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ECOLOGICAL STUDIES ON
BENTHIC MACROINVERTEBRATE COMMUNITIES
IN RELATION TO THEIR USE IN
RIVER WATER QUALITY SURVEILLANCE

2 VOLUMES

VOLUME 2

by

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VOLUME 2

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APPENDICES

APPENDIX A

Check list of macroinvertebrate species
(with authorities) cited in Volume 1 text

APPENDIX A

CHECK LIST OF MACROINVERTEBRATE SPECIES (WITH AUTHORITIES) CITED IN
VOLUME I TEXT

PLATYHELMINTHES

- Polycelis nigra (Muller)
Polycelis tenuis (Ijima)
Polycelis felina (Dalyell)
Dugesia lugubris (Schmidt)
Dugesia tigrina (Girard)
Dugesia polychroa (Schmidt)
Dendrocoelum lacteum (Muller)
Bdellocephala punctata (Pallas)

OLIGOCHAETA

- Nais elinguis (Muller)
Stylaria lacustris (L.)
Tubifex tubifex (Muller)
Psammoryctides barbatus (Grube)
Limnodrilus claparedoianus Ratzel
Limnodrilus hoffmeisteri Claparede
Limnodrilus udekemianus Claparede
Potamothrix hammoniensis (Michaelson)
Potamothrix moldaviensis (Vejdovsky and Krazek)
Rhyacodrilus coccineus (Vejdovsky)
Lumbriculus variegatus (Muller)
Stylodrilus heringianus Claparede
Eiseniella tetraedra (Savigny)

HIRUDINEA

- Piscicola geometra (L.)
Theromyzon tessulatum (Muller)
Hemiclepsis marginata (Muller)
Glossiphonia heteroclita (L.)
Glossiphonia complanata (L.)
Helobdella stagnalis (L.)
Haemopsis sanguisuga (L.)
Erpobdella octoculata (L.)
Erpobdella testacea (Savigny)
Trocheta subviridis Dutrochet

MALACOSTRACA

- Asellus aquaticus (L.)
Corophium curvispinum Sars
Crangonyx pseudogracilis Bousfield
Gammarus pulex (L.)
Gammarus tigrinus Sexton

PLECOPTERA

- Taeniopteryx nebulosa (L.)
Brachyptera risi (Morton)
Protonemura praecox (Morton)
Protonemura meyeri (Pictet)
Amphinemura sulcicollis (Stephens)
Nemoura avicularis Morton
Nemoura cambrica (Stephens)
Leuctra fusca (L.)
Leuctra hippopus (Kempny)
Leuctra inermis Kempny

PLECOPTERA (continued ...)

Leuctra nigra (Olivier)

Perlodes microcephala (Pictet)

Isoperla grammatica(Poda)

EPHEMEROPTERA

Baetis scambus Eaton

Baetis rhodani (Pictet)

Centroptilum luteolum (Muller)

Cloeon dipterum (L.)

Rhithrogena semicolorata (Curtis)

Heptagenia sulphurea (Muller)

Heptagenia lateralis (Curtis)

Ecdyonurus venosus (Fabricius)

Ecdyonurus torrentis Kimmins

Paraleptophlebia submarginata (Stephens)

Habrophlebia fusca (Curtis)

Ephemerella ignita (Poda)

Ephemera danica Muller

Caenis moesta Bengtsson

Caenis robusta Eaton

Caenis rivulorum Eaton

TRICHOPTERA

Rhyacophila dorsalis (Curtis)

Plectrocnemia conspersa (Curtis)

Polycentropus flavomaculatus (Pictet)

Holocentropus dubius (Rambur)

Cyrtus trimaculatus (Curtis)

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TRICHOPTERA (continued ...)

- Psychomyia pusilla (Fabricius)
Hydropsyche pellucidula (Curtis)
Hydropsyche angustipennis (Curtis)
Hydropsyche siltalai Dohler
Hydropsyche contubernalis McLachlan
Agraylea multipunctata Curtis
Hydroptila tineoides Dalman
Phryganea grandis L.
Limnephilus rhombicus (L.)
Limnephilus lunatus Curtis
Anabolia nervosa Curtis
Molanna angustata Curtis
Beraeodes minutus (L.)
Athripsodes bilineatus (L.)
Mystacides nigra (L.)
Silo pallipes (Fabricius)
Lepidostoma hirtum (Fabricius)
Sericostoma personatum (Spence)

COLEOPTERA

- Brychius elevatus (Panzer)
Platambus maculatus (L.)
Elmis aenea (Muller)
Esolus parallelepipedus (Muller)
Limnius volckmari (Panzer)
Macronychus quadrituberculatus Muller
Oulimnius tuberculatus (Muller)
Stenelmis canaliculata (Gyllenhal)

MEGALOPTERA

Sialis lutaria (L.)

Sialis fuliginosa Pictet

ODONATA

Platycnemis pennipes (Pallas)

Ischnura elegans (Linden)

Coenagrion puella (L.)

Coenagrion pulchellum (Linden)

Agrion splendens (Harris)

Gomphus vulgatissimus (L.)

HEMIPTERA

Ilyocoris cimicoides (L.)

Aphelocheirus montandoni (Fabricius)

Plea leachi McGregor and Kirkcaldy

DIPTERA

Pedicia rivosa (L.)

Dicranota bimaculata (Schummel)

Macropelopia notata (Meigen)

Diamesa campestris (Edwards)

Diamesa prolongata Kieffer

Brillia longifurca Kieffer

Brillia modesta (Meigen)

Prodiamesa olivacea (Meigen)

Chironomus riparius Meigen

Simulium austeni Edwards

DIPTERA (Continued ...)

Simulium equinum L.

Simulium ornatum Meigen

Atherix ibis (Fabricius)

MOLLUSCA

Theodoxus fluviatilis (L.)

Viviparus viviparus (L.)

Valvata macrostoma Morch

Valvata piscinalis (Muller)

Potamopyrgus jenkinsi (Smith)

Bithynia tentaculata (L.)

Bithynia leachi (Sheppard)

Lymnaea glabra (Muller)

Lymnaea stagnalis (L.)

Lymnaeaperegra (Muller)

Lymnaea auricularia (L.)

Physa fontinalis (L.)

Planorbis carinatus Muller

Planorbis planorbis (L.)

Planorbis leucostoma Millet

Planorbis crista (L.)

Acroloxus lacustris (L.)

Ancylus fluviatilis Muller

Zonitoides nitidus (Muller)

Sphaerium rivicola (Lamarck)

Sphaerium corneum (L.)

Anodonta cygnaea (L.)

Anodonta anatina (L.)

Annexe 1

Phase I Macroinvertebrate work

TABLE 2 (cont)

RIVER TEAN 1 POOL MACROINVERTEBRATE DATA 1976

Taxa/Species	6 WEEKS						8 WEEKS									
	8.4 - 19.5						19.5 - 13.7									
	Slag Basket	Slag Bag	Stone Bag	Biopac Unit	Biopac Bag	Spiral Sampler	Heel Kick	Slag Basket	Slag Bag	Stone Bag	Biopac Unit	Biopac Bag	Floor R Bag	Spiral Sampler	Heel Kick	
<i>Limnodrilus hoffmeisteri</i>																
<i>Tubifex tubifex</i>																
<i>Lumbriculus variegatus</i>																
Enchytraeidae																
<i>Glossiphonia complanata</i>																
<i>Pisicicola geometra</i>																
Hydracarina																
<i>Gammarus pulex</i>																
<i>Asellus aquaticus</i>																
<i>Ecdyonurus venosus</i>	1															
<i>Baetis rhodani</i>	4															
<i>Ephemerella ignita</i>																
<i>Hydropsyche angustinervis</i> (L)																
<i>Polycentropus flavomaculatus</i> (L)																
<i>Cyrtus trimaculatus</i> (L)																
<i>Plectrocnemia conspersa</i> (L)	8	7	4													
<i>Stenophylax</i> sp. (L)																
<i>Anabolia nervosa</i> (L)																
<i>Hydroporus</i> sp. (L)																
<i>Brychius elevatus</i> (L)																
<i>Brychius elevatus</i> (A)																
<i>Psychoda</i> sp. (L)	1	2	5	1	27	4	1									
<i>Psychoda</i> sp. (P)	10	10	20	11	7	43	10	1								
<i>Macropelopia</i> sp.	11	6	7	20		9	3	2								
<i>Pentaneurini</i>																
<i>Diamesa carpestris</i>																
<i>Procladius olivaceus</i>																
<i>Brillia modesta</i>	3	1	3	5	5	4	2									
Orthocladinae	1	2		6		2										
<i>Tanytarsini</i>																
<i>Chironomini</i>																
<i>Chironomus riparius</i>	6	2	1	3	2	2	3									
Chironomidae (P)	4	2	3	2	2	6	2									
<i>Potamomyzus jenkinsi</i>	2	2	2	2	2	1	1	2								
<i>Lymnaea coreana</i>	2	3	13		7		4									
<i>Ancylus fluviatilis</i>																
<i>Planorbium</i> sp.																

TABLE 3

RIVER TEAN 2 RIFFLE MACROINVERTEBRATE DATA 1976

Taxa/Species	2 WEEKS										4 WEEKS									
	8.4 - 21.4										19.5 - 16.6 (cont)									
	Slag Basket	Slag Bag	Stone Bag	Blopak Unit	Blopak Bag	Floor R Bag	Spiral Sampler	Cylinder	Heel Kick		Slag Basket	Slag Bag	Stone Bag	Blopak Unit	Blopak Bag	Plocor R Bag	Spiral Sampler	Cylinder	Heel Kick	
<i>Liriodrilus hoffmeisteri</i>	1	1	1	1	3	8	1	25	93		45	10	5	7	20	9		7	6	
<i>Tubifex tubifex</i>				1					1		30							1		
<i>Erpobdella octoculata</i>									1		2		1							
<i>Erpobdella testacea</i>	2		1											1	1			1		
<i>Trocheta subviridis</i>																				
<i>Hydracarina</i>	1		1					1			1	2		1	1				1	
<i>Gammarus culex</i>	17	7	15	6	19	19	4	33	90		140	58	70	120	95	118		115	125	
<i>Asellus aquaticus</i>	2	2	1			5	3	3	16									1	8	
<i>Baetis rhodani</i>																			1	
<i>Hydropsyche anrustinennis</i> (L)	1			2																
<i>Stenophylax</i> sp. (L)	12	1	12	47	144	237	11	163	430		10	17	95	13	483	26		838	1124	
<i>Simulium ornatum</i> (L)	30	3	16	13	97	58	6	338	241			3		6	7	3		15	120	
<i>Simulium ornatum</i> (P)	27	13	6	30	60	62	6	11	26			2		7	3			2	3	
<i>Macropelopia</i> sp.		1		2	5				1		1	1		2				5	3	
<i>Pentaneurini</i>																			3	
<i>Dianeca campestris</i>					1			1	5									7	10	
<i>Procladius olivacea</i>											11	8	1	16	22	6				
<i>Brillia modesta</i>											6	4	3	7	20	20				
<i>Orthocladiinae</i>	45	94	23	25	82	82	60	22	73		1	3	1	5	7					
<i>Tanytarsini</i>		1		2	2	3	1	4	12		20	33	19	15	25	41		2		
<i>Chironomini</i>				2	2	3	1	4	5											
<i>Chironomidae</i> (P)	1			2	2	3	3	3	5									1		
<i>Empididae</i>																				
<i>Planorbis planorbis</i>					1															
<i>Pisidium</i> sp.																				

TABLE 3 (cont)

RIVER TEAM 2 RIFFLE MACROINVERTEBRATE DATA 1976

Taxa/Species	6 WEEKS						8 WEEKS												
	Slag Basket	Slag Bag	Stone Bag	Blopac Unit	Blopac Bag	Floor R Bag	Spiral Sampler	Cylinder	Heel Kick	Slag Basket	Slag Bag	Stone Bag	Blopac Unit	Blopac Bag	Floor R Bag	Spiral Sampler	Cylinder	Heel Kick	
<i>Limnodrilus hoffmeisteri</i>																			
<i>Tubifex tubifex</i>																			
Tubiidae																			
<i>Lumbriculus variegatus</i>																			
<i>Erpobdella octoculata</i>																			
<i>Erpobdella testacea</i>																			
<i>Glossiphonia complanata</i>																			
<i>Hydracarina</i>																			
<i>Gammarus pulex</i>																			
<i>Aseillus aquaticus</i>																			
<i>Baetis rhodani</i>																			
<i>Rhyacophila dorsalis</i> (L)																			
<i>Hydropsyche angustipennis</i> (L)																			
<i>Stenop hylax</i> sp. (L)																			
<i>Anabolia nervosa</i> (L)																			
Dytiscidae (L)																			
<i>Simulium ornatum</i> (L)																			
<i>Simulium ornatum</i> (P)																			
<i>Macropelobia</i> sp.																			
<i>Pentaneurini</i>																			
<i>Diamesa campestris</i>																			
<i>Prodiamesa olivacea</i>																			
<i>Prilla modesta</i>																			
Orthocladinae																			
<i>Tanytarsini</i>																			
<i>Chironomini</i>																			
<i>Chironomidae</i> (P)																			
<i>Ceratopogonidae</i>																			
<i>Dicranota</i> sp.																			
<i>Ancyclus fluviatilis</i>																			

TABLE 4

RIVER TEAM 2 POOL MACROINVERTEBRATE DATA 1976

Taxa/Species	2 WEEKS							4 WEEKS								
	8.4 - 21.4							19.5 - 16.6								
	Slag Basket	Slag Bag	Stone Bag	Blopak Unit	Blopak Bag	Plocor R Bag	Spiral Sampler	Heel Kick	Slag Basket	Slag Bag	Stone Bag	Blopak Unit	Blopak Bag	Plocor R Bag	Spiral Sampler	Heel Kick
<i>Polycelis tenuis</i>	1	1			1											
<i>Dugesia lugubris/polychroa</i>	5		1	2	9	17	1	59								
<i>Limnodrilus hoffmeisteri</i>																
<i>Tubifex tubifex</i>																
<i>Potamothenix moldaviensis</i>	2	1	2			1										
<i>Eprobodella octoculata</i>	1	1														
<i>Eprobodella testacea</i>		6	1		1			1								
<i>Glossiphonia complanata</i>																
<i>Helobdella stagnalis</i>	2	9	1	3			2	70								
<i>Hydracarina</i>	193	155	36	86	107	81	33	5	253	106	79	110	96	273	79	1
<i>Asellus aquaticus</i>																
<i>Baetis rhodani</i>	1								2		1			1		
<i>Rhyacophila dorsalis</i> (L)																
<i>Stenophylax</i> sp. (L)																
Dytiscidae (L)																
<i>Sialis lutaria</i>																
<i>Simulium ornatum</i> (L)	3		1	20	7	1	3	8						1		
<i>Simulium ornatum</i> (P)	25	13	44	43	24	8	8	35								
<i>Macropelopia</i> sp.	40	35	13	90	88	130	30	160	2	2	1	1	2	2	22	1
<i>Pentaneurini</i>	8	15		2		26	6	19								
<i>Diamesa campestris</i>	7	8	1	7	1	3	2		4	20	9	7	1	23	38	
<i>Procladius olivaceus</i>									2							
<i>Brillia modesta</i>	12	27	9	46	34	33	14	13	1							
<i>Orthocladinae</i>	1	2		6	8	2	3	3	4	1						
<i>Tanytarsini</i>	9	3	3	2	4	2	1	43								
<i>Chironomini</i>																
<i>Chironomus riparius</i>																
<i>Chironomidae</i> (P)		5	1	8	4	8	4	3	4	4	1	2	2	1	1	4
<i>Ceratopogonidae</i>																
<i>Empididae</i>																
<i>Lymnaea perera</i>	1															
<i>Pisidium</i> sp.																

RIVER TEAM 2 POOL MACROINVERTEBRATE DATA 1976

BLE 4 (CONTINUED)

IMMERSION PERIOD	6 WEEKS						8 WEEKS									
	8.4 - 19.5						19.5 - 13.7									
SAMPLER	Slag Basket	Slag Bag	Stone Bag	Biopac Unit	Biopac Bag	Flocor R Bag	Spiral Sampler	Heel Kick	Slag Basket	Slag Bag	Stone Bag	Biopac Unit	Biopac Bag	Flocor R Bag	Spiral Sampler	Heel Kick
<i>Limnodrilus hoffmeisteri</i>	61	30	27	7	522	138	53	201	10	4	11	26	2	2		11
<i>Erobodella octoculata</i>	7	5	8	1	13	13			3			5	6	6		
<i>Erobodella testacea</i>	1	2														
<i>Glossiphonia complanata</i>		6		1	5	1	1					1	2	2		1
<i>Helodella stagalis</i>							1									1
<i>Gammarus pulex</i>								1								1
<i>Asellus aquaticus</i>	129	48	15	138	194	177	31	123	230	60	10	515	639			87
<i>Plectrocnemia conspersa</i> (L)			1			1			1							
<i>Stenophylax</i> sp. (L)									1	1						
<i>Simulium ornatum</i> (L)	6		1	3	3	9		6		4				1		31
<i>Macropelopia</i> sp.	2			1	1	2		5	2					2		1
<i>Pentaneurini</i>																
<i>Procladius olivacea</i>					1			10								
<i>Orthocladinae</i>								19								
<i>Chironomini</i>			1			1		42								
<i>Tanytarsini</i>			13	73	9	21	3									
<i>Chironomidae</i> (P)	24	5	1	2	1	4		6								
<i>Potomopygus jenkinsi</i>											1					
<i>Ancyclus fluvialis</i>																
<i>Pisidium</i> sp.									1							

Taxa species
Limnodrilus hoffmeisteri
Erobodella octoculata
Erobodella testacea
Glossiphonia complanata
Helodella stagalis
Gammarus pulex
Asellus aquaticus
Plectrocnemia conspersa (L)
Stenophylax sp. (L)
Simulium ornatum (L)
Macropelopia sp.
Pentaneurini
Procladius olivacea
Orthocladinae
Chironomini
Tanytarsini
Chironomidae (P)
Potomopygus jenkinsi
Ancyclus fluvialis
Pisidium sp.

CHECKLEY CHANNEL 50% SEWAGE EFFLUENT, 50% RIVER WATER MACROINVERTEBRATE DATA 1976

TABLE 6

IMMERSION PERIOD	4 WEEKS							4 WEEKS							4 WEEKS						
	25.3 - 21.4							19.5 - 16.6							16.6 - 13.7						
	Slag Basket	Stone Bag	Biopac Unit	Biopac Bag	Floor R Bag	Spiral Sampler	Cylinder	Slag Basket	Stone Bag	Biopac Unit	Biopac Bag	Floor R Bag	Cylinder	Slag Basket	Stone Bag	Biopac Unit	Biopac Bag	Floor R Bag	Cylinder		
	1	1	1	5	1	1	6	16	3	24	32	1	1	11	1	6	1	1	1		
	1			1				2	8	4	210			23							
	1			1	4	1	1		1	1	1			4			1	1	1		
	1	1408	1228	217	1822	698	335	74	1694					191	187	128	280	811	448	145	
	2			6	1	3	7	3	6	1	7	10	7	26	8	5	5	2	1	1	
				3	1	1		1	1					1							
				3	19	2	1	23													
				40	136	44	4	151			3	5	2	4							
	7													4							
														2	3	1	1	3	1	1	
														6	1						
	10	4	2	33	17	27	55														
	28	1	1	16	35	19	3	14			3										
				1	11	36	4				1										
														1							
				1	1	2	3														
				1	1	1	2	2													
	16	13	13	39	62	53	20	50						17	11	2	2	15	1	1	
									14	4	20	14	48	23							
									9	9	15	3	1	1							

- Palaemonetes
- Limnodrilus hoffmeisteri
- Tubificoides tubificus
- Procladius subviridis
- Glossiphonia complanata
- Hydracarina
- Gammarus pulex
- Asellus aquaticus
- Ectocarpus rhodani
- Ephemera ignita
- Stenophylax sp. (L)
- Limnephilus luteanus (L)
- Hydroptila tineoides (L)
- Dytiscidae (L)
- Mirulium ornatum (L)
- Mirulium ornatum (P)
- Macropelopia sp.
- Pentaneurini
- Tanyptodinae
- Procladius olivaceus
- Orthocladinae
- Tanytarsini
- Chironomus riparius
- Chironomidae (P)
- Tipula sp.
- Potamopygus jenkinsi
- Lymnaea peratra
- Ficidium sp.

TABLE 7

CHECKLEY CHANNEL 75% SEWAGE, 25% RIVER WATER MACROINVERTEBRATE DATA 1976

IMMERSION PERIOD	4 WEEKS						4 WEEKS						4 WEEKS										
	25.3 - 21.4						19.5 - 16.6						16.6 - 13.7										
SAMPLER	Slag Basket	Slag Bag	Stone Bag	Blopak Unit	Blopak Bag	Fluor R Bag	Spiral Sampler	Cylinder	Slag Basket	Slag Bag	Stone Bag	Blopak Unit	Blopak Bag	Fluor R Bag	Cylinder	Slag Basket	Slag Bag	Stone Bag	Blopak Unit	Blopak Bag	Fluor R Bag	Cylinder	
	1			1	2	3			24	2					3	10			3				
		2				1			100						2				3				
	86	85	27	64	30	20	13	151	146	71	51	62	247	510	631	260	146	83	261	177	96	509	1
	1	3	1	3	3	1	4		4	3	1	6	3	2		5	9	1	3	3	1	2	
										3	1					1	1		3	1	2		
										3	1								3	4			
										1									5	4	1		
																			4				
																			4	1	4		
																			3	5	4		
																			4	8	1		
																			4	4	24		
																			5	4	3		
																			3	3	3		
																			3	11	3		
																			3	8	1		
																			4	2	1		
																			2	4	24		
																			1	4	1		
																			3	4	3		
																			2	8	1		
																			2	4	3		
																			1	3	3		
																			1	11	3		
																			3	8	1		
																			2	2	361		
																			8	270	361		
																			1	1	26		
																			76	62	8	270	361
																			5	19	1	114	136
																			12				

Taxa/Species

Limnodrilus hoffmeisteri
Tubifex tubifex
Glossiphonia complanata
Hydracarina
Gammarus pulex
Asellus aquaticus
Baetis rhodani
Ephemerella ignita
Stenophylax sp. (L)
Limnephilus lunatus (L)
Hydroptila tineoides (L)
Dytiscidae (L)
Brychius elevatus (L)
Simulium ornatum (L)
Simulium ornatum (P)
Macropelonia sp.
Pentaneurini
Tanyodinae
Diaesa campestris
Prodiamesa olivacea
Orthocladinae
Tanytarsini
Chironomini
Chironomus riparius
Chironomidae (P)
Nitula sp.
Empididae
Lymnaea perera
Ficidium sp.

IMERSION PERIOD	2 WEEKS						4 WEEKS						6 WEEKS								
	11.8 - 25.8						11.8 - 8.9						11.8 - 27.9								
SAMPLER	Blopac Unit	Blopac Unit	Blopac Unit	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Blopac Unit	Blopac Unit	Blopac Unit	Slag Bag	Slag Bag	Slag Bag	Cylinder 1	Cylinder 2	Cylinder 3	
<i>axa/species</i>																					
<i>lydrosyche angustipennis</i> (L)																					
<i>limacrilus hofmeisteri</i>																					
<i>ubifex tubifex</i>																					
<i>umetriculus variegatus</i>																					
<i>irpobdella</i> sp. (J)																					
<i>lossiphonia complanata</i>																					
<i>iscicola geometra</i>																					
<i>lydracarina</i>																					
<i>amarrarus pulex</i>																					
<i>sellus aquaticus</i>																					
<i>baetis rhodani</i>																					
<i>ophenerella ignita</i>																					
<i>thysacophila dorsalis</i> (L)																					
<i>Cyrrus trimaculatus</i> (L)																					
<i>stereophylax</i> sp. (L)																					
<i>anabolia nervosa</i> (L)																					
<i>hydroptila tineoides</i> (L)																					
<i>Elmis aenea</i> (A)																					
<i>Platambus maculatus</i> (A)																					
<i>Dytiscidae</i> (L)																					
<i>Dytiscidae</i> (A)																					
<i>erycinus elevatus</i> (L)																					
<i>erycinus elevatus</i> (A)																					
<i>Hydroporus</i> sp. (L)																					
<i>Bialia lutaria</i>																					
<i>Berilium ornatum</i> (L)																					
<i>Berilium ornatum</i> (P)																					
<i>Macropelopia</i> sp.																					
<i>Procladius</i> sp.																					
<i>Pentaneurini</i>																					
<i>Diaesa campestris</i>																					
<i>Diaesa prolongata</i>																					
<i>Procladius olivaceus</i>																					
<i>Orthocladinae</i>																					
<i>Rhyacini</i>																					
<i>Chironomini</i>																					
<i>Chironomidae</i> (P)																					
<i>Ceratopogonidae</i>																					
<i>Tipula</i> sp.																					
<i>Dicranota</i> sp.																					
<i>Asterix ibis</i>																					
<i>Potamogeton jenkinsi</i>																					
<i>Lymanea serrea</i>																					
<i>Anoclea fluviatilis</i>																					
<i>Alsiid</i> sp.																					

TABLE 9.

RIVER TEAN 2 MACROINVERTEBRATE SEQUENTIAL STUDY DATA 1976

IMMERSION PERIOD	2 WEEKS						4 WEEKS			6 WEEKS							
	11.8 - 25.8						11.8 - 8.9			11.8 - 27.9							
SAMPLER	Biopac Unit	Biopac Unit	Biopac Unit	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Slag Bag	Biopac Unit	Biopac Unit	Biopac Unit	Cylinder 1	Cylinder 2	Cylinder 3
<i>Polycelis nigra</i>															26	7	1
<i>Limnodrilus hoffmeisteri</i>															6	3	1
<i>Tubifex tubifex</i>																	
<i>Eubdella octoculata</i>	1	3	1	1	1	1	2	1	1	1	1	5	3	4	1		
<i>Eubdella testacea</i>	1			1	1	1	1	1	1	1	1	1	1	1			
<i>Glossiphonia complanata</i>	1	3		2	1	1	1	1	1	1	1	4	1	3			
<i>Helobdella stagnalis</i>																	
<i>Hydracarina</i>																	
<i>Gammarus pulex</i>	3		5	1	1	1	1	1	1	2	2	4	112	120	316	420	340
<i>Asellus aquaticus</i>	420	502	810	497	750	820	283	283	2			160	112	120	316	420	340
<i>Stenophylax</i> sp. (L)															102	132	280
<i>Limnephilus lunatus</i>																	
<i>Elmis acnea</i> (L)																	
<i>Dytiscidae</i> (L)																	
<i>Simulium ornatum</i> (L)																	
<i>Simulium ornatum</i> (P)																	
<i>Macropelopia</i> sp.																	
<i>Procladius</i> sp.																	
<i>Pentaneurini</i>																	
<i>Prodianesa olivacea</i>																	
<i>Orthocladiinae</i>																	
<i>Tanytarsini</i>																	
<i>Chironomini</i>																	
<i>Chironomus riparius</i>																	
<i>Sicranota</i> sp.																	
<i>Ancyclus fluviatilis</i>																	

Taxa/Species

- Polycelis nigra*
- Limnodrilus hoffmeisteri*
- Tubifex tubifex*
- Eubdella octoculata*
- Eubdella testacea*
- Glossiphonia complanata*
- Helobdella stagnalis*
- Hydracarina*
- Gammarus pulex*
- Asellus aquaticus*
- Stenophylax* sp. (L)
- Limnephilus lunatus*
- Elmis acnea* (L)
- Dytiscidae* (L)
- Simulium ornatum* (L)
- Simulium ornatum* (P)
- Macropelopia* sp.
- Procladius* sp.
- Pentaneurini*
- Prodianesa olivacea*
- Orthocladiinae*
- Tanytarsini*
- Chironomini*
- Chironomus riparius*
- Sicranota* sp.
- Ancyclus fluviatilis*

TABLE 10

RIVER	BLITHE				DOVE			
	Biopac Bag	Slag Bag	Cylinder	Biopac Bag	Slag Bag	Cylinder	Biopac Bag	Cylinder
IMMERSION PERIOD	4 WEEKS				4 WEEKS			
IMMERSION DATES	11.8 - 8.9				11.8 - 8.9			
SAMPLER	Biopac Bag	Slag Bag	Cylinder	Biopac Bag	Slag Bag	Cylinder	Biopac Bag	Cylinder
REPLICATES	1	1	1 2 3	1	1	1 2 3	1	1 2 3
Taxa/species	10	14	100 79 60 3 2 3	2	10	11 10 1	1	11 10 1
	7	5	1 3 3	2	7	2	1	2
	5	7	3 2 6 3 3	4	5	1 9 2	4	1 9 2
	1		4 1		1	1		1
	8	2	7 4 1		8	3		1
	2		2 19 4 1 1	4	2	1 16 8	1	1 16 8
	4	1	1		4	37 16 8 1	1	37 16 8 1
	16	1	1 2 2 1 1 3 1 1 1	1	16	2 3 6	1	2 3 6
	1	1	3 1 2	1	1	1 18	1	1 18
	9	5	1 1 3 1	1	9	1 2	1	1 2
	9		1 1		9	1 1		1 1
	1		1		1	1 2		1 2
	1	2	1		1	1 2		1 2
	34	2	1 1 1	1	34	1 2	1	1 2
		2	1 1 1	1		1 2	1	1 2
		9	1 1 1	1		1 2	1	1 2
		4	73 31 51 3	4		4 6 11	11	4 6 11
	11				11	1 2		1 2
	3				3	1 1		1 1
	1				1	4 6 11		4 6 11
						1 2		1 2

Taxa/species

- Tubifex tubifex
- Lumbriculus variegatus
- Erpobdella octoculata
- Erpobdella testacea
- Glossiphonia complanata
- Helobdella stagnalis
- Hydracarina
- Ostracoda
- Gammarus pulex
- Asellus aquaticus
- Baetis rhodani
- Ephemera ignita
- Caenis moesta
- Hydropsyche angustipennis (L)
- Polycentropus flavomaculatus (L)
- Cyrtus trimaculatus (L)
- Plectrocnemia conspersa (L)
- Anabolia nervosa (L)
- Limnephilidae (P)
- Athripsodes bilineatus (L)
- Nystacides nigra (L)
- Elmis aenea (L)
- Elmis aenea (A)
- Oulimnius tuberculatus (L)
- Oulimnius tuberculatus (A)
- Limnius volckmari (L)
- Platambus maculatus (A)
- Dytiscidae (L)
- Dytiscidae (A)
- Gyrinus sp. (L)
- Bryconius elevatus (L)
- Bryconius elevatus (A)
- Chalcididae
- Procladius sp.
- Pentaneurini
- Diamesa campestris
- Procladius olivaceus
- Brillia modesta
- Orthocladinae
- Tanytarsini
- Chironomini
- Chironomus riparius

TABLE 10 (CONTINUED)

RIVER	BLITHE			DOVE		
	Biopac Bag	Slag Bag	Cylinder	Biopac Bag	Slag Bag	Cylinder
IMMERSION PERIOD	4 WEEKS			4 WEEKS		
IMMERSION DATES	11.8 - 8.9			11.8 - 8.9		
SAMPLER						
REPLICATES	1	1	1 2 3	1	1	1 2 3
Taxa/species			1			1 4
Chironomidae (P)						1
Stimulium ornatum (L)						1
Tipula sp.			1 2			2 3 8
Dicranota sp.						2 8 24
Atherix ibis			94 13 11	2		8
Potamopyrgus jenkinsi	41	2	2	124		1 30
Lymnaea peregra	2	1				
Ancylus fluviatilis			145 21 54			3
Sphaerium corneum	10	8				
Pisidium sp.						

Taxa/species
 Chironomidae (P)
 Stimulium ornatum (L)
 Tipula sp.
 Dicranota sp.
 Atherix ibis
 Potamopyrgus jenkinsi
 Lymnaea peregra
 Ancylus fluviatilis
 Sphaerium corneum
 Pisidium sp.

