

Supplementary material

Taxa list and numbers of individuals per body of water. The ID no. applies to the clear identification of the taxon. The individual numbers of the Ihle with gravel (G) may not be compared with those of the Nieplitz and the Verlorenwasser at this point, since a different number of sampling points were examined. A comparison of the Ihle without gravel with the Nieplitz and the Verlorenwasser is permissible: $n_{\text{Ihle}}(G) = 39$ (with gravel, [I]), $n_{\text{Ihle}} = 33$ (without gravel), $n_{\text{Nieplitz}} = 33$ (N), $n_{\text{Verlorenwasser}} = 33$ (V) each 0.0625 m².

Table S1. Taxa list and numbers of individuals per body of water.

Group	Family	Species /Taxon	ID-Nr.	I (G)	I	N	V
Bival-via	Corbiculidae	<i>Corbicula fluminea</i>	11176	0	0	0	1
	Sphaeriidae	<i>Pisidium amnicum</i>	6409	46	46	4	8
		<i>Pisidium casertanum casertanum</i>	6410	783	775	118	460
		<i>Pisidium henslowanum</i>	6418	8	8	0	9
		<i>Pisidium subtruncatum</i>	6426	240	238	14	58
		<i>Sphaerium corneum</i>	6882	453	442	0	5
Coleop-tera	Dytiscidae	<i>Agabus sturmii</i>	17494	1	1	0	0
	Elmidae	<i>Elmis</i> sp. Ad.	12072	1	1	3	0
		<i>Elmis</i> sp. Lv.	5095	62	60	127	2
		<i>Limnius</i> sp.	18419	0	0	3	0
		<i>Limnius volckmari</i>	18421	150	118	0	0
	Gyrinidae	<i>Orectochilus villosus</i> Lv.	6200	39	39	0	0
Crusta- cea	Haliplidae	<i>Haliplus</i> sp. Lv.	5396	6	4	0	2
	Asellidae	<i>Asellus aquaticus</i>	8691	674	609	6	2
	Gammaridae	<i>Gammarus pulex</i>	5291	1372	1295	33132	4513
		<i>Gammarus roeselii</i>	5292	761	755	0	0
Diptera	[Ord:Diptera]	<i>Diptera</i> Gen. sp.	9353	2	2	4	8
	Ceratopogonidae	Ceratopogoninae/Palpomyiinae Gen. sp.	14768	1	1	0	0
	Chironomidae	Chironomidae Gen. sp.	4642	3036	3005	5003	4632
	Culicidae	Culicidae Gen. sp.	7726	22	22	1	0
	Limoniidae	<i>Eloeophila</i> sp.	9654	15	14	3	6
	Pediciidae	<i>Dicranota</i> sp.	4955	32	27	10	48
	Ptychopteridae	<i>Ptychoptera</i> sp.	7492	1	1	22	272
	Simuliidae	<i>Simulium</i> sp.	6853	1913	1848	6	146
	Tabanidae	Tabanidae Gen. sp.	8485	37	36	21	7
	Tipulidae	<i>Tipula maxima</i>	7075	0	0	0	1
Epheme-roptera		<i>Tipula</i> sp.	7077	1	1	0	8
	Baetidae	<i>Baetis buceratus</i>	4388	6	6	0	0
		<i>Baetis fuscatus</i>	4397	323	296	138	111
		<i>Baetis rhodani</i>	4415	104	99	2	4
		<i>Baetis</i> sp.	4419	397	319	830	8
		<i>Baetis vernus</i>	4427	52	50	1	2
	Ephemerellidae	<i>Serratella ignita</i>	5131	1	0	0	0
	Ephemeridae	<i>Ephemera danica</i>	5124	3051	2943	254	405
	Heptageniidae	<i>Heptagenia sulphurea</i>	5457	124	91	0	13
	Leptophlebiidae	<i>Paraleptophlebia submarginata</i>	6309	26	26	5	0
Gastro-poda	Bithyniidae	<i>Bithynia tentaculata</i>	4462	1	1	1	0
	Hydrobiidae	<i>Potamopyrgus antipodarum</i>	8251	6	6	56	0
		<i>Galba truncatula</i>	5284	7	7	5	0
	Lymnaeidae	<i>Lymnaea stagnalis</i>	5916	9	9	0	0
		<i>Omphiscola glabra</i>	6191	5	5	0	0
		<i>Radix balthica</i>	16959	8	6	0	0
	Physidae	<i>Physa fontinalis</i>	6395	14	14	0	1
	Planorbidae	<i>Ancylus fluviatilis</i>	4310	0	0	0	2
		<i>Bathyomphalus contortus</i>	4433	7	7	0	0
		<i>Gyraulus albus</i>	5354	45	45	1	1
		<i>Pisidium supinum</i>	6431	2	2	0	11
		<i>Planorbarius corneus</i>	6431	2	2	0	0
<i>Planorbis planorbis</i>		6436	3	3	0	0	
Hetero-ptera	Aphelocheiridae	<i>Aphelocheirus aestivalis</i>	4335	26	18	0	0
	Corixidae	<i>Sigara</i> sp.	6829	0	0	0	1

