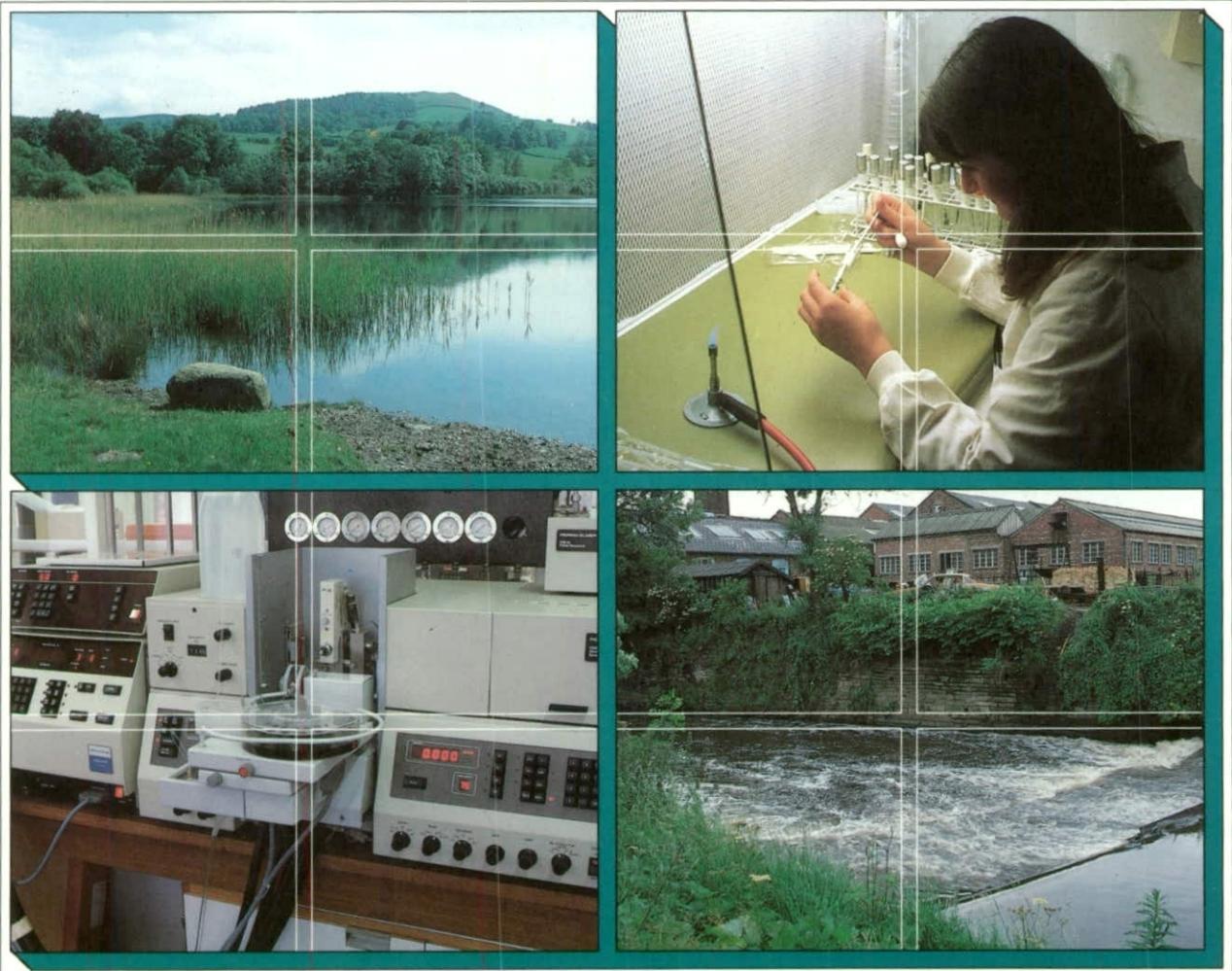


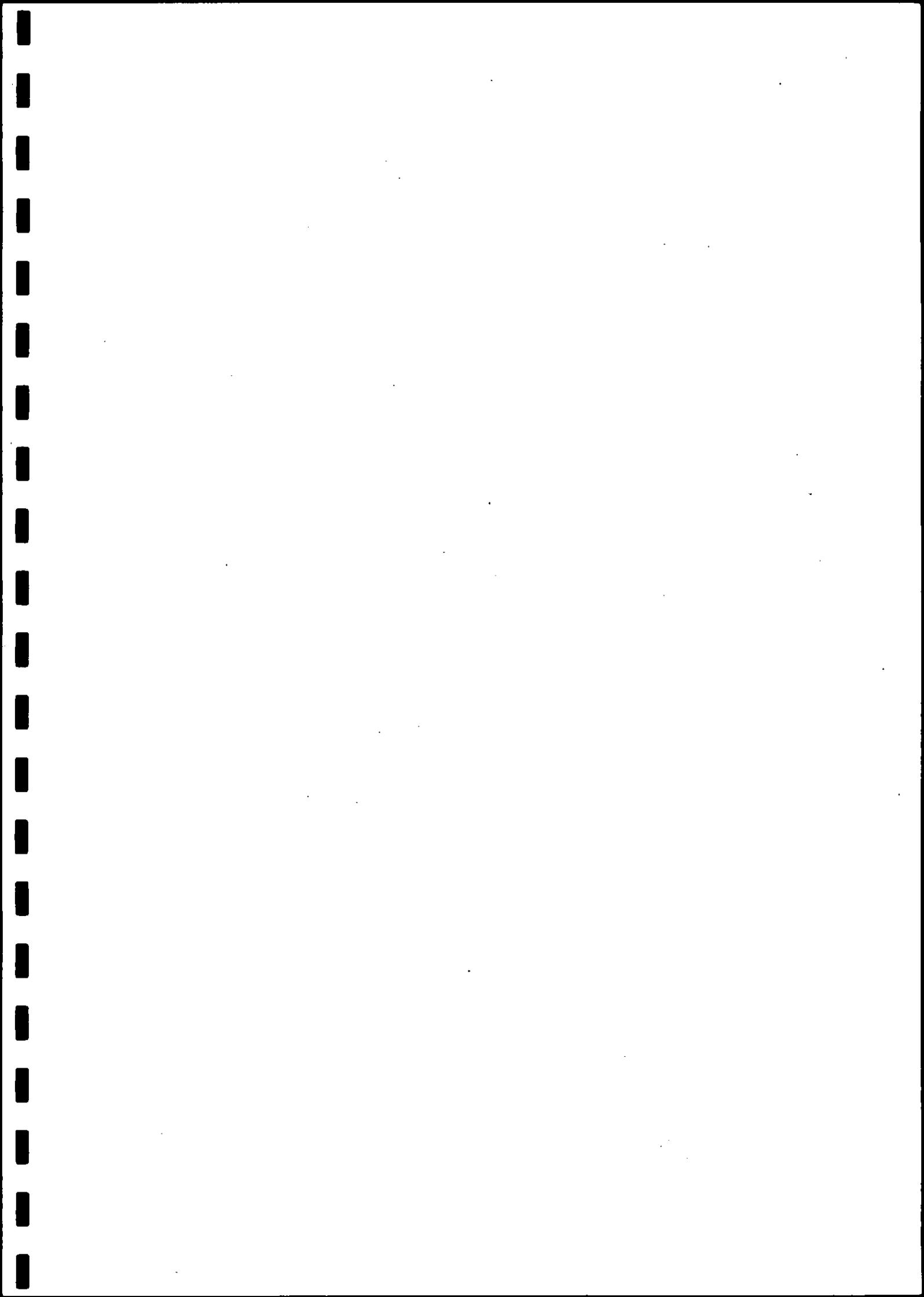


Institute of  
Freshwater  
Ecology

# Quality audit of biological samples for the 1990 River Quality Survey NRA Anglian Region

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for the 1990 River Quality Survey  
NRA Anglian Region**

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Anglian Region

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## 1. INTRODUCTION

The 1990 River Quality Survey included the sampling of aquatic macro-invertebrates for biological assessment of river quality throughout the United Kingdom. In England and Wales the survey was undertaken by the National Rivers Authority (NRA), the River Purification Boards (RPBs) sampled in Scotland and the Department of Economic Development (DED) undertook the work in Northern Ireland.

Approximately 7750 sites were surveyed, the majority of which were sampled in spring, summer and autumn. Standard collection procedures were used and the sampling strategy was compatible with RIVPACS (River InVertebrate Prediction And Classification System), which has been developed by the Institute of Freshwater Ecology (IFE). Most of the remaining sites were sampled in a single season only, in order to extend the scope of the survey. For a variety of reasons, a few locations were sampled in just two seasons.