RIVER TEAN 2 MACROINVERTEBRATE DATA 1976/77

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS													
	27.10 - 25.11.76			25.11 - 22.12.76			22.12.76 - 19.1.77													
	Blopac Unit	Slag Bag	Heel Kick	Blopac Unit	Slag Bag	Heel Kick	Blopac Unit	Slag Bag	Heel Kick											
SAMPLER	Cylinder 1	Cylinder 2	Cylinder 3	Blopac Unit	Slag Bag	Slag Bag	Slag Bag	Blopac Unit	Slag Bag	Slag Bag	Blopac Unit	Slag Bag	Slag Bag	Blopac Unit	Cylinder 1	Cylinder 2	Cylinder 3			
	2 1 3 3	1 4	1 4	2 4	2 3 3 1	2 23	2 23	2 4	2 4	2 4	3 7 11	3 7 11	3 7 11	1 1	23 9 3	1 9 3	1 3			
	4 4 5 1	5 17	5 17	5 17	5 17	5 17	5 17	5 17	5 17	5 17	1 2	1 2	1 2	1 1	1 1	1 1	1 1			
	1 1 1 1	1 2	2	3 1	3 1	3 1	3 1	3 1	3 1	3 1	3 4 1	3 4 1	3 4 1	3 2	3 2 7 13 3 1 4	3 2 7 13 3 1 4	3 2 7 13 3 1 4			
	1 1 1 1	1 2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 1 2 1	2 1 2 1	2 1 2 1	2 7 1 4	2 7 1 4	2 7 1 4	2 7 1 4			
	1 1 1	2 2	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	2 1 1	2 1 1	2 1 1	3 2 193 220 95 124 162 1972	3 2 193 220 95 124 162 1972	3 2 193 220 95 124 162 1972	3 2 193 220 95 124 162 1972			
	126 267 515 311 191 178 1220	1 1	204 217 661	1 1	262 216 291 136 412 115 924	2 2	2 2	2 2	2 2	2 2	517 198 329	517 198 329	517 198 329	271 193 220 95 124 162 1972	271 193 220 95 124 162 1972	271 193 220 95 124 162 1972	271 193 220 95 124 162 1972			
	3 2 2 1 3 2 22	8 44 45	8 44 45	1 1 1 2	2 2	3 3	3 3	3 3	3 3	3 3	15 9 12	15 9 12	15 9 12	1 50 68 85	1 50 68 85	1 50 68 85	1 50 68 85			
	1 1 1 4 1 3	1 3 2	1 3 2	31 18 17 2 1 1 47	2 1 1	2 2	2 2	2 2	2 2	2 2	4 2 3	4 2 3	4 2 3	4 81 52 47 3 11 11 4	4 81 52 47 3 11 11 4	4 81 52 47 3 11 11 4	4 81 52 47 3 11 11 4			
	3 4 6 3 2 2	1 5	1 5	4 2 1	4 2 1	4 2 1	4 2 1	4 2 1	4 2 1	4 2 1	1 1 1 5 2	1 1 1 5 2	1 1 1 5 2	1 1 1 5 2	1 1 1 5 2	1 1 1 5 2	1 1 1 5 2	1 1 1 5 2		
	4 3 1 1 1 8	4 2	4 2	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	3 4 3	3 4 3	3 4 3	3 1 1 1 3 3	3 1 1 1 3 3	3 1 1 1 3 3	3 1 1 1 3 3	3 1 1 1 3 3		
	1 2 3 9 2 1 6	1 4	1 4	16 7 5 2	2 2	2 2	2 2	2 2	2 2	2 2	2 5 1	2 5 1	2 5 1	12 3 6 5 3 28	12 3 6 5 3 28	12 3 6 5 3 28	12 3 6 5 3 28	12 3 6 5 3 28		
	1 1 1 4 3 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	2 5 1	2 5 1	2 5 1	2 1 1	2 1 1	2 1 1	2 1 1	2 1 1		

Taxa/species

- Limnodrilus hoffmeisteri
- Tubifex tubifex
- Nais elinguis
- Lumbriculus variegatus
- Anchytraeidae
- Erebodella octoculata
- Glossiphonia complanata
- Helobdella stagnalis
- Gammarus pulex
- Asellus aquaticus
- Beetis rhodani
- Dytiscidae (L)
- Dytiscidae (A)
- Simulium ornatum (L)
- Psychoda sp. (L)
- Macropelopia sp.
- Pentaneurini
- Prodiamesa oliivacea
- Brillia modesta
- Brillia longifurca
- Orthocladiinae
- Tanytarsini
- Chironomini
- Chironomus riparius
- Ceratopogonidae
- Dicranota sp.
- Tipula sp.
- Doiichopodidae
- Ancylus fluviatilis

TABLE 12

Annexe 2

Physico-chemical Data (Aston University)

RIVER WEAVER PHYSICO-CHEMICAL DATA 1977																	
DATE	Temperature °C				Suspended solids mg. l ⁻¹ .				Dissolved Oxygen mg. l ⁻¹ .				Dissolved Oxygen % Saturation				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
26. 4.77		4.2	4.4	5.5	5.9	9	11	27	16	7.6	9.6	6.9	7.8	60	77	57	65
24. 5.77		12.4	13.9	13.6	14.4	5	12	14	11	8.65	10.9	7.1	7.4	84	108	71	75
21. 6.77		11.4	12.9	12.9	13.4	8	16	16	11	8.3	10.5	7.4	7.6	78	102	72	75
19. 7.77		14.0	15.5	15.5	16.0	0	2	5	3	7.0	9.4	6.7	4.4	70	97	80	46
16. 8.77		15.5	16.9	16.7	16.8	6	7	5	3	6.1	8.0	4.9	3.2	63	85	52	34
15. 9.77						2	2	5	6	9.7	11.4	4.7	3.3				
11.10.77		8.8	10.2	9.8	10.0	6	79	11	12	8.8	9.9	7.5	5.5	79	91	69	50
11.11.77		10.5	10.9	10.9	10.9	0	4	6	5	7.7	9.3	7.2	7.4	72	87	68	69
6.12.77		3.5	3.3	3.8	4.0	7	9	10	18	11.2	13.0	10.3	10.2	88	100	81	81

RIVER WEAVER PHYSICO-CHEMICAL DATA																	
DATE	Chloride mg l ⁻¹				Alkalinity mg l ⁻¹				Ammonia N mg.l ⁻¹				Nitrates N mg.l ⁻¹				
	SITE	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
26. 4.77		62	107	100	102	152	140	160	150	0.5	0.85	6.7	4.15	7.15	8.6	6.7	7.85
24. 5.77		69	109	117	117	170	155	170	160	0.65	0.9	1.9	2.25	9.1	14.4	12.2	11.8
21. 6.77		62	119	119	114	167.5	155	167.5	160	1.0	1.1	2.5	2.1	6.35	9.35	7.4	7.15
19. 7.77		96	158	152	149	195	167.5	182.5	162.5	3.2	1.15	4.85	4.5	6.3	8.6	7.3	8.4
16. 8.77		90	161	161	156	170	170	170	147.5	0.8	1.5	2.4	1.8	5.7	6.5	5.35	6.0
15. 9.77		88	165	150	151	50	160	175	162.5	1.1	1.15	4.4	2.1	5.2	8.1	6.4	7.7
11.10.77		103	173	152	145	190	175	172.5	157.5	0.9	0.8	1.9	4.0	6.8	8.6	7.4	7.5
11.11.77		80	143	133	129	172.5	162.5	157.5	147.5	3.0	2.25	3.35	3.15				
6.12.77		79	148	135	131	182.5	167.5	160	155	1.75	1.75	5.25	4.9				

RIVER WEAVER PHYSICO-CHEMICAL DATA 1977																
DATE	Phosphates mg. l ⁻¹ .				Total Hardness mg. l ⁻¹ .				Calcium Hardness mg. l ⁻¹ .				Magnesium Hardness mg. l ⁻¹ .			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
26. 4.77	0.75	1.75	2.25	1.55	392	310	334	324	254	210	218	216	38	100	116	108
24. 5.77	0.35	1.2	1.0	1.15	400	360	370	354	274	238	252	236	126	122	118	118
21. 6.77	0.65	1.35	1.3	1.3	380	338	362	358	274	244	256	244	106	94	106	114
19. 7.77	0.75	1.35	1.9	1.7	456	398	370	357	332	264	250	276	124	134	120	81
16. 8.77	0.7	1.2	1.7	1.5	422	376	352	328	290	154	134	126	132	222	218	202
15. 9.77	0.5	1.3	1.6	1.4	464	370	336	328	264	250	230	222	200	120	106	106
11.10.77	Neg.	1.5	1.3	1.0	472	380	374	342	324	262	234	222	148	118	140	120
11.11.77	0.85	1.15	1.1	1.1	444	378	356	354	298	262	246	236	146	116	110	118
6.12.77	0.5	1.0	1.3	1.35	442	398	388	358	314	266	256	248	128	132	132	110

TABLE 14

RIVER TRENT PHYSICO-CHEMICAL DATA 1977

DATE SITE	Temperature °C		Suspended Solids mg.l ⁻¹		Dissolved Oxygen mg.l ⁻¹		Dissolved Oxygen % Saturation	
	1	2	1	2	1	2	1	2
2. 5.77		11.2		21		7.7		72
30. 5.77	13.9	14.0	12	19	10.9	7.4	108	80
27. 6.77	15.0	10.4	5	13	11.2	7.3	114	68
26. 7.77	15.4	15.8	22	15	8.9	6.3	92	65
22. 8.77	16.2	15.6	10	25	9.0	6.3	94	65
20. 9.77			14	10	10.3	7.1		
17.10.77	11.0	12.0	1	18	9.1	6.2	85	60
15.11.77	7.0		19		10.3		88	
13.12.77	7.5	8.0	27	52	10.2	9.1	88	80
DATE SITE	Chloride mg.l ⁻¹		Alkalinity mg.l ⁻¹		Ammonia N mg.l ⁻¹		Nitrate N mg.l ⁻¹	
	1	2	1	2	1	2	1	2
2. 5.77		99		110.0		1.75		15.0
30. 5.77	140	133	155.0	135.0	1.4	2.0	6.7	12.8
27. 6.77	176	125	152.5	125.0	0.85	2.0	9.35	13.4
26. 7.77	164	137	152.5	135.0	1.65	3.25	10.6	26.8
22. 8.77	176	110	142.5	102.5	5.1	7.0	7.6	10.5
20. 9.77	179	137	157.5	137.5	1.1	4.2	7.5	11.75
17.10.77	177	142	150.0	142.5	0.65	1.0	9.0	12.4
15.11.77	123		122.5		1.0		8.5	
13.12.77	113	73	115.0	90.0	1.75	2.15	9.0	10.2
DATE SITE	Phosphate mg.l ⁻¹		Total Hardness mg.l ⁻¹		Calcium Hardness mg.l ⁻¹		Magnesium Hardness mg.l ⁻¹	
	1	2	1	2	1	2	1	2
2. 5.77		1.65		331		216		115
30. 5.77	0.75	2.35	414	378	288	266	126	112
27. 6.77	1.35	2.5	424	362	296	250	128	112
26. 7.77	2.0	2.65	406	374	280	252	126	122
22. 8.77	1.7	2.5	404	320	282	220	142	100
20. 9.77	0.1	0.35	400	336	288	244	112	92
17.10.77	1.2	2.3	424	356	270	232	154	124
15.11.77	1.3		392		278		114	
13.12.77	1.0	1.25	370	324	260	216	110	108

TABLE 15								
RIVER TAME PHYSICO-CHEMICAL DATA 1977								
DATE SITE	Temperature °C		Suspended Solids, mg.l ⁻¹		Dissolved Oxygen mg.l ⁻¹		Dissolved Oxygen % Saturation	
	1	2	1	2	1	2	1	2
2. 5.77	11.3	11.4	26	21	7.5	6.6	71	63
30. 5.77	14.5	14.8	32	20	8.0	7.4	81	76
27. 6.77	15.0	15.0	18	17	7.4	6.9	76	71
26. 7.77	16.2	16.2	21	34	6.8	6.0	72	63
22. 8.77	16.1	16.2	35	22	6.5	6.1	68	64
20. 9.77			16	11	6.5			
17.10.77	13.0	12.0	17	10	6.4	5.2	63	50
15.11.77		8.0		31		7.4		65
13.12.77	10.0	8.5	32	46	8.4	8.8	77	78
DATE SITE	Chloride mg.l ⁻¹		Alkalinity mg.l ⁻¹		Ammonia N mg.l ⁻¹		Nitrate N mg.l ⁻¹	
	1	2	1	2	1	2	1	2
2. 5.77	112	88	147.5	107.5	6.6	4.65	12.5	>20.0
30. 5.77	122	111	167.5	112.5	7.1	2.9	13.6	18.0
27. 6.77	121	91	170.0	115.0	7.35	3.5	9.8	15.7
26. 7.77	119	107	155.0	102.5	4.85	2.85	10.1	25.6
22. 8.77	76	94	105.0	102.5	2.2	7.5	10.5	5.1
20. 9.77	128	111	165.0	112.5	8.9	6.3	10.5	13.3
17.10.77	124	112	172.5	120.0	7.85	1.65	7.8	13.9
15.11.77		89		100.0		2.5		11.5
13.12.77	87	66	120.0	90.0	1.75	1.65	10.9	6.6
DATE SITE	Phosphate P mg.l ⁻¹		Total Hardness mg.l ⁻¹		Calcium Hardness mg.l ⁻¹		Magnesium Hardness m.g. l ⁻¹	
	1	2	1	2	1	2	1	2
2. 5.77	2.5	2.5	359	293	242	202	117	91
30. 5.77	3.85	3.7	382	332	270	222	112	110
27. 6.77	3.8	3.25	368	308	262	212	106	96
26. 7.77	3.35	4.15	350	304	240	182	110	122
22. 8.77	3.1	1.9	246	284	175	198	71	86
20. 9.77	0.6	0.4	340	272	220	184	120	92
17.10.77	2.5	4.1	340	272	231	168	109	104
15.11.77		3.0		278		178		100
13.12.77	1.0	1.1	304	326	228	206	76	120

TABLE 16

RIVER MEASE PHYSICO-CHEMICAL DATA 1977

DATE	Temperature °C	Suspended solids mg. l ⁻¹	Dissolved Oxygen mg. l ⁻¹	Dissolved Oxygen % Saturation	Chloride mg. l ⁻¹	Alkalinity mg. l ⁻¹	Ammonia N mg. l ⁻¹	Nitrate N mg. l ⁻¹	Phosphate mg. l ⁻¹	Total Hardness mg. l ⁻¹	Calcium Hardness mg. l ⁻¹	Magnesium Hardness mg. l ⁻¹
4. 4.77	5.5	14	13.2	108	106	147.5	1.1	10.1	Neg	463	272	181
2. 5.77	10.5	5	10.8	100	146	167.5	1.2	10.1	Neg.	464	292	172
30. 5.77	13.2	8	11.7	115	233	202.5	1.2	13.9	0.8	546	344	202
26. 7.77	14.8	15	8.3	85	270	210	1.15	6.9	1.35	564	238	126
22. 8.77	15.0	16	8.0	82	137	145	1.9	4.8	1.4	394	238	156
20. 9.77		12	10.5		304	202.5	1.8	7.5	Neg.	532	308	224
17.10.77	10.5	6	9.4	87	392	195	6.5	7.4	Neg.	538	364	174
15.11.77	5.5	14	11.0	91	131	152.5	0.85	7.5	1.15	434	272	62
13.12.77	7.0	38	11.1	95	94	112.5	1.25	11.8	0.35	426	278	148

TABLE 17a

RIVER TEAN 1 PHYSICO-CHEMICAL DATA 1976-1977

DATE	Temperature °C	Suspended Solids: mg. l ⁻¹ :	Dissolved Oxygen mg. l ⁻¹ :	Dissolved Oxyg % Saturation mg. l ⁻¹ :	Chloride mg. l ⁻¹ :	Alkalinity mg. l ⁻¹ :	BOD ₅ mg. l ⁻¹ :	Ammonia N mg. l ⁻¹ :	Nitrate -N mg. l ⁻¹ :	Phosphate -P mg. l ⁻¹ :	Total Hardness mg. l ⁻¹ :	Calcium Hardness mg. l ⁻¹ :	Magnesium Hardness mg. l ⁻¹ :
8. 4.76		2.5	13.3		43			1.9	5.1	0.6	240	170	70
21. 4.76		1	10.5		37	135	1.1	1.9	4.3	0.6	248	177	71
19. 5.76		10	11.0		50	143	1.8	2.1	1.41	1.55	248	184	64
3. 6.76	11.5	3	9.2	88	43	134	3.2	2.2	1.3	1.75	252	180	72
16. 6.76	13.5	2	7.2	72	39	151		2.6	1.86	0.3	270	180	90
30. 6.76	16.5	9	8.2	86	36	142.5	3.1	2.81	1.99	0.4	236	182	54
13. 7.76	15.8	14	5.9	61	59	100	7.0	1.7	1.45	0.04	176	148	28
28. 7.76	13.6	11	9.3	92	35	146	1.5	1.1	1.58	0.2	236	182	54
25. 8.76	13.6	8	9.9	98	35	140		1.15	1.7	0.55	238	180	58
8. 9.76	11.5	5	9.9	94	34	137.5	0.5	0.85	1.6	0.4	240	182	58
27. 9.76	13.0	7.5	8.9	87	64	78.8	3.0	1.25	3.55	0.45	258	200	58
3. 11.76	5.0	5.5	10.8	88	41	83.8	0.82	0.9	2.4	2.15	212	156	56
25. 11.76	7.8	0.5	10.9	95	40	107.5	0.9	1.0	2.2	1.8	242	176	66
22. 12.76	4.0	18	12.0	95	68	67.5		0.7	4.8	0.85	192	148	44
19. 1.77	3.5	13	9.7	76	100	128.8	8.8	1.6		2.5	288	196	92
16. 3.77	7.0	102	10.2	87	41	95	6.8	1.25	1.7	0.5	190	142	48
13. 4.77	8.5	17	11.4	101	39	95		2.55	4.0	0.4	230	148	82
11. 5.77	10.2	4	10.1	93	33	100	3.8	0.45	5.0	0.05	214	154	60
9. 6.77	10.0	13	10.7	98	36	130	1.7	0.7	3.8	0.15	256	190	66
6. 7.77	14.0	16	9.3	93	37	140		0.65	4.3	0.25	256	186	70
3. 8.77	14.0	8	9.0	90	36	142.5					244	186	58
1. 9.77		5	10.15		41	137.5					246	180	66
29. 9.77		5	9.7		37	137.5		3.05	4.5	Neg.	240	196	44
25. 10.77	9.7	2	9.9	90	68	130		0.5		0.1	244	180	64
22. 11.77	4.5	7	12.1	97	65	80		1.3	6.0	Neg.	198	160	38
19. 12.77		5	11.3		61	82.5		0.75	5.7		212	166	46

TABLE 17b

RIVER TEAN 2 PHYSICO-CHEMICAL DATA 1976-1977

DATE	Temperature °C	Suspended Solids mg. l ⁻¹ .	Dissolved Oxygen mg. l ⁻¹ .	Dissolved Oxygen % Sat.	Chloride mg. l ⁻¹ .	Alkalinity mg. l ⁻¹ .	BOD ₅ mg. l ⁻¹ .	Ammonia N mg. l ⁻¹ .	Nitrate N mg. l ⁻¹ .	Phosphate mg. l ⁻¹ .	Total Hardness mg. l ⁻¹ .	Calcium Hardness mg. l ⁻¹ .	Magnesium Hardness mg. l ⁻¹ .
8. 4.76		15.5	8.7		53.5			2.1	7.7	2.5	289	192	97
21. 4.76		18.5	8.9		72	167	5.65	1.9	7.3	2.4	312	190	122
19. 5.76		15	7.5		54	170	6.1	2.3	4.25	4.3	298	202	96
3. 6.76	12.0	5	4.95	47	58	153	4.75	2.3	3.78	3.9	284	188	96
16. 6.76	14.2	5.5	5.0	50	67	176		2.69	4.49	4.02	332	192	140
30. 6.76	18.5	8	7.2	79	53	177.5	5.1	3.0	4.58	4.4	286	188	98
13. 7.76	16.5	13.5	3.7	39	57	130		2.3	2.5	1.95	218	152	66
28. 7.76	14.6	8.5	4.2	42	80.5	169	8.1	1.2	6.0	5.2	298	194	104
25. 8.76	15.5	11.5	7.49	77	77	165		1.3	11.6	5.75	290	186	104
8. 9.76	12.1	6.5	8.7	88	74	160	5.0	1.15	8.15	5.6	310	190	120
27. 9.76	13.5	23	6.4	63	62	94	4.0	1.35	6.0	1.65	301	234	67
3. 11.76	6.0	18.5	8.9	74	50	107.5	11.2	0.5	3.45	2.5	248	178	70
25. 11.76	8.5	5	8.5	76	54	147.5	10.0	0.9	3.9	3.5	291	194	97
22. 12.76	4.7	34.5	11.05	88	90	82.5		1.0	5.9	1.15	248	167	61
19. 1.77.	3.5	13	9.7	76	100	129	8.8	1.6		2.5	288	196	92
16. 3.77	7.5	24	9.3	80	48	125	13.5	1.55	2.9	0.1	242	168	74
13. 4.77	9.0	33	8.3	75	45	132.5		2.4	6.4	2.0	255	162	93
11. 5.77	10.9	12	7.4	69	45	132.5	6.4	1.0	8.7	1.0	246	176	70
9. 6.77	10.7	20	6.7	63	54	157.5	14.0	0.9	11.1	3.0	284	184	100
6. 7.77	14.8	12	4.4	45	50	165		0.85	10.0	3.75	286	198	88
3. 8.77	15.0	8	4.6	47	71	147.5					296	192	104
1. 9.77		13	6.1		67	147.5					280	192	88
29. 9.77		7	5.5		74	135		2.0	6.4	4.55	290	190	100
25. 10.77	10.6	7	6.5	60	60	140		0.8	11.6	2.5	286	170	116
22. 11.77	4.2	10	11.0	87	92	100		1.2	7.5	0.75	238	174	64
19. 12.77		7	9.9		61	105		0.65	7.4		232	170	62

TABLE 18a RIVER CHURNET PHYSICO-CHEMICAL DATA 1977-1978

DATE	TRIB.	Current Velocity (cm.sec. ⁻¹) (Rifflles).												
		1	2	3	4	5	6	7	8	9	10	11	12	13
17. 3.77	106.3	20.3	75.6	54.7	121	51.3	116	63.1	108	118	76.5	90		
14. 4.77	56.3	41.2	61.4	39.6	58.9	58.5	94.2	84.5	118	118	76.5	76.5		
12. 5.77	23.6	44.2	109.7	33.7	114.3	52.2	155.9	59.3	83.2	83.2	127.3	109.7		
10. 6.77	28.2	21.9	40.4	37.4	15.9	36.2	125.2	46.3	56.8	56.8	64.3	39.1		
7. 7.77	24.4	17.9	31.6	47.1	33.7	50.1	126.1	47.1	34.1	34.1	71.9	35.8		
4. 8.77	31.6	10.1	31.6	63.1	22.3	47.9	121.9	47.5	27.8	27.8	24.4	38.7		
2. 9.77	37.9	9.7	14.0	22.3	24.0	63.1								
30. 9.77	19.1	6.9	8.9	30.3	11.6	56.4	120.2	30.3	22.3	22.3	49.6	27.8		
26.10.77	34.1	14.3	22.3	33.3	10.8	47.5	140.8	24.0	43.3	43.3	56.2	33.3		
23.11.77	22.3	86.2	68.5	72.3	27.8	107.2	137	63.5	100.9	100.9	125.3	109.7		
21. 2.78	24.0	33.3	26.9	45.0	29.1	85.8	110.5	43.7	103.4	103.4	91.6	77.8		
21. 3.78	67.7	79.0	90.8	85.6	80.7	83.7	142.5	144.6	110.1	110.1	153.8	68.1		
18. 4.78	35.8	47.5	40.4	84.9	40.4	66.4	101.7	60.6	65.2	65.2	76.5	63.9		

Temperature (°C)	
17. 3.77	7.2
14. 4.77	6.5
10. 6.77	8.5
7. 7.77	11.5
4. 8.77	10.2
30. 9.77	10.4
26.10.77	8.4
23.11.77	6.4
21. 2.78	5.0
21. 3.78	4.5
18. 4.78	6.0
17. 5.78	10.0

TABLE 18b RIVER CHURNET PHYSICO-CHEMICAL DATA 1977-1978

pH														
DATE	TRIB.	1	2	3	4	5	6	7	8	9	10	11	12	13
17. 3.77	6.05	5.6	5.7		6.1		6.0	6.4	6.6	6.35	6.65	6.65		6.2
4. 8.77	6.9	7.2	7.4		7.1	6.8	7.0	7.0	6.7	6.7	7.0	7.2	7.4	7.4
21. 3.78	6.92	6.89	6.94		7.09	7.09	7.06	7.06	7.2	7.23	7.28	7.29	7.31	7.28
18. 4.78	7.13	6.91	7.1		7.16	7.2	7.02	7.0	7.22	7.21	7.26	7.29	7.3	7.23
17. 5.78	7.05	6.9	7.2		7.1	7.2	6.95	6.84	7.03	7.06	7.21	7.3	7.25	7.6

Suspended Solids (mg.l ⁻¹).														
17. 3. 77	16	6	4		2		5	12	7	11	12	8		0
4. 8. 77	4	3	5		6	5	10	14	8	8	7	24	11	11
2. 9. 77	4	7	11		5	8	7	7	10	13	6	7	10	5
30. 9. 77	2	0	4		0	2	8	9	6	7	10	3		2
26. 10. 77	2	3	9		1	4	22	10	13	11	10	5	15	5
23. 11. 77	1	14	1		5	3	12	2	0	5	1	0	7	4
21. 2. 78	3	5	4		3	2.5	16	12	11.5	15	16	12.5	13	9.5
21. 3. 78	8.5	16.3	14.3		35	26	47.8	51.5	51.5	76	85.5	99.5	98.5	99
18. 4. 78	2.5	6	3.5		6.5	12	10	11	29.5	9.5	4.5	6.5	6	6
17. 5. 78	0.5	0.5	12		4	0.5	5.5	8	7.5	7.5	5.5	3.5	10.5	7

TABLE 18c RIVER CHURNET PHYSICO-CHEMICAL DATA 1977-1978

Dissolved Oxygen (mg.l ⁻¹ °)														
DATE	TRIB.	1	2	3	4	5	6	7	8	9	10	11	12	13
17. 3.77	11.1	12.2	11.8	10.2	11.7	8.5	10.5	9.55	10.7	10.6	10.7	10.9		10.4
4. 8.77	10.7	9.4	10.6	9.2	10.2	10.6	2.7	7.5	9.6	10.5	10.6	10.4	10.2	10.5
2. 9.77	12.0	11.0	10.1	9.6	9.3	8.4	3.95	5.0	7.7	9.4	9.5	9.5	9.5	9.5
30. 9.77	10.55	10.1	10.1	10.7	10.7	9.6	5.3	6.3	8.7	9.9	10.0	10.5	10.5	10.7
26. 10.77	10.9	12.0	11.8	11.8	10.7	11.7	9.6	10.5	11.5	11.5	11.9	11.6	11.6	11.6
23. 11.77	11.6	12.3	12.1	12.0	11.7	12.5	11.4	10.7	12.2	12.7	12.6	12.4	12.5	12.4
21. 2.78	11.6	12.9	12.1	13.0	12.5	12.5	11.3	11.2	11.6	11.3	11.0	10.8	11.2	11.3
21. 3.78	12.1	12.86	12.48	12.0	11.9	12.1	11.3	11.2	11.6	11.3	11.0	9.7	10.7	10.2
18. 4.78	11.5	11.3	11.0	11.9	11.1	8.9	7.6	9.3	9.5	9.4	9.5	11.3	11.0	12.6
17. 5.78	11.1	11.4	11.4	12.2	12.2	11.4	8.3	7.2	9.0	9.8	11.2	11.3	11.0	12.6

Dissolved Oxygen % Saturation														
17. 3.77	96	100	99	98	97	81	90	84	94	92	94	95	94	91
4. 8.77	99	91	97	94	93	82	27	52	77	93	97	93	93	107
30. 9.77	97.5	105	104	108	96	91	51	62	82	91	92	96	96	93
26. 10.77	96	100	99	99	97	100	82	92	98	97	100	97	98	98
23. 11.77	97	100	99	97	93	94	86	85	92	94	94	93	94	94
21. 2.78	94	93	90	93	93	95	90	90	93	92	89	88	92	93
21. 3.78	97	96	95	93	93	75	67	84	83	82	82	85	94	90
18. 4.78	96	91	93	97	93	105	82	73	89	82	108	109	106	122
17. 5.78	102	105	108	110	114	105	82	73	89	95	108	109	106	122

TABLE 18d

RIVER CHURNET PHYSICO-CHEMICAL DATA 1977-1978

Chloride mg.l^{-1} .

DATE	TRIB.	1	2	3	4	5	6	7	8	9	10	11	12	13
17. 3.77	30	33	30		31		44	47	43	43	54	44		43
4. 8.77	20	25	22	26	25	29	76	86	56	65	59	45	45	43
2. 9.77	28	31	27	31	33	38	45	43	45	45	43	51	51	51
30. 9.77	25	24	26	24	27	32	99	132	68	70	66	52	49	57
26.10.77	21	25	28	31	36	35	84	84	60	58	47	49	49	49
23.11.77	29	36	32	32	41	42	64	61	58	48	47	50	47	47
21. 2.78	23	41	26	35	32	39	51	54	34	32	32	32	34	35
21. 3.78	25	42	27	28	29	30	33	33	30	31	31	37	37	39
18. 4.78	23	41	48	36	58	40	60	58	36	38	36	38	38	38
17. 5.78	22	26	19	25	29	30	61	58	42	46	34	36	40	38

Alkalinity mg.l^{-1}

17. 3.77	28.75	15	15	35	23.75	47.5	50	47.5	47.5	45	47.5	60		60
4. 8.77	45	37.5	37.5	37.5	35	80	75	70	70	62.5	67.5	72.5	80	80
2. 9.77	47.5	30	37.5	37.5	37.5	65	70	75	75	70	75	82.5	70	72.5
30. 9.77	50	37.5	42.5	37.5	40	80	90	102.5	85	85	82.5	85	82.5	82.5
26.10.77	42.5	12.5	22.5	37.5	42.5	75	67.5	62.5	65	65	65	75	82.5	87.5
23.11.77	25	12.5	15	30	40	62.5	62.5	55	52.5	52.5	52.5	55	61	60
21. 2.78	40	32	35	35	45	75	80	80	65	65	65	75	85	90
21. 3.78	20	15	17.5	30	30	55	55	54	50	50	55	60	65	65
18. 4.78	40	18.5	30	35	50	90	65	67.5	65	65	70	75	80	80
17. 5.78	47.5	20	32.5	35	42.5	85	80	85	80	80	80	95	90	90

TABLE 18e RIVER CHURNET PHYSICO-CHEMICAL DATA 1977-1978

DATE	TRIB.	BOD ₅ (mg.l ⁻¹)												
		1	2	3	4	5	6	7	8	9	10	11	12	13
4. 8.77	1.1	1.9	1.1	1.2	1.0	0.3	33.0	5.3	2.7	2.1	1.9	1.5	1.7	1.7
2. 9.77	2.1	1.7	1.1	1.1	1.3	7.3	3.3	9.3	4.9	2.6	2.5	1.8	1.8	1.6
30. 9.77	1.05	1.7	1.4	1.4	1.3	13.5	7.3	17.5	10.5	9.1	8.4	4.5	2.9	1.8
26.10.77	1.7	1.4	2.0	1.2	13.5	9.9	6.8	6.8	3.8	2.6	2.6	2.3	2.3	2.4
23.11.77	0.7	0.8	1.3	2.0	4.8	12.5	29.7	2.2	2.2	2.9	2.7	1.9	2.4	2.1
21. 2.78	0.9	1.5	1.4	1.1	12.5	18.2	10.0	4.5	4.5	2.3	1.9	1.9	1.7	2.5
18. 4.78	1.3	0.8	1.8	1.5	1.6	5.8	7.15	6.2	6.2	3.5	2.7	1.7	3.5	2.1
17. 5.78	1.3	1.2	1.4	2.4	1.7	4.1	7.15	6.2	6.2	3.5	2.7	1.7	3.5	2.2
NH ₃ -N (mg.l ⁻¹)														
17. 3.77	0.45	0.5	0.5	1.25	1.1	0.85	1.2	1.55	1.2	1.2	1.05	1.05	1.0	1.0
14. 4.77	1.1	1.5	0.5	0.65	0.65	1.75	2.25	2.7	2.7	2.3	2.25	0.95	2.05	0.65
4. 8.77	1.6	0.65	1.15	1.0	1.0	0.8	2.0	3.5	1.85	1.0	1.0	0.85	1.15	0.85
30. 9.77	0.7	0.65	0.65	0.75	0.75	0.8	1.15	1.2	0.9	5.0	1.2	0.5	0.7	0.75
26.10.77	0.5	0.5	0.5	0.7	0.7	0.8	1.65	2.15	1.4	1.35	0.85	0.8	0.7	0.7
23.11.77	0.65	0.6	0.6	1.25	1.25	1.15	1.0	1.25	1.2	0.9	0.9	0.85	0.7	0.85
21. 2.78	1.2	1.6	1.6	2.4	2.4	2.5	4.1	4.7	2.5	1.9	2.8	1.9	1.7	1.6
21. 3.78	0.8	0.6	0.6	0.6	0.6	0.8	1.2	1.35	1.2	1.3	0.8	1.55	1.4	1.65
18. 4.78	0	0	0	0.4	0.6	0.5	1.6	2.3	0.7	0.7	0.3	0.4	0.2	0.2
17. 5.78	0	0	0	0.1	0.3	0.3	1.7	2.9	1.3	0.7	0.2	0.2	0.2	0.1

TABLE 18f

RIVER CHURNET PHYSICO-CHEMICAL DATA 1977-1978

DATE	TRIB.	Nitrates $\text{NO}_3\text{-N}$ (mg. l^{-1})													
		1	2	3	4	5	6	7	8	9	10	11	12	13	
17. 3.77	1.1	0.5	0.6	1.2	1.15	1.6	1.65	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7
4. 8.77	1.75	1.95	1.1	1.3	1.3	2.85	4.8	2.85	5.3	3.8	3.8	3.8	3.8	3.8	4.0
2. 9.77	0.8	4.6	1.1	1.25	1.3	4.2	4.35	4.2	3.9	3.6	3.4	3.0	3.0	3.0	3.0
30. 9.77	2.05	1.0	1.9	1.4	1.3	1.5	3.3	1.5	4.6	4.45	4.8	5.65	5.65	5.65	5.65
26.10.77	1.9	0.7	0.9	1.7	1.8	5.2	6.65	5.2	6.4	6.2	5.8	4.6	5.0	4.6	4.6
23.11.77	2.5	0.9	1.3	2.4	2.6	4.6	5.1	4.6	5.1	4.9	5.1	5.1	5.0	5.1	5.1
21. 2.78	2.1	1.8	1.9	2.0	2.0	3.95	4.15	3.95	4.3	2.2	3.8	3.7	3.7	3.95	3.95
18. 4.78	1.9	0.6	1.0	1.8	1.8	3.4	3.6	3.4	4.1	3.6	3.3	3.3	3.3	3.4	3.4
17. 5.78	1.6	0.4	0.7	1.6	1.6	3.9	4.7	3.9	4.4	4.1	4.3	4.7	4.7	4.6	4.6
Phosphates $\text{PO}_4\text{-P}$ (mg. l^{-1})															
17. 3.77	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4. 8.77	0.2	0.4	0	0	0	0.2	0.2	0.2	0.6	0.4	0.4	0.3	0.3	0.4	0.4
2. 9.77	Neg.	0.7	Neg.	Neg.	Neg.	0.6	0.4	0.6	Neg.	0.1	0.4	0.2	0.2	Neg.	Neg.
30. 9.77	0.1	0.1	Neg.	Neg.	Neg.	0.1	0.2	0.1	Neg.	Neg.	0.2	0.2	0.2	Neg.	Neg.
26.10.77	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
23.11.77	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
21. 2.78	0.55	0.4	0.4	0.25	0.3	0.55	0.5	0.55	0.5	0.5	0.4	0.55	0.55	0.5	0.5
18. 4.78	0.2	0.2	0.2	<0.2	<0.2	0.4	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
17. 5.78	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.4	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