Hirudi-nea	Erpobdellidae	<i>Erpobdella octoculata</i>	5159	78	77	1	7
	Glossiphoniidae	<i>Alboglossiphonia heteroclita</i>	4261	1	0	4	6
		<i>Alboglossiphonia hyalina</i>	7856	0	0	2	2
		<i>Glossiphonia complanata</i>	5304	55	54	266	10
		<i>Glossiphonia concolor</i>	5307	0	0	0	5
		<i>Glossiphonia nebulosa</i>	7725	0	0	3	0
Megalo-tera	Sialidae	<i>Sialis fuliginosa</i>	6821	3	3	3	3
		<i>Sialis lutaria</i>	6822	1	0	6	14
Odo-nata	Calopterygidae	<i>Calopteryx splendens</i>	4530	6	6	0	0
		<i>Calopteryx virgo</i>	4532	8	8	0	0
Oligo-chaeta	Cordulegastridae	<i>Cordulegaster boltonii</i>	4740	0	0	4	5
	[Kl:Oligochaeta]	Naididae/Tubificidae Gen. sp.	20200	318	308	10	0
		Oligochaeta Gen. Sp.	8736	107	106	0	0
	Lumbricidae	<i>Eiseniella tetraedra</i>	5075	8	8	2	3
Plecop-tera	Lumbriculidae	<i>Lumbriculus variegatus</i>	5907	7	1	4	1
	Chloroperlidae	<i>Isoptera serricornis</i>	5676	0	0	0	7
	Leuctridae	<i>Leuctra hippopus</i>	5768	1	1	1	1
	Nemouridae	<i>Nemoura flexuosa</i>	6097	0	0	0	1
	Perlodidae	<i>Perlodes dispar</i>	6373	0	0	0	1
Tricho-ptera	[Ord:Trichoptera]	Trichoptera Gen. sp.	8670	1	1	0	0
	Beraeidae	<i>Beraea pullata</i>	4441	3	3	0	0
	Glossosomatidae	<i>Agapetus fuscipes</i>	4251	4	4	37	0
		<i>Synagapetus iridipennis</i>	6954	0	0	2	0
	Goeridae	<i>Silo nigricornis</i>	6833	1	1	6	0
	Hydropsychidae	<i>Hydropsyche angustipennis</i>	5588	2	2	0	0
		<i>Hydropsyche pellucidula</i>	5601	1	1	2	0
		<i>Hydropsyche saxonica</i>	5602	2	2	6	0
		<i>Hydropsyche siltalai</i>	5604	19	16	151	0
	Hydroptilidae	<i>Hydroptila</i> sp.	5616	3	3	2	0
	Lepidostomatidae	<i>Lepidostoma basale</i>	5713	5	5	0	0
	Leptoceridae	<i>Athripsodes bilineatus</i> ssp.	21232	9	9	0	0
		<i>Athripsodes cinereus</i>	4369	7	6	0	0
		<i>Athripsodes</i> sp.	4371	1	0	0	0
		<i>Ceraclea annulicornis</i>	4579	2	2	0	0
	Limnephilidae	<i>Anabolia nervosa</i>	4300	13	12	9	0
		<i>Chaetopteryx villosa</i>	8826	14	13	215	18
		<i>Halesus digitatus</i>	21501	101	100	159	1
		<i>Halesus radiatus</i>	5376	83	81	182	4
		<i>Halesus</i> sp.	5378	0	0	0	3
		<i>Halesus tessellatus</i>	5379	9	9	1	0
		Limnephilidae Gen. sp.	5809	1	1	0	0
		<i>Limnephilus decipiens</i>	5824	1	1	1	0
		<i>Limnephilus flavicornis</i>	5827	0	0	1	0
		<i>Limnephilus lunatus</i>	5837	17	16	0	0
		<i>Limnephilus rhombicus</i> ssp.	19351	1	1	7	0
		<i>Micropterna sequax</i>	6023	0	0	1	0
	Philopotamidae	<i>Parachiona picicornis</i>	6278	0	0	2	0
		<i>Potamophylax cingulatus</i>	19394	0	0	34	8
		<i>Potamophylax luctuosus</i>	21665	0	0	17	5
		<i>Potamophylax</i> sp.	6527	0	0	1	0
		<i>Wormaldia occipitalis</i>	19450	1	1	0	0
	Polycentropodidae	<i>Plectrocnemia conspersa</i>	21218	64	64	311	145
		<i>Polycentropus irroratus</i>	6469	4	4	0	3
	Psychomyiidae	<i>Lype phaeopa</i>	5920	10	10	16	8
		<i>Lype reducta</i>	5921	83	82	20	14
		<i>Tinodes rostocki</i>	7066	0	0	1	0
	Rhyacophilidae	<i>Rhyacophila fasciata</i>	21233	0	0	32	31
	Sericostomatidae	<i>Notidobia ciliaris</i>	6134	22	22	0	9
		<i>Sericostoma personatum</i>	6817	164	150	694	194
Turbel-laria	Dugesidae	<i>Dugesia gonocephala</i>	5018	34	25	279	0