Samples were sorted for the families of macro-invertebrates included in the Biological Monitoring Working Party (BMWP) system. Taxa present were recorded on site data sheets. Sample processing and recording techniques varied from region to region.

In order to undertake this massive programme of fieldwork and sample processing, a large number of new staff were employed by the surveying agencies. In view of the number of staff involved and the variability of sample processing techniques, it was recognised that an independent quality control exercise was necessary to promote a consistently high level of reliability.

The IFE was contracted to undertake an audit of the sample sorting and identification performance of each NRA region, RPB and the DED. This report collates the results of 76 samples audited for Anglian Region of the NRA. The IFE was not required to perform any statistical analyses nor interpretation of the results of the audit.

## 2. SAMPLE SELECTION

Nearly all samples from the 1990 River Quality Survey were sent to IFE for storage. They were catalogued on arrival and placed in crates, such that individual samples were readily accessible. A stratified random selection of samples for each sample processor was then made. Selection was undertaken by IFE staff and no selection was made before each sample had been received by IFE. Thus, sample processors had no means of knowing which of their samples would be audited.

The total number of sample processors employed nationally during the survey was considerably higher than that anticipated at the outset. As a consequence, the number of samples audited per processor was limited by the need to keep within the contracted overall total of 700 samples. A minimum of 4 samples was audited per processor, except where individuals processed very few samples or did not process material from each of the 3 seasons.

Sample selection was weighted towards spring samples in order to give early feedback on the blindspots of particular sorters and problems of identification.

### 3. SAMPLE PROCESSING

Biologists processing samples for the 1990 Survey were instructed to sort their samples, ideally within the laboratory, and select examples of each scoring taxon within the BMWP system. In most cases, the invertebrates were placed in a vial of preservative (4% formaldehyde solution or 70% industrial alcohol) and the BMWP taxa were listed on a data sheet. The vial of animals and the sorted material were then returned to the sample container and preservative added. Thus, each sample available to IFE for selection for audit should have included:

- i) a list of the BMWP FAMILIES FOUND IN THE SAMPLE
- ii) a vial containing representatives from each family
- iii) the preserved sample

When these three elements were present, the sequence of operations at IFE was as follows:

- a) The remainder of the sample was sorted and the BMWP families listed
- b) The families contained within the vial were identified and listed
- c) A comparison was made between the NRA listing of families and those identified from the vial by IFE
- d) A comparison was made between the NRA listing of families and those found in the sample by IFE
- e) "Losses" or "gains" from the NRA listing of families were noted. In the case of "gains", each additional family was identified, where possible, to species level, in order to clarify any specific repetitive errors.

For a number of different reasons, some samples did not include a vial containing representative examples of the families listed on the NRA data sheet. These samples were avoided for audit, where possible. When selection of such samples was unavoidable (eg where a particular sorter would otherwise have been excluded from the audit exercise), only operations a), d) and e) above were appropriate.

Several directives were issued to IFE relating to the treatment of BMWP taxa. Terrestrial representatives of BMWP scoring families, animals deemed to have been dead at the time of sampling, cast insect skins, pupal exuviae, empty mollusc shells and tail ends of "living" specimens were to be excluded from the listing of families present. Trichopteran pupae, although not routinely identified by many biologists, were to be included in the listing of families.

#### 4. REPORTING

The results of each sample audit were recorded on a standard report form (Table 1). For audit samples where a vial of animals was included, the comparison between the NRA listing and the taxa found in the vial by IFE was shown in box A of the report form. Discrepancies could be due to carelessness, misidentifications or errors in completing the NRA data sheet. Families not on the NRA listing but found by IFE in the remainder of the sample were entered in box B of the report form under "additional families". When the families listed as "losses" in section A of the report form were compared with the full list of families recorded in the sample by IFE, some apparent losses from the vial were offset by the presence of those families in the remainder of the sample. These taxa were therefore listed in the "losses" box of section A and the "gains" box of section B and were neither a net loss nor a net gain. In these cases, the families were marked with an asterisk in both boxes. Such errors are noted as "omissions" in the tables which summarise the results for each season (Tables 2, 3 and 4).

Species identifications, state of development (eg adult or larval coleopterans) and the presence of a single representative of a family within the remainder of the sample were recorded in the notes section of the report form. Where the NRA data sheet indicated that a family was noted and released at the site, this was recorded in the notes section but not included as a "loss", even though the family was not found in the vial.