TABLE 189

RIVER CHURNET PHYSICO-CHEMICAL DATA 1977-1978

Total Hardness (mg. l ⁻¹ . Ca.CO ₃)														
DATE	TRIB.	1	2	3	4	5	6	7	8	9	10	11	12	13
17. 3.77	87	57	60		85		110	110	118	128	143	142		148
4. 8.77	108	82	88	100	86	94	140	160	162	220	218	196	230	216
2. 9.77	94	96	88	126	102	92	128	138	151	210	196	202	224	218
30. 9.77	88	98	92	104	94	94	156	188	176	232	216	206		240
26.10.77	86	100	92	106	102	116	174	172	176	232	210	246	271	206
23.11.77	80	78	66	112	120	116	138	144	150	166	160	164	173	176
21. 2.78	87	71	83	73	93	92	129	138	142	167	162	173	194	198
21. 3.78	66.5	53	58.2	79.8	82	85.8	109	110.2	106.5	115	120	121.5	128	131
18. 4.78	76.5	59.5	66	82	93.5	94	122	125.5	132	183	178.5	171	180	181
17. 5.78	80	58.2	65.5	76.5	83.2	88.8	126.5	131	141.2	164.5	158.8	167.5	182	182
Calcium Hardness (mg.l ⁻¹ . CaCO ₃)														
17. 3.77	50	38	52	66	59	66	85	90	92	102	106	108		116
4. 8.77	56	56	54	64	64	68	112	120	124	176	170	150	178	174
2. 9.77	54	56	54	64	62	68	92	94	112	164	156	160	174	168
30. 9.77	52	56	54	58	72	66	118	144	136	194	184	166		180
26.10.77	52	50	46	72	72	70	110	124	126	188	164	194	168	156
23.11.77	48	42	42	84	92	86	112	114	122	136	130	122	128	130
21. 2.78	50	47	63	47	65	68	100	108	112	135	131	137	153	155
21. 3.78	45	41	45.5	65	66	69	91.5	92.5	89	96	99	100.5	104	106
18. 4.78	48	54.5	49	66.5	72	73	100	101.5	108	154	152	141	144	144
17. 5.78	52.5	48	49.5	61.5	64.5	69	102	105.5	115	127	127.5	133	148.5	142

TABLE 18h

RIVER CHURNET PHYSICO-CHEMICAL DATA 1977-1978

DATE	Heavy Metals (mg.l ⁻¹)											
	CADMIUM				CHROMIUM				LEAD			
	3	6	8	13	3	6	8	13	3	6	8	13
4. 8.77	.002	.002	.002	.002	0	0	0	0	.02	.02	.02	.02
2. 9.77	.002	.002	.002	.002	.01	.01	.03	.01	.02	.02	.02	.02
30. 9.77	.002	.002	.002	.002	.01	.01	.02	.02	0	.02	.02	.02
26. 10.77	.002	.002	.002	.002	0	.01	.02	.01	.02	.02	.02	.01
23. 11.77	.002	.001	.001	.001	0	.01	.01	.01	.02	.02	.02	.02
21. 3.78	.002	.002	.002	.002	0	0	.01	.01	.01	.02	.02	.03
18. 4.78	.001	.001	.002	.001	0	.01	.01	0	.01	.02	.02	.01
17. 5.78	.001	.001	.002	.002	0	0	0	0	.01	.02	.02	.02
DATE	COPPER				NICKEL				ZINC			
SITE	3	6	8	13	3	6	8	13	3	6	8	13
4. 8.77	.01	.02	.02	.044	.05	.1	.1	.05	.06	.04	.01	.02
2. 9.77	.022	.022	.024	.022	.01	.01	.01	.01	.05	.11	.04	.05
30. 9.77	.024	.026	.028	.022	.005	.01	.01	.005	.03	.06	.05	.04
26. 10.77	.012	.012	.022	.018	.01	.015	.015	.015	.01	.03	.03	.02
23. 11.77	.008	.014	.022	.022	.015	.015	.015	.015	.08	.04	.05	.04
21. 3.78	.002	.004	.012	.038	.015	.015	.015	.02	.01	.02	.03	.05
18. 4.78	.002	.004	.044	.014	.01	.01	.01	.01	0	0	.02	0
17. 5.78	.002	.004	.06	.022	.01	.01	.01	.01	.03	.01	.01	0

TABLE 19
RIVER NENE PHYSICO-CHEMICAL DATA 1977

DATE SITE	Temperature °C			Suspended Solids mg.l ⁻¹			Dissolved Oxygen mg.l ⁻¹			Dissolved Oxygen % Saturation		
	1	2	3	1	2	3	1	2	3	1	2	3
6. 4.77	7.5	7.3	7.5	12	16	14	11.74	10.8	11.3	101	93	98
3. 6.77	17.0	16.8	16.0	14	20	34	13.8	11.7	15.1	146	124	157
30. 6.77	15.5	15.4	15.8	8	18	18	12.4	12.4	12.4	128	127	129
25. 8.77	14.9	14.2	14.8	12	12	11	8.9	7.9	9.6	91	79	97
21. 9.77	13.0	13.0	13.1	4	9	6	8.8	9.3	10.3	86	92	101
16.11.77				10	6	8	9.55	10.1	11.2			
14.12.77				10	6	20	10.9	10.9	11.9			

DATE SITE	Chloride mg. l ⁻¹			Alkalinity mg. l ⁻¹			Ammonia N mg.l ⁻¹			Nitrate N mg. l ⁻¹		
	1	2	3	1	2	3	1	2	3	1	2	3
6. 4.77	59.5	61.5	70.5	142.5	160	170	1.3	1.8	1.25	10.9	11.4	11.1
3. 6.77	75	92	92	150	160	170	0.85	1.15	0.9	8.6	15.6	14.0
30. 6.77	75	74	79	170	172.5	177.5	0.75	0.85	0.85	12.7	13.0	8.3
25. 8.77	56.5	63	61.5	137.5	145	130				5.8	7.1	7.0
21. 9.77	70	90	101	167.5	162.5	165	1.3	2.1	1.1	9.8	12.0	9.5
16.11.77	77	85	104	157.5	157.5	157.5	1.35	1.65	0.5	10.9	12.3	11.5
14.12.77	58	58	60	137.5	142.5	127.5	1.15	1.0	1.15	11.6	12.5	12.3

DATE SITE	Phosphate mg.l ⁻¹			Total Hardness mg.l ⁻¹			Calcium Hardness mg.l ⁻¹			Magnesium Hardness mg.l ⁻¹		
	1	2	3	1	2	3	1	2	3	1	2	3
6. 4.77	0.75	1.0	0.75	342	386	436	300	346	370	42	40	66
3. 6.77	0.9	2.15	0.6	338	382	452	276	332	378	62	50	74
30. 6.77	1.15	1.25	1.85	358	392	420	308	330	362	50	62	58
25. 8.77	0.1	0.5	0.1	284	324	322	260	298	294	24	26	28
21. 9.77	1.9	2.35	1.6	360	388	404	292	324	376	68	64	28
16.11.77	1.65	1.85	Neg.	322	366	408	276	292	330	46	74	78
14.12.77	0.3	0.5	0.35	348	370	344	284	324	312	64	46	32

TABLE 20

SOUTH DRAIN PHYSICO-CHEMICAL DATA 1977

DATE	Temp. oC	Susp. Solids mg.l ⁻¹	Diss. Oxygen mg.l ⁻¹	Diss. OXYGEN %Sat.	Chloride mg.l ⁻¹	Alkalin. mg.l ⁻¹	Ammonia N mg.l ⁻¹	Nitrates N. mg.l ⁻¹	Phosphate P mg.l ⁻¹	Total Hdns. mg.l ⁻¹	Calcium Hdns. mg.l ⁻¹	Magnesium Hdns. mg.l ⁻¹
18. 4.77	10.8	16	14.25	134	49	212.5	0.5	5.4	0.65	354	304	50
17. 5.77	12.5	15	14.0	135	90	235.0	0.85	2.7	0.15	348	292	56
11. 7.77	20.0	6	4.8	54	71	217.5	0.75	< 0.05	0.75	308	260	48
8. 8.77	20.4	10	4.3	49	88	240.0	1.15	0.2	1.25	336	274	62
5.10.77	12.2	8	7.7	74	79	235.0	0.7	3.6	0.55	340	280	60
31.10.77	12.0	17	7.0	67	96	252.5				330	266	64
30.11.77		10	9.4		80	217.5	1.2	2.6	0.35	356	264	92

TABLE 21

KING'S SEDGEMOOR DRAIN PHYSICO-CHEMICAL DATA 1977

DATE	Temp. °C.	Susp. solids mg.l ⁻¹ .	Diss Oxygen mg.l ⁻¹ .	Diss ° Oxygen %Sat.	Chloride mg.l ⁻¹ .	Alkalin. mg.l ⁻¹ .	Ammonia N mg.l ⁻¹ .	Nitrates N mg.l ⁻¹ .	Phosphate P mg.l ⁻¹ .	Total Hdns. mg.l ⁻¹ .	Calcium Hdns. mg.l ⁻¹ .	Magnesium Hdns. mg.l ⁻¹ .
18. 4.77	11.0	26			71	197.5	0.75	3.5	0.3	436	334	102
17. 5.77	11.8	11	15.7	148	46	212.5	0.85	3.7	Neg.	438	340	98
11. 7.77	20.0	8	7.1	80	55	217.5	0.75	0.6	0.75	346	292	54
8. 8.77	19.5	10	9.4	105	54	217.5	1.5	0.4	0.6	306	264	42
5.10.77	12.2	2	10.0	96	62	227.5	6.15	2.5	Neg.	326	272	54
31.10.77	12.2	9	9.9	95	73	230.0				400	316	84
30.11.77		4	9.1		56	237.5	3.85	4.9	0.65	460	362	98

Annexe 3

Physico-chemical Data (Water Authorities)

TABLE 22

RIVER WEAVER WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977						
	WEAVER 1		WEAVER 2		WEAVER 3	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
Temperature	8.6	1.0- 14.5	9.6	1.5- 17.0	10.0	3.0- 17.0
pH	7.7	7.3- 8.2	7.8	7.6- 8.3	7.6	7.3- 7.8
Susp. Solids	14	5 - 38	19	3 - 61	21	2 - 103
D.O. Conc ⁿ .	9.6	7.5- 12.0	10.3	8.3- 12.3	7.8	4.1- 11.2
D.O. % Sat ⁿ .	81	71 - 92	90	82 - 105	66	42 - 87
BOD ₅	3.8	1.9- 6.5	4.9	2.3- 12.0	7.7	2.9- 24.0
BOD ₅ + ATU						
Chloride	43	28 - 60	109	38 - 180	105	48 - 154
Alkalinity	200	60 - 260	201	130 - 240	202	135 - 240
Total Hdns.	227	150 - 300				
NH ₃ -N	0.6	< 0.1- 2.1	0.7	0.1- 2.7	2.7	1.1- 4.8
NO ₃ - N	7.4	4.5 14.0	8.7	6.5- 14.5	7.6	5.4- 15.0
Orthophosphate	0.4	0.1- 0.7	0.7	0.25- 1.5	0.9	0.3- 1.7

TABLE 23

RIVER TRENT WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	TRENT 1		TRENT 2		TRENT 3		TRENT 4	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
	Temperature	11.0	3.5- 21.3	11.3	3.8- 17.0	12.1	4.2- 19.2	15.1
pH	7.8	7.4- 8.4	7.4	7.1- 7.7	7.6	7.1- 8.0	7.7	7.3- 8.1
Susp.solids	25	1.8- 84	33	10 -256	26	8 - 74	29	8 -178
D.O. Conc ⁿ .	10.3	7.3- 15.1	7.6	4.3- 10.2	9.1	7.5- 10.6	9.1	7.1- 11.5
D.O.% Sat ⁿ .	97	71 -157	70.1	45 - 86	87.9	66 -107	92.7	76 -116
BOD ₅	4.3	1.8- 9.6	10.2	4.0- 17.2	6.4	3.8- 15.8	6.2	2.5- 9.8
BOD ₅ + ATU	2.8	1.0- 6.0	5.8	2.7- 11.0			4.2	1.4- 8.2
Chloride	133	35 -200	106	46 -143	95	53 -147	100	46 -155
Alkalinity	164	75 -200	142	85 -175	162	100 -305	161	105 -300
Total Hdns.	390	235 -500	335	235 -400	354	275 -425	370	300 -435
NH ₃ - N	0.3	<0.1- 0.8	1.3	0.3- 2.6	0.7	0.3- 1.5	0.5	<0.1- 1.1
Total Ox.N.	9.4	7.0- 12.0	12.5	10.0- 19.2	9.4	6.8- 12.0	10.1	7.5- 15.7
Orthophosphate	1.3	0.36- 2.3	1.9	0.54- 2.8			1.3	0.3- 2.5

TABLE 24

RIVER TRENT TRIBUTARIES WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	TAME 1		TAME 2		DERWENT 1		DERWENT 2	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
	Temperature	12.4	4.0- 20.5	18	18	9.3	2.5 - 15.5	13.9
pH	7.5	6.9- 8.8	7.8	7.8	7.8	7.5- 8.1	7.7	7.5- 8.0
Susp. solids	42	13 -256	21	21	16	6 - 46	13	7 - 31
D.O. Conc ⁿ .	7.6	3.3- 9.6	8.9	8.9	10.8	9.0- 13.0	8.8	5.1- 11.4
D.O. % Sat ⁿ .	71	32 - 96	97	97	99	89 -115	87.6	58 -128
BCD ₅	12.1	5.5- 33.0	10.5	10.5	2.4	1.5- 4.4	3.9	0.6- 7.5
BCD ₅ + ATU	10.3	4.5- 23.0						
Chloride	123	64 -345	110	110	62	39 - 93	79	43 -137
Alkalinity	190	135 -240	135	135	140	120 -160	160	120 -195
Total Hdns.	369	190 -465	320	320	229	210 -265	286	230 -370
NH ₃ - N	5.5	1.6- 10.0	3.7	3.7	0.2	<0.1- 0.3	0.4	<0.1- 0.8
Total Ox.N.	7.6	<0.2- 11.0	0.7	0.7	4.1	3.0- 6.4	4.8	3.2- 7.1
Orthophosphate	1.5	0.8- 2.7			0.5		0.5	0.5

TABLE 25

RIVER TRENT TRIBUTARIES WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	DOVE		MEASE		TEAN 1		TEAN 2	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
	Temperature	10.6	3.5- 20.0	10.1	1.5- 17.5	8.3	3.0- 12.2	10.5
pH	8.0	7.4- 8.5	7.9	7.3- 8.5	7.7	7.4- 8.0	7.7	7.3- 8.1
Susp. solids	22	1 -265	30	<1 -382	19	4 - 61	35	4 -427
D.O.Conc ⁿ .	11.2	8.7- 13.5	10.3	5.9- 15.2	10.7	8.5- 11.8	9.7	7.5- 11.1
D.O.% Sat ⁿ .	103	88 -135	94	62 -140	93	79 -110	90	71 -102
BOD ₅	2.5	0.2- 7.5	2.4	0.5- 6.3	2.8	1.4- 6.0	5.1	2.2- 12.0
BOD ₅ + ATU	1.9	0.5- 4.5	2.1	0.5- 4.0			3.5	1.8- 6.2
Chloride	36	23 - 51	160	34 -410	34	29 - 41	46	25 - 93
Alkalinity	160	75 -195	193	90 -265	118	90 -155	157	75 -200
Total Hdns.	290	185 -360	463	295 -600	214	175 -250	268	150 -320
NH ₃ - N	0.1	<0.1- 0.6	0.2	<0.1- 0.6	0.3	<0.1- 0.7	0.5	<0.1- 1.8
Total Ox.N.	4.3	2.9- 7.5	10.3	5.2- 20.8	4.5	3.4- 5.7	8.8	4.7- 12.6
Orthophosphate	0.4	<0.1- 0.7	0.9	0.26- 1.4			2.0	0.34- 3.2

TABLE 26a

RIVER CHURNET WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	CHURNET 1		CHURNET 2		CHURNET 3		CHURNET 4	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
Temperature	9.5	2.3- 16.0	9.0	4.0-16.0	8.8	2.0- 14.7	9.1	1.7- 16.0
pH	7.3	6.3- 8.0	7.2	6.9- 7.4	7.4	7.1- 7.9	7.5	7.2- 8.0
Susp. solids	8	1 - 29	5	3 - 6	6	2 - 14	8	2 - 39
D.O. Conc ⁿ .	11.0	9.7- 12.2	12.1	11.0-13.2	10.8	8.0- 12.3	11.1	9.2- 12.6
D.O. % Sat ⁿ .	98	90 -104	105	101 -112	96	80 -114	99	91 - 116
BOD ₅	1.4	0.5- 3.1	2.3	1.4- 3.8	2.4	0.7- 8.1	1.9	0.4- 5.4
BOD ₅ + ATU							1.5	0.5- 4.0
Chloride	19	11 - 44	17	15 -20	20	14 - 35	22	13 - 38
Alkalinity	30	12 - 60	37	22 -54	40	20 - 65	48	25 - 65
Total Hdns.	70	45 -105	69	60 -83	89	50- -135	93	65 -140
NH ₃ - N	0.1	0.03- 0.2	0.1	0.1	0.2	<0.1- 0.7	0.4	<0.1- 1.3
Total Ox.N.	0.9	0.3- 2.3	1.3	0.9- 1.7	1.7	1.0- 2.7	1.7	1.1- 2.7
Orthophosphate			<0.1	0.05 -0.14			0.1	0.02- 0.16

TABLE 26b

RIVER CHURNET WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	CHURNET 5		CHURNET 6		CHURNET 7		CHURNET 8	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
	Temperature	9.9	2.4- 14.0	10.2	2.5- 17.5	11.7	3.0- 18.8	10.4
pH	7.5	7.3- 7.9	7.3	7.1- 7.5	7.3	6.8- 7.6	7.3	7.2- 7.9
Susp. solids	5	4 - 8	13	5 - 38	12	4 - 55	13	5 - 76
D.O. Conc ⁿ .	10.5	9.4- 11.8	9.1	6.0- 11.3	7.9	4.8- 11.6	9.9	7.5- 11.8
D.O.% Sat ⁿ .	96	90 -106	84	64 -102	74	50 - 96	90	74 -102
BOD ₅	13.0	1.7->51	4.7	2.9- 7.2	6.8	2.9- 12.0	5.1	2.6- 11.0
BOD ₅ + ATU					6.2	2.8- 8.8		
Chloride	24	18 - 33	47	31 - 88	53	30 - 90	38	21 - 62
Alkalinity	46	35 - 55	70	40 -105	81	45 -105	73	45 -100
Total Hdns.	101	75 -155	129	105 -165	139	105 -175	147	105 -175
NH ₃ - N	0.3	0.1- 1.1	1.1	0.3- 2.3	1.8	0.4- 5.8	0.9	<0.1- 2.7
Total Ox.N.	1.9	1.2- 2.4	3.6	2.3- 4.6	4.1	2.7- 6.8	4.1	3.2- 5.4
Orthophosphate					0.2	0.0- 0.4		

TABLE 26c.

RIVER CHURNET WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	CHURNET 9		CHURNET 10		CHURNET 11		CHURNET 12	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
Temperature	9.6	2.5- 16.7	10.0	2.9- 16.3	11.8	8.0- 16.0	10.2	3.0- 16.0
pH	7.4	7.2- 7.9	7.4	7.2- 7.9	7.6	7.1- 7.9	7.4	7.0- 7.8
Susp. solids	15	4 - 63	19	3 -127	6	3 - 8	20	3 -121
D.O. Conc ⁿ .	9.9	8.7- 11.5	10.4	9.3- 11.5	9.9	8.5- 10.8	10.1	8.4- 12.0
D.O. % Sat ⁿ .	90	85 - 98	95	88 -106	94	85 - 99	93	82 -103
BOD ₅	3.5	2.0- 5.8	3.4	0.7- 5.8	3.3	1.6- 5.0	3.4	1.1- 5.9
BOD ₅ + ATU							2.7	1.1- 4.1
Chloride	36	27 - 54	33	26 - 42	37	31 - 45	39	26 - 62
Alkalinity	75	45 -105	77	45 -100	96	70 -120	85	45 -115
Total Hdns.	168	105 -215	170	110 -215	191	160 -235	185	115 -240
NH ₃ - N	0.6	<0.1- 2.4	0.4	<0.1- 1.0	0.3	<0.1- 0.7	0.3	<0.1- 0.7
Total Ox.N.	4.1	3.0- 5.0	4.1	3.2- 5.3	3.6	2.8- 4.3	4.0	3.2- 5.0
Orthophosphate							0.1	0.06- 0.3

TABLE 27

YORKSHIRE WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	FOSS		DON		CALDER 1		CALDER 2	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
	Temperature	10.5	2.0- 18.0	14.0	7.0- 25.0	14.9	6.0- 24.0	15.5
pH	7.8	7.4- 8.3	7.4	7.3- 7.8	7.1	7.0- 7.4	7.2	7.0- 7.4
Susp. solids	21	6 - 69	28	10 - 83	21	4 - 54	16	9- 24
D.O. Conc ⁿ .	9.9	6.1- 12.4	7.6	4.3- 11.8	6.2	2.3- 10.7	4.4	1.6- 8.8
D.O. % Sat ⁿ .	89	65 -107	75	48 -103	61	28 - 89	44	18 - 78
CO ₂	2.5	1.6- 3.7	9.1	3.6- 22.1	4.9	1.7- 8.4	8.3	4.8- 10.6
CO ₂ + ATU			6.8	6.8				
Chloride	61	33 - 97	265	109 -370	57	28 -106	155	65 -250
Alkalinity	181	130 -250	142	80 -184	45	18 - 78	101	45 -151
Total Hdns.	343	283 -404			108	80 -124	195	128 -320
NH ₃ - N	0.1	<0.1- 0.2	11.6	2.9- 19.6	1.0	<0.1- 2.5	7.2	1.5- 11.7
NO ₃ - N	14.3	6.6- 22.1	6.1	4.6- 8.5	3.3	1.7- 5.7	4.5	2.5- 8.0
Orthophosphate	3.3	<0.1- 12.8	1.1	<0.1- 3.3	0.2	<0.1- 0.6	0.5	<0.1- 1.4

TABLE 28
RIVER WYE WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	WYE 1		WYE 2	
	MEAN	RANGE	MEAN	RANGE
Temperature	10.8	3.5- 19.0	10.3	1.8- 19.0
pH	7.6	7.2- 8.5	7.9	7.3- 9.0
Susp. solids	22.5	4.0- 99.0	29.40	4.0-145.0
D.O. Conc ⁿ .	10.4	9.4- 12.5	10.9	8.4- 13.0
D.O. % Sat ⁿ .	91.8	85.0-101.5	95.0	83.0-126.0
BOD ₅	2.2	0.7- 5.7	1.6	0.4- 3.3
Chloride	13.8	8.0- 22.0	15.2	9.0- 23.0
Alkalinity	53.7	23.0- 96.0	89.1	29.0-142.0
Total Hdns.	69.8	35.0-120.0	117.2	50.0-174.0
NH ₃ -N	0.1	0.01- 0.23	0.09	0.01- 0.26
NO ₃ -N	1.3	0.8- 1.76	3.3	1.0 - 6.9
Orthophosphate	0.07	0.01- 0.31	0.09	0.01- 0.3

	RIVER SEVERN WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977						RIVER AVON WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977		
	SEVERN 1		SEVERN 3		AVON 2		MEAN	RANGE	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE			
Temperature	11.3	2.0- 23.5	11.3	4.0- 22.0	10.4	1.0- 15.0			
pH	7.9	6.9- 9.0	7.9	6.7- 9.0	8.1	7.8- 8.4			
Susp. solids	33	6 -180	35	8 -151	28	3 -230			
D.O. Conc ⁿ .	11.4	9.4- 15.6	11.7	11.1- 12.8	91	82 -110			
D.O. % Sat ⁿ .	101	85 -150	94	78 -120	3.7	1.6- 10.8			
BOD ₅	2.5	1.0- 5.5	2.8	1.3- 7.0	34	22 - 45			
BOD ₅ + ATU	2.2	1.0- 3.7	2.1	0.9- 3.5					
Chloride	29	8 - 51	45	13 - 87					
Alkalinity	85	35 -135	110	43 -163					
Total Hdns.	156	67 -430	192	91 -294					
NH ₃ - N	0.1	<0.1- 0.4	0.2	<0.01- 0.5	0.4	0.08- 1.0			
Total Ox.N.	4.6	1.5- 9.6	5.5	1.6- 9.2	6.6	4.7- 12.5			
Orthophosphate	0.2	0.03- 0.53	0.3	0.03- 0.9	0.5	0.1- 0.86			

TABLE 30

RIVER NENE WATER AUTHORITY PHYSICO-CHEMICAL DATA 1977

	NENE 1		NENE 2		NENE 3	
	MEAN	RANGE	MEAN	RANGE	MEAN	RANGE
Temperature	11.6	4.0- 16.0	13.0	4.0- 17.0	11.1	2.0- 19.0
pH	8.04	7.8- 8.2	8.1	7.9- 8.4	8.3	7.8- 9.3
Susp.solids	15	5 - 29	15	5 - 31	17	2 - 78
D.O. Conc ⁿ .	9.1	1.6- 12.7	9.0	4.7- 12.3	11.2	7.5- 14.3
D.O. % Sat ⁿ .	82	16 - 118	84	48 - 104	101	84 - 154
BOD ₅	6.9	4.1- 13.5	10.5	2.0- 27.0	4.4	1.2- 12.5
BOD ₅ +ATU					4.0	1.2- 12.5
Chloride	78	60 - 99	69	45 - 82	71	31 - 101
Alkalinity	206	170 - 230	208	185 - 245	201	145 - 235
NH ₃ - N	1.3	0.03- 4.0	1.29	0.45- 2.5	0.31	<0.05- 2.4
NO ₃ - N	13.8	10.5- 16.7	13.4	11.7 - 17.7	13.6	6.8- 19.6
Orthophosphate					0.75	0.19- 2.1

Annexe 4

Phase II Macroinvertebrate work

TABLE 32 RIVER WEAVER 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS				4 WEEKS				4 WEEKS			
	21.6 - 19.7				19.7 - 16.8				16.8 - 15.9 (cont.)			
	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER
<i>Polycelis tenuis</i>	12	2	12									
<i>Dendrocoelum lacteum</i>				7	9	5						
<i>Dugesia lugubris/polychroa</i>			1									
<i>Tubifex tubifex</i>												
<i>Rhyacodrilus coccineus</i>												
<i>Nais</i> spp.			35									
<i>Enchytraeidae</i>												
<i>Erpobdella octoculata</i>	8	1	11	8	6	2						
<i>Glossiphonia complanata</i>	12	7	7	2	6	3	1					
<i>Helobdella stagnalis</i>				1	5	2						
<i>Piscicola geometra</i>												
<i>Hydracarina</i>				3								
<i>Gammarus pulex</i>	25	71	54	18	15	25	230					
<i>Asellus aquaticus</i>	174	76	113	42	21	200	200					
<i>Baetis rhodani</i>												
<i>Ephemera ignita</i>				5								
<i>Hydropsyche angustipennis</i> (L)												
<i>Polycentropus flavomaculatus</i> (L)												
<i>Potamophylax</i> sp. (L)	1	2	3	1								
<i>Anabolia nervosa</i> (L)	2	3	1	5	1	1	2					
<i>Lamphelilus rhombicus</i> (L)												
<i>Phryganea grandis</i> (L)												
<i>Mystacides nigra</i> (L)												
<i>Elmis aenea</i> (L)				1								
<i>Elmis aenea</i> (A)				6	4	1						
<i>Platambus maculatus</i> (A)	5			4	6	2	8					
<i>Dytiscidae</i> sp. (L)	3			3	1	3	2					
<i>Hydroperus</i> sp. (L)	1			3	3	2						
<i>Haliphus</i> sp. (A)				3	3	2						
<i>Tyrinus</i> sp. (L)	3	2	2	2	3	3	17					
<i>Sigara</i> sp.				1								
<i>Sialis lutaria</i>												
<i>Simulium</i> sp. (L)												
<i>Macropelopia</i> sp.												
<i>Procladius</i> sp.												
<i>Pentaneurini</i>												
<i>Procladius olivaceus</i>												
<i>Orthocladinae</i>												
<i>Tanytarsini</i>												
<i>Chironomini</i>												
<i>Chironomus</i> sp.												
<i>Chironomidae</i> (P)												
<i>Ceratopogonidae</i>												
<i>Cipulinidae</i>												
<i>Siphonura</i> sp.												
<i>Siphonura</i> sp.												
<i>Potamopyrgus benckius</i>												
<i>Lymnaea peregra</i>												
<i>Planorbis leucostoma</i>												
<i>Lacertina carolinensis</i>												

TABLE 22

RIVER WEAVER 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS				4 WEEKS				4 WEEKS			
	15.9 - 11.10				11.10 - 11.11				11.11 - 6.12			
	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER
REPLICATES	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3
Taxa/Species	1		2	10					7	28		
<i>Polycelis tenuis</i>												
<i>Dendrocoelum lacteum</i>												
<i>Tubifex tubifex</i>												
<i>Lumbriculus variegatus</i>												
<i>Nais elinguis</i>												
<i>Erpobdella octoculata</i>												
<i>Glossiphonia complanata</i>												
<i>Helobdella stagnalis</i>												
<i>Hydracarina</i>	185	36	58	5	8	16	23	17	9	13	8	3
<i>Gammarus pulex</i>	59	48	45	75	90	59	134	76	70	56	130	120
<i>Asellus aquaticus</i>	22	11	5	6	62	75	87	29	28	35	63	36
<i>Baetis rhodani</i>	1	1	3	3								
<i>Ephemera danica</i>												
<i>Rhyacophila dorsalis</i> (L)												
<i>Hydropsyche angustipennis</i> (L)	17	30	20	1	19	28	22	6	5	3	5	46
Leptoceridae (L)	5	1	1		2	1	7	1				
<i>Mystacides nigra</i> (L)												
<i>Elmis aenea</i> (L)												
<i>Elmis aenea</i> (A)												
<i>Oulimnius tuberculatus</i> (L)												
<i>Platambus maculatus</i> (A)												
Dytiscidae (L)												
<i>Brychius elevatus</i> (L)												
<i>Haliphus sp.</i> (L)	1		4	6	1			2	1	6		1
<i>Haliphus sp.</i> (A)				7								
<i>Cyrtinus sp.</i> (L)	3	4			1			1				1
<i>Sigara sp.</i>												
<i>Sialis lutaria</i>	2	1		5	6	9	10	7	1	1	1	
<i>Agrion splendens</i>	1											
<i>Simulium sp.</i> (L)												
<i>Procladius olivaceus</i>	1											
<i>Brillia longifurca</i>												
<i>Brillia modesta</i>	4	12	16	3	2	2	1	3	4	13	3	4
Orthocladinae												
<i>Taeniatini</i>												
<i>Chironomini</i>												
<i>Chironomus sp.</i>												
<i>Chironomus (P)</i>												
<i>Polyura sp.</i>												
<i>Limnophora sp.</i>												
<i>Limnophora sp.</i>												
Empididae												
<i>Potamopygia benkisi</i>												
<i>Lymnobia peruviana</i>												
<i>Pedicia sp.</i>												
<i>Copestylum borneum</i>												

TABLE 34

RIVER WEAVER 2 MACROINVERTEBRATE DATA 1977

IMMERSTION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS		
	29.3 - 26.4			26.4 - 24.5			24.5 - 21.6 (cont.)		
	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
<u>Taxa/Species</u>									
<u>Nematoda</u>									
<u>Dendrocoelum lacteum</u>									
<u>Limnodrilus hoffmeisteri</u>	2 5 2	1 8	1 1	1 7			1 1 1	1 1 1	1 2 7
<u>Tubifex tubifex</u>	3 3 3			3	1 1 1	1 1 1	20 7 31	4	7
<u>Psammoryctides barbatus</u>									
<u>Rhyacodrilus coccineus</u>	1	1							
<u>Nais elinguis</u>									
<u>Nais sp.</u>							5 2 1	1	
<u>Erpobdella octoculata</u>	30 26 19	2 5 4	30 24	24	3 2	2 2	28 17	1	9 11
<u>Glossiphonia complanata</u>	4 7 8	1 1	1 3	6	1 1	1 1	2 3 2		
<u>Helobdella stagnalis</u>							1 1 1	8	
<u>Hydracarina</u>	4 3 6	1 1 1	2 4 10	2	2	4 10	32 42 28	2	24 30
<u>Gammarus pulex</u>	13 26 9	26 20 35	58 24 43	1	28 25	160 86 77		96 78 34	
<u>Asellus aquaticus</u>									
<u>Baetis rhodani</u>									
<u>Caenis moesta</u>	4 4 7	6 3 6	1		2		1 4 1	1	
<u>Hydropsyche angustipennis (L)</u>									
<u>Potamophylax sp. (L)</u>									
<u>Halesus sp. (L)</u>	2	2 1		1	2 1				
<u>Anabolia nervosa (L)</u>									
<u>Phryganea grandis (L)</u>									
<u>Platambus maculatus</u>	24 5 3	1 3 2	1 1 5		2		1	2	1 1
<u>Dytiscidae (A)</u>									
<u>Hydroporus sp. (L)</u>									
<u>Halobius sp. (A)</u>									
<u>Cyrtinus sp. (L)</u>	1 1 1	1 1 1	1 1				2 1 1	1 1 1	
<u>Sigara sp.</u>									
<u>Cicadella lateralis</u>	1 1 1	2 1							
<u>Atractodes</u>									
<u>Pentaneurini</u>									
<u>Dixaea dimorpha</u>									
<u>Procladius</u>									
<u>Orthocentrus</u>									
<u>Tanytarsini</u>									
<u>Chironomina</u>	13 3 3	1 1 1	7 16 7	11 7	2 2 2	4	1 4 3 11	2	1 4 6
<u>Ceratopogonidae</u>									
<u>Pitavnia barbata</u>									
<u>Lymnaea stagnalis</u>									
<u>Utricularia</u>									

RIVER WEAVER 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS						4 WEEKS						4 WEEKS					
	21.6 - 19.7						19.7 - 16.8						16.8 - 15.9 (cont.)					
	S.AUF.U.		GRAB		S.AUF.U.		GRAB		S.AUF.U.		GRAB		S.AUF.U.		GRAB			
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
<i>Polycelis tenuis</i>	7	2	5				1	2	3									
<i>Dendrocoelum lacteum</i>	10	2	5		1			2		3	4				1			
<i>Dugesia lugubris/polychroa</i>	4																	
<i>Tubifex tubifex</i>																		
<i>Psammoryctides barbatus</i>		1	1	6	13	29		1	3	17	16	12			6	20		
<i>Erpobdella octoculata</i>	16	5	13	1	1	2		28	38	56	2	4		5	19	12		
<i>Glossiphonia complanata</i>	9		1					1	1	1				1	1	3		
<i>Helobdella stagnalis</i>	9	7	20	8	2	6		8	7	6		3			1			
<i>Theromyzon tessellatum</i>			1															
<i>Hydracarina</i>			2					1	7	7	1			1	2	15		
<i>Gammarus pulex</i>	8	108	76	5	1	1		3	24	5				52	4	8		
<i>Asellus aquaticus</i>	672	125	432	69	38	49		161	100	183	102	17	11	38	43	108		
<i>Baetis rhodani</i>										1						2		
<i>Hydropsyche angustipennis (L)</i>																		
<i>Cynurus trimaculatus (L)</i>								3		1				1				
<i>Potamophylax sp. (L)</i>			3															
<i>Anabolia nervosa (L)</i>			2					9	6	8				5	14	15		
<i>Phryganea grandis (L)</i>														10	3	1		
<i>Platambus maculatus (A)</i>	6								1	3				1		1		
<i>Dytiscidae (L)</i>	4	3	11	1	3	5		1	2	2				1				
<i>Hydroporus (L)</i>			1		1	1		1	1	2				1				
<i>Halipplus sp. (L)</i>			1		1	1		2	1	1				1				
<i>Halipplus sp. (A)</i>																		
<i>Sigara sp.</i>																		
<i>Stalis lutaria</i>	1	4	6	2	4	11		2	1	1	1	1				7		
<i>Agrion splendens</i>		2	1	1	1	3		1						2				
<i>Procladius sp.</i>	3	1	3	1	3	1		1										
<i>Pentaneurini</i>			3		3	1												
<i>Diamera campestris</i>					1	3				1								
<i>Procladius bliviana</i>					1	3										1		
<i>Ornocoeladidae</i>	5	1	3	10	14	11								1				
<i>Tanytarsini</i>																		
<i>Chironomina</i>	5	14	29	27	43	51		3	3	1	3	1		3				
<i>Chironomus sp.</i>	13	17	36							1								
<i>Chironomidae (P)</i>								2	4	4				3	1	3		
<i>Blythina tentaculata</i>																		
<i>Pavon fontinalis</i>																		
<i>Amphipoda sp.</i>																		
<i>Amphipoda sp.</i>																		
<i>Amphipoda sp.</i>																		
<i>Amphipoda sp.</i>																		
<i>Amphipoda sp.</i>																		
<i>Amphipoda sp.</i>																		
<i>Amphipoda sp.</i>																		

S.A.U.F.U. = 1 individual per 100ml

TABLE 36

RIVER WEAVER 2 MACROINVERTEBRATE DATA 1977

Taxa/Species	4 WEEKS			4 WEEKS			4 WEEKS					
	15.9 - 11.10			11.10 - 11.11			11.11 - 6.12					
	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB			
IMMERSION PERIOD	1	2	3	1	2	3	1	2	3	1	2	3
IMMERSION DATES	15.9 - 11.10			11.10 - 11.11			11.11 - 6.12					
SAMPLER	S.AUF.U.			GRAB			S.AUF.U.			GRAB		
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3
<i>Polycelis tenuis</i>							1					
<i>Dendrocoelum lacteum</i>	1									1		
<i>Limnodrilus hoffmeisteri</i>	2	1	17	20	45	10						1
<i>Tubifex tubifex</i>	2		3	22	35	8	7	23	13			3
<i>Psammoretyctides barbatus</i>												29
<i>Mais elinguis</i>	9	3	6	3	3	3	1	1	3			20
<i>Erpobdella octoculata</i>	3		1				4	1	3			1
<i>Helobdella stagnalis</i>												
<i>Pisicicola geometra</i>	10	2	12	1	4	12	3	6	4			12
<i>Hydracarina</i>	46	8	52	2	5	3	9	36	26	9	4	22
<i>Gammarus pulex</i>	17	18	75	9	10	11	17	45	42	5	17	96
<i>Asellus aquaticus</i>	1		1	1	1	1	1	3	5	2	5	109
<i>Hydropsyche angustipennis (L)</i>	8	9	5	1	1	1	15	8	31	7	4	160
<i>Phryganea grandis (L)</i>	1											6
<i>Elmis aenea (L)</i>	7	5	10				6	2	5			5
<i>Platambus maculatus (A)</i>												3
<i>Dytiscidae (L)</i>	2	2	2	1								1
<i>Halipus sp. (A)</i>							1					3
<i>Gyrinus sp. (L)</i>	1	6	1									2
<i>Sialis lataria</i>												
<i>Agriion splendens</i>	1						1	1				1
<i>Macropelopia sp.</i>												
<i>Diamesa campestris</i>												
<i>Procladius olivaceus</i>	2	1	3	1	1	1	1	1	1	1	1	2
<i>Orthocentrus</i>	2	1	3	4	12	14	1	5	1	2	2	4
<i>Coicocentrus</i>	1		1				3	1	1	1	1	2
<i>Chironomus sp.</i>												5
<i>Ceratopogonidae</i>												
<i>Bitania rectaculata</i>												
<i>Lymnaea peragris</i>	2	1	3	1	2	2	12			1		1
<i>Sphaerium corneum</i>												
<i>Limnoria sp.</i>												

This is a preliminary report and should not be used for publication purposes.

