.118	24.17	0.17	0.17	0.025	3.333	0.634	0.222	10.5	1.01	60
14	Bukovec	Hron	48.80573	19.39205	0.065	16.76	0.21	0.20	0.031	3.261	0.408	0.284	21.3	0.46	92
15	Bystriansky potok	Hron	48.81988	19.56020	0.350	90.89	0.33	0.29	0.016	3.896	2.861	1.115	10.0	3.10	77
16	Čelno	Hron	48.81008	19.49973	0.022	9.98	0.22	0.20	0.076	2.500	1.128	0.381	13.5	1.31	80
17	Hodrušský potok	Hron	48.46723	18.72630	0.034	40.06	0.33	0.26	0.011	2.921	0.956	0.540	19.3	1.17	103
18	Hronec	Hron	48.84452	19.92947	0.052	43.84	0.25	0.23	0.020	3.333	0.966	0.451	14.0	1.13	90
19	Jaseniansky potok 1	Hron	48.84590	19.45942	0.210	56.89	0.33	0.31	0.022	2.597	1.663	0.562	13.0	1.85	77
20	Jaseniansky potok 2	Hron	48.82073	19.46285	0.430	90.34	0.29	0.25	0.015	3.448	2.985	1.784	17.3	3.24	87
21	Kľak	Hron	48.53360	18.66335	0.076	54.64	0.17	0.14	0.017	2.143	0.805	0.368	21.3	2.13	140
22	Krivuľa	Hron	48.88285	19.96218	0.035	5.05	0.22	0.16	0.063	3.529	0.510	0.222	12.3	1.01	85
23	Malý Zelený potok	Hron	48.84020	19.80147	0.020	6.50	0.14	0.12	0.050	3.058	0.209	0.086	13.5	0.60	65
24	Osrblianka	Hron	48.79073	19.57277	0.107	48.71	0.16	0.14	0.013	3.158	0.652	0.316	15.3	1.62	95
25	Petríkovo	Hron	48.84478	19.83003	0.055	17.01	0.23	0.20	0.037	4.286	0.973	0.549	13.2	1.37	70
26	Rácov	Hron	48.84348	19.99747	0.054	19.81	0.15	0.13	0.022	2.459	0.393	0.238	24.7	1.53	122
27	Slatina	Hron	48.55642	19.21000	0.372	383.36	0.79	0.53	0.003	1.994	3.297	1.728	26.3	5.47	351
28	Sopotnica	Hron	48.80647	19.37117	0.067	23.61	0.15	0.15	0.025	3.125	0.467	0.161	11.0	1.00	64
29	Teplá	Hron	48.54333	18.83605	0.031	35.98	0.27	0.21	0.011	2.874	0.854	0.581	23.7	1.15	104

**Table S1 (continuation).** Basic characteristics of the data set: 364-day discharge ( $Q_{364d}$ ), catchment area to the last profile of the reference reach ( $A_p$ ), maximum value of the water depth in the reference reach ( $d_{max}$ ), average maximum depth from all cross-sections ( $d_{am}$ ), average longitudinal slope of the water level ( $i_p$ ), average number of fish covers (microhabitats) per 100 m of reach ( $n_{100}$ ), average value of the area weighted suitability for the monitored fish covers ( $AWS_{Cov}$ ), Area weighted suitability for the monitored reach ( $AWS_{Rch}$ ), fish cover length in the flow direction ( $L_{Cov}$ ), fish cover width ( $W_{Cov}$ ), length of the reach in the flow direction ( $L_{Rch}$ )