For those samples which did not contain a vial of animals, box A of the report form was not applicable (N/a). Families not on the NRA list but present in the sample were listed in box B under "additional families" as before. Families recorded on the NRA list but not found by IFE were indicated on the left hand side of box B. If the vial of animals was retained by the NRA, entries in this box could include the sole representative of a family which was removed by the NRA, a family seen at the site which escaped or was released (without mention being made on the NRA data sheet), inaccurate identification, the wrong family box being ticked on the NRA data sheet or the family being present in the sample but missed by IFE.

Results of the audits of individual samples are presented in Table 5.

#### ACKNOWLEDGEMENTS

Thanks to Mrs Jessica Winder and Mrs Kay Symes for assistance with cataloguing and storage of samples and Mrs Valerie Palmer for typing the manuscript.

TABLE 1. The IFE Report form

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION  RIVER

SEASON  SITE

SORTER  SAMPLE CODE

AQC OF BMWP FAMILIES    A. IN VIAL     B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE		

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	

NET LOSSES     NET GAINS

NOTES

TABLE 2. The 37 spring samples audited for Anglian Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'

River	Site	Sorter	Losses	Gains	Omissions
Elstow Brook	D/s Stewartby Lk	RFS	0	9	1
Witcham Gr Drain	C'water SI Mepal	SEH	0	4	0
Ancholme	Horkstow	SJB	0	3	0
Witham	Langrice Bridge	CAE	0	6	4
Cam	Cambridge	GTF	1	5	0
Bain	D/s Coningsby STW	IG	0	4	0
Upper Witham	Bracebridge	RPC	0	2	0
Sincil Dyke	Destructor	RPC	0	0	0
Cam	Chesterton	GTF	0	1	1
Cut Off Channel	M'wold Hythe Br	SEH	1	7	0
* N. Lynn Drain	61M09	WTC	0	2	0
* Tove	Cappenham Bridge	PDS	1	3	0
Old Wryde Drain	B1167 Bridge	IG	0	3	0
Londonthorpe Beck	Belton Park	AS	0	4	4
Blackwater	Blackwater Bridge	MJ	0	3	0
Waveney	Burgh St Peter	MJ/EJB	2	2	2
Tud	Whitford Bridge	EJB	1	3	0
Lark	Bury St Edmonds	GTF	0	3	0
Stour	Dedham Mill Pool	PJM	0	2	0
Hen Brook	St Neotts	RFS	0	3	1
Belchamp Brook	Nether Hall	FCB	0	4	0
Fosdyke Canal	Pyewipe	RCP/AS	0	4	0
Willoughby High Dr	Chapel St Leon	CAE	0	3	0
Ancholme	Cadney	IG	0	1	0
Marley Gap Brook	Stocks Br Stive	RFS	1	3	0
Wensum	South Raynham	EJB	0	6	0
Hintlesham	Church Lane Br	MJ	0	5	0
Bourne Brook	Nightingale Hall	FCB	0	5	0
Holland Brook	Holland Road Br	FCB	1	5	0
Wid	Lawness Bridge	PJM	0	4	0
Robins Brook	Robins Bridge	PJM	0	4	0
Lark	Sicklesmere	PDS	0	2	0
Leiston Beck	Lovers Lane Br	EJB	0	2	0
Old Ancholme	Brigg	SJB	0	2	0
Bain	Hemingby	AS	3	4	4
Horncastle Canal	Dalderry	AS	0	2	3
* Middleton Stop Dr	Middleton Towers	WTC	-	-	-

\* indicates no vial of animals present in sample.

TABLE 3. The 21 summer samples audited for Anglian Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'

River	Site	Sorter	Losses	Gains	Omissions
Nene	Nether Heyford	RPC	1	1	0
Hobhole Drain	Freiston Bridge	CAE	0	1	0
Tiffey	Carlton Forehoe	EJB	0	6	0
Chater	Lyndon Road Br	AS	1	7	3
Ouse	Haversham Bridge	RFS	0	8	0
Everdon Brook	Everdon	AS	0	5	2
Dobbs Beck	Dobbs Lane	MJ	0	4	0
Heacham	Heacham Mill	WTC	0	7	1
Granta	Hildersham Ford	GTF	0	5	2
N Level Main Drain	Tydd Gote	RPC	0	1	0
Glem	Scotchford Bridge	PJM	0	5	0
Stretham C'water	Pumping Station	SEH	0	3	0
Brant	Blackmoor Bridge	CAE	1	2	0
Nar	West Acre	WTC	2	6	0
Brampton Branch	Kingsthorpe	IG	0	4	0
Stour	Pont B BBA Ltd	FCB	0	6	0
Willow Brook South	S. Priors Hall	IG	0	0	0
Greyfleet Drain	Queens Bridge	PH	0	0	0
Long Eau	Little Carlton	PH	0	5	0
Great Eau	Cloves Bridge	PH	1	4	0
Laceby Beck	Laceby	SJB	0	5	0

TABLE 4. The 18 autumn samples audited for Anglian Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'.