RIVER WEAVER 3 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS		
	29.3 - 26.4			26.4 - 24.5			24.5 - 21.6 (cont.)		
	S.AUF.U.	GRAB	CYLINDER	S.AUF.U.	GRAB	CYLINDER	S.AUF.U.	GRAB	CYLINDER
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
<u>axa/Species</u>									
<u>lycelis tenuis</u>									
<u>androcoelum lacteum</u>									
<u>ammodrilus hoffmeisteri</u>	2	1	1						
<u>bifex tubifex</u>									
<u>btamothrix hammoniensis</u>	2	1	1	3	6	11	28	2	44
<u>ambriculus variegatus</u>									
<u>ails sp.</u>									
<u>prochella octoculata</u>	3	3	6	7	14	12	1		
<u>rocheta subviridis</u>									
<u>ammarus pulex</u>	3	3	3	2	3	1			
<u>sellus aquaticus</u>	2048	2880	4160	13	34	8	13	74	41
<u>aetis rhodani</u>									
<u>olycentropus flavomaculatus (L)</u>									
<u>hydrophilidae (L)</u>									
<u>igara sp.</u>									
<u>oenagrion puella</u>									
<u>schura elegans</u>									
<u>himulium sp. (L)</u>									
<u>procladius sp.</u>									
<u>pentaneurini</u>									
<u>lamesa prolongata</u>									
<u>rodiamesa olivacea</u>									
<u>prillia longifurca</u>	1								
<u>orthocladinae</u>									
<u>anytarsini</u>									
<u>chironomini</u>									
<u>chironomus riparius</u>	1								
<u>lipulinae</u>									

RIVER WEAVER 3 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS												4 WEEKS											
	21.6 - 19.7						19.7 - 16.8						16.8 - 15.9 (cont.)											
	S.AUF.U.		GRAB		CYLINDER		S.AUF.U.		GRAB		CYLINDER		S.AUF.U.		GRAB		CYLINDER							
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3						
<i>Axa/Species</i>	9	6	4	2	1	1	1	1	1	4	3	3	1	1	1	4	3	7						
<i>Arctocelus tenuis</i>	25	1	1							2	2	2												
<i>Arctocelus lacteum</i>	4	8	2							5	16	16				420	37	2						
<i>Agnesia lugubris/polychroa</i>	1	15	4	13	6	4	10	3	11	10	10	10	3	79	5	704	63	7						
<i>Limnodrilus hoffmeisteri</i>	38	15	4				10	3	11	10	10	10	3	79	5	704	63	7						
<i>Limnodrilus tubifex</i>	11		2				5	2	2	5	2	2	1	1	1	2	2	2						
<i>Protonothrix hammonensis</i>	2	13	9	3	1	1	5	2	2	5	2	2	33	12	5	3	1	4						
<i>Lumbriculus variegatus</i>																								
<i>Erpobdella octoculata</i>																								
<i>Erpobdella subviridis</i>																								
<i>Procheta subviridis</i>																								
<i>Blössiphonia complanata</i>	1		2			1						3												
<i>Helobdella stagnalis</i>																								
<i>Theromyzon tessulatum</i>																								
<i>Gammarus pulex</i>																								
<i>Asellus aquaticus</i>	174	69	352	16	20	8	324	76	268	1	1	1	2	49	10	11	30	3						
<i>Baetis rhodani</i>							1	5	8	1	1	1	2	2	2	1	1	1						
<i>Hydropsyche angustipennis (L)</i>							1	3	3	1	1	1	43	13	95	3	11	112						
<i>Platambus maculatus (A)</i>							1	268	1	1	1	1	220	522	332	22	11	220						
<i>Dytiscidae (L)</i>							1	1	1	1	1	1	8	1	2	1	1	1						
<i>Haliphus (L)</i>							1	1	1	1	1	1	1	1	2	1	1	1						
<i>Sigara sp.</i>																								
<i>Ischnura elegans</i>	1																							
<i>Platycnemis pennipes</i>																								
<i>Simulium sp. (L)</i>							9	5	7															
<i>Simulium sp. (P)</i>																								
<i>Macropelopia sp.</i>	1						1	1	1	1	1	1	1	1	1	1	1	1						
<i>Procladius sp.</i>																								
<i>Pentaneurini</i>																								
<i>Dianesa campestris</i>																								
<i>Procladius olivacea</i>																								
<i>Orthocladinae</i>	4	3	3	5	2	1	1	7	6	1	1	1	1	2	1	3	3	6						
<i>Tanytarsini</i>							1	4	6	1	1	1	1	2	2	2	2	7						
<i>Chironomini</i>							3	2	4	3	2	4	1	1	1	2	2	4						
<i>Chironomidae (P)</i>																								
<i>Limnophora sp.</i>																								
<i>Ancyclus fluviatilis</i>																								

RIVER WEAVER 3 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS						4 WEEKS											
	15.9 - 11.10						11.10 - 11.11						11.11 - 6.12					
	S.AUF.U.		GRAB		CYLINDER		S.AUF.U.		GRAB		CYLINDER		S.AUF.U.		GRAB		CYLINDER	
1 2 3		1 2 3		1 2 3		1 2 3		1 2 3		1 2 3		1 2 3		1 2 3		1 2 3		
<i>Polycelis tenuis</i>	10	8	7				1	1										
<i>Dendrocoelum lacteum</i>	42	31	6	3	3	1	5	1										
<i>Dugesia lugubris/polychoa</i>		2					5	2	13									
<i>Limnodrilus hoffmeisteri</i>				25	12	20	5	2	13	1								
<i>Tubifex tubifex</i>	1						6	4	1									
<i>Lumbriculus variegatus</i>	5	7	9	4	1	1	2	5	4	5	5	4	6	9	7	5	6	1
<i>Erpobdella octoculata</i>							2	2	1									
<i>Haemopsis sanguisuga</i>							2	2	1									
<i>Trocheta subviridis</i>	1		1				28	17	6	2	4	4	4	2	2			
<i>Helobdella stagnalis</i>	1	6	4	3	2	2	1088	768	456	1540	640	712	800	864	1012	42	23	20
<i>Gammarus pulex</i>	1014	1600	1474	50	230	372	1	1										
<i>Asellus aquaticus</i>	1																	
<i>Hydropsyche angustipennis (L)</i>																		
<i>Platambus maculatus (A)</i>																		
<i>Halipplus sp. (L)</i>			1							2	1	1						
<i>Ischnura elegans</i>			1							1								
<i>Platycnemis pennipes</i>			2															
<i>Procladius sp.</i>													3	1				
<i>Pentaneurini</i>										2	1		1	2				
<i>Prodiamesa olivacea</i>																		
<i>Erillia longifurca</i>																		
<i>Orthocladinae</i>																		
<i>Chironomini</i>										1		3	1	1				
<i>Ancyclus fluviatilis</i>							2	2	1	1			1	1				
							17	3	44									
							4	4										



RIVER WEAVER 4 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS		
	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB
IMMERSION DATES	29.3 - 26.4			26.4 - 24.5			24.5 - 21.6			21.6 - 19.7 (cont.)		
SAMPLER	S.AUF.U.			S.AUF.U.			S.AUF.U.			S.AUF.U.		
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3
<u>Taxa/Species</u>												
<u>Nematoda</u>												
<u>Polycelis tenuis</u>	1											
<u>Dendrocoelum lacteum</u>												
<u>Dugesia lugubris/polychrea</u>												
<u>Limnodrilus hoffmeisteri</u>	28	9	13	2	3	2	30	17	6	1	2	3
<u>Limnodrilus udekemianus</u>	3	2		2	1	1						
<u>Limnodrilus clapparedesianus</u>												
<u>Tubifex tubifex</u>												
<u>Nais elinguis</u>	1	1	5				2	3	1	12	10	16
<u>Erpobdella octoculata</u>	12	9	4				4	5	1	8	9	11
<u>Haemopsis sanguisuga</u>												
<u>Glossiphonia complanata</u>												
<u>Helobdella stagnalis</u>												
<u>Hemiclepsis marginata</u>												
<u>Gammarus pulex</u>												
<u>Asellus aquaticus</u>	35	56	94				8	49	13			
<u>Phryganea grandis (L)</u>	1											
<u>Dytiscidae (L)</u>												
<u>Sigara sp.</u>												
<u>Sialis lutaria</u>												
<u>Ischnura elegans</u>	6	11	1				2	4	1			
<u>Macropelopia sp.</u>												
<u>Procladius sp.</u>												
<u>Pertanearini</u>	1		2									
<u>Prodiamesa olivacea</u>												
<u>Orthoclaadiinae</u>												
<u>Tanytarsini</u>												
<u>Chironomini</u>												
<u>Chironomus sp.</u>												
<u>Ceratopogonidae</u>												
<u>Lymnaea peregra</u>												
<u>Spizarium corneum</u>												

RIVER WEAVER 4 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS					
	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB	S.AUF.U.	GRAB	GRAB			
IMMERSION DATES	19.7 - 16.8			16.8 - 15.9			15.9 - 11.10			11.10 - 11.11					
SAMPLER	S.AUF.U.			S.AUF.U.			S.AUF.U.			S.AUF.U.					
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
<u>Taxa Species</u>															
<u>Polycelis tenuis</u>															
<u>Dendrocoelum lacteum</u>															
<u>Dugesia lugubris/polychroa</u>	1														
<u>Limnodrilus hoffmeisteri</u>	93	16	20	5	11	1									
<u>Limnodrilus claparedianus</u>															
<u>Tubifex tuuifex</u>															
<u>Enchytraeidae</u>															
<u>Eprobodella octoculata</u>	3	4	4	1											
<u>Haemopsis sanguisuga</u>			1												
<u>Trocheta subviridis</u>															
<u>Glossiphonia complanata</u>															
<u>Glossiphonia heteroclita</u>															
<u>Helobdella stagnalis</u>															
<u>Hemiclepsis marginata</u>															
<u>Hydracarina</u>															
<u>Asellus aquaticus</u>	43	68	70	16	16	20	3	35	12	3	36	29	3	18	18
<u>Halipus sp. (L)</u>	1														
<u>Sigara sp.</u>															
<u>Sialis lutaria</u>	1														
<u>Platynemus pennipes</u>															
<u>Procladius sp.</u>	36	44	10	5	1	7	7	9	10	8	13	5	1	1	1
<u>Pentaneurini</u>	15	2													
<u>Prodiamesa olivacea</u>	25	2	6	2			3			3	6	1	4	10	9
<u>Chironomini</u>	1	10	3												
<u>Chironomus sp.</u>	7	5	3	3	3	3	2	7	3	4	4	29	16	8	
<u>Tanytarsini</u>															
<u>Bithynia tentaculata</u>	1	3													
<u>Potamopyrgus jenkinsi</u>															
<u>Lymnaea peregra</u>	1	1	1												
<u>Physa fontinalis</u>															
<u>Pisidium sp.</u>															
<u>Sphaerium corneum</u>	1	1		1			1			3		2			

RIVER TRENT 1 MACROINVERTEBRATE DATA 1971

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS		
	S.AUF.U.	CYLINDER	IMMERSION DATES	S.AUF.U.	CYLINDER	IMMERSION DATES	S.AUF.U.	CYLINDER	IMMERSION DATES
IMMERSION DATES	30.5 - 27.6			27.6 - 26.7			26.7 - 22.8		
SAMPLER	S.AUF.U.			S.AUF.U.			S.AUF.U.		
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Taxa/Species	1	2	1	2	1	1	2	1	1
<i>Polycelis tenuis</i>			1				2	1	
<i>Dugesia lugubris/polychroa</i>							1		
<i>Limnodrilus hoffmeisteri</i>			18				1		
<i>Tubifex tubifex</i>	1	2	4	1	4	2			
<i>Potamothenix hammoniensis</i>	2	1	15						
<i>Psemmocyctides barbatus</i>			1						
<i>Nais elinguis</i>	4	5	18						
<i>Erbodella octoculata</i>	1	1	1	2	5	2	1	2	2
<i>Glossiphonia complanata</i>	1	1	1	2	1	2	6	7	3
<i>Glossiphonia heteroclita</i>			2	1	1	2			
<i>Hydracarina</i>		18	1	13	11	7			
<i>Gammarus pulex</i>	1	3	1	30	29	21	1	54	64
<i>Gammarus tigrinus</i>	14	10	6	10	7	11	12	14	13
<i>Asellus aquaticus</i>	2	2	9	7	7	1	6	14	16
<i>Baetis rhodani</i>									
<i>Caenis moesta</i>	1	1							
<i>Hydropsyche angustipennis (L)</i>	1	1		9	36	4	1	1	2
<i>Hydropsyche contubernalis (L)</i>				13	12	1	1	1	2
<i>Polycentropus flavomaculatus (L)</i>									
<i>Potamophylax sp. (L)</i>	1			2	2	1			1
<i>Hydroptila tineoides (L)</i>									2
<i>Platambus maculatus (A)</i>							1		1
<i>Hydroporus sp. (L)</i>							2		
<i>Halipus sp. (L)</i>							1		1
<i>Halipus sp. (A)</i>									3
<i>Agrion splendens</i>									
<i>Coenagrion puella</i>									
<i>Macropelopia sp.</i>	2								
<i>Pentaneurini</i>									
<i>Diamesa campestris</i>	1	3		1	2	1		3	2
<i>Orthocladinae</i>	6	14	9	16	9	35	5	11	6
<i>Chironomini</i>									
<i>Ceratopogonidae</i>	1								
<i>Valvata macrostoma</i>									
<i>Eithynia tentaculata</i>	1	1	7	5	7	11			3
<i>Potamopygus henkinki</i>	29	17	29	68	86	54	2	1	15
<i>Lymnaea peregra</i>	7	11	6	13	22	16	6	19	34
<i>Physa fontinalis</i>			2	2	20	13	1	6	1
<i>Ancylus fluviatilis</i>	1	4	11				1	2	6
<i>Sphaerium corneum</i>									

TABLE 42

TABLE 43

RIVER TRENT 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS		
	22.8 - 20.9			20.9 - 17.10			17.10 - 15.11			15.11 - 13.12		
IMMERSION DATES	S.AUF.U.			S.AUF.U.			S.AUF.U.			S.AUF.U.		
SAMPLER	CYLINDER			CYLINDER			CYLINDER			CYLINDER		
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3
<u>Taxa/Species</u>												
<u>Polycelis tenuis</u>				1	1	1						1
<u>Dendrocoelum lacteum</u>												
<u>Dugesia lugubris/polychroa</u>							1			1		
<u>Limnodrilus hoffmeisteri</u>				3	7	2						
<u>Tubifex tubifex</u>				2	12	3				3	1	4
<u>Potamothrix hammoniensis</u>				1	3	1				3	7	6
<u>Psammodictyodes barbatus</u>												
<u>Nais elinguis</u>												
<u>Eprobaddella octoculata</u>	7	15	3	1	3	4	10	7	5	1	3	4
<u>Glossiphonia complanata</u>				1	3	1	8	11	2	1	1	2
<u>Glossiphonia heteroclita</u>				1	1	1						
<u>Hemiclepsis marginata</u>												
<u>Theromyzon tessulatum</u>	1	1	6	13	10	2				1	1	
<u>Hydracarina</u>												
<u>Gammarus pulex</u>							2	2	3			
<u>Gammarus tigrinus</u>							1	7	3			
<u>Asellus aquaticus</u>	50	68	37	58	134	95	83	182	332	47	79	58
<u>Gaenis moesta</u>	3	5	5	8		4	3	4		5	3	7
<u>Hydropsyche angustipennis (L)</u>							1	15	1	1	2	1
<u>Hydropsyche contubernalis (L)</u>							1	1	1	1	3	2
<u>Hydropsyche siltalai (L)</u>				1								
<u>Polycentropus flavomaculatus (L)</u>												
<u>Atripodes bilineatus (L)</u>												
<u>Platambus maculatus (A)</u>	1	1	1	1	10	5	4	1		1	2	1
<u>Halipilus sp. (L)</u>	1	2	1	2		1	2	1		1	2	1
<u>Halipilus sp. (A)</u>												
<u>Agrion splendens</u>												
<u>Coenagrion puella</u>												
<u>Procladius sp.</u>												
<u>Pentaneurini</u>												
<u>Prodiamesa olivacea</u>												
<u>Orthocladinae</u>				3		10						
<u>Chironomini</u>												
<u>Tipula sp.</u>												
<u>Valvata macrostoma</u>				6	5	6	1	2	1	6	3	3
<u>Eithymia tentaculata</u>	4	5	6				3	3	5	2	7	3
<u>Potamopygeus jenkinsi</u>	184	31	104	10	1	20	190	106	147	142	482	310
<u>Lymnaea peregra</u>	23	10	19	8	16	33	21	18	23	7	4	12
<u>Pisidium sp.</u>	3	3	6	1		1	10	8	9	4	3	5
<u>Ancylus fluviatilis</u>												
<u>Pisidium carinatus</u>	1						1	1	2	1	1	2
<u>Pisidium sp.</u>												
<u>Potameryon corneum</u>	1			6	1	3	1	1	3	1	1	2

RIVER TRENT 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS				4 WEEKS				4 WEEKS			
	4.4 - 2.5		2.5 - 30.5		30.5 - 27.6		27.6 - 26.7 (Cont)					
SAMPLER	S.AUF.U.	Kick	S.AUF.U.	Kick	Cylinder	S.AUF.U.	Kick	Cylinder	S.AUF.U.	Kick	Cylinder	
REPLICATES	1 2 3	1	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	
<i>Ara/species</i>												
<i>blycelis tenuis</i>				1	1							
<i>emirocoelum lacteum</i>					1						1	
<i>imnodrilus hoffmeisteri</i>				2	2	1	3	1				
<i>ubifex tubifex</i>				1	2	2	2	6				
<i>otamoethrix hammoniensis</i>												
<i>ais elinguis</i>	19											
<i>probodella octoculata</i>	31 23 25	68		21 46 2	5	32 224	7	33	7	10	6	
<i>aenopis sanguisuga</i>	2			34 45 53	25	7 2	42 18	25	2	7	13	
<i>lossiphonia complanata</i>	1	1		1			1					
<i>lossiphonia heteroclita</i>												
<i>heromyzon tessulatum</i>	2			5	1	1	5	4			1	
<i>dracarina</i>												
<i>ammarus pulex</i>	29 25 11	1		1	1	1	2	4				
<i>ammarus tigrinus</i>		4		32 28	5	1 2 1						
<i>selius aquaticus</i>	414 144 90	77		16 52 61	77	114 79 46	53 41	148	134	96	280	
<i>caetis rhodani</i>						1			422 498 355	342	85 360 127	
<i>caenis moesta</i>												
<i>hydropsycha angustipennis</i> (L)	1	1		1	2	1 1	1	1				
<i>hydropsycha contubernalis</i> (L)												
<i>hydroporus sp.</i> (L)												
<i>zoenagrion puella</i>				1							1	
<i>entaneurini</i>												
<i>orthocladiinae</i>												
<i>chironomini</i>												
<i>ancylus fluviatilis</i>				9	5	1	16	21	33	25	16	
<i>glauxium corneum</i>		1										

INVERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS		
	S.AUF.U.	KICK	S.AUF.U.	S.AUF.U.	KICK	S.AUF.U.	KICK	S.AUF.U.	KICK
INVERSION DATES	6.5 - 1.6			1.6 - 29.6			29.6 - 28.7 (Cont)		
SAMPLER	1	2	3	1	2	3	1	2	3
REPLICATES	1	2	3	1	2	3	1	2	3
	1	14	5	39	40	13	5	11	12
	1	1	1	8	2	2	1	1	3
	1	1	1	4	1	1	6	13	6
	57	147	133	320	192	412	328	295	512
	4	1	3	4	1		1	1	1
	1	1	1	1	5	5	4	6	3
	10	6	4	1	1	1	9	15	9
	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1

Taxa/species

- Polycelis tenuis
- Dendrocoelum lacteum
- Limnodrilus hoffmeisteri
- Limnodrilus udekemianus
- Tubifex tubifex
- Psammoryc tides barbatus
- Hais elinaius
- Eprobodella octoculata
- Glossiphonia complanata
- Helobdella stagnalis
- Hemiclepsis marginata
- Gammarus pulex
- A sellus aquaticus
- Baetis rhodani
- Hydropsyche angustibennis (L)
- Hydropsyche contubernalis (L)
- Sigara sp.
- Isonura elegans
- Procladius sp.
- Orthocladiinae
- Chironomini
- Valvata piscinalis
- Bitynia tentaculata
- Potamopyrgus jenkinsi
- Lymnaea peregra
- Lymnaea stagnalis
- Lymnaea stagnalis

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			8 WEEKS		
	26.8 - 23.9			23.9 - 21.10			21.10 - 16.12					
IMMERSION DATES	S.AUF.U.			S.AUF.U.			S.AUF.U.			S.AUF.U.		
	1	2	3	1	2	3	1	2	3	1	2	3
REPLICATES	KICK			KICK			KICK			KICK		
	1	2	3	1	2	3	1	2	3	1	2	3
<i>Taxa/species</i>												
<i>Polycelis tenuis</i>												
<i>Dendrocoelum lacteum</i>												
<i>Dugesia lugubris/polychroa</i>												
<i>Limnodrilus hoffmeisteri</i>												
<i>Tubifex tubifex</i>												
<i>Nais elinguis</i>												
<i>Eteobdella octoculata</i>												
<i>Glossiphonia complanata</i>												
<i>Glossiphonia heteroclita</i>												
<i>Helobdella stagnalis</i>												
<i>Hemiclepsis marginata</i>												
<i>Gammarus pulex</i>												
<i>Asellus aquaticus</i>												
<i>Phryganea grandis (L)</i>												
<i>Platambus maculatus (A)</i>												
<i>Dytiscidae (L)</i>												
<i>Heliclus sp. (L)</i>												
<i>Sisera sp.</i>												
<i>Platycnemis pennipes</i>												
<i>Orthocladinae</i>												
<i>Chironomini</i>												
<i>Ceratopogonidae</i>												
<i>Bituthia tentaculata</i>												
<i>Potamopygus jenkinsi</i>												
<i>Lymnaea peregra</i>												
<i>Planorbis carinatus</i>												
<i>Sphaerium corneum</i>												
<i>Sphaerium sp.</i>												

RIVER TRENT 4 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			8 WEEKS			4 WEEKS					
	29.6 - 28.7			28.7 - 23.9			23.9 - 21.10					
IMMERSION DATES	1.6			CYLINDER			S.AUF.U.			CYLINDER		
SAMPLER	CYLINDER			S.AUF.U.			S.AUF.U.			CYLINDER		
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3
<i>Dugesia lugubris/polychroa</i>												
<i>Tubifex tubifex</i>												
<i>Psammoryctides barbatus</i>				5	1	35	2	1	1			
<i>Mais elinguis</i>	1	2		2		1	30	3	1	2	2	1
<i>Lumbriculus variegatus</i>	2											
<i>Enchytraeidae</i>	8	6	1				7	12	6	2	1	1
<i>Ernobdella octoculata</i>				2	1		4	2	3			1
<i>Glossiphonia complanata</i>	3			2	1	1	1	5	1	7	6	3
<i>Gammarus pulex</i>	2	26	35	16	45	19	158	134	97	2	6	1
<i>Asellus aquaticus</i>	1			3	4		5	3	2	4	1	5
<i>Baetis rhodani</i>	1											
<i>Caenis moesta</i>												
<i>Ephemera ignita</i>				1								
<i>Hydropsyche angustipennis (L)</i>				1								
<i>Hydropsyche contubernalis (L)</i>												
<i>Halipilus sp. (L)</i>							22	52	48	7	11	156
<i>Procladius sp.</i>	2	8	3									
<i>Orthocladinae</i>	1											
<i>Tanytarsini</i>				2	7							
<i>Chironominae</i>	6	2	2	8	14	6	25	42	30	2	4	
<i>Chironomidae (P)</i>				1	3	1						
<i>Bitthynia tentaculata</i>				1	1		1	2	7	1	3	
<i>Potamopygus jenkinsi</i>				1	2	4	2	13	2	3	7	2
<i>Physa fontinalis</i>									1			
<i>Ancylus fluviatilis</i>				2	1	2	2	3	10	1	2	3
<i>Unio sp.</i>									2			
<i>Pisidium sp.</i>												
<i>Lepaerium corneum</i>							1			1	1	3

Taxa/species
Dugesia lugubris/polychroa
Tubifex tubifex
Psammoryctides barbatus
Mais elinguis
Lumbriculus variegatus
Enchytraeidae
Ernobdella octoculata
Glossiphonia complanata
Gammarus pulex
Asellus aquaticus
Baetis rhodani
Caenis moesta
Ephemera ignita
Hydropsyche angustipennis (L)
Hydropsyche contubernalis (L)
Halipilus sp. (L)
Procladius sp.
Orthocladinae
Tanytarsini
Chironominae
Chironomidae (P)
Bitthynia tentaculata
Potamopygus jenkinsi
Physa fontinalis
Ancylus fluviatilis
Unio sp.
Pisidium sp.
Lepaerium corneum

TABLE 49

RIVER TAME 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS													
	4.4 - 2.5			2.5 - 30.5			30.5 - 27.6 (cont.)													
IMMERSION DATES	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER											
SAMPLER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER											
REPLICATES	1	2	3	1	2	3	1	2	3											
<u>Nematoda</u>																				
<u>Tubifex tubifex</u>	151	45	76	25	2240	1760	960	30	11	40	96	40	120	157	96	35	224	320	652	17
<u>Nais elinguis</u>	23	10	14	2	15	1	7	11	30	16						3	7			
<u>Chaetogaster sp.</u>	1							2	1	8										
<u>Enchytraeidae</u>	2			2				2	1	1										
<u>Glossiphonia complanata</u>	151	225	295	31	43	25	10	58	49	79	1	4	6	34	52	15	69	3	11	2
<u>Asellus aquaticus</u>																				
<u>Baetis rhodani</u>																				
<u>Dytiscidae (L)</u>																				
<u>Macropelopia sp.</u>																				
<u>Orthocladinae</u>																				
<u>Chironomidae (P)</u>																				
<u>Lymnaea peregra</u>																				

Taxa Species

- Nematoda
- Tubifex tubifex
- Nais elinguis
- Chaetogaster sp.
- Enchytraeidae
- Glossiphonia complanata
- Asellus aquaticus
- Baetis rhodani
- Dytiscidae (L)
- Macropelopia sp.
- Orthocladinae
- Chironomidae (P)
- Lymnaea peregra

TABLE 50

RIVER TAME 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS			8 WEEKS													
	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER											
IMMERSION DATES	27.6 - 26.7			22.8 - 20.9			20.9 - 17.10			17.10 - 13.12																
SAMPLER																										
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3											
<i>axa/Species</i>	60	1500	76	320	127	186	320	77	74	16	11	36	320	184	212	156	190	46	104	256	200	192	6	13	3	
<i>tubifex tubifex</i>																										
<i>irpobdella octoculata</i>																										
<i>procheta subviridis</i>	345	492	800	560	6	8	13	313	832	201	146	176	212	344	21	30	376	550	940	106	80	228	1	1	1	
<i>asellus aquaticus</i>																										
<i>macropelopia sp.</i>																										
<i>prodiamesa olivacea</i>	18	26	38	33	15	24	1	36	19	3	10	2	16	154	35	4	6	10	87	8	29	12	34	78	50	
<i>orthocladinae</i>																										
<i>chironomus riparius</i>																										
<i>chironomidae (P)</i>																										
<i>lymnaea peregra</i>	2	1	1	5	2	4		2				2	33	7	5		1	1	1	3	2	6	15	19	12	

TABLE 51

RIVER TAME 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS			
	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER		
IMMERSION DATES	4.4 - 2.5		2.5 - 30.5		30.5 - 27.6		27.6 - 26.7 (cont.)					
SAMPLER	S.AUF.U.		S.AUF.U.		S.AUF.U.		S.AUF.U.		S.AUF.U.			
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3
	1	340	29	1	5	11	3	53	71	62		
<i>Tubifex tubifex</i>												
<i>Nais elinguis</i>	93	57	53	10	5	10	25	5	3	1	6	11
<i>Erpobdella octoculata</i>	43				692	8	6	5	5	3	5	6
<i>Haemopsis sanguisuga</i>						2		2	4	5	6	1
<i>Asellus aquaticus</i>	324	150	226	364	5	1216	1920	1472	1408	1792	1120	203
<i>Platambus maculatus</i> (A)					128	144	196	700	320	224	812	544
<i>Halipilus</i> sp. (I)												2
<i>Halipilus</i> sp. (A)												1
<i>Coenagrion pulchellum</i>												
<i>Ischnura elegans</i>												
<i>Pentaneurini</i>												
<i>Orthocladinae</i>												
<i>Chironomini</i>												
<i>Lymnaea peregra</i>												

Taxa/Species

- Tubifex tubifex
- Nais elinguis
- Erpobdella octoculata
- Haemopsis sanguisuga
- Asellus aquaticus
- Platambus maculatus (A)
- Halipilus sp. (I)
- Halipilus sp. (A)
- Coenagrion pulchellum
- Ischnura elegans
- Pentaneurini
- Orthocladinae
- Chironomini
- Lymnaea peregra

TABLE 52

RIVER TAME 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS			
	S. AUF. U.	CYLINDER	S. AUF. U.	S. AUF. U.	CYLINDER	S. AUF. U.	S. AUF. U.	CYLINDER	S. AUF. U.	S. AUF. U.	CYLINDER	S. AUF. U.	
IMMERSION DATES	26.7 - 22.8			22.8 - 20.9			20.9 - 17.10			17.10 - 15.11			15.11 - 12.12
SAMPLER	CYLINDER			CYLINDER			CYLINDER			CYLINDER			S. AUF. U.
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
	1120 1632 960	255 509 316	216 1168 856	600 416 348	2336 1504 1856	560 306 1016	2112 1600 1830	2624 2240 3140					
<u>Taxa Species</u>													
<u>Polycelis tenuis</u>													
<u>Tubifex tubifex</u>		143 49 48		19 1	11	2 5 3	3	6 3 7					
<u>Nais elinguis</u>								1					
<u>Erpobdella octoculata</u>	8 13 14	6 11 5	3 9 4	14 2 4	14 20 44	2 8 17	1 1 4	6 6 7					
<u>Haemopis sanguisuga</u>			1		1								
<u>Glossiphonia complanata</u>													
<u>Gammarus pulex</u>													
<u>Asellus aquaticus</u>			216	600 416 348	1504 1856	560 306 1016	2112 1600 1830	2624 2240 3140					
<u>Platambus maculatus (A)</u>			1		1								
<u>Haliphus sp. (A)</u>			1		1								
<u>Coenagrion puella</u>			1		1								
<u>Orthocladiinae</u>	4 3												
<u>Lymnaea peregra</u>	3 1	1	2 2		1	1							
<u>Planorbis leucostoma</u>													

RIVER NEASE MACRO-INVERTEBRATE DATA 1977.

