

## SUPPLEMENTARY MATERIALS

Table S1. List of the 38 macroinvertebrate families for whom it was possible to assign the score for the calculation of the ASPT index. Scores = sensitivity score assigned to each family, while the numbers in the cells indicate the total number of individuals in each sampling site.

Taxon	Scores	Agogna1	Agogna2	Caccasca1	Caccasca2	Cavo Cattedrale	Cavo Dassi	Cavo Panizzina	Fontana Pietta
Aphelocheiridae	10	0	0	0	24	23	16	8	1
Asellidae	3	616	118	62	2	3	0	0	31
Baetidae	4	214	5	49	34	17	3	51	57
Bithyniidae	3	3	1	0	0	0	0	0	2
Caenidae	7	102	8	35	8	23	11	55	31
Calopterygidae	8	0	0	1	3	23	8	7	37
Chironomidae	2	252	618	321	474	795	1811	1310	74
Coenagrionidae	6	2	48	9	4	1	0	4	0
Corixidae	5	0	18	1	1	0	5	2	1
Dryopidae	5	0	5	1	4	2	1	2	2
Dytiscidae	5	1	0	0	0	0	0	0	0
Ecnomidae	8	1	4	0	0	8	21	7	1
Elmidae	5	0	1	1	2	6	9	0	0
Erpobdellidae	3	32	6	0	0	0	0	0	1
Gammaridae	6	0	0	1	456	3	0	0	595
Glossiphoniidae	3	10	2	1	0	0	0	0	1
Goeridae	10	0	0	9	40	3	0	2	62
Gomphidae	8	1	0	0	0	5	2	5	2
Heptageniidae	10	2	0	0	0	0	0	0	4
Hydropsychidae	5	192	10	433	11	16	18	12	25
Hydroptilidae	6	1	0	0	0	0	0	0	0
Lepidostomatidae	10	0	0	0	0	0	0	1	0
Leptoceridae	10	1	0	5	4	25	5	61	10
Limnephilidae	7	0	0	0	0	0	0	0	2
Limoniidae	5	0	1	0	1	1	4	34	0
Lumbricidae	1	49	14	22	7	2	2	7	4
Lumbriculidae	1	553	751	60	11	28	49	27	19
Lymnaeidae	3	10	1	3	0	0	1	0	166
Naididae	1	15	30	0	2	15	1	7	8
Neritidae	6	0	0	0	0	217	1	3	0
Physidae	3	1	4	1	0	4	0	2	4
Piscicolidae	4	0	0	0	0	0	0	1	0
Planorbidae	3	0	0	0	0	0	6	0	5
Platycnemididae	6	0	0	0	1	0	0	0	0
Psychomyiidae	8	0	0	1	0	1	0	1	14
Simuliidae	5	9	4	2	0	1	1	16	0
Sphaeriidae	3	0	1	3	1	9	3	10	8
Tipulidae	5	2	1	0	1	0	1	1	0

Note: ASPT was calculated at the family level by using the function “aspt” of the R package “biomonitor” (Laini et al. 2022) and setting “method = ita”. According to the R documentation provided by the authors of the R package, “method = ita” allows us to assign scores to some taxa present in Italy due to recent implementation by some authors but not considered in the original version of the ASPT.

Laini, A., Guareschi, S., Bolpagni, R., Burgazzi, G., Bruno, D., GutiérrezCánovas, C., Miranda, R., Mondy, C., Várbíró, G., Cancellario, T. biomonitorR: an R package for calculating taxonomic and functional indices for river biomonitoring. PeerJ 2022, 10: e14183

Table S2. List of macroinvertebrate taxa found in each sampling sites. Symbols indicate their abundance ranges: + = 1-10 individuals, ++ = 11-100 individuals, +++ = >100 individuals.

Taxon	Agogna1	Agogna2	Caccasca1	Caccasca2	Cavo Cattedrale	Cavo Dassi	Cavo Panizzina	Fontana Pietta
<i>Baetis</i>	+++	+	++	++	++	+	++	++
<i>Caenis</i>	+++	+	++	+	++	++	++	++
<i>Ecdyonurus</i>	+							+
<i>Serratella ignita</i>	+		+					+
Ecnomidae	+	+			+	++	+	+
Goeridae			+	++	+		+	++
Hydropsychidae	+++	+	+++	++	++	++	++	++
Hydroptilidae	+							
Lepidostomatidae							+	
Leptoceridae	+		+	+	++	+	++	+
Limnephilidae								+
Psychomyidae			+		+		+	++
Ceratopogonidae					+	+	+	
Chironomidae	+++	+++	+++	+++	+++	+++	+++	++
Dixidae			+					
Empididae	+				+	+	+	
Limoniidae		+		+	+	+	++	
Psychodidae	+			+				
Simuliidae	+	+	+		+	+	++	
Tipulidae	+	+		+		+	+	
<i>Aphelocheirus</i>				++	++	++	+	+
<i>Asellus</i>	+++	+++	++	+	+			++
<i>Batracobdella</i>								+
<i>Bithynia</i>	+	+						+
<i>Calopteryx</i>			+	+	++	+	+	++
<i>Corbicula fluminea</i>			+	++	++	++	++	+++
Corixidae				+			+	+
<i>Dina</i>	++	+						+
Dryopidae		+	+	+	+	+	+	+
Dytiscidae	+							
<i>Echinogammarus</i>			+	+++	+			+++
Elmidae		+	+	+	+	+		
<i>Gomphus</i>						+	+	
<i>Gyrulus</i>						+		
<i>Helobdella</i>	+	+	+					
<i>Ischnura</i>	+	++	+	+	+		+	
Lumbricidae	++	++	++	+	+	+	+	+
Lumbriculidae	+++	+++	++	++	++	++	++	++
<i>Lymnaea</i>	+	+	+			+		+++
<i>Micronecta</i>		++	+			+		
Naididae	++	++		+	++	+	+	+
Nematoda	++	+	+			+	+	

<i>Onychogomphus</i>	+				+	+	+	+
<i>Physa</i>	+	+	+		+		+	+
<i>Piscicola</i>							+	
<i>Pisidium</i>		+	+	+	+	+	+	+
Planorbidae						+		+
<i>Platycnemis</i>				+				
<i>Pyrrhosoma</i>		++	+				+	
<i>Procambarus clarkii</i>		+						+
<i>Theodoxus</i>					+++	+	+	
Turbellaria	+		+					