ID	Stream	River basin	Latitude N	Longitude E	$Q_{364d}$ ( $m^3 \cdot s^{-1}$ )	$A_p$ ( $km^2$ )	$d_{max}$ (m)	$d_{am}$ (m)	$i_p$	$n_{100}$ (pcs·100m <sup>-1</sup> )	$AWS_{Cov}$ (m <sup>2</sup> ·m <sup>-1</sup> )	$AWS_{Rch}$ (m <sup>2</sup> ·m <sup>-1</sup> )	$L_{Cov}$ (m)	$W_{Cov}$ (m)	$L_{Rch}$ (m)
30	Vážna	Hron	48.78622	19.33245	0.058	15.35	0.22	0.16	0.028	3.226	0.461	0.233	15.7	0.93	93
31	Veľký Zelený potok	Hron	48.82928	19.77803	0.034	11.80	0.12	0.11	0.030	2.933	0.129	0.067	17.7	1.09	102
32	Volchovo	Hron	48.84910	19.86985	0.028	10.00	0.27	0.22	0.035	2.947	0.764	0.345	15.3	1.00	102
33	Krupinica	Ipeľ	48.39817	19.08644	0.014	107.72	0.14	0.12	0.007	1.667	0.150	0.070	28.0	0.73	120
34	Šibská voda	Bodrog	49.26850	21.25469	0.024	54.87	0.41	0.32	0.004	3.509	0.610	0.235	11.0	0.85	57
35	Topľa 1	Bodrog	49.31844	21.10106	0.129	131.51	0.59	0.38	0.012	4.211	2.001	0.906	10.8	2.63	95
36	Topľa 2	Bodrog	49.31539	21.18111	0.223	204.15	0.44	0.34	0.007	4.651	1.560	1.107	15.3	1.65	86
37	Torysa	Hornád	49.11661	21.05253	0.330	467.16	0.57	0.48	0.004	1.600	4.313	1.691	24.5	5.20	125
38	Udava 1	Bodrog	48.96883	21.95897	0.094	212.94	0.13	0.12	0.007	3.279	0.233	0.184	24.0	2.30	61
39	Udava 3	Bodrog	49.15883	22.17928	0.016	12.05	0.18	0.14	0.021	3.704	0.382	0.198	14.0	0.86	81
40	Udava 4	Bodrog	49.12625	22.10536	0.025	59.25	0.41	0.22	0.009	4.000	0.770	0.561	18.2	1.17	125
41	Udava 5	Bodrog	49.02522	22.04275	0.078	174.80	0.39	0.21	0.004	4.211	1.642	1.245	18.0	4.48	95
42	Bebrava	Váh	48.84119	18.23506	0.116	43.43	0.21	0.12	0.030	4.587	0.213	0.072	7.4	1.16	218
43	Drietomica	Váh	48.90650	17.95381	0.080	82.50	0.50	0.35	0.006	4.149	1.388	0.404	7.0	1.92	240
44	Hradnianska	Váh	49.17810	18.56980	0.025	32.14	0.18	0.18	0.008	0.800	1.416	0.232	20.5	2.00	125
45	Hybica	Váh	49.03577	19.79210	0.030	44.78	0.51	0.44	0.007	4.505	3.726	2.227	13.3	3.80	111
46	Chotina	Váh	48.60264	18.13361	0.010	81.97	0.36	0.22	0.002	4.329	0.318	0.121	8.8	0.51	231
47	Kamečnica	Váh	48.79052	17.72410	0.013	12.77	0.10	0.08	0.031	2.128	0.006	0.002	14.4	0.35	94
48	Lesnianska 2	Váh	49.03743	18.65703	0.052	20.89	0.37	0.24	0.016	2.551	1.285	0.404	12.3	2.32	118
49	Lupčianska	Váh	49.04050	19.41506	0.081	14.20	0.28	0.25	0.065	3.743	1.795	0.739	11.0	2.00	80
50	Manínsky potok	Váh	49.14248	18.50013	0.015	9.59	0.23	0.15	0.020	3.158	0.860	0.462	17.0	1.24	95
51	Nitrica	Váh	48.77350	18.49347	0.213	202.54	0.65	0.46	0.020	2.151	4.460	0.824	8.6	5.49	465
52	Petrovička 1	Váh	49.24465	18.55167	0.022	64.18	0.12	0.11	0.010	3.488	0.111	0.057	14.7	1.21	86
53	Teplička 2	Váh	48.91948	18.14478	0.052	51.08	0.41	0.37	0.022	4.348	1.669	0.895	12.3	1.74	69
54	Vadičovský potok	Váh	49.28940	18.79682	0.050	39.39	0.11	0.11	0.013	0.966	0.179	0.036	21.0	1.40	104
55	Veselianka 1	Váh	49.41445	19.43275	0.127	85.87	0.32	0.20	0.010	2.797	1.097	0.690	22.5	2.17	143
56	Veselianka 2	Váh	49.43653	19.40490	0.104	69.12	0.41	0.38	0.011	1.993	2.682	1.010	18.9	2.67	100
57	Vôdky	Váh	49.00642	18.99382	0.045	15.79	0.15	0.12	0.018	2.395	0.186	0.145	32.5	1.09	167
58	Vrzavka	Váh	48.81615	17.74457	0.008	10.00	0.16	0.16	0.015	1.266	0.901	0.125	11.0	1.50	79
59	Zázrivka 1	Váh	49.24115	19.15547	0.258	76.47	0.49	0.38	0.014	2.970	0.917	0.481	17.7	1.01	101