IMPRESSION PERIOD	4 WEEKS				4 WEEKS				22.8 (Cont.)			
	4.4 - 2.5				2.5.77 - 30.5				26.7			
	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER
IMPRESSION DATES	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1 2 3	1 2 3
SAMPLER	8	27	15 9 3	6 3 20 42 33 7 1 3	2 5 2 1 1	2 27 5 3 3	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4
REPLICATES	7 24 30 1	256	192 20 230 1	1 3 28 2 2 2 3 3	1 4 4 1 2	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Taxa/species												
<u>Limnodrilus hoffmeisteri</u>												
<u>Potamothrix moldaviensis</u>												
<u>Tubifex tubifex</u>												
<u>Psammoryctides barbatus</u>												
<u>Lumbriculus variegatus</u>												
<u>Nais elinguis</u>												
<u>Nais sp.</u>												
<u>Eteobdella octoculata</u>												
<u>Urosipponia complanata</u>												
<u>Hydracarina</u>												
<u>Cstracoda</u>												
<u>Gammarus pulex</u>												
<u>Asellus aquaticus</u>												
<u>Aphinemura standfussi</u>												
<u>Baetis rhodani</u>												
<u>Caenis moesta</u>												
<u>Hydropsyche angustipennis(L)</u>												
<u>Limnephilus rhombicus(L)</u>												
<u>Anabolia nervosa(L)</u>												
<u>Atripodes bilineatus(L)</u>												
<u>Hysteroidea nigris(L)</u>												
<u>Hydroptila tiberoides(L)</u>												
<u>Volanna angustata(L)</u>												
<u>Zanis aenea(L)</u>												
<u>Zanis aenea(A)</u>												
<u>Callibaetis tuberculatus(L)</u>												
<u>Callibaetis tuberculatus(A)</u>												
<u>Platambus maculatus(A)</u>												
<u>Ptilopus sp(L)</u>												
<u>Ptilopus sp(A)</u>												

RIVER MEASE MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			CYLINDER	CYLINDER	CYLINDER			
	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER						
IMMERSION DATES	4.4 - 2.5			2.5.77 - 30.5			26.7			22.8		
SAMPLER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER
REPLICATES	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3
<i>Paxa</i> /species	1											
<i>Stalis lutaria</i>	1			1								
<i>Agriion splendens</i>	1											
<i>Coenagrion puella</i>	1											
<i>Simulium</i> spp.(L)			1									
<i>Pentaneurini</i>												
<i>Prodiamesa olivacea</i>	2											
<i>Prodiamesa campestris</i>												
<i>Orthocladinae</i>			6									
<i>Chironomini</i>		8										
<i>Chironomus</i> sp.												
<i>Ceratopogonidae</i>	1											
<i>Pipula</i> sp.												
<i>Dicranota</i> sp.												
<i>Limnophora</i> sp.												
<i>Theodoxus fluviatilis</i>			2									
<i>Viviparus viviparus</i>		1	1									
<i>Valvata macrostoma</i>	2		1									
<i>Valvata piscinalis</i>	1											
<i>Bithynia tentaculata</i>	10	2										
<i>Bithynia leachi</i>	3		4									
<i>Potamopyrgus jenkinsi</i>	3		2									
<i>Lymnaea peregra</i>												
<i>Ancylus fluviatilis</i>												
<i>Planorbis carinatus</i>												
<i>Planorbis leucostoma</i>												
<i>Planorbis planorbis</i>	2	1										
<i>Anodonta cyanea</i>		3										
<i>Pisidium</i> sp.		3										
<i>Sphaerium corneum</i>		3	1	2	1	1	37	1	2	7	105	6

TABLE 53 Continued:

- Paxa*/species
- Stalis lutaria*
- Agriion splendens*
- Coenagrion puella*
- Simulium* spp.(L)
- Pentaneurini*
- Prodiamesa olivacea*
- Prodiamesa campestris*
- Orthocladinae*
- Chironomini*
- Chironomus* sp.
- Ceratopogonidae*
- Pipula* sp.
- Dicranota* sp.
- Limnophora* sp.
- Theodoxus fluviatilis*
- Viviparus viviparus*
- Valvata macrostoma*
- Valvata piscinalis*
- Bithynia tentaculata*
- Bithynia leachi*
- Potamopyrgus jenkinsi*
- Lymnaea peregra*
- Ancylus fluviatilis*
- Planorbis carinatus*
- Planorbis leucostoma*
- Planorbis planorbis*
- Anodonta cyanea*
- Pisidium* sp.
- Sphaerium corneum*

RIVER MEASE MACROINVERTEBRATE DATA 1977.

IMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS		
	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER
IMERSION DATES	22.8 - 20.9.			20.9 - 17.10.			17.10 - 15.11.			15.11 - 13.12		
SAMPLER												
REPLICATES	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3
Taxa/species	1	2	3	1	2	3	1	2	3	1	2	3
<i>Limnodrilus hoffmeisteri</i>				2								
<i>Potamobothrix moldaviensis</i>	1	4	2	1			1					
<i>Psammoryctides barbatus</i>	6	9	5	3	2	1	1	1	8	1	1	2
<i>Nais</i> sp.	1											
<i>Erpobdella octoculata</i>	2		1	6	1		39	8	13	16		6
<i>Glossiphonia complanata</i>	1			1	1		1	1		6		
<i>Theromyzon tessulatum</i>	7	12	4	8	40	125	8	5	12	3	20	66
<i>Pisicicola geometra</i>												
<i>Hydracarina</i>												
<i>Ostracoda</i>	1	2	1	1	1		1	1		3	3	20
<i>Gammarus pulex</i>	7	12	4	2	8	3	2	8	10	15	17	14
<i>Asellus aquaticus</i>	47	50	89	4	2	2	126	25	68	42	1	86
<i>Centroptilum luteolum</i>	2	2	4	3	5	8				1	1	2
<i>Jaenis moesta</i>												
<i>Hydropsyche angustipennis</i> (L)												
<i>Limnocalanus rhombicus</i> (L)												
<i>Limnocalanus</i> sp.(L)	3	4	2	1	7	2	1	2	7	1	1	2
<i>Phryganea grandis</i> (L)												
<i>Athripsodes bilineatus</i> (L)	4	11	13	6	8	14	3	8	14	2	2	3
<i>Xystacides nigra</i> (L)												
<i>Molanna angustata</i> (L)												
<i>Elmis aenea</i> (L)	4	2	2	1	3	1	3	1	1	6	1	1
<i>Culimnius tuberculatus</i> (L)	6	3	5		1		1	3	1	1	15	8
<i>Culimnius tuberculatus</i> (A)	3	5	3		10	4	10	4	1	1	1	2
<i>Platambus maculatus</i> (A)												
<i>Gyrinus</i> sp.(L)	10	3	8	1	8	2	1	2	2	1	1	1
<i>Halipilus</i> sp.(L)												
<i>Halipilus</i> sp.(A)												

RIVER MEASE MACROINVERTEBRATE DATA 1977.

IMPERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			
	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	
IMPERSION DATES	22.8 - 20.9.			20.9 - 17.10.			17.10 - 15.11.			15.11 - 13.12
SAMPLER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.
REPLICATES	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3
Taxa/species	2 1 3	2	1 1	1	1	4 2 1	4 2 1	1	2	2
<i>Sialis lutaria</i>										
<i>Agrion splendens</i>										
<i>Simulium</i> sp.(L)										
<i>Procladius</i> sp.	1									
Tanypodinae										
<i>Diamesa campestris</i>		1								1
<i>Prodiamesa olivacea</i>		54	35 9 16	2 8	3 10 5	3 13 5	3 12 7	2 6	6 2 6	2 4 6
Orthocladinae	1 1 7 3	7								3 11
<i>Chironomus</i> sp.										1
<i>Chironomus</i> sp.	1 1	1	1		2		1		4	2 1
Ceratopogonidae										
<i>Tipula</i> sp.										
<i>Dicranota</i> sp.										
<i>Limnophora</i> sp.										
Tabanidae										
<i>Psychoda</i> sp.	1 1	1								2
<i>Theobaldus fluviatilis</i>										
<i>Viviparus viviparus</i>										
<i>Talvata macrostoma</i>										
<i>Eithynia tentaculata</i>	8 4 17	140	192 220 59	10 16 3	3 7 2	1 1 1	4 6 1	1 32	1 1 1	1 3 35
<i>Rotamopyrgus jenkinsi</i>	3 6 9		2 3 1	12 7 2	79 3 3	240 124 113	22 12 2	5 5	73 185 128	1 1 1
<i>Lymnaea peregra</i>	1 2 2	1		3 2 3		3	1			
<i>Lymnaea carinata</i>										
<i>Panorbia planorbis</i>										
<i>Panorbia</i> sp.										
<i>Anodonta</i> sp.	1		1	1	7	23	12 17 14	1	1 12 5	1 4
<i>Pisidium</i> sp.	24 9 4	7	6 3 11	12 7 7	18	1 2	4 1 10	18	1 2 2	
<i>Sphaerium corneum</i>										
<i>Sphaerium</i> sp.										

TABLE 54 Continued:

- Sialis lutaria*
- Agrion splendens*
- Simulium* sp.(L)
- Procladius* sp.
- Tanypodinae
- Diamesa campestris*
- Prodiamesa olivacea*
- Orthocladinae
- Chironomus* sp.
- Chironomus* sp.
- Ceratopogonidae
- Tipula* sp.
- Dicranota* sp.
- Limnophora* sp.
- Tabanidae
- Psychoda* sp.
- Theobaldus fluviatilis*
- Viviparus viviparus*
- Talvata macrostoma*
- Eithynia tentaculata*
- Rotamopyrgus jenkinsi*
- Lymnaea peregra*
- Lymnaea carinata*
- Panorbia planorbis*
- Panorbia* sp.
- Pisidium* sp.
- Sphaerium corneum*
- Sphaerium* sp.

TABLE 55

RIVER TEAN 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS (cont)		
	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER
IMMERSION DATES	16.2 - 16.3.			16.3 - 13.4.			13.4 - 11.5 (cont)		
SAMPLER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER
REPLICATES	1	1	1 2 3	1 2 3	1	1 2 3	1 2 3 4 5 6 7 8 9 10	1	1 2 3
Taxa/Species									
Nematoda									
<i>Polycelis felina</i>				1					
<i>Limnodrilus hoffmeisteri</i>	1		3 8 4	2		3	1 1	1	3
<i>Tubifex tubifex</i>			1			16	1	1	8
<i>Rhyacodrilus coccineus</i>				26 42 77		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2 1
<i>Nais elinguis</i>	31	4	5 19 19			10			15
<i>Nais</i> sp.		1				4			3
<i>Lumbriculus variegatus</i>						1			
Echytraeidae									
<i>Glossiphonia complanata</i>	1	1		1		1			
<i>Helobdella stagnalis</i>	1								
<i>Piscicola geometra</i>	4	8	2	3 8 18					
<i>Hydracarina</i>		17	6 1	21 43 22		1			
<i>Gammarus pulex</i>	73			2 6 2		14			1
<i>Asellus aquaticus</i>	7								3
<i>Ecdyonurus venosus</i>									2
<i>Baetis rhodani</i>	14	5	23 35 15	12 1 5		50			4
<i>Rhyacophila dorsalis</i> (L)						1			1
<i>Hydropsyche angustibennis</i> (L)	2					68			2
<i>Polycentropus flavomaculatus</i> (L)	1					1			1
<i>Plectrocnemia conspersa</i> (L)									
<i>Stenophylax</i> sp.(i)	2			1 1					
<i>Anabolia nervosa</i> (L)	17	14		3 3 37					
<i>Elmis aenea</i> (A)				8 15		19			1
<i>Platambus maculatus</i> (A)									
Dytiscidae (L)									
<i>Sialis lutaria</i>									
<i>Simulium orpatum</i> (L)						1			
<i>Macrolepobla</i> sp.									
<i>Pentaneurini</i>									
<i>Diamesa prolongata</i>	1	1		3 1		2			1
<i>Procladius olivaceus</i>		2		1 1 6		8			3
<i>Brittonia longicauda</i>	5			1					
<i>Brittonia togata</i>	1								
<i>Orthocentrus</i>	6			6 1 1		2			1
<i>Tanytarsini</i>									
<i>Chironomidi</i>	1	3	1	2 11		1			
<i>Chironomidae</i> (F)	2								15
<i>Tibella</i> sp.	1	2							1
<i>Dicranota</i> sp.									
Empididae									
<i>Polatopygus bogkiani</i>									
<i>Eumecurus</i>									
<i>Eumecurus</i> sp.									
<i>Acyclus flaviventris</i>	12	4							1
<i>Pisidium</i> sp.									1
<i>Comptosia</i>									

RIVER TEAN 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS					
	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER			
IMMERSION DATES	11.5 - 9.6			9.6 - 6.7			6.7 - 3.8			3.8-1.9 (Cont)		
SAMPLER												
REPLICATES	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Taxa/Species	1		1			1						1
<i>Polycelis tenuis</i>			1			1						1
<i>Polycelis felina</i>			5	1 2 5	36	2 6						2 5
<i>Limnodrilus hoffmeisteri</i>			12	2 2		1 5						3
<i>Tubifex tubifex</i>			3	4 7		10 1						1
<i>Rhyacodrilus coccineus</i>	2	4	3	3		1						2
<i>Nais elinguis</i>	1	1										1
<i>Lemniculus variegatus</i>	1	1										1
<i>Eprobodella octoculata</i>	3	1										1
<i>Glossiphonia complanata</i>	2	3										1
<i>Fisicicola geometra</i>	30	19	80	47 36 35 4	2 28 3	1 192	313	4 192	1	2 125	382 310 452	1 5 2 7 12 64 1 1 1
<i>Hydracarina</i>	73	77	176	92	1							43 2 102 249 204
<i>Gammarus pulex</i>	3	6	1									1
<i>Asellus aquaticus</i>			1									1
<i>Isoperla grammatica</i>	3	5	33	52 63	2	8 5 1	8	5 1	9 2 1	4 1	16 40 32	
<i>Ecdyonurus venosus</i>	1											
<i>Baetis rhodani</i>	3	22	112	284 154	1 5 4	52 36 66	52	36 66	2 1 2	10 1	7 41 40	
<i>Baetis scambus</i>			4	3 3		5 1 3	5	1 3			1 3	
<i>Ephemera ignita</i>												
<i>Rhyacophila dorsalis</i> (L)			4	3 1								
<i>Hydropsyche anustipennis</i> (L)	18	14										
<i>Hydropsyche siltalai</i> (L)	1	1										
<i>Polycentropus flavoraculatus</i> (L)	5	7										
<i>Cyrrhus trimaculatus</i> (L)	3	14										
<i>Cyrrhus trimaculatus</i> (L)	1	1										
<i>Stenopteryx</i> sp. (L)	1	14										
<i>Anabolia nervosa</i> (L)	5	7										
<i>Limnephilus rhombicus</i> (L)	3	14										
<i>Hydroptila tincoides</i> (L)	1	1										

TABLE 56

RIVER JEAN 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS						4 WEEKS						4 WEEKS					
	11.5 - 9.6			9.6 - 6.7			6.7 - 3.8			3.8-1.9			3.8-1.9			3.8-1.9		
	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER
REPLICATES	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3
	1		1				1						1			1		
		1														3	1	3
			10 7 3			1 1 1						42 2 16				1	1	
	1			5 8 2	2		13 9 20	53					6 2 1	25				
	5	4 3	4 3			1	3 10 6					1 2 1				1		
												1 2 1				1		
	1			3 11 1	1 1 1	1	1 3 3	13				1 2 1		3				
				3 1 1	1 1 1							1 2 1						
	1		1	7 2 2	4 4 1	1	10 15 6	17	1			1 6 2	9					
	2	1 8 10	3	17 24 11	3 4 2		2 1 1	2				2 1 1	3					
	1			1 1 6	2 1													
		2 2	1	1 1	2							5 2 3		1				
			1 1 1			11 6 14												
	5	1 3 3		1 3 10	13	42 16 13	405 49 290	94				802 711 420	65			1 3 1		
	1	1 1 2	1 1	1 3 2	1	1 1	1 4	62				2 2 3	1			1 2 3		
	1		1	2	2	1	1	1				2 6				2 3		

TABLE 56 Continued :

- Taxa/Species
Isonychia maculatus (A)
Hydropsyche sp. (L)
Psephenus elevatus (A)
Alloea sp. (L)
Isonychia lutaria
Limnoria ornata (L)
Limnoria ornata (P)
Acropelopia sp.
Procladius sp.
Pentaneurini
Diamesa prolongata
Diamesa campestris
Procladius olivacea
Trichoptera longifurca
 Orthocladinae
Tanytarsini
Chironomini
Chironomus sp.
 Chironomidae (P)
 Ceratopogonidae
Limnoria sp.
Dicranota sp.
 Empididae
Potamopygus henkinsi
Limnoria peregrina
Ancylus fluviatilis
Pisidium sp.

TABLE 57

RIVER TEAM 1 MACROINVERTEBRATE DATA 1977

IMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS		
	1.9 - 29. 9			29.9. - 25. 10.			25.10 - 22.11			22.11 - 19.12		
IMERSION DATES	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK	CYLINDER
SAMPLER	1	2	3	1	2	3	1	2	3	1	2	3
ROPLICATES	1	2	3	1	2	3	1	2	3	1	2	3
<u>tax/Species</u>	1	1										
<u>Polycelis tenuis</u>												
<u>Polycelis felina</u>												
<u>Tubifex tubifex</u>												
<u>Rhyacodrilus coccineus</u>												
<u>Nais elinguis</u>												
<u>Lumbriculus variegatus</u>												
<u>Erebodella octoculata</u>												
<u>Ploossiphonia complanata</u>												
<u>Melobdella stagnalis</u>												
<u>Pisicicola geometra</u>												
<u>Hydracarina</u>												
<u>Ceratrus pulex</u>												
<u>Acellular aquaticus</u>												
<u>Ecdyonurus venosus</u>												
<u>Baetis rhodani</u>												
<u>Ephemerella ignita</u>												
<u>Rhyacophila dorsalis (L)</u>												
<u>Rhyacopsyche angustipennis (L)</u>												
<u>Hydropsyche contubernalis (L)</u>												
<u>Polycentropus flavomaculatus (L)</u>												
<u>Stenophylax sp. (L)</u>												
<u>Limn. aenea (A)</u>												
<u>Platambus maculatus (A)</u>												
<u>Dytiscidae (L)</u>												
<u>Brychius elevatus (A)</u>												
<u>Simulium ornatum (L)</u>												
<u>Macropelopia sp.</u>												
<u>Pentaneurini</u>												
<u>Diaesa campestris</u>												
<u>Prodiamesa olivacea</u>												
<u>Brillia modesta</u>												
<u>Orunocladinae</u>												
<u>Tanytarsini</u>												
<u>Caironomini</u>												
<u>Ceratopogonidae</u>												
<u>Dicranota sp.</u>												
<u>Potamopygeus jenkinsi</u>												
<u>Lymnaea peregra</u>												
<u>Ancyliis fluviatilis</u>												
<u>Pisidium sp.</u>												

RIVER TEAN 2 MACROINVERTEBRATE DATA 1977.

IMMERSION PERIOD	4 WEEKS				4 WEEKS				4 WEEKS							
	16.2 - 16.3				16.3 - 13.4				13.4 - 11.5				11.5 - 9.5(cont)			
	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	S.AUF.U.	KICK	CYLINDER	KICK	S.AUF.U.	S.AUF.U.	CYLINDER	S.AUF.U.	KICK	CYLINDER	S.AUF.U.	KICK
REPLICATES	1 2 3	1	1 2 3	1 2 3	1 2 3	1	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1	1 2 3	1 2 3	1
Taxa/Species																
<u>Limnodrilus hoffmeisteri</u>			3 16 2 11			1										
<u>Limnodrilus clabaredeianus</u>		14	95 17 63	2 3 17		1	25 3 3									
<u>Tubifex tubifex</u>						4										
<u>Nais elinguis</u>		2	1													
<u>Lumbriculus variegatus</u>						1										
<u>Erpobdella octoculata</u>		1				1										
<u>Glossiphonia complanata</u>		1	2			1										
<u>Helobdella stagnalis</u>		1	213 107 108	5 642 921 860		1	82 236 1408 960 1536									
<u>Gammarus culex</u>	1249 1920 1471	790	7	3		8	11 21									
<u>Aesolus aquaticus</u>	2															
<u>Baetis rhodani</u>	1															
<u>Stenophylax sp. (L)</u>																
<u>Hydroptila tineoides (L)</u>	56 78 32	156	57 132 95	97 35 135			32 47									
<u>Simulium ornatum (L)</u>	11 32	42	3 3 7	15 11 46		1	1 4									
<u>Simulium ornatum (P)</u>																
<u>Macropelopia sp.</u>		2		2												
<u>Procladius sp.</u>		5	1 3 15	3 2			1									
<u>Pentaneurini</u>																
<u>Diatessa prolongata</u>		3	2 1 2													
<u>Procladius olivaceus</u>		2														
<u>Brillia longifurca</u>	1		1	56 15			4 5 4									
<u>Orthocladinae</u>	165 246 144			45 32 56			5 1									
<u>Tanytarsini</u>	448 440 95	1		1			1									
<u>Chironomini</u>																
<u>Chironomus riparius</u>	25 53 15	10	2 2 2	11		15										
<u>Chironomidae (P)</u>																
<u>Dicranota sp.</u>																
<u>Lymnaea peregra</u>																

TABLE 58.

RIVER TEAN 2 MACROINVERTEBRATE DATA 1977

IMPRESSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS					
	9.6 - 6.7			6.7 - 3.8			3.8 - 1.9			1.9 - 29.9 (Cont)		
IMPRESSION DATES	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER	S.AUF.U.	Kick	CYLINDER
Taxa/Species	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3	1 2 3	1	1 2 3
<i>Polycelis tenuis</i>				3 1			5	4		6 3 3		
<i>Polycelis nigra</i>			2	1						1 10		
<i>Limnodrilus hoffmeisteri</i>												
<i>Limnodrilus claparedelanus</i>	3 1 1	5	11 8	21 1	16	3 6 4	57 22 44		12 2 2	20 4 19	6	1 2
<i>Tubifex tubifex</i>			7									
<i>Nais elinguis</i>												
<i>Nais</i> sp.												
<i>Lembriculus variegatus</i>	11 20 26	2		9 1 5		1	4 4 5	3	1 1	9 4 6	10	4 1 1
<i>Eprobodella octoculata</i>	2			1			3 1			2 1 1	6	1 1 2
<i>Glossiphonia complanata</i>							2		2 3	13 11 7	8	2 9 3
<i>Helobdella stagnalis</i>	2 3 1	16	1 6 1	6 4 8	5	1 2 2	1 2		2 3 1	1098 780 862	720	625 259 460
<i>Gammarus pulex</i>	1536 1408 1856	216	315 198 128	581 612 645	920	56 114 134	640	792 686	77 121 73	38 1098 862	720	625 259 460
<i>Asellus aquaticus</i>												
<i>Spinemarella ignita</i>												
<i>Stenobrylax</i> sp.(L)	1		125 1080 736	4 2	15	42 78 47			8 68 8		293	162 250
<i>Simulium ornatum</i> (L)	1		5 2 1			4 14 3			5 18 1		12	3 2
<i>Simulium ornatum</i> (P)												
<i>Sialis lutaria</i>												
<i>Macropelopia</i> sp.	1 1 1	9		1 1	62				10		14	1 1
<i>Pentaneurini</i>	3 1 5	13		2	32	1					3	
<i>Prodiamesa olivacea</i>												
<i>Trillia longifurca</i>												
<i>Orthocladinae</i>	1 4 1	16	3 2 8	1 9 19	71	6 18 1				1 2	10	2 80
<i>Pachytarsiini</i>	11 4 7	16	42 69 10	4 9 19	55	1 1			2 1	1 1	35	13 13
<i>Chironomini</i>												
<i>Chironomus riparius</i>												
<i>Chironomidae</i> (P)												
<i>Dicranota</i> sp.												
<i>Acyclus fluviatilis</i>			2 1 4 1								2	1

RIVER CHURNET 6 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS		
	10.6 - 7.7.			7.7 - 4.8			4.8 - 2.9 (Cont)		
	S.AUF.U.	GRAB	CYLINDER	S.AUF.U.	GRAB	CYLINDER	S.AUF.U.	CYLINDER	CYLINDER
Taxa/species									
<u>Tubifex tubifex</u>	3	1	5	1	6	6	2	2	
<u>Inchytraeidae</u>									
<u>Erpobdella octoculata</u>				1	6	6	2	14	2
<u>Helobdella stagnalis</u>							2		
<u>Gammarus pulex</u>	1	5	2					14	4
<u>Isellus aquaticus</u>	408	352	544	16	2	9	286	930	1172
<u>Hydropsyche angustipennis (L)</u>									
<u>Polycentropus flavomaculatus (L)</u>	1						2	1	
<u>Potamophylax sp. (L)</u>									
<u>Dytiscidae (L)</u>									
<u>Brychius elevatus (L)</u>							1	3	2
<u>Halobius sp. (L)</u>							1		
<u>Halobius sp. (A)</u>							4		
<u>Macropelopia sp.</u>									
<u>Procladius sp.</u>							10	68	4
<u>Pentaneurini</u>	1	2	3						
<u>Prodiamesa olivacea</u>							2		
<u>Brillia modesta</u>							1		
<u>Brillia longifurca</u>							4		
<u>Orthocladinae</u>							9		
<u>Chironomini</u>	4	1	3	2	1	3	1		
<u>Chironomus riparius</u>			1	4	3	3	1		
<u>Chironomidae (P)</u>				1	2	1	1		1
<u>Ceratopogonidae</u>									5
<u>Potamopyrus jenkinsi</u>									19
<u>Lymnaea peregra</u>							1	52	2
<u>Physa fontinalis</u>							1		
<u>Pisidium sp.</u>							1	1	1
<u>Sphaerium corneum</u>							1	1	1

RIVER CHURNET 6 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS						
	2.9 - 30.9			30.9 - 26.10			26.10 - 23.11						
IMMERSION DATES	S.AUF.U.			S.AUF.U.			S.AUF.U.						
SAMPLER	1	2	3	1	2	3	1	2	3				
REPLICATES	CYLINDER			CYLINDER			CYLINDER						
<u>Tubifex tubifex</u>	56	3	115				2	2	112				
<u>Enchytraeidae</u>							4		14				4
<u>Erebodella octoculata</u>		1	1	1	2				2				
<u>Erebodella testacea</u>				1					1				
<u>Glossiphonia complanata</u>						1			2				
<u>Helobdella stagnalis</u>				7	1		13		7				1
<u>Gammarus pulex</u>	36	12	176	1050	82	86	869		280				4960
<u>Aseillus aquaticus</u>									1				2
<u>Baetis rhodani</u>					1	2			1				1
<u>Dytiscidae (L)</u>									40				1
<u>Brvechius elevatus (L)</u>					52	12	91		6				2
<u>Procladius sp.</u>	12	41	45						2				
<u>Pentaneurini</u>		1							10				
<u>Brillia longifurca</u>				1					2				
<u>Orthocladinae</u>				1					1				
<u>Chironomini</u>													
<u>Chironomus riparius</u>						1			1				1
<u>Limnophora sp.</u>													1
<u>Potamopyrgus jenkinsi</u>				2					2				1
<u>Lymnaea peregra</u>				42									44
<u>Physa fontinalis</u>													25
<u>Ancylus fluviatilis</u>													
<u>Pisidium sp.</u>	1	1	1	2	4	1	7		5				5
<u>Sphaerium corneum</u>													13

TABLE 63

Taxa/species
Tubifex tubifex
Enchytraeidae
Erebodella octoculata
Erebodella testacea
Glossiphonia complanata
Helobdella stagnalis
Gammarus pulex
Aseillus aquaticus
Baetis rhodani
Dytiscidae (L)
Brvechius elevatus (L)
Procladius sp.
Pentaneurini
Brillia longifurca
Orthocladinae
Chironomini
Chironomus riparius
Limnophora sp.
Potamopyrgus jenkinsi
Lymnaea peregra
Physa fontinalis
Ancylus fluviatilis
Pisidium sp.
Sphaerium corneum

RIVER CHURNET 10 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS	
	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER
IMMERSION DATES	17.3 - 14.4.		14.4 - 12.5		12.5 - 10.6.		10.6 - 7.7.	
SAMPLER	S.AUF.U.		S.AUF.U.		S.AUF.U.		S.AUF.U.	
REPLICATES	1	2	3	1	1	2	3	1
Taxa/Species	1	7	4	7	2	43	11	8
<i>Polycelis tenuis</i>	1	1	1	5	2	2	3	1
<i>Polycelis nigra</i>	1	15	3	1	1	7	3	78
<i>Limnodrilus hoffmeisteri</i>	1	2	1	1	1	1	2	3
<i>Tubifex tubifex</i>	2	12	1	3	1	8	7	11
<i>Lumbriculus variegatus</i>	1	8	5	1	2	6	6	10
<i>Nais</i> sp.	2	1	2	5	10	2	4	4
<i>Eiseniella tetraedra</i>	1	1	1	1	1	2	2	2
<i>Eprobdelta octoculata</i>	1	1	1	1	1	1	1	1
<i>Eprobdelta testacea</i>	1	1	1	1	1	1	1	1
<i>Glossiphonia complanata</i>	1	1	1	1	1	1	1	1
<i>Felobdella stagnalis</i>	3	7	4	25	106	3	1	3
<i>Hydracarina</i>	1	7	1	2	17	8	1	4
<i>Gammarus pulex</i>	1	67	49	27	4	182	526	140
<i>Asellus aquaticus</i>	14	1	1	2	2	1	4	6
<i>Nemoura avicularis</i>	25	1	1	2	2	106	75	92
<i>Isoperla grammatica</i>	1	1	1	2	2	3	3	4
<i>Ecdyonurus venosus</i>	3	1	3	3	3	19	26	6
<i>Baetis rhodani</i>	1	1	1	1	1	1	1	1
<i>Ephemerella ignita</i>	1	1	1	1	1	1	1	1
<i>Rhyacophila dorsalis</i> (L)	5	2	2	2	2	2	2	2
<i>Hydropsyche angustipennis</i> (L)	11	1	1	1	1	1	1	1
<i>Hydropsyche contubernalis</i> (L)	2	1	1	1	1	1	1	1
<i>Hydropsyche siltalai</i> (L)	2	1	1	2	2	2	2	2
<i>Potamophylax</i> sp. (L)	3	1	1	2	2	1	1	1
<i>Limnephilus rhombicus</i> (L)	1	6	11	25	1	1	1	1
<i>Anabolia servosa</i> (L)	2	2	1	1	1	1	1	1
<i>Mystacides nigra</i> (L)	1	1	1	1	1	1	1	1

TABLE 64

Taxa/Species
Polycelis tenuis
Polycelis nigra
Limnodrilus hoffmeisteri
Tubifex tubifex
Lumbriculus variegatus
Nais sp.
Eiseniella tetraedra
Eprobdelta octoculata
Eprobdelta testacea
Glossiphonia complanata
Felobdella stagnalis
Hydracarina
Gammarus pulex
Asellus aquaticus
Nemoura avicularis
Isoperla grammatica
Ecdyonurus venosus
Baetis rhodani
Ephemerella ignita
Rhyacophila dorsalis (L)
Hydropsyche angustipennis (L)
Hydropsyche contubernalis (L)
Hydropsyche siltalai (L)
Potamophylax sp. (L)
Limnephilus rhombicus (L)
Anabolia servosa (L)
Mystacides nigra (L)

RIVER CHURNET 10 MACROINVERTEBRATE DATA 1977

IMERSION PERIOD	4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS	
	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER
IMERSION DATES	17.3 - 14.4.		14.4 - 12.5		12.5 - 10.6.		10.6 - 7.7.	
SAMPLER								
REPLICATES	1 2 3	1	1 2 3	1	1 2 3	1	1 2 3	1
Taxa/Species								
<i>Athripsodes bilineatus</i> (L)								
<i>Athripsodes</i> sp.(L)								
<i>Sericostoma personatum</i> (L)	4	3	1	1	3	1	1	1
<i>Sericostomatidae</i> (L)			1	1				
<i>Agarvea multipunctata</i> (L)			1	1				
<i>Molanna angustata</i> (L)								
<i>Beraeodes tinutus</i> (L)								
<i>Hydroporus</i> sp.(L)								
<i>Halipus</i> sp.(A)								
<i>Sialis lutaria</i>	1							
<i>Ischnura elegans</i>								
<i>Macropelopia</i> sp.								
<i>Procladius</i> sp.								
<i>Pentaneurini</i>	3	3	2	2	3	2	3	1
<i>Diamesa prolongata</i>								
<i>Procladius</i> sp.	4	52	1	5	1	9	2	48
<i>Brillia modesta</i>								
<i>Brillia longifurca</i>								
<i>Orthocladinae</i>	1		1	1	1	1	1	1
<i>Chironomini</i>								
<i>Chironomus</i> sp.								
<i>Chironomidae</i> (P)								
<i>Ceratopogonidae</i>								
<i>Dicranota</i> sp.								
<i>Atherix ibis</i>								
<i>Lymnaea peregra</i>	2	1	1	1	2	1	2	1
<i>Ancylus fluviatilis</i>								
<i>Placobdis contortus</i>								
<i>Pisidium</i> sp.								