River	Site	Sorter	Losses	Gains	Omissions
Wensum	Bintry Mill	MJ	0	1	0
Alconbury Brook	Alconbury Ford	RFS	0	4	0
East Fen C'water	Stickney	SJB	0	0	0
Nene	Flore Road Bridge	PH	0	2	0
Grand Union Canal	A43 Blisworth	IG	0	1	0
Grand Union Canal	East of A5	SJL	0	6	0
Stour	Little Thurlow	FCB	0	1	0
Nene	Cogenhoe	CAE	1	5	0
Box Trib (Groton)	Horners Green	PJM	0	0	0
Stirtloe Brook	Offord Intake	JN	0	8	3
Didlington Brook	Margetts Farm	JN	0	2	0
East Ruston Stream	New Bridge	EB	1	2	2
Brampton Branch	Chapel Brampton	SJL	0	6	0
Nar	KingsLynn	WTC	3	8	2
Mid Level Main Dr	Mullicourt Priory	JN	0	3	0
Old West	Old Streatham PS	SEH	0	3	0
Ripton Brook	Bury	JN	0	3	0
Louth Canal	Ticklepenny Lock	SJL	0	1	1

**TABLE 5**  
**Results of individual sample audits**

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Elstow Brook
SEASON	Spring	SITE	Outflow Stewartby Lake
SORTER	RFS	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1. Lymnaeidae*	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)  N/a	2. Planariidae 3. Dendrocoelidae 4. Lymnaeidae* 5. Sphaeriidae 6. Erpobdellidae 7. Caenidae 8. Haliplidae 9. Polycentropodidae 10. Molannidae 11. Leptoceridae

NET LOSSES        NET GAINS   

NOTES

1. Empty shells in vial
2. Dugesia polychroa, D. tigrina, Polycelis sp.
8. Larvae
9. Cyrnus flavidus
11. Athripsodes aterrimus, Mystacides sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Witcham Gravel Dr
SEASON	Spring	SITE	Catchwater Sl Mepal
SORTER	SEH	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:            i) BMWP families listed on sample data sheet and            ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:            i) BMWP families listed on sample data sheet and            ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p> <p style="text-align: center; font-size: 1.2em;">N/a</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: left; font-size: 1.1em;">           1.Valvatidae            2.Sphaeriidae            3.Oligochaeta            4.Chironomidae         </p>

NET LOSSES        NET GAINS   

NOTES

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Ancholme
SEASON	Spring		SITE	Horkstow
SORTER	SJB		SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1. Viviparidae 2. Unionidae	None
<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)  N/a	3. Planariidae 4. Corophiidae 5. Leptoceridae

NET LOSSES        NET GAINS   

NOTES

1,2 Viviparus & Unionid presumed too large for vial  
 3. Dugesia sp.  
 5. Mystacides sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Witham
SEASON	Spring	SITE	Langrice Br
SORTER	CAE	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	BMWP FAMILIES NOT FOUND BY IFE  1. Planariidae* 2. Coenagriidae* 3. Haliplidae* 4. Chironomidae*	ADDITIONAL FAMILIES FOUND BY IFE  None
B	<u>SAMPLE</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	BMWP FAMILIES NOT FOUND BY IFE  (This box only completed when no vial supplied with sample)  N/a	ADDITIONAL FAMILIES FOUND BY IFE  5. Planariidae* 6. Valvatidae 7. Planorbidae 8. Sphaeriidae 9. Haliplidae* 10. Hydrophilidae 11. Elmidae 12. Tipulidae 13. Chironomidae*

NET LOSSES        NET GAINS   

NOTES    1,2 & 3 Label reads "not incl Planariidae, Haliplidae, Coenagriidae"  
 10. Laccobius sp. (a+1)  
 11. Oulimnius sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Cam
SEASON	Spring	SITE	Coe Fen Br, Cambridge
SORTER	GTF	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>1. Limnephilidae</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p> <p>N/a</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>2. Neritidae                      3. Baetidae                      4. Caenidae                      5. Coenagriidae                      6. Elmidae</p>