Hronec



Sopotnica



Malý zelený potok



Bacúšsky potok



Bystriansky potok



Rajčianka



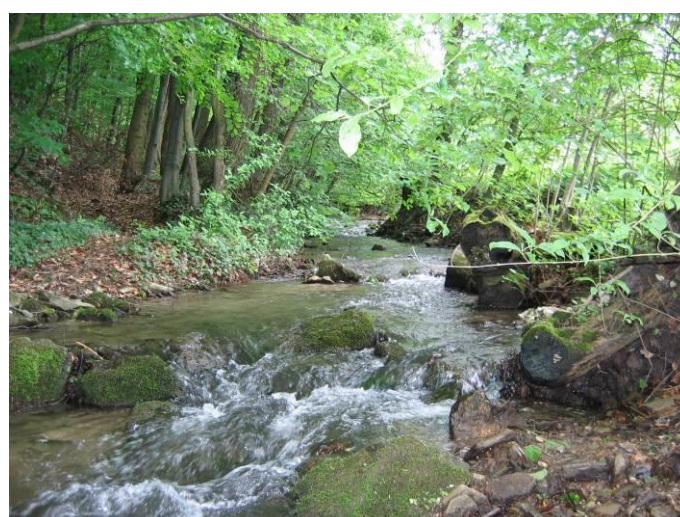
Drietomica



Jaseniensky potok 1



Hradnianska



Kamečnica



Jaseniensky potok 2



Jaseniensky potok 2

Figure S1. Photos from the reaches taken during field surveys to illustrate the character of the reaches