IMMERSION PERIOD	4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS	
	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER
IMMERSION DATES	4.8 - 2.9		2.9 - 30.9		30.9 - 26.10.		26.10 - 23.11	
SAMPLER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER	S.AUF.U.	CYLINDER
REPLICATES	1 2 3	1	1 2 3	1	1 2 3	1	1 2 3	1
<i>Axa/Species</i>								
<i>Alycelis tenuis</i>	2 5 1		1 1 1		1 1 1		1 1 1	4
<i>Pendrocoelium lacteum</i>	2 3 1		1 1 1					
<i>Hugesia lugubris/polychroa</i>	1 2 1		7 3 11	1	47 14		2 2	3
<i>Tubifex tubifex</i>								
<i>Hais elinguis</i>								
<i>Hais</i> sp.								
<i>Proboldella octoculata</i>		2	1 2		3 1 2		2 5 3	
<i>Procheta subviridis</i>	1							
<i>Glossiphonia complanata</i>			1 3 3		2			
<i>Belobdella stagnalis</i>		5	2 1 6		1 1 1		5 3 3	
<i>Hydracarina</i>		19	73 64 82		9 32 25		10 7 6	
<i>Pammarus pulex</i>							148 20 45	
<i>Asellus aquaticus</i>	67 85 80						4 3 7	5
<i>Isoperla grammatica</i>							1 1 1	9
<i>Ecdyonurus venosus</i>		8					4 3 7	16
<i>Baetis rhodani</i>		6					1 1 1	1
<i>Ephemera ignita</i>		1						2
<i>Rhyacophila dorsalis</i> (L)		3						1
<i>Hydropsyche angustipennis</i> (L)				95			1 12 23	3
<i>Hydropsyche siltalai</i> (L)							14 12 23	13
<i>Potamophylax</i> sp. (L)	1 2				1		5 3 4	4
<i>Limnephilus rhombicus</i> (L)								1
<i>Limnephilidae</i> (P)								
<i>Erysganea grandis</i> (f)			1					
<i>Mystacides nigra</i> (L)	3 10 6		4 5 6		44 35 28		69 24 60	
<i>Sericostoma personatum</i> (L)			1 3 1	1	1		6 1 2	
<i>Dytiscidae</i> (L)								
<i>Halibus</i> sp. (A)					1		1	
<i>Macropelopia</i> sp.	1 2							
<i>Frocladius</i> sp.								
<i>Diamesa prolouata</i>		51			1			
<i>Procladius olivacea</i>	3 2		1 3		3 22 19		1	
<i>Brillia longifurca</i>								
<i>Orthocladinae</i>								
<i>Chironomini</i>	2 1 7		1 2				1 1 2	
<i>Ceratopogonidae</i>								
<i>Tipula</i> sp.		1						
<i>Dicranota</i> sp.		1						
<i>Atherix ibis</i>		2						
<i>Lymnaea peregra</i>	1 3 2		2 1 1				3 2 2	1
<i>Egusa fontinalis</i>	1 4 1							4
<i>Ancyclus fluviatilis</i>								
<i>Pisidium</i> sp.		1	1 1 2		1		3 3	7
<i>Sphaerium corneum</i>								
<i>Succaerium</i> sp.								1

RIVER DOVE MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS. (Cont)					
	6.5 - 1.6			1.6 - 29.6.			29.6 - 28.7			28.7 - 26.8,					
IMMERSION DATES	CYLINDER			CYLINDER			CYLINDER			S.AUF.U.					
	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.	S.AUF.U.			
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
<i>axa/Species</i>															
<i>polycelus tenuis</i>															
<i>ugesia lugubris/polychroa</i>															
<i>imnodrilus hoffmeisteri</i>															
<i>imnodrilus udekemianus</i>															
<i>uolifex tubifex</i>															
<i>lais elineus</i>															
<i>lais sp.</i>															
<i>umbriculus variegatus</i>															
<i>nchytraeidae</i>															
<i>trpobdella octoculata</i>															
<i>filossiphonia complanata</i>															
<i>helobdella stagnalis</i>															
<i>hydracarina</i>															
<i>ostracoda</i>															
<i>gammarus pulex</i>															
<i>asellus aquaticus</i>															
<i>leuctra sp.</i>															
<i>edycynurus venosus</i>															
<i>baetis rhodani</i>															
<i>ephemerella ignita</i>															
<i>caenis moesta</i>															
<i>hydropsyche angustipennis (L)</i>															
<i>hydropsyche contubernalis (L)</i>															
<i>polycentropus flavomaculatus (L)</i>															
<i>psychomyia pusilla (L)</i>															
<i>potamophylax sp. (L)</i>															
<i>anabolia nervosa (L)</i>															
<i>atripsodes bilineatus (L)</i>															
<i>athripsodes sp. (L)</i>															

TABLE 66

TABLE 67

RIVER DOVE MACROINVERTEBRATE DATA 1977

IMPRESSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS					
	S.AUF.U.	CYLINDER	S.AUF.U.	S.AUF.U.	CYLINDER	S.AUF.U.	S.AUF.U.	CYLINDER	S.AUF.U.			
IMPRESSION DATES	26.8 - 23.9			23.9 - 21.10			21.10 - 18.11.			18.11 - 16.12		
SAMPLER	S.AUF.U.	CYLINDER	S.AUF.U.	S.AUF.U.	CYLINDER	S.AUF.U.	S.AUF.U.	CYLINDER	S.AUF.U.	S.AUF.U.	S.AUF.U.	
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
Taxa/Species												
<i>Dugesia lugubris/polychroa</i>		1		1	8	3						
<i>Psammoryctides barbatus</i>				1	23					1	2	
<i>Nais elinguis</i>	3	7										
<i>Nais</i> sp.				2	1	2						
<i>Lumbriculus variegatus</i>		1	36	2								
<i>Frøbdella octoculata</i>		15	11	15	14	16	10					
<i>Helobdella starnalis</i>		6	1	3	7	4	6					
<i>Pisicicola geometra</i>				1	1							
<i>Hydracarina</i>	2	1	5	3	6	9	11	36	18	11	15	
<i>Ostracoda</i>								1			3	
<i>Gammarus sullex</i>	1							7	7	1	1	
<i>Asellus aquaticus</i>	3	5	3		1	3	5	15	5	8	2	
<i>Taeniopteryx nebulosa</i>												
<i>Baetis rhodani</i>	1			2	1							
<i>Epemerella ignita</i>				3	1							
<i>Caenis moesta</i>	1	2	1		1	1		26	31	4	19	
<i>Ephemera danica</i>				9	5	8						
<i>Hydropsyche angustipennis</i> (L)	4	4	1	4	1	1		1			1	
<i>Hydropsyche contubernalis</i> (L)	1	3	1	1							2	
<i>Polycentropus flavomaculatus</i> (L)				1	2					1	3	
<i>Limnephilus</i> sp. (L)								1				
<i>Athripsodes bilineatus</i> (L)	1	1										
<i>Mystacides nigra</i> (L)				1				1				
<i>Leptoceridae</i> (f)				1								
<i>Sericostomatidae</i>												
<i>Elmis aenea</i> (L)	1	1		5	1	1					1	
<i>Elmis aenea</i> (A)												
<i>Oulimnius tuberculatus</i> (L)	1	1		8	3	6		2	8	2	1	

RIVER DOVE MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS		
	S.AUF.U.	CYLINDER	S.AUF.U.	S.AUF.U.	CYLINDER	S.AUF.U.	S.AUF.U.	CYLINDER	
IMMERSION DATES	26.8 - 23.9			23.9 - 21.10			21.10 - 18.11.		
SAMPLER	S.AUF.U.			S.AUF.U.			S.AUF.U.		
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
Taxa/Species	1			2			1 1 2		
<i>Aimnium volckmari</i> (L)				1 1			1 1		
<i>Platambus maculatus</i> (A)				1			1		
Odytiscidae (L)				1 1 2			1 1		
<i>Haliphus</i> sp. (L)				1			1		
<i>Marion splendens</i>				2			3		
<i>Platycnemis pennipes</i>	1			1			1		
<i>Simulium ornatum</i> (L)	1 3 4			1			1		
<i>Simulium</i> sp. (L)				1					
<i>Procladius</i> sp.				1					
<i>Pentaneurini</i>				1			2 3		
<i>Prodiamesa olivacea</i>				1			1		
Orthocladinae	10 16 3			6			15 3 3		
<i>Lanybarsini</i>	2 3			3			31 20 5		
Chironomini	4 3 8 3 1			5 6 12			12 10 6		
Chironomus sp.				1 1			2 1		
Ceratopogonidae	1			1			1		
<i>Tibialia</i> sp.	1 1			2 1 1			2 1		
Dicranota sp.				1					
<i>Limnophora</i> sp.				1					
<i>Theodoxus fluviatilis</i>	1 2			2			218 113 69		
<i>Bitania tentaculata</i>				1 3			36 15 13		
<i>Lymnaea peregra</i>				1			1		
<i>Acovius fluviatilis</i>				1					
<i>Phaenobis carinatus</i>	1			1 2 2					
<i>Copaerium corneum</i>				2					
<i>Sphaerium</i> sp.	2 3			2			1		

TABLE 67 Continued:

Taxa/Species
Aimnium volckmari (L)
Platambus maculatus (A)
 Odytiscidae (L)
Haliphus sp. (L)
Marion splendens
Platycnemis pennipes
Simulium ornatum (L)
Simulium sp. (L)
Procladius sp.
Pentaneurini
Prodiamesa olivacea
 Orthocladinae
Lanybarsini
 Chironomini
 Chironomus sp.
 Chironomidae (P)
 Ceratopogonidae
Tibialia sp.
 Dicranota sp.
Limnophora sp.
Theodoxus fluviatilis
Bitania tentaculata
Lymnaea peregra
Acovius fluviatilis
Phaenobis carinatus
Copaerium corneum
Sphaerium sp.

TABLE 68

RIVER DERWENT 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS				4 WEEKS				4 WEEKS					
	6. 5 - 1. 6		1. 6 - 29. 6		1. 6 - 29. 6		29. 6 - 28. 7		(Cont)					
	S. AUF. U.	KICK	CYLINDER	S. AUF. U.	KICK	CYLINDER	S. AUF. U.	CYLINDER	S. AUF. U.	CYLINDER				
IMMERSION DATES	1	2	3	1	2	3	1	2	3	1	2	3		
SAMPLER	3	1	2	2	1	2	3	1	2	3	1	2	3	
REPLICATES	3	1	2	2	1	2	3	1	2	3	1	2	3	
Taxa/Species	3	1	2	2	1	2	3	1	2	3	1	2	3	
<u>Limnodrilus hoffmeisteri</u>														
<u>Tubifex tubifex</u>														
<u>Potamothenix hammoniensis</u>														
<u>Psammoryctides barbatus</u>	2	9	4	7	23	20	13	1	1	2	3	1	2	3
<u>Nais elinguis</u>														
<u>Nais sp.</u>														
<u>Lumbriculus variegatus</u>														
<u>Erpobdella octoculata</u>	1	2												
<u>Glossiphonia complanata</u>														
<u>Helobdella stagnalis</u>				10	1			2						
<u>Hydracarina</u>														
<u>Gammarus pulex</u>														
<u>Asellus aquaticus</u>				2	2	1		1						
<u>Ephemera ignita</u>				2	2									
<u>Caenis rivulorum</u>	1													
<u>Potamophylax sp. (L)</u>														
<u>Athripsodes sp. (L)</u>														
<u>Oulimnius tuberculatus (L)</u>														
<u>Platambus maculatus (A)</u>				2										
<u>Aeshna sp.</u>	1	4	1					9						
<u>Macropelopia sp.</u>														
<u>Procladius sp.</u>	1													
<u>Pentaneurini</u>														
<u>Prodiamesa olivacea</u>								29						
<u>Brillia longifurca</u>														
<u>Orthocladinae</u>														
<u>Tanytarsini</u>														
<u>Chironomini</u>	2	3	5	3	56	21	29	13			10	18	3	6
<u>Chironomus sp.</u>														
<u>Chironomidae (P)</u>														
<u>Valvata piscinalis</u>														
<u>Potamopyrgus henkinsi</u>														
<u>Lymnaea peregra</u>														
<u>Ancylus fluviatilis</u>														
<u>Pisidium sp.</u>	1			1	1			1			1		2	

TABLE 69 RIVER DERWENT 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			8 WEEKS					
	S. AUF. U.	S. AUF. U.	Kick	S. AUF. U.	S. AUF. U.	Kick	CYLINDER	S. AUF. U.	S. AUF. U.	Kick	CYLINDER	S. AUF. U.			
IMMERSION DATES	28.7-26.8			26.8-23.9.			23.9 - 21. 10.			21.10-16.12					
SAMPLER															
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Taxa/species	2	3	5	3	7	10	4	2	8	1	1	1	2	1	1
<i>Limnodrilus hoffmeisteri</i>															
<i>Tubifex tubifex</i>															
<i>Potamothrix hammoniensis</i>															
<i>Psammoryctides barbatus</i>															
<i>Nais</i> sp.															
<i>Lumbriculus variegatus</i>															
<i>Erpobdella octoculata</i>															
<i>Glossiphonia complanata</i>															
<i>Pisicicola geometra</i>															
<i>Hydracarina</i>															
<i>Gammarus pulex</i>															
<i>Asellus aquaticus</i>															
<i>Limis aenea</i> (A)															
<i>Esolus parallelepipedus</i> (L)															
<i>Limnius volckmari</i> (L)															
<i>Platambus maculatus</i> (A)															
<i>Macropelopia</i> sp.															
<i>Halipus</i> sp. (L)															
<i>Procladius</i> sp.															
<i>Pentaneurini</i>															
<i>Prodiamesa olivacea</i>															
<i>Orthocladiinae</i>															
<i>Chironomini</i>															
<i>Chironomus</i> sp.															
<i>Tipula</i> sp.															
<i>valvata macrostoma</i>															
<i>Valvata piscinalis</i>															
<i>Bithynia tentaculata</i>															
<i>Potamopyrgus jenkinsi</i>															
<i>Lymnaea peregra</i>															
<i>Ancylus fluviatilis</i>															
<i>Pisidium</i> sp.															
<i>Sphaerium corneum</i>															

TABLE 70 RIVER DERIVENT 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	6 WEEKS
IMMERSION DATES	6.5-1.6	1.6-29.6	29.6-28.7	28.7-26.8	26.8-23.9	23.9-21.10	21.10-16.12				
SAMPLER	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.				
REPLICATES	1 2 3	1	1 2 3	1 2 3	1	1 2	1 2 3				
<u>Taxa/species</u>											
<u>Polycelis tenuis</u>			6 1			116 67	12 5 2				
<u>Dendrocoelum lacteum</u>			1			1 2	3 1 3				
<u>Dugesia lugubris/polychroa</u>						5 3	1				
<u>Limnodrilus hoffmeisteri</u>						130 112	3 5 8 13				
<u>Nais elinguis</u>			9 1 13	24 19 16	45 4	42 53	1 1 1				
<u>Erpobdella octoculata</u>	2 4 4 1	47	1 1 1	13 4 10	5 5		6 8 10				
<u>Glossiphonia complanata</u>	1		59 29 33	15 11 8							
<u>Glossiphonia heteroclita</u>	2	4	5 1 6								
<u>Helobdella stagnalis</u>											
<u>Hydracarina</u>											
<u>Gammarus pulex</u>	26 32 46	97	435 144 215	25 61 112	42 275	718 1116	240 310 368				
<u>Asellus aquaticus</u>	1										
<u>Hydropsyche angustipennis (L)</u>			1		2						
<u>Halipplus sp. (L)</u>	2 1 2 6				1		3 8 2				
<u>Halipplus sp. (A)</u>	2		1				1				
<u>Coenagrion puella</u>		3	1				3 6 3				
<u>Ischnura elegans</u>		1	3 1								
<u>Orthocladinae</u>											
<u>Chironomini</u>											
<u>Ceratopogonidae</u>	1						1 1 1				
<u>Valvata macrostoma</u>	28 10 16	68	206 74 168	180 206 135	120	264 210	12 9 48 5				
<u>Bithynia tentaculata</u>											
<u>Bithynia leachi</u>			1 3	2 1 2		3					
<u>Potamopyrgus jenkinsi</u>	3 2 2	5	1 6	1 1 1	2		2 1				
<u>Lymnaea peregra</u>	1										
<u>Physa fontinalis</u>											
<u>Planorbis corneus</u>			1								
<u>Planorbis leucostoma</u>											
<u>Planorbis sp.</u>		1	6 9		3	26 5	1 1 6				
<u>Sphaerium corneum</u>											
<u>Spinaerium sp.</u>											

TABLE 71

RIVER FOSS MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS		8 WEEKS	4 WEEKS
	IMMERSION DATES	S.AUF.U.		
29.4.	29.4 - 27. 5.	27.5-22.7	22.7-19.8	
SAMPLER	CYLINDER	S. AUF. U.	S. AUF. U.	S. AUF. U.
REPLICATES	1	1 2 3	1 2 3	1 2 3
<u>Taxa/species</u>				
Nematoda	1			
<u>Polycelis tenuis</u>				12 18 7
<u>Polycelis nigra</u>				32 5
<u>Dendrocoelum lacteum</u>	2	1	5 12 6	10 18 27
<u>Dugesia lugubris/polychroa</u>	14		39 126 78	10 13 6
<u>Limnodrilus hoffmeisteri</u>	1			46 15 6
<u>Tubifex tubifex</u>	2	1		
<u>Potamothrix hammoniensis</u>	1	1		
<u>Psammoryctides barbatus</u>	1	1		
<u>Lumbriculus variegatus</u>	4	3 3	55 52 46	14 41 30
<u>Erpobdella octoculata</u>		18 26 42	3 1	
<u>Erpobdella testacea</u>		1 5 6	7 8 10	2 5 2
<u>Trocheta subviridis</u>	1	4 3	4 7 2	4 8 12
<u>Glossiphonia complanata</u>		13 4 3	1 1	
<u>Helobdella stagnalis</u>		24 14 7	2 2 1	
<u>Hydracarina</u>	18	124 163 63	34 28 39	103 132 56
<u>Gammarus pulex</u>	146		16 145 89	
<u>Asellus aquaticus</u>	6			
<u>Amphinemura sulcipectus</u>	1			
<u>Baetis rhodani</u>	25	1 2	15 8 9	
<u>Caenis moesta</u>		1 1		
<u>Limnephilus sp. (L)</u>		4 3 9		
<u>Mystacides nigra (L)</u>				1
<u>Leptoceridae (L)</u>				
<u>Elmis aenea (L)</u>	2		2	
<u>Elmis aenea (A)</u>				1
<u>Oulimnius tuberculatus (L)</u>				1
<u>Platambus maculatus (A)</u>	3	2	1	3 1
<u>Halipilus sp. (L)</u>	1	20 17 18		1
<u>Halipilus sp. (L)</u>	1	1 1		
<u>Ischnura elegans</u>	2	5 2 2		
<u>Simulium sp. (L)</u>	2	1		
<u>Pentaneurini</u>	2			
<u>Orthocladinae</u>	9	1 1	9 28 12	
<u>Tanytarsini</u>		2 1 1		
<u>Chironomini</u>		1 3	1	1 1 4
<u>Chironomidae (P)</u>				
<u>Ceratopogonidae</u>		2 4 2		
<u>Potamopyrgus jenkinsi</u>		1 1	1 3	1
<u>Lymnaea peregra</u>				3 3
<u>Physa fontinalis</u>				
<u>Pianorbis sp.</u>			1 1	1
<u>Sphaerium corneum</u>		2		

TABLE 72

RIVER CALDER 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			8 WEEKS			4 WEEKS		
	S. AUF. U.	CYLINDER	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	
IMMERSION DATES	29.4 - 27.5.			27.5 - 22.7			22.7 - 19.8		
SAMPLER	CYLINDER								
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
<u>Taxa/species</u>	1 1	25 5 2							
<u>Tubifex tubifex</u>		2							
<u>Potamothenrix hammoniensis</u>			2	2	16	9	1	1	
<u>Nais sp.</u>	1	2	5	5			1	1	
<u>Erpobdella octoculata</u>		1		12	13	10	3	14	
<u>Glossiphonia complanata</u>									
<u>Glossiphonia heteroclita</u>									
<u>Helobdella stagnalis</u>	2	3	58	24	32		1	1	
<u>Asellus aquaticus</u>							4	1	
<u>Piatycnemis pennipes</u>							1		
<u>Coenagrion puella</u>									
<u>Orthocladinae</u>			2	1	6	11	2	26	
<u>Chironomini</u>					2	6	5	1	
<u>Chironomidae (P)</u>	1						28	13	
<u>Ancyclus fluviatilis</u>			1	2			1	2	

TABLE 73

RIVER CALDER 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			8 WEEKS			4 WEEKS		
IMMERSION DATES	29.4 - 27.5			27.5 - 22.7			22.7 - 19.8		
SAMPLER	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.
REPLICATES	1	2	3	1	2	3	1	2	3
<u>Tubificidae</u>	10	5	5	20	4				
<u>Enchytraeidae</u>			8						
<u>Asellus aquaticus</u>	43	65	21	104	412	396	326	512	200
<u>Orthocladinae</u>	2	1							
<u>Chironomini</u>							57	244	310
<u>Chironomus riparius</u>	1			148	100	92	16	23	35
<u>Chironomidae (P)</u>				17	14	6			
<u>Physa fontinalis</u>				2		4			

Taxa/speciesTubificidaeEnchytraeidaeAsellus aquaticusOrthocladinaeChironominiChironomus ripariusChironomidae (P)Physa fontinalis

TABLE 74

RIVER DON MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS	8 WEEKS	4 WEEKS
IMMERSION DATES	29.4 - 27.5	27.5 - 22.7	22.7 - 19.8
SAMPLER	S. AUF. U.	S. AUF. U.	S. AUF. U.
REPLICATES	1 2 3	1 2 3	1 2 3
<u>Taxa/species</u>			
<u>Tubificidae</u>			
<u>Nais elinguis</u>	1	1	7
<u>Encytraeidae</u>	2		3000
<u>Erpobdella octoculata</u>	1	4	3
<u>Haemopis sanguisuga</u>		1	2
<u>Glossiphonia complanata</u>			5
<u>Theromyzon tessulatum</u>		1	1
<u>Asellus aquaticus</u>	22	232	460
<u>Halipplus sp. (A)</u>		2	313
<u>Ischnura elegans</u>	16	720	1
<u>Orthocladinae</u>	7	582	
<u>Chironomini</u>			
<u>Lymnaea peregra</u>		82	12
<u>Physa fontinalis</u>		92	15
		78	4
		9	6
		40	34
			46
			53

TABLE 75.

RIVER WYE 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS	
	S.	AUF. U.	S.	AUF. U.	S.	AUF. U.	S.	AUF. U.	S.	AUF. U.	S.	AUF. U.
IMMERSION DATES	15.6-13. 7		13.7 - 10.8		10.8 - 8.9		8.9 - 7.10		7.10 - 7.11.		7.11 - 2.12	
SAMPLER	S. AUF. U.		S. AUF. U.		S. AUF. U.		S. AUF. U.		S. AUF. U.		S. AUF. U.	
REPLICATES	1		1 2 3		1 2 3		1 2 3		1 2 3		1 2 3	
Taxa/species	4											
<i>Polycelis tenuis</i>	1											
<i>Dendrocoelum lacteum</i>	1				1	46						
<i>Dugesia lugubris/polychroa</i>												3
<i>Lumbriculus variegatus</i>			3	6			1					
<i>Erbodella octoculata</i>	1											
<i>Glossiphonia complanata</i>	3											
<i>Glossiphonia heteroclita</i>	1		1	4	1	1						
<i>Helobdella stagnalis</i>	1		242	64	120	1	1					
<i>Hydracarina</i>	2		6	6	3	4						
<i>Gammarus pulex</i>	5		6	3	5	4						
<i>Aseillus aquaticus</i>	1						2					
<i>Caenis moesta</i>			4	1	2	6						
<i>Polycentropus flavomaculatus</i> (L)			7	2	6							
<i>Cyrtus trimaculatus</i> (L)	2						1					
<i>Hydropsyche angustipennis</i> (L)												
<i>Anabolia nervosa</i> (L)												
<i>Phryganea grandis</i> (L)				1	1							
<i>Athripsodes bilineatus</i> (L)							1					
<i>Mystacides nigra</i> (L)	1			1	1							
<i>Leptoceridae</i> (L)												
<i>Lepidostoma hirtum</i> (L)												
<i>Platambus maculatus</i> (A)	6		36	32	40	2	9	10				
<i>Dytiscidae</i> (L)			2	2	2							
<i>Haliphus</i> sp. (A)						1						
<i>Sigara</i> sp.												
<i>Agrion splendens</i>												
<i>Coenagrion puella</i>												
<i>Platycnemis pennipes</i>			1		1							
<i>Procladius</i> sp.												
<i>Pentaneurini</i>												
<i>Orthocladiinae</i>	3											
<i>Chironomini</i>	11		81	30	53	6	4					
<i>Chironomidae</i> (P)	3		2	3	1	5	2	1	3	1		
<i>Ceratopogonidae</i>												
<i>Bithynia tentaculata</i>	6		26	35	46	1	1	3	1	6	5	
<i>Potamopyrgus Jenkinsi</i>			1	1	1	2	3	23				
<i>Physa fontinalis</i>	7		7	3	4	5	5	22	6	2	4	4
<i>Planorbis carinatus</i>			2	3	3	3	11					
<i>Planorbis</i> sp.												
<i>Fisidium</i> sp.												
<i>Sphaerium corneum</i>			2	1	1	1						

TABLE 76

RIVER WYE 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS						
	15.6 - 13.7		13.7 - 10.8		10.8 - 8.9		8.9 - 7.10		7.10 - 7.11		7.11 - 2.12				
IMMERSION DATES	S, AUF. U.		S. AUF. U.		S. AUF. U.		S. AUF. U.		S. AUF. U.		S. AUF. U.				
SAMPLER	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
REPLICATES															
<u>Taxa/species</u>															
<u>Polycelis tenuis</u>	1														
<u>Dendrocoelum lacteum</u>	116	176	224	109	62	84	65	86	80	18	2	3	1	1	2
<u>Dugesia tigrina</u>	1	1		1			1	6	9	1			2	3	12
<u>Potamothrix hammoniensis</u>															
<u>Lumbriculus variegatus</u>	1	1		3			6	2		2	5	3	1	10	16
<u>Glossiphonia complanata</u>				4	1		2	3	4	1	2	1	9	17	23
<u>Helobdella stagnalis</u>	2	4	5	1			3	7	4	2	2	4	112	101	91
<u>Hydracarina</u>															
<u>Ostracoda</u>															
<u>Gammarus pulex</u>	2	4	5				2	3	7	1	2	2	86	50	32
<u>Asellus aquaticus</u>	2	24	15				3	7	4	2	2	4	40	15	28
<u>Taeniopteryx nebulosa</u>													1	4	8
<u>Caenis moesta</u>													6	1	1
<u>Hydropsyche angustipennis (L)</u>													1	1	3
<u>A. thripsodes bilineatus (L)</u>															
<u>Mystacides nigra (L)</u>				1			1			1	5	2			
<u>Leptoceridae (L)</u>	4	7		47	13	34	1			2	2	2			
<u>Oulimnius tuberculatus (A)</u>	9	15		6	16	17	1	1	6						
<u>Platambus maculatus (L)</u>	1	3		3	3	1									
<u>Dytiscidae (L)</u>															
<u>Sigara sp.</u>															
<u>Sialis fuliginosa</u>															
<u>Sialis lutaria</u>													4	11	12
<u>Agriion splendens</u>															
<u>Coenagrion puella</u>													1	1	7
<u>Platycnemis pennipes</u>				2	2	3	3	3	3	6					
<u>Macropelopia sp.</u>	1	1								8	1	11			
<u>Procladius sp.</u>	1	2													
<u>Pentaneurini</u>															
<u>Prodiamesa olivacea</u>	1	7		2	5	2	20	14	32	14	5	6	3	4	12
<u>Orthocladinae</u>	25	123		2	26	35				20	6	12	16	22	31
<u>Chironomini</u>													1	1	3
<u>Ceratopogonidae</u>															
<u>Limnophora sp.</u>	3	8	3	6	1	1	1	1	2	3	1	1	1	2	1
<u>Bithynia tentaculata</u>															
<u>Physa fontinalis</u>															
<u>Ancylus fluviatilis</u>															
<u>Pisidium sp.</u>															
<u>Sphaerium corneum</u>				8			2	2	3	1		2	2	5	3

TABLE 77(Contd)

RIVER SEVERN 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS								
	20.4 - 18.5			18.5 - 15.6			15.6 - 13.7			13.7 - 10.8 (Cont)					
	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.			
SAMPLER	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
REPLICATES															
<i>Haliphus</i> sp. (L)															
<i>Haliphus</i> sp. (A)															
<i>Aphelocheirus montandoni</i>															
<i>Sigara</i> sp.	1														
<i>Agrion splendens</i>		1													
<i>Coenagrion puella</i>															
<i>Platycnemis pennipes</i>															
<i>Simulium ornatum</i> (L)															
<i>Simulium aureum</i> (L)															
<i>Simulium aureum</i> (P)															
<i>Simulium</i> sp.															
<i>Macropelopia</i> sp.															
<i>Procladius</i> sp.															
<i>Pentaneurini</i>															
<i>Diamasa prolongata</i>															
<i>Prodiamesa olivacea</i>															
<i>Orthocladiinae</i>															
<i>Tanytarsini</i>	8	3	3												
<i>Chironomini</i>															
<i>Chironomus</i> sp.															
<i>Chironomidae</i> (P)	8	2	1												
<i>Ceratopogonidae</i>	1														
<i>Tipulinae</i>															
<i>Dicranota</i> sp.															
<i>Atherix</i> ibis															
<i>Viviparus viviparus</i>															
<i>Valvata macrostoma</i>	8	1	4												
<i>Bithynia tentaculata</i>	12	21	4												
<i>Potamopyrgus jenkinsi</i>															
<i>Lymnaea peregra</i>		1													
<i>Lymnaea auricularia</i>															
<i>Physa fontinalis</i>	1														
<i>Ancylus fluviatilis</i>															
<i>Planorbis carinatus</i>															
<i>Planorbis planorbis</i>															
<i>Anodonta anatina</i>															
<i>Zisidium</i> sp.															
<i>Sphaerium corneum</i>	1	4	2												
<i>Sphaerium rivicola</i>															

Taxa/species

Haliphus sp. (L)
Haliphus sp. (A)
Aphelocheirus montandoni
Sigara sp.
Agrion splendens
Coenagrion puella
Platycnemis pennipes
Simulium ornatum (L)
Simulium aureum (L)
Simulium aureum (P)
Simulium sp.
Macropelopia sp.
Procladius sp.
Pentaneurini
Diamasa prolongata
Prodiamesa olivacea
Orthocladiinae
Tanytarsini
Chironomini
Chironomus sp.
Chironomidae (P)
Ceratopogonidae
Tipulinae
Dicranota sp.
Atherix ibis
Viviparus viviparus
Valvata macrostoma
Bithynia tentaculata
Potamopyrgus jenkinsi
Lymnaea peregra
Lymnaea auricularia
Physa fontinalis
Ancylus fluviatilis
Planorbis carinatus
Planorbis planorbis
Anodonta anatina
Zisidium sp.
Sphaerium corneum
Sphaerium rivicola

TABLE 78

RIVER SEVERN 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			4 WEEKS			4 WEEKS			4 WEEKS													
	10.8 - 8.9			8.9 - 7.10			7.10-7.11			7.1.-2.12													
	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.											
REPLICATES	1	2	3	1	2	3	4	5	6	7	8	9	10	1	2	3	1	2	3	1	2	3	
	9	4	2	3	5	5	5	5	5	3	4	5	7	3	5	5	5	5	3	4	5	7	
<i>Polycelis tenuis</i>																							
<i>Dendrocoelum lacteum</i>			1																				
<i>Dugesia lugubris/polychroa</i>		1																					
<i>Limnodrilus hoffmeisteri</i>																							
<i>Rhyacodrilus coccineus</i>																							
<i>Stylodrilus heringianus</i>			1	16	12	6	11	1	1	2	10	3	46	10	8								
<i>Nais</i> sp.																							
<i>Erpobdella octoculata</i>		3	2	2	3	2	2	2	2	1	1	2	1	3									
<i>Glossiphonia complanata</i>		3	1																				
<i>Glossiphonia heteroclita</i>																							
<i>Helobdella stagnalis</i>				1																			
<i>Hemiclepsis marginata</i>		1																					
<i>Pisicicola geometra</i>		6	2	3	6	10	17	7	8	7	5	2	5	5									
<i>Hydracarina</i>																							
Ostracoda																							
<i>Corophium curvispinum</i>		52	36	28	1	2	42	8	34	16	27	53	49	112	31	15							
<i>Gammarus pulex</i>		4	2	2	2	2	5	4	7	1	9	7	2										
<i>Taeniopteryx nebulosa</i>		1	7	2	1	1	5	2	4	3	3	1	2	10	8	6							
<i>Ecdyonurus venosus</i>																							
<i>Baetis rhodani</i>				1																			
<i>Caenis moesta</i>		1																					
<i>Ephemera danica</i>																							
<i>Hydropsyche angustipennis</i> (L)																							
<i>Hydropsyche contubernalis</i> (L)																							
<i>Polycentropus flavomaculatus</i> (L)																							
<i>Mystacides nigra</i> (L)		1																					
<i>Sericostoma personatum</i> (L)			1																				
<i>Elmis aenea</i> (L)																							
<i>Oulimnius tuberculatus</i> (L)		1																					
<i>Oulimnius tuberculatus</i> (A)																							
<i>Limnius volckmari</i> (L)				2	1																		

TABLE 78 (Cont.)