NET LOSSES        NET GAINS   

NOTES

3. Abdomen only  
 6. Elmis aenea larva

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Bain
SEASON	Spring	SITE	D/s Coningsby STW
SORTER	IG	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)  N/a	1. Hydrobiidae 2. Lymnaeidae 3. Planorbidae 4. Simuliidae

NET LOSSES        NET GAINS   

NOTES

1. Bithynia tentaculata
2. Lymnaea sp (damaged)
3. Armiger crista, Anisus vortex
4. Simulium sp larva

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Upper Witham
SEASON	Spring	SITE	Bracebridge
SORTER	RPC	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE		None	None
<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE		(This box only completed when no vial supplied with sample)  N/a	1. Viviparidae 2. Haliplidae

NET LOSSES        NET GAINS   

NOTES

1. Viviparus sp. (juvenile)  
 2. Adult + larvae

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Sincil Dyke
SEASON	Spring	SITE	Destructor
SORTER	RPC	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p>

NET LOSSES        NET GAINS   

NOTES

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Cam
SEASON	Spring	SITE	Chesterton
SORTER	GTF	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>1. Glossiphoniidae*</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>2. Planariidae 3. Glossiphoniidae*</p>

NET LOSSES        NET GAINS   

NOTES    2. Dugesia tigrina

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Cut Off Channel
SEASON	Spring		SITE	Methwold Hythe Br
SORTER	SEH		SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:            i) BMWP families listed on sample data sheet and            ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>1. Polycentropodidae</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>2. Psychomyiidae</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:            i) BMWP families listed on sample data sheet and            ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p> <p>N/a</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>3. Planorbidae            4. Baetidae            5. Hydrophilidae            6. Elmidae            7. Limnephilidae            8. Tipulidae</p>

NET LOSSES        NET GAINS   

NOTES

3. Anisus vortex  
 4. Cloeon dipterum  
 5. Laccobius sp. (a+1)  
 6. Larvae  
 8. Tipula sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	N.Lynn Drain
SEASON	Spring	SITE	61M09
SORTER	WTC	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	N/a	N/a
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)  None	1. Hydrobiidae 2. Chironomidae

NET LOSSES   

NET GAINS   

NOTES

1. Assimineia grayana, Hydrobia ulvac

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Tove
SEASON	Spring	SITE	Cappenham Br
SORTER	PDS	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE		N/a	N/a

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE		(This box only completed when no vial supplied with sample)  1 Hydropsychidae	2 Hydrobiidae 3 Lymnaeidae 4 Limnephilidae

NET LOSSES        NET GAINS   

NOTES

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

SEASON

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Sphaeriidae 2 Glossiphoniidae 3 Asellidae

NET LOSSES

NET GAINS

NOTES

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Londonthorpe Beck
SEASON	Spring	SITE	Belton Park
SORTER	AS	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>1 Glossiphoniidae*                      2 Limnephilidae*                      3 Chironomidae*                      4 Simuliidae*</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>5 Planariidae                      6 Glossiphoniidae*                      7 Nemouridae                      8 Corixidae                      9 Limnephilidae*                      10 Tipulidae                      11 Chironomidae*                      12 Simuliidae*</p>

NET LOSSES        NET GAINS   

NOTES

7 Amphinemura standfussi  
 8 Hesperocorixa sahlbergi  
 10 Ptilaria sp. & Tipula sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Blackwater
SEASON	Spring	SITE	Blackwater Br
SORTER	MJ	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p>1 Astacidae</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>None</p>
<b>B</b>	<p><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>2 Planorbidae                      3 Polycentropodidae                      4 Hydroptilidae</p>

NET LOSSES        NET GAINS   

NOTES

1 Astacidae assumed returned to river  
 3 Polycentropus flavomaculatus  
 4 Ithytrichia sp.

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

SEASON

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1.Dreissenidae* 2.Unionidae* 3.Psychomyidae 4.Chironomidae	5.Oligochaeta
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	6.Viviparidae 7.Dreissenidae* 8.Unionidae*

NET LOSSES

NET GAINS

NOTES  
 1 & 2 Dreissena & Unionid assumed too large for vial  
 3 Ecnomus tenellus not found in vial

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION

RIVER

SEASON

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Valvatidae	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Planariidae 3 Planorbidae 4 Rhyacophilidae