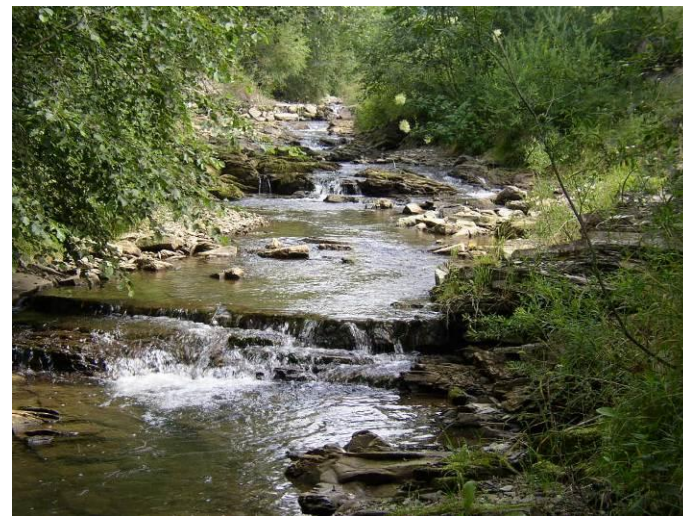




Vadičovský potok



Krivuľa



Kamienka



Rohozná



Petrovička 1



Zázrivka 1



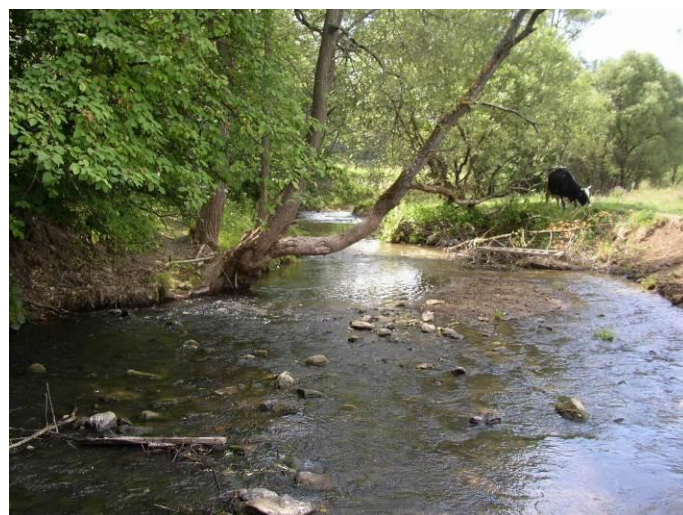
Teplička 2



Veselianka 1



Veselianka 2



Hybica



Lipník 1



Lipník 2

Figure S2. Photos from the reaches taken during field surveys to illustrate the character of the reaches





Bystriansky potok



Volchovo



Jaseniensky potok 1



Čelno



Lupčianka



Vôdky



Volchovo



Čelno

Figure S3. Photos from the reaches taken during field surveys to illustrate the character of the reaches





Teplica 2

Kamečnica



Topla

Topla

Topla

Udava 3

Figure S4. Photos from the reaches taken during field surveys to illustrate the character of the reaches





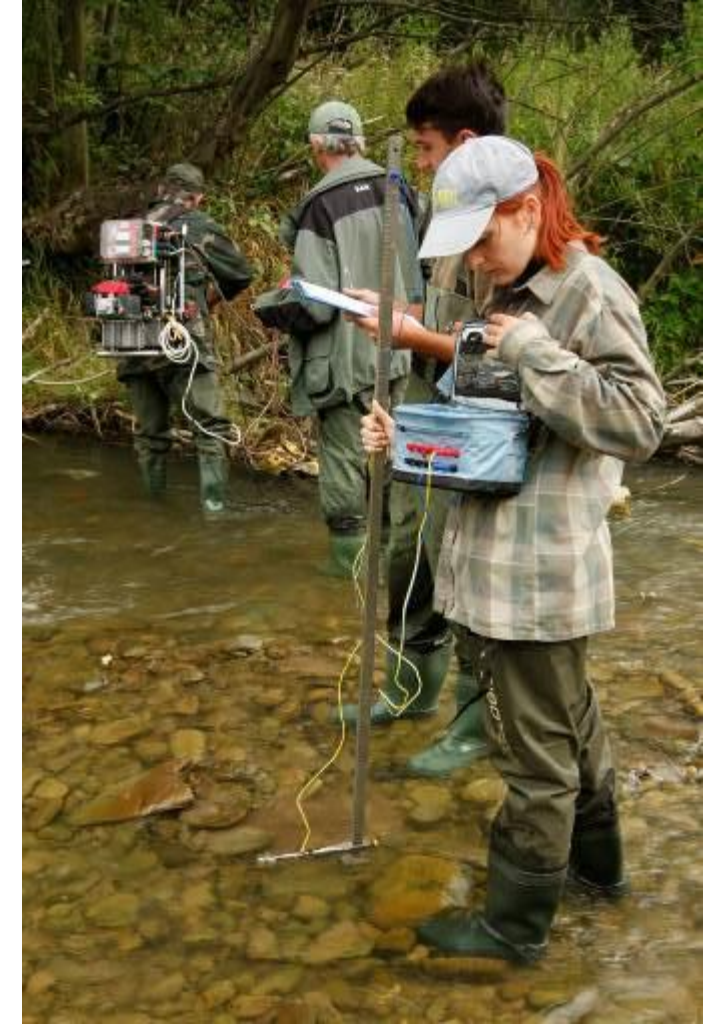
Topľa



Topľa



Topľa



Topľa



Udava 5



Torysa



Biela



Biela

Figure S5. Photos from the reaches taken during field surveys to illustrate the character of the reaches