RIVER SEVERN 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS				4 WEEKS				4 WEEKS															
	10.8 - 8.9				8.9 - 7.10				7.10-7.11				7.1.-2.12											
IMMERSION DATES	CYLINDER				S. AUF. U.				S. AUF. U.				S. AUF. U.											
SAMPLER	1 2 3				1 2 3 4 5 6 7 8 9 10				1 2 3				1 2 3											
REPLICATES	1 2 3				1 2 3 4 5 6 7 8 9 10				1 2 3				1 2 3											
<u>Taxa/species</u>																								
<u>Platambus maculatus</u> (A)																								
<u>Halipilus sp.</u> (L)																								
<u>Gyrinus sp.</u> (L)																								
<u>Aphelocheirus montandoni</u>																								
<u>Si gara sp.</u>																								
<u>Sialis fuliginosa</u>																								
<u>Agriion splendens</u>																								
<u>Coenagrion puella</u>																								
<u>Platynemis pennipes</u>																								
<u>Simulium ornatum</u> (L)																								
<u>Macropelopia sp.</u>																								
<u>Procladius sp.</u>																								
<u>Pentaneurini</u>																								
<u>Orthocladinae</u>																								
<u>Tanytarsini</u>																								
<u>Chironomini</u>																								
<u>Chironomus sp.</u>																								
<u>Ceratopogonidae</u>																								
<u>Tipula sp.</u>																								
<u>Dicranota sp.</u>																								
<u>Atherix ibis</u>																								
<u>Limnophora sp.</u>																								
<u>Viviparus viviparus</u>																								
<u>Bithynia tentaculata</u>																								
<u>Potamopyrgus Jenkinsi</u>																								
<u>Lymnaea peregra</u>																								
<u>Ancylus fluviatilis</u>																								
<u>Planorbis carinatus</u>																								
<u>Planorbis leucostoma</u>																								
<u>Planorbis sp.</u>																								
<u>Pisidium sp.</u>																								
<u>Sphaerium corneum</u>																								

RIVER SEVERN 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	8 WEEKS
IMMERSION DATES	20.4-18.5.	18.5-15.6	15.6-13.7	13.7-10.8	10.8-8.9.	8.9-7.10	7.10-2.12		
SAMPLER	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
<i>Limnodrilus hoffmeisteri</i>	11	2	14						
<i>Limnodrilus claparedelanus</i>	2		1						
<i>Potamothenix moldaviensis</i>	37		18						
<i>Rhyacodrilus coccineus</i>		1	3						
<i>Stylodrilus heringianus</i>	1	2	3						
<i>Nais elinguis</i>									
<i>Nais</i> sp.		1	1						
<i>Erpobdella octoculata</i>			1						
<i>Glossiphonia complanata</i>		1							
<i>Pisicicola geometra</i>	3	13	2						
<i>Corophium curvispinum</i>									
<i>Gammarus pulex</i>	1								
<i>Baetis rhodani</i>	1		1						
<i>Caenis maesta</i>									
<i>Polycentropus flavomaculatus</i>		2	1						
<i>Limnius volckmari</i> (A)									
<i>Dytiscidae</i> (A)									
<i>Halipilus</i> sp. (A)									
<i>Coenagrion pulchellum</i>		1							
<i>Platycnemis pennipes</i>	7	4	6						
<i>Procladius</i> sp.									
<i>Pentaneurini</i>									
<i>Prodiamesa olivacea</i>									
<i>Orthocladinae</i>	1	2	3						
<i>Chironomini</i>	1	1	1						
<i>Chironomus</i> sp.	5	1	6						
<i>Ceratopogonidae</i>									
<i>Tipulinae</i>	5	7	8						
<i>Theodoxus fluviatilis</i>	9	4	5						
<i>Viviparus viviparus</i>	2	9	2						
<i>Valvata macrostoma</i>	2	1	1						
<i>Eithynia tentaculata</i>	7	5	4						
<i>Potamopyrgus jenkinsi</i>									
<i>Lymnaea peregra</i>		1	1						
<i>Physa fontinalis</i>		3	1						
<i>Anodonta anatina</i>									
<i>Pisidium</i> sp.	1								
<i>Sphaerium corneum</i>									
<i>Sphaerium rivicola</i>									

Taxa/species

- Limnodrilus hoffmeisteri*
- Limnodrilus claparedelanus*
- Potamothenix moldaviensis*
- Rhyacodrilus coccineus*
- Stylodrilus heringianus*
- Nais elinguis*
- Nais* sp.
- Erpobdella octoculata*
- Glossiphonia complanata*
- Pisicicola geometra*
- Corophium curvispinum*
- Gammarus pulex*
- Baetis rhodani*
- Caenis maesta*
- Polycentropus flavomaculatus* (L)
- Limnius volckmari* (A)
- Dytiscidae* (A)
- Halipilus* sp. (A)
- Coenagrion pulchellum*
- Platycnemis pennipes*
- Procladius* sp.
- Pentaneurini*
- Prodiamesa olivacea*
- Orthocladinae*
- Chironomini*
- Chironomus* sp.
- Ceratopogonidae*
- Tipulinae*
- Theodoxus fluviatilis*
- Viviparus viviparus*
- Valvata macrostoma*
- Eithynia tentaculata*
- Potamopyrgus jenkinsi*
- Lymnaea peregra*
- Physa fontinalis*
- Anodonta anatina*
- Pisidium* sp.
- Sphaerium corneum*
- Sphaerium rivicola*

TABLE 80

RIVER SEVERN 3 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS	4 WEEKS
IMMERSION DATES	20.4-18.5.	18.5-15.6	15.6-13.7	13.7-10.8.	10.8-8.9	8.9-7.10	7.10-7.11	7.11-2.12	
SAMPLER	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
Taxa/species									
<i>Polycelis tenius</i>	1		1		1		1		
<i>Dendrocoelum lacteum</i>				1					
<i>Dugesia lugubris/polychroa</i>					1				
<i>Dugesia tigrina</i>								1	
<i>Limnodrilus hoffmeisteri</i>		105	14	35	12	1	142	35	13
<i>Limnodrilus claparedelanus</i>		52	1				10		1
<i>Potamothenix moldaviensis</i>	3	7	4	1	33				2
<i>Tubifex tubifex</i>	3	4	1	6	1				1
<i>Stylodrilus heringianus</i>	3	5	1			1	8	3	7
<i>Nais</i> sp.					1				
<i>Glossiphonia heteroclita</i>					4				
<i>Helobdella stagnalis</i>				1	1				2
<i>Piscicola geometra</i>									
Mermithidae									
<i>Hydracarina</i>									
<i>Corophium curvispinum</i>	3	2	13	14	16	1	13	33	41
<i>Gammarus pulex</i>	1	2	9	4	26	1	65	5	3
<i>Asellus aquaticus</i>	1	1					2	2	2
<i>Polycentropus flavomaculatus</i> (L)	1					1			1
<i>Holocentropus dubius</i> (L)									
<i>Macronychus quadrituberculatus</i> (A)									
<i>Sialis lutaria</i>			1						
<i>Agrion splendens</i>									
<i>Coenagion puella</i>	1								
<i>Macropelopia</i> sp.		2							
<i>Procladius</i> sp.		7							
<i>Pentaneurini</i>		11		1					
<i>Prodiamesa olivacea</i>		3							
Orthocladinae		2							
<i>Chironomini</i>	4	3	6	46	58	36	6	5	3
Chironomidae (P)									
Ceratopogonidae	1	4	3	3	4	7	1	1	1
<i>Theodoxus fluviatilis</i>	1	3	6	6	8	15	2	12	3
<i>Viviparus viviparus</i>	4	7	9	3	4	4	1	2	2
<i>Valvata macrostoma</i>	2	2	4	6	20	15	3	3	1
<i>Bithynia tentaculata</i>	4	3	1	3	5	4	2	1	3
<i>Potamopyrgus jenkinsi</i>	2	2	1	1	1	2	2	1	1
<i>Lymnaea peregra</i>									
<i>Physa fontinalis</i>									
<i>Ancylus fluviatilis</i>									
<i>Sphaerium corneum</i>									
<i>Sphaerium rivicola</i>	1	1		6	1		5	1	

TABLE 81

RIVER NENE 1 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			8 WEEKS			4 WEEKS															
	9.3 - 6.4			6.4 - 3.6.			3.6 - 30.6.															
	S. AUF. U.			S. AUF. U.			S. AUF. U.															
IMMERSION DATES	1	2	3	1	2	3	1	2	3	4	5	6	7	8	9	10	(cont)					
SAMPLER	GRAB			GRAB			GRAB										GRAB					
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3	4	5	6	7	8	9	10	1	2	3
<u>Taxa/species</u>																						
<u>Polycelis tenius</u>																						
<u>Limnodrilus hoffmeisteri</u>																						
<u>Limnodrilus claparedianus</u>																						
<u>Potamothenix hammondiensis</u>																						
<u>Lumbriculus variegatus</u>	2	2								1	2	2	2	2	2	2	2	2	2	2	2	
<u>Nais elinguis</u>	1	5	36							1	2	2	2	2	2	2	2	2	2	2	2	
<u>Erpobdella octoculata</u>	13	15	12	5	4	4	27	14	9	6	1	3	4	1	1	1	1	1	1	1	1	
<u>Glossiphonia complanata</u>																						
<u>Helobdella stagnalis</u>	2	3		26	26	9	38	34	9	11	10	8	45	41	33	76	67	22	12	54	62	
<u>Gammarus pulex</u>	15	3	3	1	1		1	1		1	1		1	1	1	1	1	1	1	1	1	
<u>Asellus aquaticus</u>	114	72	59	17	21	8	45	70	34	22	3	4	160	309	253	203	415	266	317	219	187	
<u>Polycentropus flavomaculatus (L)</u>																						
<u>Holocentropus dubius (L)</u>																						
<u>Cyrrus trimaculatus (L)</u>																						
<u>Platambus maculatus (A)</u>	1																					
<u>Dytiscidae (L)</u>																						
<u>Sialis lutaria</u>																						
<u>Coenagrion puella</u>																						
<u>Coenagrion pulchellum</u>																						
<u>Ischnura elegans</u>																						
<u>Procladius sp.</u>																						
<u>Damesa prolongata</u>																						
<u>Orthoclaudiinae</u>																						
<u>Chironomini</u>																						
<u>Chironomidae riparius</u>																						
<u>Chironomidae (P)</u>																						
<u>Ceratopogonidae</u>																						
<u>Bituthnia tentaculata</u>																						
<u>Potamopyrgus jenkinsi</u>																						
<u>Lymnaea peregra</u>	1	1								1	1	1	1	1	1	1	1	1	1	1		
<u>Lymnaea glabra</u>	1	1																				
<u>Planorbis planorbis</u>	1	1																				
<u>Planorbis leucostoma</u>	5	6	4																			
<u>Sphaerium corneum</u>																						

RIVER NENE 1 MACROINVERTEBRATE DATA 1977

TABLE 82

IMMERSION PERIOD	8 WEEKS			4 WEEKS			8 WEEKS			4 WEEKS		
	30.6-25.8			25.8 - 21.9			21.9 - 16.11.			16.11-14.12		
	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3
<i>Polycelis tenuis</i>	1											
<i>Dugesia lugubris/polychroa</i>	13	8	3		4	2		1				
<i>Limnodrilus hoffmeisteri</i>	71	32	5	44	27	38	20	18	8	40	46	41
<i>Erbodella octoculata</i>	2	2	4	15	3	6	4	2	2	3	5	3
<i>Glossiphonia complanata</i>	58	32								4	2	6
<i>Helobdella stagnalis</i>	1			1	3	3		1		7	6	6
<i>Theromyzon tessulatum</i>				39	137	146	35	76	82	83	116	160
<i>Gammarus pulex</i>	286	133	29							2	3	1
<i>Aseillus aquaticus</i>												
<i>Hydropsyche angustipennis</i> (L)												
<i>Hydropsyche contubernalis</i> (L)				2						19	12	7
<i>Polycentropus flavomaculatus</i> (L)	2		1	4	1	5				2		
<i>Holocentropus dubius</i> (L)	1									2		
<i>Athripsodes</i> sp. (L)				5								
<i>Mystacides nigra</i> (L)				1								
Dytiscidae (L)												
<i>Sialis lutaria</i>	1	3										
<i>Procladius</i> sp.				2	2	9	3	6	9	8	2	4
Orthocladinae												
Chironomini												
<i>Chironomus riparius</i>												
Ceratopogonidae												
<i>Bithynia tentaculata</i>				1			2			1	1	
<i>Potamopyrgus jenkinsi</i>												
<i>Acroloxus lacustris</i>												
<i>Lymnaea peregra</i>	2	5	2	5	4	15	7	4	2	2	21	9
<i>Lymnaea stagnalis</i>	2		1	2	2	1	1	1	3	14	15	9
<i>Physa fontinalis</i>				8	2	21	5	3		26	28	24
<i>Planorbis carinatus</i>	3	1	1	2	6	11	2	3	4	9	6	3
<i>Planorbis leucostoma</i>				7	1	8	2	1		1	2	2
<i>Planorbis</i> sp.												
<i>Pisidium</i> sp.	1	1	1	11	2	1	3	1		8	17	3
<i>Sphaerium corneum</i>												

Taxa/species

TABLE 83

RIVER NENE 2 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			8 WEEKS			4 WEEKS							
	9-3 - 6-4			6.4 - 3.6.			3.6 - 30.6 (Cont)							
	S. AUF.	U.	GRAB	CYLINDER	S. AUF.	U.	GRAB	CYLINDER	S. AUF.	U.	GRAB	CYLINDER		
REPLICATES	1	2	3	1	1	2	3	1	2	3	1	2	3	1
<u>Taxa/species</u>														
<u>Polycelis tenuis</u>														
<u>Dendrocoelum lacteum</u>	1			1										
<u>Dugesia lugubris/polychroa</u>	1													
<u>Tubifex tubifex</u>														
<u>Psammoryctides barbatus</u>														
<u>Limnodrilus hoffmeisteri</u>														
<u>Lumbriculus variegatus</u>	3			4										
<u>Nais elinguis</u>	4													
<u>Enchytraeidae</u>	2													
<u>Erpobdella octoculata</u>	11			7										
<u>Haemopsis sanguisuga</u>														
<u>Glossiphonia complanata</u>														
<u>Glossiphonia heteroclita</u>	2			1										
<u>Helobdella stagnalis</u>	9			1										
<u>Gammarus pulex</u>	9			3										
<u>Asellus aquaticus</u>	241			327										
<u>Hydropsyche angustipennis (L)</u>	3			1										
<u>Mystacides nigra (L)</u>	1			1										
<u>Halipilus sp. (L)</u>														
<u>Coenagrion puebla</u>	1			1										
<u>Ischnura elegans</u>	8			4										
<u>Orthocladinae</u>														
<u>Chironomini</u>														
<u>Ceratopogonidae</u>														
<u>Bithynia tentaculata</u>														
<u>Bithynia leachi</u>														
<u>Lymnaea peregra</u>	1			1										
<u>Planorbis planorbis</u>	2			1										
<u>Planorbis leucostoma</u>														
<u>Pisidium sp.</u>	1			3										
<u>Sphaerium corneum</u>														

IMMERSION PERIOD	8 WEEKS			4 WEEKS			8 WEEKS			4 WEEKS		
	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	GRAB	GRAB	S. AUF. U.	GRAB	S. AUF. U.	GRAB	S. AUF. U.	
IMMERSION DATES	30.6-25.8			25.8 - 21.9			21.9 - 16.11			16.11-14.12		
SAMPLER	S. AUF. U.			S. AUF. U.			S. AUF. U.			S. AUF. U.		
REPLICATES	1 2			1 2 3			1 2 3			1 2 3		
<u>Taxa/species</u>												
<u>Polycelis tenuis</u>	1	2					7					
<u>Dendrocoelum lacteum</u>			8	2	7	4						
<u>Dugesia lugubris/polychroa</u>	1						1					
<u>Tubifex tubifex</u>						6	8			36	27	
<u>Limnodrilus hoffmeisteri</u>	13	36	18	3	1	44	220	78				
<u>Lumbriculus variegatus</u>			1	1	2							
<u>Erpobdella octoculata</u>	6	3	2	7	3	1	9	3	14	1	3	
<u>Helobdella stagnalis</u>	1	2	10	15	35	8	16	1	25	1	2	
<u>Theromyzon tessulatum</u>												
<u>Gammarus pulex</u>	18		22	48	26	3	5	9	11	7	35	
<u>Asellus aquaticus</u>	63	70	96	128	72	36	15	30	244	388	319	
<u>Dytiscidae (L)</u>									1			
<u>Halipilus sp. (L)</u>												
<u>Halipilus sp. (A)</u>												
<u>Sigara sp.</u>		1							1			
<u>Coenagrion puella</u>												
<u>Bithynia tentaculata</u>												
<u>Lymnaea peregra</u>												
<u>Physa fontinalis</u>												
<u>Sphaerium corneum</u>			1	4		1			2			
<u>Sphaerium sp.</u>	20								1			
										2	3	
										2	2	
										1	1	
										640	412	
										5	2	
										18	722	
										1	1	
										1	1	

RIVER NENE 3 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS			8 WEEKS			4 WEEKS		
	9.3 - 6.4			6.4 - 3.6			3.6 - 30.6		
	S.AUF.U.	GRAB	CYLINDER	S.AUF.U.	GRAB	CYLINDER	S.AUF.U.	GRAB	CYLINDER
REPLICATES	1	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
<i>Nematoda</i>	1								
<i>Dugesia lugubris/polychroa</i>									
<i>Tubifex tubifex</i>		11 3 7	12 15 45						
<i>Psammoryctides barbatus</i>				14 2		22 56 31			
<i>Potamothrix hammoniensis</i>				1					
<i>Limnodrilus hoffmeisteri</i>		1	2		1	1			
<i>Lumbriculus variegatus</i>						11			
<i>Nais elinguis</i>									
<i>Erpobdella octoculata</i>			2 4	2		1			
<i>Glossiphonia complanata</i>			1		1	1			
<i>Helobdella stagnalis</i>									1 3
<i>Piscicola geometra</i>	1		1 1					6 1 1	
<i>Hydracarina</i>				1		1			
<i>Gammarus pulex</i>		1	3 1	2 1 1		3 3 5			
<i>Aselelus aquaticus</i>			6 1	1 1 2		22 44 40			
<i>Baetis rhodani</i>	2			1 1 1					
<i>Caenis moesta</i>	1			2 1					
<i>Hydropsyche angustipennis (L)</i>		1							
<i>Holocentropus dubius (L)</i>		1							
<i>Cyrtus trimaculatus (L)</i>									
<i>Limnephilus lunatus (L)</i>	1					2			
<i>Athripsodes bilineatus (L)</i>			1	2					
<i>Athripsodes aterrimus (L)</i>									
<i>Mystacides nigra (L)</i>									
<i>Sericostoma personatum (L)</i>			1						

Taxa/species

- Nematoda*
- Dugesia lugubris/polychroa*
- Tubifex tubifex*
- Psammoryctides barbatus*
- Potamothrix hammoniensis*
- Limnodrilus hoffmeisteri*
- Lumbriculus variegatus*
- Nais elinguis*
- Erpobdella octoculata*
- Glossiphonia complanata*
- Helobdella stagnalis*
- Piscicola geometra*
- Hydracarina*
- Gammarus pulex*
- Aselelus aquaticus*
- Baetis rhodani*
- Caenis moesta*
- Hydropsyche angustipennis (L)*
- Holocentropus dubius (L)*
- Cyrtus trimaculatus (L)*
- Limnephilus lunatus (L)*
- Athripsodes bilineatus (L)*
- Athripsodes aterrimus (L)*
- Mystacides nigra (L)*
- Sericostoma personatum (L)*

TABLE 86

RIVER NENE 3 MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	8 WEEKS			4 WEEKS			8 WEEKS			4 WEEKS		
	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.	S.	AUF.	U.
IMMERSION DATES	30.6-25.8			25.8 - 21.9			21.9 - 16.11			16.11-14.12		
SAMPLER	S. AUF. U.			S. AUF. U.			S. AUF. U.			S. AUF. U.		
REPLICATES	1	2	3	1	2	3	1	2	3	1	2	3
Taxa/species	2	1	3	1	1	1	1	2	2	1	1	1
<u>Polycelis tenuis</u>							1					
<u>Dugesia lugubris/polychroa</u>							2					
<u>Dugesia tigrina</u>							1					
<u>Bellocephala punctata</u>							2		3			
<u>Psammoryctides barbatus</u>												
<u>Nais sp.</u>												
<u>Eprobodella octoculata</u>							2					
<u>Glossiphonia complanata</u>							1					
<u>Helobdella stagnalis</u>							2		1			
<u>Piscicola geometra</u>							17		1			
<u>Hydracarina</u>												
<u>Ostracoda</u>												
<u>Gammarus pulex</u>							12	1	9			
<u>Asellus aquaticus</u>							75	5	36			
<u>Caenis moesta</u>												
<u>Cloeon dipterum</u>												
<u>Hydropsyche anekustipennis (L)</u>												
<u>Polycentropus flavomaculatus (L)</u>												
<u>Holocentropus dubius (L)</u>	1	3					1	3	2			
<u>Cyrnus trimaculatus (L)</u>							1					
<u>Phryganea grandis (L)</u>												
<u>Mystacides nigra (L)</u>												
<u>Oulimnius tuberculatus (A)</u>												
<u>Platambus maculatus (A)</u>	1	2	1				16	2	7			
<u>Sigara sp.</u>												
<u>Sialis lutaria</u>												
<u>Agrion splendens</u>												
<u>Coenagrion puella</u>												
<u>Platycnemis pennipes</u>							1					
<u>Procladius sp.</u>												
<u>Orthocladiinae</u>												
<u>Chironomini</u>												
<u>Ceratopogonidae</u>	6	7	9				1	2	3			
<u>Theodoxus fluviatilis</u>												
<u>Vivibarus viviparus</u>	12	2	10				4	11	7	1		
<u>Bithynia tentaculata</u>	17	5	4				13	5	5			
<u>Potamopyrgus jenkinsi</u>												
<u>Zonitoides sp.</u>												
<u>Lymnaea peregra</u>												
<u>Physa fontinalis</u>												
<u>Planorbis carinatus</u>												
<u>Planorbis leucostoma</u>												
<u>Anodonta cygnea</u>												
<u>Unio sp.</u>												
<u>Sphaerium corneum</u>												
<u>Sphaerium sp.</u>	1	1	3				1	1	3			4

KING SEDGEMOOR DRAIN MACROINVERTEBRATE DATA 1977

IMMERSION PERIOD	4 WEEKS	8 WEEKS	4 WEEKS	8 WEEKS	4 WEEKS	4 WEEKS
IMMERSION DATES	18.4 - 17.5.	17.5 - 11.7	11.7 - 8.8.	8.8 - 5.10	5.10 - 31.10	4 WEEKS
SAMPLER	S. AUF. U.	S. AUF. U.	S.AUF. U.	S.AUF. U.	S. AUF. U.	S. AUF. U.
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
<u>Taxa/species</u>						
<u>Dendrocoelum lacteum</u>		1 1		1 1 6	1 1	1
<u>Dugesia lugubris/polychroa</u>		1				
<u>Dugesia tigrina</u>		1				
<u>Chaetogaster sp.</u>				1 1 2		
<u>Eprobodella octoculata</u>		1 1				
<u>Glossiphonia heteroclita</u>		3				
<u>Hemiclepsis marginata</u>			1 1 1	12 1 6	1 2	11 2 1
<u>Theromyzon tessulatum</u>		39 160 143		10 11 11	10 11 10	25 19 27
<u>Hydracarina</u>		5 1	1 1 6	5 2 3	1 1	1 1
<u>Asellus aquaticus</u>		1				
<u>Caenis robusta</u>		4 2				
<u>Cloeon dipterum</u>						
<u>Phryganea grandis (L)</u>		27		13 43 19	8 6 5	1 2 3 4
<u>Hydroptilidae (L)</u>						
<u>Oulimnius tuberculatus (L)</u>		1 2 1	1			
<u>Dytiscidae (L)</u>						
<u>Hydroporus sp. (L)</u>		1		2 1	1 1 1	2
<u>Halipus sp. (L)</u>						
<u>Coenagrion puella</u>		1				
<u>Coenagrion pulchellum</u>				13 2		
<u>Platycnemis pennipes</u>						
<u>Procladius sp.</u>			1			
<u>Pentaneurini</u>		1 11 23				
<u>Orthocladinae</u>		7 11 23				
<u>Tanytarsini</u>		301 181 466	61 40 67	52 62 35	7 6	7 5 6
<u>Chironomini</u>		24 11 29				
<u>Chironomidae (P)</u>		5 1 4	1	4 6 3	10 36 13	1 1
<u>Ceratopogonidae</u>						
<u>Valvata macrostoma</u>		9 1	2	2 5 12	4 2 4	1 3
<u>Valvata piscinalis</u>		2 2	1 1		1 4 1	1 1
<u>Bithynia tentaculata</u>		3	1		1 1 1	
<u>Potamopyrgus jenkinsi</u>		5	2		1 1 1	
<u>Lymnaea peregra</u>						
<u>Lymnaea auricularia</u>				1 1	1 1	
<u>Physa fontinalis</u>						
<u>Planorbis leucostoma</u>				3 1		1 2
<u>Planorbis cristata</u>						1
<u>Planorbis sp.</u>						

TABLE 90

TABLE 91

IMMERSION PERIOD	4 WEEKS.																			
	IMMERSION DATES																			
	SAMPLER																			
S. AUF. U.																				
REPLICATES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<i>Polycelis tenuis</i>	11	15	17	13	11	6	21	19	4	4	8	9	13	2	16	9	12	11	6	18
<i>Dendrocoelum lacteum</i>	3	1			1	1	1	1	1	1	4	7	2	1	2	2	1	1	1	3
<i>Dugesia lugubris/polychroa</i>	1				4	2	1	1			1	1	1		7	1	1	2	1	1
<i>Stylodrilus reringianus</i>	1				3		3	3			1	1								1
<i>Nais</i> sp.																				
<i>Erpobdella octoculata</i>	1				1	1	1	1		1	1									2
<i>Glossiphonia complanata</i>	1			1	3	3	2					1	1	1	1	1	1	1	1	1
<i>Glossiphonia heteroclita</i>					1	1		1		1	1	1	1		1			1		1
<i>Helobdella stagnalis</i>			1	1		1														1
<i>Hemicletis marginata</i>			1	1		1														1
<i>Hydracarina</i>	11	842	680	62	30	13	8	3	28	6	6	2	19	4	10	1	10	6	3	13
<i>Corophium curvispinum</i>	323	2	1	335	483	402	224	178	225	641	828	715	325	513	798	490	1006	519	722	568
<i>Gammarus pulex</i>	4	2	1	17	6	7	15	2	26	1	1	2	5	6	6	19	3	7	4	8
<i>Crangonyx pseudogracilis</i>				1	1	4	1	1		1	1	1	1	1	4	1	1	1	2	2
<i>Asellus aquaticus</i>		3	2		2	1	2	5	2	6	1	1	5	3	3	17	12	3	3	9
<i>Heptagenia sulphurea</i>				1																
<i>Baetis rhodani</i>	1			1	1	1	1	1	4	1	1	1	1	3	2			1	1	
<i>Ephemerella ignita</i>				2	2	3		2			1	1	1	1						
<i>Caenis moesta</i>				4																
<i>Centroptilum luteolum</i>				2	2									1						
<i>Hydropsyche contubernalis</i> (L)	1			2			1		1	1			1	1		2	1	1	1	1
<i>Polycentropus flavomaculatus</i> (L)				2																
<i>Potamophylax</i> sp. (L)					1				1	1			1	1		2	1	3	10	7
<i>Mystacides nigra</i> (L)	1			3	10	16	7	2	3	1	3	7	32	2	2	2	8	3	10	7
<i>Leptoceridae</i> (L)	3	2	1	3	4	16	7	2	1	1	1	1	1	1	9	2	1	1	1	1
<i>Lepidostoma hirtum</i> (L)	4			1	1	4		2	2	2	1	1	1	1	1			1	1	2
<i>Platambus maculatus</i> (A)	1																			
<i>Halipilus</i> sp. (L)	1	5	9	1	1		1	1	1	1	7	2			1	1	1	4	2	
<i>Halipilus</i> sp. (A)																				
<i>Aphelocheirus montandoni</i>																				
<i>Sigara</i> sp.																				
<i>Sialis lutaria</i>				1																
<i>Agrion splendens</i>	1			7	5	2	3	1	1	1	4	3	3	3	3	1	1	1	7	2
<i>Pentaneurini</i>				12	11	11	7	5	12	8	4	3	11	6	6	6	15	2	4	6
<i>Orthocladinae</i>	9	2	15	31	12	28	20	19	10	25	25	13	19	14	14	10	32	16	30	27
<i>Tanytarsini</i>	3	4	2	71	34	16	25	76	7	32	10	12	12	79	56	35	96	29	15	8
<i>Chironomini</i>	1	1	1	82	41	16	25	2	4	4	32	1	10	2	2	1	1	3	2	4
<i>Chironomidae</i> (P)					6	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Ceratopogonidae</i>																				
<i>Dicranota</i> sp.	2	9	7	6	15	17	5	7	4	1	7	3	8	4	13	4	3	6	10	7
<i>Viviparus viviparus</i>	1	9	16	21	8	2	2	24	1	16	7	7	34	1	3	5	14	20	8	8
<i>Bithynia tentaculata</i>				6	2	1	2	2	2	2	7	14	13	2	2	1	3	3	8	11
<i>Potamopyrgus jenkinsi</i>	1	4	7	1	7	1	3	5	1	1	1	16	5	1	5	6	3	1	2	1
<i>Lymnaea peregra</i>																				
<i>Ancylus fluviatilis</i>																				
<i>Planorbis carinatus</i>		2	3			5	1	1	1	1	1	1	1	1	1	1	1	3	2	1
<i>Sphaerium corneum</i>		1	5				3	3	1	5	10	6	1	1	2	1	1	3	1	1

RIVER SEVERN 1 MACROINVERTEBRATE SEQUENTIAL DATA 1978 (Run2)

IMMERSION PERIOD	1 WEEK	2 WEEKS	3 WEEKS	4 WEEKS	5 WEEKS	6 WEEKS	7 WEEKS	8 WEEKS
IMMERSION DATES	26.4 - 2.5.	26.4 - 10.5.	26.4 - 16.5	26.4 - 23.5	26.4 - 30.5	26.4 - 7.6	26.4 - 13.6	26.4 - 21.6
SAMPLER	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
<u>Taxa/species</u>								
<u>Polycelis tenuis</u>		12 1	3 4 1	3 9 7	14 8 19	25 15 28	10 32 22	32 28 19
<u>Dendrocoelum lacteum</u>				1 1 2		1 1	1 1	4 5 1
<u>Bugesia lugubris/polychroa</u>			1 2	2 3 4	2 1 4	6 1 500	1 4 19	3 5 2
<u>Stylodrilus heringianus</u>		4 3	2 6 1	4 3 3	2 5 13	3 4	3 3 5	4 4 1
<u>Nais spp.</u>				1 1 1	1 1 1	3 3	1 1 3	1 2 1
<u>Eprobella octoculata</u>				1 1 2		3 3	1 1 3	2 1 1
<u>Glossiphonia complanata</u>								
<u>Glossiphonia heteroclita</u>								
<u>Helobdella staenalis</u>		1				1		
<u>Hemicleipsis marginata</u>								
<u>Hydracarina</u>		14 5	9 9 13	4 18 10	28 137 86	1 15 27	1 13 1	10 7 4
<u>Corophium curvispinum</u>		41 8	37 25 17	4 4 34	44 14 45	53 82	36 19	105 35 50
<u>Gammarus pulex</u>		10 5	11 7 7	15 5 12	13 23 17	28 12	10 7	8 25 16
<u>Crangonyx pseudogracilis</u>		1	2 4 2	6 10 5	1 1 2	4 6 5	1 10 7	1 1 7
<u>Asellus aquaticus</u>		1 10 3				12 2	2 11 7	16 11 7
<u>Baetis rhodani</u>						27 55	57 32	19 29 13
<u>Empoerella ignita</u>		15 9 2	20 15 11	18 25 13	27 12 1	32 46	7 23 13	7 18 14
<u>Caenis moesta</u>							7 4 1	3 2 1
<u>Centroptilum luteolum</u>							1 3	1 2 3
<u>Habrophlebia fusca</u>								
<u>Hydropsyche angustipennis (L)</u>		2 2	7 6 2	3 3 3	7 8	2 2	1 1	1 1
<u>Hydropsyche contubernalis (L)</u>		5 1	1 2 2	3 3 2	2 2 1	1 1	4 4	5 6 2
<u>Polycentropus flavomaculatus (L)</u>		1						
<u>Potamophylax sp. (L)</u>			1 3 8	3 3 1	1 1 1	6 6	17 4	8 4 2
<u>Mystacides nigra (L)</u>		3 17 12	12 3 1	4 3 2	12 6 14	19 13 24	15 29 20	19 25 14
<u>Leptoceridae (L)</u>								
<u>Hydroptila tineoides (L)</u>								

INVERSION PERIOD	1 WEEK	2 WEEKS	3 WEEKS	4 WEEKS	5 WEEKS	5 WEEKS	7 WEEKS	9 WEEKS
INVERSION DATES	26.4 - 2.5.	26.4 - 12.5.	26.4 - 16.5	26.4 - 23.5	26.4 - 30.5	26.4 - 7.6	26.4 - 13.6	26.4 - 21.6
SAMPLER	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.	S. AUF. U.
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
<i>Limnius tuberculatus</i> (L)	1							
<i>Stambus maculatus</i> (A)								
<i>Tiscidae</i> (L)								
<i>Droporus</i> sp. (L)								
<i>Lilplus</i> sp. (A)								
<i>Trinius</i> sp.								
<i>Chelocheirus montandoni</i>								
<i>Union splendens</i>								
<i>Latynemis pennipes</i>								
<i>Omphus vulgarissimus</i>								
<i>Acropelopia</i> sp.								
<i>Entaneurini</i>								
<i>Rodiamesa olivacea</i>								
<i>Orthocladinae</i>								
<i>Tanytarsini</i>								
<i>Chironomini</i>								
<i>Chironomidae</i> (P)								
<i>Ceratopogonidae</i>								
<i>Empididae</i>								
<i>Viviparus viviparus</i>								
<i>Valvata macrostoma</i>								
<i>Bithynia tentaculata</i>								
<i>Potamopyrgus jenkinsi</i>								
<i>Lymnaea peregra</i>								
<i>Ancylus fluviatilis</i>								
<i>Planorbis carinatus</i>								
<i>Sphaerium corneum</i>								

taxa/species

RIVER BLYTHE MACROINVERTEBRATE DRIFT DATA 1977 (Run 1) 27.4 - 22.5

SAMPLING SITE	POOL 1			POOL 2			POOL 3		
	RIFFLE	4 WEEKS		4 WEEKS		4 WEEKS		4 WEEKS	
IMMERSION PERIOD	27.4	27.4 - 25.5		27.4 - 25.5		27.4 - 25.5		27.4 - 25.5 (Cont)	
IMMERSION DATES	27.4	27.4 - 25.5		27.4 - 25.5		27.4 - 25.5		27.4 - 25.5 (Cont)	
SAMPLER	CYLINDER	S. AUF. U.	GRAB	S. AUF. U.	GRAB	S. AUF. U.	GRAB	S. AUF. U.	GRAB
REPLICATES	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
<i>amnatoda</i>	2	1	2	1	2	1	2	1	2
<i>annodrilus hoffmeisteri</i>	1	1							
<i>ablifex tubifex</i>	2	2	2						
<i>btamothrix hammoniensis</i>	1	3	3						
<i>ssammoryctides barbatu</i>	1	3	3						
<i>ais elinguis</i>	1	3	3						
<i>umbriculus variegatus</i>	1	3	3						
<i>rpobdella octoculata</i>	1	1	1						
<i>flrossiphonia complanata</i>	1	1	1						
<i>telobdella sternalis</i>	4	1	1						
<i>hydracarina</i>	1	30	5	1	15	24	2	2	31
<i>zannarus pulex</i>		5	8	3	3	2	2	4	4
<i>ascellus aquaticus</i>					1				1
<i>baetis rhodani</i>		3	21	67	1	1	19	18	15
<i>ephemerella ignita</i>	2	1	5	12	1	5	1	2	2
<i>caenis moesta</i>	17	12	3	5	3	3	2	2	1
<i>hydrosyche angustipennis (L)</i>	1	1	1	1	1	1	1	2	1
<i>polycentropus flavomaculatus (L)</i>									
<i>stenophylax sp. (L)</i>									
<i>anabolia nervosa (L)</i>		2	1	6	1	1	1	3	2
<i>atripsodes bilineatus (L)</i>									
<i>mystacides nigra (L)</i>		13	19	23	4			2	2
<i>hydroptila tineoides (L)</i>	1	1	1	1	6	11	9	1	1
<i>elmis aenea (L)</i>									
<i>halipus sp. (A)</i>									
<i>sifara sp.</i>									
<i>cenagrion puella</i>									
<i>coena grion pulchellum</i>									
<i>macroptopia sp.</i>									
<i>procladius sp.</i>									
<i>diamasa campestris</i>	2	10	4	1	8	3	2	2	2
<i>orthocladinae</i>									
<i>tanytarsini</i>									
<i>chironomini</i>	1	1	55	30	33	1	2	1	1
<i>chironomus sp.</i>									
<i>ceratopogonidae</i>									
<i>empididae</i>									
<i>bithynia tentaculata</i>									
<i>potamopygus lenkinsi</i>									
<i>lymnaea peregina</i>	1	2	1	2	2	1	1	2	1
<i>planorbis planorbis</i>									
<i>sphaerium corneum</i>									
<i>psidium sp.</i>									