NET LOSSES

NET GAINS

NOTES

- 1 Valvata-like terrestrial snail in vial
- 2 Polycelis felina
- 3 Bathyomphalus contortus
- 4 Agapetus sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Lark
SEASON	Spring	SITE	Bury St Edmonds
SORTER	GTF	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Baetidae	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Hydrobiidae 3 Sphaeriidae 4 Haliplidae

NET LOSSES        NET GAINS   

NOTES

1 Note saying "Bactidae" in vial  
 2 Potamopyrgus jenkinsi  
 3 Haliplus sp. (larva)

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Stour
SEASON	Spring	SITE	Dedham Mill Pool
SORTER	PJM	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL     B. IN SAMPLE

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Valvatidae
<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Leptoceridae

NET LOSSES     NET GAINS

NOTES

1 Valvata piscinalis & V. cristata  
2 Athripsodes sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Hen Brook
SEASON	Spring	SITE	St Neotts
SORTER	RFS	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p>1 Erpobdellidae*</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>None</p>
<b>B</b>	<p><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>2 Planariidae                      3 Planorbidae                      4 Erpobdellidae*                      5 Chironomidae</p>

NET LOSSES        NET GAINS   

NOTES

2 Planaria torva  
 3 Gyraulus albus

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Belchamp Brook
SEASON	Spring	SITE	Nether Hall
SORTER	FCB	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Lymnaeidae 2 Sphaeriidae 3 Helodidae 4 Hydropsychidae

NET LOSSES        NET GAINS   

NOTES

1 Lymnaca peregra  
 2 Pisidium sp.  
 3 Helodes sp. (larva)  
 4 Hydropsyche angustipennis

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Fosdyke Canal
SEASON	Spring		SITE	Pyewipe
SORTER	RPC(id)/AS		SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE		None	None
<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE		(This box only completed when no vial supplied with sample)	1 Hydrobiidae 2 Ancylidae 3 Psychomyiidae 4 Hydroptilidae

NET LOSSES        NET GAINS   

NOTES

- 1 Potamopyrgus jenkinsi
- 2 Ancylus fluviatilis
- 3 Tinodes waeneri
- 4 Without case - Hydroptila sp.?

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Willoughby High Dr
SEASON	Spring	SITE	Chapel St Leonards
SORTER	CAE	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None
<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Physidae 2 Notonectidae 3 Leptoceridae

NET LOSSES        NET GAINS   

NOTES

2 Small nymph  
3 Mystacides sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Ancholme
SEASON	Spring	SITE	Cadney
SORTER	IG	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Elmidae

NET LOSSES        NET GAINS   

NOTES    1 Oulimnius sp. (larva)

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

SEASON

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Hydrophilidae	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Sphaeriidae 3 Sialidae 4 Tipulidae

NET LOSSES

NET GAINS

NOTES

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Wensum
SEASON	Spring		SITE	A1065 Br. S.Raynham
SORTER	EJB		SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:            i) BMWP families listed on sample data sheet and            ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:            i) BMWP families listed on sample data sheet and            ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: left;">               1 Valvatidae                2 Planorbidae                3 Leptophlebiidae                4 Gyridae                5 Scirtidae.                6 Hydroptilidae             </p>

NET LOSSES        NET GAINS   

- NOTES
- 1 Valvata piscinalis, V.cristata
  - 2 Gyraulus albus
  - 3 Habrophlebia fusca
  - 4 Orectochilus villosus
  - 5 Elodes sp.
  - 6 Ithytrichia sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Hintlesham
SEASON	Spring	SITE	Church Lane Bridge
SORTER	MJ	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	BMWP FAMILIES NOT FOUND BY IFE  None	ADDITIONAL FAMILIES FOUND BY IFE  None
B	<u>SAMPLE</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	BMWP FAMILIES NOT FOUND BY IFE  (This box only completed when no vial supplied with sample)	ADDITIONAL FAMILIES FOUND BY IFE  1 Planariidae 2 Sphaeriidae 3 Erpobdellidae 4 Sialidae 5 Simuliidae

NET LOSSES        NET GAINS   

NOTES

1 Crenobia alpina  
 3 Erpobdella octoculata  
 4 Sialis fuliginosa  
 5 Simulium costatum

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Bourne Brook

SEASON Spring

SITE Nightingale Hall Farm

SORTER FCB

SAMPLE CODE NRA01 0950

AQC OF BMWP FAMILIES    A. IN VIAL +

B. IN SAMPLE +

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Planorbidae 2 Caenidae 3 Nouridae 4 Hydroptilidae 5 Simuliidae

NET LOSSES 0

NET GAINS 5

NOTES

- 1 Bathyomphalus contortus 1 only
- 2 Caenis luctuosa group
- 3 Amphinemura standfussi 1 only
- 4 Hydroptila sp.