BLE 9/4

xa/species

SAMPLING SITE	POOL 4			POOL 5			RIFFLE		
	4 WEEKS			4 WEEKS					
IMMERSION PERIOD	27.4 - 25.5			27.4 - 25.5			25.5		
SAMPLER	S. AUF. U.	GRAB	S. AUF. U.	GRAB	S. AUF. U.	GRAB	CYLINDER		
REPLICATES	1	2	3	1	2	3	1	2	3
<i>mnodrilus hofmeisteri</i>									
<i>bifex tubifex</i>									
<i>stamothrix hammoniensis</i>									
<i>semnoryctides barbatus</i>									
<i>ais elinguis</i>	7								
<i>ambliculus variegatus</i>		1							
<i>robodella octoculata</i>		3							
<i>lossiphonia complanata</i>									
<i>elobdella stagnalis</i>	13		1	27	1				
<i>hydracarina</i>	18			26	3	15			
<i>hammarus pulex</i>	2			2	4	4			
<i>asellus aquaticus</i>	1		1						
<i>lactis rhodani</i>	1								
<i>gloeon dipterum</i>									
<i>ephemerella ignita</i>	3	2		7	1	3			
<i>Caenis moesta</i>									
<i>Rhithrogena semicolorata</i>									
<i>Hydropsyche angustipennis (L)</i>									
<i>Anabolia nervosa (L)</i>				1					
<i>Athripsodes bilineatus (L)</i>	3			1					
<i>Mytacidides nigra (L)</i>	1								
<i>Sialis fuliginosa</i>	3								
<i>Sialis lutaria</i>	6								
<i>Coenagrion puella</i>		1	4	2					
<i>Procladius sp.</i>				1					
<i>Orthocladiinae</i>	3	15	5	2	4	8			
<i>Tanytarsini</i>	12	3		1	1	1			
<i>Chironomini</i>	2		1	2					
<i>Chironomus sp.</i>				1		1			
<i>Ceratopogonidae</i>	10			5					
<i>Valvata piscinalis</i>	5			1					
<i>Eithynia tentaculata</i>	13	3		3					
<i>Potamopyrgus jenkinsi</i>				1					
<i>Lymnaea stagnalis</i>	1								
<i>Ancylus fluviatilis</i>									
<i>Planorbis leucostoma</i>			1						
<i>Planorbis planorbis</i>	2								
<i>Sphaerium corneum</i>	1								
<i>Fisidium sp.</i>			3						

xa/species

BLE 95

Annexe 5

River Churnet Macroinvertebrate work

Taxa/species	STATIONS													
	TR	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>Polycelis felina</u>	83													
<u>Polycelis tenuis</u>				1					2					
<u>Dendrocoelum lacteum</u>									4					
<u>Limnodrilus hoffmeisteri</u>								1						
<u>Tubifex tubifex</u>								4						
<u>Lumbriculus variegatus</u>	3	1	6	5	6	36					1			8
<u>Enchytraeidae</u>														
<u>Erpobdella octoculata</u>							14							
<u>Erpobdella testacea</u>								10		1		3		
<u>Glossiphonia complanata</u>								1						
<u>Hydracarina</u>	3	4	1		1				1					
<u>Gammarus pulex</u>					6					4				1
<u>Asellus aquaticus</u>					6		14		2		7	41		5
<u>Isoperla grammatica</u>		41	27	9	54		930	156	62	160	43	1		6
<u>Ecdyonurus venosus</u>				2	5									
<u>Baetis rhodani</u>		3		5	7						1	9		4
<u>Ephemera ignita</u>	3	1	4	49	53				6	5	1	16	19	22
<u>Rhyacophila dorsalis (L)</u>		6	1	2					1	1	26	13	20	10
<u>Hydropsyche angustipennis (L)</u>													3	
<u>Polycentropus flavomaculatus (L)</u>							1				19	1	4	
<u>Plectrocnemia conspersa (L)</u>												1	1	
<u>Potamophylax sp. (L)</u>			1											
<u>Hydroptila tineoides (L)</u>						1					1			
<u>Glossosoma sp. (L)</u>										1			3	5
<u>Sericostoma personatum (L)</u>			2											
<u>Elmis aenea (L)</u>	1	3	13											
<u>Elmis aenea (A)</u>														1
<u>Platambus maculatus (A)</u>			1											
<u>Haliphus sp. (L)</u>										2				
<u>Haliphus sp. (A)</u>										5				1
<u>Sialis fuliginosa</u>					1		3							
<u>Simulium sp. (L)</u>	2	20			2									
<u>Macropelopia sp.</u>	4			1	3	4								1
<u>Procladius sp.</u>			1											
<u>Pentaneurini</u>	2		1		1	2	68	6	1	7		1	1	
<u>Diamesa prolongata</u>	34	1	2	228	36	6				2	2		5	
<u>Prodiamesa olivacea</u>						4								
<u>Brillia longifurca</u>						42	1	12						
<u>Brillia modesta</u>	1	3			1									
<u>Orthoclaadiinae</u>	1					4	56	16	1	8				3
<u>Tanytarsini</u>		2	1		4					3				
<u>Chironomini</u>					1	5	2							
<u>Chironomus riparius</u>						1	1	53						
<u>Ceratopogonidae</u>														1
<u>Dicraneta sp.</u>	4	2	5	13	16								1	
<u>Tipula sp.</u>														
<u>Atherix ibis</u>											1		4	8
<u>Potamopyrgus jenkinsi</u>												2		11
<u>Lymnaea peregra</u>			1			52	29	10	11					1
<u>Ancylus fluviatilis</u>	3		1				12	3		1			1	12
<u>Sphaerium corneum</u>							1							
<u>Pisidium sp.</u>							1							

Taxa/species	STATIONS													
	TR	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>Polycelis felina</u>	82													
<u>Polycelis tenuis</u>		2												
<u>Dendrocoelum lacteum</u>										1				
<u>Tubifex tubifex</u>									2					
<u>Lumbriculus variegatus</u>														1
<u>Erpobdella octoculata</u>	2	3	4		1	17								
<u>Trocheta subviridis</u>					1		2	27	4		2	1	3	3
<u>Glossiphonia complanata</u>									1		1			
<u>Hydracarina</u>					1									
<u>Gammarus pulex</u>		1			1							1		
<u>Asellus aquaticus</u>				1	9		4	2	8		5	30		
<u>Amphineura sulcicollis</u>							1172	118	21	76	19			3
<u>Isoperla grammatica</u>		1												
<u>Ecdyonurus venosus</u>	1	11		2										
<u>Baetis rhodani</u>					1								2	1
<u>Ephemera ignita</u>		1		1	1				4	5	8	8	1	8
<u>Rhyacophila dorsalis (L)</u>	2	3	12	3	3						6	11	15	13
<u>Hydropsyche angustipennis (L)</u>	1		1						1		1			1
<u>Polycentropus flavomaculatus (L)</u>	1									2	3	6		
<u>Hydroptilidae (P)</u>											3			
<u>Glossosoma sp. (L)</u>				3										
<u>Sericostoma personatum (L)</u>				12										
<u>Elmis aenea (L)</u>	2		1							1				
<u>Elmis aenea (A)</u>					1									
<u>Limnius volckmari (L)</u>					2									
<u>Dytiscidae (L)</u>								2						
<u>Brychius elevatus (L)</u>							2		4				3	
<u>Sialis lutaria</u>						1								
<u>Simulium sp. (L)</u>		1												
<u>Simulium sp. (P)</u>		1	1											
<u>Macropelopia sp.</u>		1	3			4								
<u>Pentaneurini</u>		1				4	4	11	2	1				1
<u>Diamesa campestris</u>	1	1												
<u>Diamesa prolongata</u>	48	17	2	240	24	1				31	51		6	
<u>Brillia longifurca</u>						64				1				
<u>Brillia modesta</u>			1						2					
<u>Orthocladinae</u>		1	1											
<u>Chironomini</u>						24			3					1
<u>Chironomus riparius</u>									5					
<u>Chironomidae (P)</u>						4								
<u>Ceratopogonidae</u>							1							
<u>Dicranota sp.</u>		6	3	6	10						1		1	1
<u>Tipula sp.</u>											1	1		1
<u>Empididae</u>														
<u>Limnophora sp.</u>										2				
<u>Atherix ibis</u>											2	2	8	9
<u>Potamopyrgus jenkinsi</u>							5					7		18
<u>Lymnaea peregra</u>	2		7		1		19	95					4	12
<u>Physa fontinalis</u>							2	13						
<u>Ancylus fluviatilis</u>	2	1	3					7		2	1		2	6
<u>Sphaerium corneum</u>									1					
<u>Pisidium sp.</u>				1	1				1					

Taxa/species	STATIONS													
	TR	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>Polycelis felina</u>	98	13												
<u>Polycelis tenuis</u>									1					
<u>Dendrocoelum lacteum</u>									1					
<u>Tubifex tubifex</u>									1					
<u>Lumbriculus variegatus</u>	5		2	2	6	5					1	1		
<u>Erpobdella octoculata</u>							1	14	2	1		1	2	2
<u>Erpobdella testacea</u>							1							
<u>Hydracarina</u>	2	3									2	1	3	16
<u>Gammarus pulex</u>					11		7		3	1	3	10		
<u>Asellus aquaticus</u>							1050	33	50	424	20		20	10
<u>Protonemura praecox</u>		2												
<u>Amphinemura sulciocollis</u>			1											
<u>Isoperla grammatica</u>	1	3		1	1						1	1		
<u>Ecdyonurus venosus</u>		4	1								2			
<u>Baetis rhodani</u>		1		2	5				11	3	12	1	6	14
<u>Rhyacophila dorsalis (L)</u>		10	9	3	1					2				
<u>Hydropsyche angustipennis (L)</u>		5	9	1						20	95	8	5	11
<u>Polycentropus flavomaculatus (L)</u>		1	3											
<u>Hydroptila tineoides (P)</u>													1	
<u>Glossosoma sp. (L)</u>			2											
<u>Sericostoma personatum (L)</u>			13								1			
<u>Dytiscidae (A)</u>		1												
<u>Haliphus sp. (L)</u>									1				1	
<u>Simulium sp. (L)</u>	1	5		2	7									
<u>Simulium sp. (P)</u>		1												
<u>Macropelopia sp.</u>	1					3								
<u>Pentaneurini</u>												1	1	
<u>Diamesa prolongata</u>	26	1	4	170	26					8	1		3	1
<u>Prodiamesa olivacea</u>												1		
<u>Brillia longifurca</u>						46	1							
<u>Brillia modesta</u>				1	1								2	25
<u>Orthocladinae</u>		2			1	2	1	3	3	3			5	6
<u>Tanytarsini</u>		1	1	12	6	13		5						
<u>Chironomini</u>			1			24						1	2	1
<u>Chironomidae (P)</u>	4			3	4									
<u>Dicranota sp.</u>		1	13	15	13	1					1	1		
<u>Tipula sp.</u>														1
<u>Limnophora sp.</u>							2							
<u>Atherix ibis</u>										2	1		6	8
<u>Potamopyrgus jenkinsi</u>							42	53		12			9	53
<u>Lymnaea peregra</u>	2												6	30
<u>Physa fontinalis</u>								5						
<u>Ancylus fluviatilis</u>	5		4	1				4			2	2	4	7
<u>Pisidium sp.</u>	1						2							

Taxa/species	STATIONS													
	TR	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>Polycelis felina</u>	544													
<u>Polycelis tenuis</u>														
<u>Dugesia lububris/polychroa</u>									3	1	4	3		15
<u>Nais elinguis</u>									1	2				
<u>Lumbriculus variegatus</u>	2		1	18	28	25				1	3	10		
<u>Erpobaelia octocolata</u>								4	91	5	2			
<u>Helobdella stagnalis</u>									4					
<u>Hydracarina</u>	6		3	5	2					1				
<u>Gammarus pulex</u>					9					1				4
<u>Asellus aquaticus</u>							1		2		5			
<u>Protonemura praecox</u>	2						4960	220	52	200	9			15
<u>Amphinemura sulcipectus</u>	4	20		15	1									
<u>Nemoura avicularis</u>					1									
<u>Nemoura cambrica</u>		1			2									
<u>Leuctra hippopus</u>	3	4		1										
<u>Perlodes microcephala</u>														
<u>Isoperla grammica</u>	1	27		31	3					1		2		
<u>Ecdyonurus venosus</u>					1						16	4		
<u>Rhithrogena semicolorata</u>		4		4							1			
<u>Baetis rhodani</u>				11	5		2			3	2			
<u>Ephemerebella ignita</u>														
<u>Rhyacophila dorsalis (L)</u>		2		12	6									1
<u>Hydropsyche angustipennis (L)</u>		1		9						2	3			
<u>Hydropsyche siltalai (L)</u>				3						12	13	1		
<u>Polycentropus flavomaculatus(L)</u>				1	1	2				3	4			
<u>Plectrocnemia conspersa (L)</u>	6			1										
<u>Potamophylax sp.(L)</u>	12	2	1	2							1			4
<u>Agapetus sp.(L)</u>	1													
<u>Elmis aenea (L)</u>			1											
<u>Elmis aenea (A)</u>	1													
<u>Dytiscidae (L)</u>		1												
<u>Brychius elevatus (L)</u>							1							
<u>Sialis lutaria</u>						1								
<u>Simulium sp.(L)</u>				1	1									
<u>Macropelopia sp.</u>						6								
<u>Pentaneurini</u>	2						2							
<u>Diamesa campestris</u>				1	1									
<u>Diamesa proiongata</u>	2													
<u>Prodiamesa olivacea</u>														1
<u>Brillia longifurca</u>						252								
<u>Brillia modesta</u>				2										
<u>Tanytarsini</u>					4									
<u>Chironomini</u>						14						1		3
<u>Chironomidae (P)</u>			1											
<u>Dicranota sp.</u>	2			16	11						1			
<u>Tipula sp.</u>		1		1					1					
<u>Limnophora sp.</u>							1							10
<u>Atherix ibis</u>							1				4			35
<u>Potamopyrgus jenkinsi</u>							44	115	1					7
<u>Lymnaea peregra</u>	1			5			25	76						
<u>Physa fontinalis</u>								23	2		7			16
<u>Ancylus fluviatilis</u>	1		1	1				1						
<u>Sphaerium sp.</u>							13	1						
<u>Pisidium sp.</u>	1						5	14						3

Taxa/species

STATIONS

	TR	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>Polycelis felina</u>	110													
<u>Polycelis tenuis</u>														
<u>Dendrocoelum lacteum</u>									1	4	3			
<u>Limnodrilus hoffmeisteri</u>									1					
<u>Tubifex tubifex</u>										1				
<u>Nais elinguis</u>							8							
<u>Lumbriculus variegatus</u>	8		20	5	15	6				16	2		3	1
<u>Erpobdella octoculata</u>											16	3		2
<u>Glossiphonia complanata</u>							5	38	3	1	2		6	4
<u>Hydracarina</u>							1							
<u>Gammarus pulex</u>											2			
<u>Asellus aquaticus</u>											1		1	
<u>Brachyptera risi</u>							507	51	8	5	16	1	1	
<u>Protonemura praecox</u>		2		1					3	1				
<u>Amphinemura sulcicollis</u>	20	40	14	15										
<u>Nemoura avicularis</u>				1										
<u>Nemoura cambrica</u>	1	3	2	1										
<u>Leuctra hippopus</u>		2	4	3										
<u>Perlodes microcephala</u>										1	1			
<u>Isoperla grammatica</u>		2	10							3	49	7	6	
<u>Rhithrogena semicolorata</u>			20											
<u>Heptagenia sulphurea</u>													1	
<u>Baetis rhodani</u>			6	2	13	5	4		10	6	7		2	
<u>Rhyacophila dorsalis (L)</u>			2		2		3			3	3	1	12	1
<u>Hydropsyche angustipennis (L)</u>										1	22			
<u>Hydropsyche siltalai (L)</u>		1								13	5	1	10	3
<u>Potamophylax sp. (L)</u>	1			2	1			5						
<u>Limnephilidae (L)</u>			1								3			
<u>Elmis aenea (L)</u>	5													
<u>Limnius volckmari (L)</u>												1		
<u>Brychius elevatus (L)</u>												1		
<u>Brychius elevatus (A)</u>												1		
<u>Sialis lutaria</u>						1								
<u>Simulium sp. (L)</u>			1		2		14			12				
<u>Diamesa prolongata</u>	3									1				
<u>Prodiamesa olivacea</u>	2							2						
<u>Brillia longifurca</u>						31					1			
<u>Brillia modesta</u>				1						1	3			
<u>Orthoclaadiinae</u>							7			2				
<u>Chironomini</u>						3					1	1	1	11
<u>Chironomidae (P)</u>	4													
<u>Ceratopogonidae</u>											2			
<u>Dicranota sp.</u>	1	1	7		2		1				3			1
<u>Empididae</u>			2						1					
<u>Atherix ibis</u>										1	5	1	3	4
<u>Potamopyrgus jenkinsi</u>							5	83			1	1	1	3
<u>Lymnaea peregra</u>	3							10						
<u>Physa fontinalis</u>							1	27	1		20		6	19
<u>Ancylus fluviatilis</u>	19		17	1										
<u>Sphaerium sp.</u>							2							
<u>Pisidium sp.</u>							1	4			1	1		1

Taxa/Species

Taxa/Species	STATIONS													
	Tr	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>Polycelis felina</u>														
<u>Polycelis tenuis</u>														
<u>Dugesia lugubris/polychroa</u>									1	3				
<u>Tubifex tubifex</u>									1					
<u>Nais elinguis</u>							10		1	5	2			
<u>Lumbriculus variegatus</u>	4	1		11	8	20	1		3	47	5	5	2	
<u>Erpobdella octoculata</u>							1	21	4	4	1	1	1	6
<u>Erpobdella testacea</u>							2	1						
<u>Glossiphonia complanata</u>							1							
<u>Hydracarina</u>							1							
<u>Gammarus pulex</u>	3	3	25		2	5						3	2	
<u>Asellus aquaticus</u>					1				3	1	1			
<u>Brachyptera risi</u>							286	17	32	21	2			
<u>Protonemura praecox</u>									4	3				
<u>Amphinemura sulcicollis</u>	6	2												
<u>Nemoura cambrica</u>		49	13	10	1									
<u>Leuctra hippopus</u>		3								1				
<u>Isoperla grammatica</u>		53	7	17	1					4	1			
<u>Ecdyonurus torrentis</u>	2	3		20	2				2	6	47	116	35	7
<u>Ecdyonurus venosus</u>				1			1				1			
<u>Rhithrogena semicolorata</u>										2				1
<u>Baetis rhodani</u>		3		45	1				10	4	1			
<u>Rhyacophila dorsalis (L)</u>		2	2	3	79	8	26	3	69	103	27	10	2	12
<u>Hydropsyche angustipennis (L)</u>		1	1	1	2	2	1		1	3	6	4		
<u>Hydropsyche siltalai (L)</u>				3	2				1	2	2	5	1	
<u>Plectrocnemia conspersa (L)</u>										31	5	11	1	3
<u>Potamophylax sp. (L)</u>	1	2				3								
<u>Haliphus sp. (A)</u>	3	1		1	1									
<u>Simulium sp. (L)</u>							3		6	2				
<u>Simulium sp. (P)</u>									1					
<u>Pentaneurini</u>							3			1	1			
<u>Dianesa campestris</u>										1				
<u>Dianesa prolongata</u>														
<u>Brillia longifurca</u>	15		1	3										
<u>Orthocladinae</u>	5	20	54	20	4	12	68	6	5	22	19	14	15	3
<u>Tanytarsini</u>						1	1			1	2			
<u>Chironomini</u>						5	1			1				8
<u>Chironomidae (P)</u>											1			
<u>Ceratopogonidae</u>		1	1		1									
<u>Dicranota sp.</u>					3									
<u>Tipula sp.</u>														1
<u>Empididae</u>		1	1											
<u>Atherix ibis</u>											3	1	1	1
<u>Potamopyrgus jenkinsi</u>														2
<u>Lymnaea peregra</u>	9							5						1
<u>Ancylus fluviatilis</u>	9				1			17						2
<u>Sphaerium sp.</u>							1							
<u>Pisidium sp.</u>							5							5

Taxa/species

STATIONS

TR	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>Polycelis felina</u>													
<u>Tubifex tubifex</u>	80												
<u>Nais elinguis</u>			2		7					7			2
<u>Lumbriculus variegatus</u>	7	5	2	10	13	68			1	3	16	2	8
<u>Erpobdella octoculata</u>													
<u>Trocheta subviridis</u>							44	1	5	2		2	5
<u>Hydracarina</u>	1		1		1	5							
<u>Gammarus pulex</u>					1	2						1	
<u>Asellus aquaticus</u>								2					1
<u>Amphineura sulciollis</u>	9	19	7	14	19	420	22	17	31		1		1
<u>Leuctra hippopus</u>		41	26	1	6			1	1				
<u>Isoperla grammatica</u>		1	3	16	7								
<u>Ecdyonurus venosus</u>				1					3	3	24	26	14
<u>Rhithrogena semicolorata</u>		5		9	3			3	2			1	
<u>Heptagenia sulphurea</u>				2									
<u>Baetis rhodani</u>	1		2	2	7	4	9	32	28	1		1	5
<u>Rhyacophila dorsalis (L)</u>		4	3	2	8				3	2	6		
<u>Hydropsyche angustipennis (L)</u>		2			1				6	6	4	2	2
<u>Hydropsyche siltalai (L)</u>		1		3	1			2	4	7	20		3
<u>Polycentropus flavomaculatus (L)</u>					5	1					2		
<u>Plectrocnemia conspersa (L)</u>	1												
<u>Potamophylax sp. (L)</u>	2	2	1		2	1				2			
<u>Glossosoma sp. (L)</u>		1											
<u>Lepidostoma hirtum (L)</u>										1			
<u>Dytiscidae (A)</u>					2								
<u>Halipilus sp. (A)</u>													1
<u>Simulium sp. (L)</u>	1												
<u>Pentaneurini</u>						29		4	9	3	1		
<u>Dianesa campestris</u>		1											
<u>Dianesa prolongata</u>	214	3	2	18				2	5	2			
<u>Brillia longifurca</u>						58							
<u>Brillia modesta</u>									1				
<u>Orthoclaadiinae</u>		9	1	14		7	12	1	3	10	1	4	8
<u>Chironomini</u>	2					7	1				1		1
<u>Chironomidae (r)</u>	5			2		5	3			3	5		2
<u>Dicranota sp.</u>		1		1	1	1							
<u>Empididae</u>						1							
<u>Atherix ibis</u>										1			3
<u>Potamopyrus jenkinsi</u>													3
<u>Lymnaea peregra</u>	4			6			18						1
<u>Physa fontinalis</u>						1							
<u>Ancylus fluviatilis</u>	8					1	5			2		5	6
<u>Sphaerium sp.</u>							4						
<u>Pisidium sp.</u>			1				5				1		4

Annexe 6

River Trent/Gammarus tigrinus work

TABLE 110 RIVER TRENT & TRIBUTARIES MACROINVERTEBRATE DATA 23.2.78 (Nos. 015m⁻²)

RIVER	TRENT						SOW
	A	B	C	D	E	F	3
<u>Taxa/Species</u>							
<u>Tubificidae</u>	26	72	45	12	104	25	12
<u>Naididae</u>		10		3			
<u>Erpobdella octoculata</u>	1	11	1	4	9	9	5
<u>Trocheta subviridis</u>	3	3					
<u>Glossiphonia complanata</u>	1		10	1	6		
<u>Helobdella stagnalis</u>							3
<u>Theromyzon tessulatun</u>		1					
<u>Hydracarina</u>	2	12	12	6	1		
<u>Gammarus pulex</u>	66	82			1	37	
<u>Gammarus tigrinus</u>			287	330	323	121	304
<u>Asellus aquaticus</u>	418	121	9	2	3	238	
<u>Hydropsyche angustipennis(L)</u>		3	1		3	1	
<u>Hydropsyche contubernalis(L)</u>		2			3	1	
<u>Hydropsyche pellucidula(L)</u>		1			1		1
<u>Leptoceridae (L)</u>			1				
<u>Elmis aenea (L)</u>			1				
<u>Platanus maculatus (A)</u>		2	4				2
<u>Haliphus sp.(L)</u>		2	16				
<u>Haliphus sp.(A)</u>	1		1				
<u>Dryops sp(L)</u>	1						
<u>Sialis lutaria</u>			1				
<u>Pentaneurini</u>	1						
<u>Procladius olivacea</u>			5				
<u>Orthocladinae</u>		1					
<u>Tanytarsini</u>	1						
<u>Chironomini</u>							3
<u>Valvata macrostoma</u>					6		
<u>Bithynia tentaculata</u>					15		1
<u>Potamopyrgus jenkinsi</u>		1	956	7	11		
<u>Lymnaea pergra</u>		1	3	2	4		
<u>Ancylus fluviatilis</u>					1	1	
<u>Sphaerium corneum</u>			2		5		1
<u>Pisidium sp.</u>					2		

TABLE III RIVER TRENT & TRIBUTARIES MACROINVERTEBRATE DATA 7.4.78 (Nos 0,15m⁻²)

RIVER	TRENT					TAME	SOW			PENK		
	STATIONS	B	C	D	E	F	2	1	2	3	4	6
<u>Taxa/species</u>												
<u>Tubificidae</u>			3	23	5	36	216	20	13	7	39	8
<u>Naididae</u>		6		16		5					1	
<u>Erpobdella octoculata</u>		2		3	17	26	20					
<u>Glossiphonia complanata</u>				1	8				1			1
<u>Helobdella stagnalis</u>								4				
<u>Hydracarina</u>		2	4	22				1	6			6
<u>Gammarus pulex</u>		22			2	6		87	169	3		3
<u>Gammarus tigrinus</u>			9	133	112	137				257	27	42
<u>Asellus aquaticus</u>		160		1	3	968	560	1	15	3	2	
<u>Baetis rhodani</u>								5	10			
<u>Hydropsyche angustipennis (L)</u>	2			3	3	1						1
<u>Hydropsyche pellucidula(L)</u>								2				
<u>Limnephilidae (L)</u>												1
<u>Leptoceridae (L)</u>			1									
<u>Elmis aenea (L)</u>									1			
<u>Elmis aenea (A)</u>									1			
<u>Oulimnius tuberculatus (L)</u>								1				
<u>Platambus maculatus (A)</u>		3								1		
<u>Brychius elevatus (L)</u>		3										
<u>Haliphus sp.(L)</u>						1		1				
<u>Gyrinus sp.(L)</u>								5	1			
<u>Simulium spp.(L)</u>								568	1			
<u>Simulium spp.(P)</u>								129				
<u>Diamesa campestris</u>								1				
<u>Procladius olivacea</u>											3	3
<u>Orthoclaadiinae</u>		5			2		3	38	53			49
<u>Chironomini</u>								2		3	3	17
<u>Chironomus sp.</u>								1			1	
<u>Chironomidae (P)</u>									2			2
<u>Dicranota sp.</u>												1
<u>Tipula sp.</u>										1		
<u>Valvata macrostoma</u>					5						5	14
<u>Potamopyrgus jenkinsi</u>			12		9				12	20		
<u>Lymnaea peregra</u>			1		4				3	1	1	
<u>Ancylus fluviatilis</u>					3	1		2		1	2	
<u>Sphaerium corneum</u>					5				1			
<u>Pisidium sp.</u>					4				1			

TABLE 112 RIVER TRENT & TRIBUTARIES MACROINVERTEBRATE DATA 5.5.78 (Nos. 0.15m⁻²)

RIVER	TRENT					TAME	SOW			PENK					TRIB
	STATIONS						2	2	3	1	2	3	5	2	
	B	C	D	E	F										
<u>Taxa/species</u>															
<u>Polycelis tenuis</u>										1					
<u>Tubificidae</u>	1		5	6	20			44		25	122	3	2	48	
<u>Naididae</u>	28	4	52	13	3		7				36	2	1		
<u>Erpobdella octoculata</u>	2		5	11	17	48				14					
<u>Glossiphonia complanata</u>			3	4											
<u>Helobdella stagnalis</u>								1							
<u>Hydracarina</u>	2	8	20	10			8			2			2		
<u>Gammarus pulex</u>	9		1	2	1		75	17		39	2		3	1	
<u>Gammarus tigrinus</u>		7	33	64	4			164		22	32	50		8	
<u>Asellus aquaticus</u>	118		1	5	38	280	7	5		134	10	2		114	
<u>Baetis rhodani</u>													2		
<u>Caenis moesta</u>								6							
<u>Hydropsyche angustipennis</u> (L)				1						2	4	3	4	4	
<u>Leptoceridae</u> (L)							18	14							
<u>Platambus maculatus</u> (A)								1							
<u>Dytiscidae</u> (A)							1								
<u>Haliphus</u> sp. (L)		1	1												
<u>Haliphus</u> sp. (A)			1					12			1				
<u>Pentaneurini</u>								1			1			2	
<u>Diamesa campestris</u>								1		2					
<u>Prodiamesa olivacea</u>														1	
<u>Orthocladiid</u>		1					2			6	1		1		
<u>Chironomini</u>		1						7			13	7	2		
<u>Chironomidae</u> (P)	1														
<u>Valvata macrostoma</u>				18											
<u>Bithynia tentaculata</u>				1				1							
<u>Potamopyrgus jenkinsi</u>			235	374	144		75	88		15				16	
<u>Lymnaea peregra</u>	2			2			15			2			1	2	
<u>Ancylus fluviatilis</u>				3	1	1									
<u>Sphaerium corneum</u>			1	4			8	10		4	3				
<u>Pisidium</u> sp.				1			1								

TABLE 113 RIVER TRENT & TRIBUTARIES MACROINVERTEBRATE DATA 31.5.78 (Nos 0.15m⁻²)

RIVER	TRENT					TAME	SOW			PENK			TRIB	
	B	C	D	E	F		2	2	3	1	2	5	1	2
<u>Taxa/species</u>														
<u>Tubificidae</u>	7	7	12	9	8	6	1	116	17	3	7	25	15	
<u>Naididae</u>	7	7	5	2	2			12	5	23	1			
<u>Erpobdella octoculata</u>	1		7	14	31	33	3	3	6	2		1		
<u>Glossiphonia complanata</u>				4			1	2	1					
<u>Hydracarina</u>		5	1	1							1			
<u>Gammarus pulex</u>	14			2			57	4	28	3		1	1	
<u>Gammarus tigrinus</u>		1	13	62				28		14	14	5	8	
<u>Asellus aquaticus</u>	95			2	490	830	8	5	55	3		66	258	
<u>Hydropsyche angustipennis(L)</u>		1	1	1				1		2	2			
<u>Hydropsyche pellucidula(L)</u>								1						
<u>Leptoceridae (L)</u>		3					12	5						
<u>Hydroptila tineoides (L)</u>											4			
<u>Platambus maculatus (A)</u>								1						
<u>Haliphus sp. (A)</u>				1				5						
<u>Simulium sp. (L)</u>												2		
<u>Prodiamesa olivacea</u>	1													
<u>Orthoclaadiinae</u>	37		13	15		10		3	23	42	102	44	17	
<u>Chironomini</u>							1	4	15	24		4	10	
<u>Chironomus sp.</u>													2	
<u>Chironomidae (P)</u>	7			3		3				4	3	10	2	
<u>Valvata macrostoma</u>				18										
<u>Bithynia tentaculata</u>				8				1						
<u>Potamopyrgus jenkinsi</u>	6	74	137	27				46	60		24	4	15	
<u>Lymnaea peregra</u>			2	6		1		2						
<u>Ancylus fluviatilis</u>				4										
<u>Sphaerium corneum</u>				50				28	17	6	1	1	4	
<u>Pisidium sp.</u>				13					2		1			

TABLE 114 RIVER TRENT & TRIBUTARIES MACROINVERTEBRATE DATA 14.7.78. (Nos 0.15m⁻²)

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RIVER STATIONS	TRENT					TAME	SOW			PENK			TRIB	
	B	C	D	E	F	2	2	3	1	2	5	1	2	
<u>Taxa/species</u>														
<u>Tubificidea</u>	3	4	1	6	3	130	5	78	10	2	2	16	17	
<u>Naididae</u>	1	5		1				4	1	16				
<u>Erpobdella octoculata</u>	3		10	10	23	6	2	3	3	1			1	
<u>Glossiphonia complanata</u>				23	9	2								
<u>Hydracarina</u>				1										
<u>Gammarus pulex</u>	17		1				41	2	30	3	1		1	
<u>Gammarus tigrinus</u>		14	10	233	17			16		25	17	12	19	
<u>Asellus aquaticus</u>	68		1	4	187	375	2	2		1		32	00	
<u>Hydropsyche angustipennis(L)</u>								3						
<u>Leptoceridae</u>							6	2						
<u>Platanus maculatus (A)</u>								1						
<u>Dystiscidae (L)</u>								1						
<u>Halipus sp.(L)</u>								2						
<u>Halipus sp.(A)</u>								10						
<u>Pentaneurini</u>								1					2	
<u>Prodiamesa olivacea</u>	2												1	
<u>Orthocladinae</u>	24		10	5	31			1	16	19	79	21	8	
<u>Chironomini</u>							6	6	10	15		3	14	
<u>Chironomus sp.</u>													4	
<u>Chironomidae (P)</u>	2		1	6	1		1		4	10	16	2	3	
<u>Valvata macrostoma</u>				16										
<u>Bithynia tentaculata</u>				4				1						
<u>Potamopyrgus jenkinsi</u>	10	86	120	11			15	35		20		5	11	
<u>Lymnaea peregra</u>				34										
<u>Lymnaea stagnalis</u>				1										
<u>Ancylus fluviatilis</u>			3											
<u>Sphaerium corneum</u>			10	3			16	13	2	1		1	2	
<u>Pisidium sp.</u>				1				1						