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Holland Brook
SEASON	Spring	SITE	Holland Main Rd Bridge
SORTER	FCB	SAMPLE CODE	NRA01 0939

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Physidae	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Valvatidae 3 Hydrobiidae 4 Oligochaeta 5 Baetidae 6 Tipulidae.

NET LOSSES        NET GAINS   

NOTES

1 Succinea sp.  
 2 Valvata cristata  
 3 Bithynia tentaculata, Potamopyrgus jenkinsi  
 5 Cloeon dipterum 1 only  
 6 Helius sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION

RIVER

SEASON

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Planariidae

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Lymnaeidae 3 Haliplidae 4 Eluidae

NET LOSSES

NET GAINS

NOTES

2 Lymnaea peregra  
3 Haliplus sp. (larva) 1 only  
4 Oulimnius sp. (adults + larvae)

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Robins Brook
SEASON	Spring	SITE	Robins Bridge
SORTER	PJM	SAMPLE CODE	NRA01 0975

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Planariidae 2 Sphaeriidae 3 Erpobdellidae 4 Elmidae

NET LOSSES   

NET GAINS   

NOTES

1 Polycelis felina 1 only  
 2 Pisidium sp.  
 3 Erpobdella octoculata 1 only (small)  
 4 Elmis aenea, Limnius volckmari (larvae)

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Lark

SEASON Spring

SITE A134 Sicklesmere

SORTER PDS

SAMPLE CODE NRA01 1044

AQC OF BMWP FAMILIES    A. IN VIAL    +

B. IN SAMPLE    +

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Hydrophilidae 2 Hydroptilidae

NET LOSSES 0

NET GAINS 2

NOTES 1 Indet larvae  
2 Hydroptila sp. 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Leiston Beck
SEASON	Spring	SITE	Lovers Lane Bridge
SORTER	EJB	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">None</p>
B	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">1 Sphaeriidae 2 Gammaridae</p>

NET LOSSES        NET GAINS   

NOTES

1 Pisidium sp. 1 only  
 2 Gammarus sp., Crangonyx pseudogracilis

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Old Ancholme
SEASON	Spring	SITE	Brigg
SORTER	SJB	SAMPLE CODE	NRA01 0024

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">1 Coenagriidae 2 Elmidae</p>

NET LOSSES        NET GAINS   

NOTES

1 Ischnura elegans 1 only  
 2 Oulimnius sp. (larvae)

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Bain
SEASON	Spring	SITE	Hemingby
SORTER	AS	SAMPLE CODE	NRA01 0143

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>1 Sphaeriidae*                      2 Oligochaeta                      3 Asellidae*                      4 Gammaridae*                      5 Haliplidae*                      6 Chrysomelidae                      7 Hydropsychidae</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>8 Hydrobiidae                      9 Sphaeriidae*                      10 Asellidae*                      11 Gammaridae*                      12 Baetidae                      13 Haliplidae*                      14 Gyrimidae                      15 Rhyacophilidae</p>

NET LOSSES        NET GAINS   

NOTES	<p>6 Terrestrial beetle in vial                      8 Bithynia tentaculata 1 only                      12 Baetis scambus/fuscatus                      14 Orectochilus villosus (larva) 1 only                      15 Rhyacophila dorsalis</p>
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# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Horncastle Canal
SEASON	Spring	SITE	Dalderry
SORTER	AS	SAMPLE CODE	NRA01 0147

AQC OF BMWP FAMILIES    A. IN VIAL     B. IN SAMPLE

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>1 Valvatidae*                      2 Planorbidae*                      3 Sphaeriidae*</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>4 Dytiscidae</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>5 Valvatidae*                      6 Planorbidae*                      7 Sphaeriidae*                      8 Gammaridae</p>

NET LOSSES     NET GAINS

NOTES 8 Crangonyx pseudogracilis

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Middleton Stop Drain
SEASON	Spring	SITE	Middleton Towers
SORTER	WTC	SAMPLE CODE	NRA01 0712

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

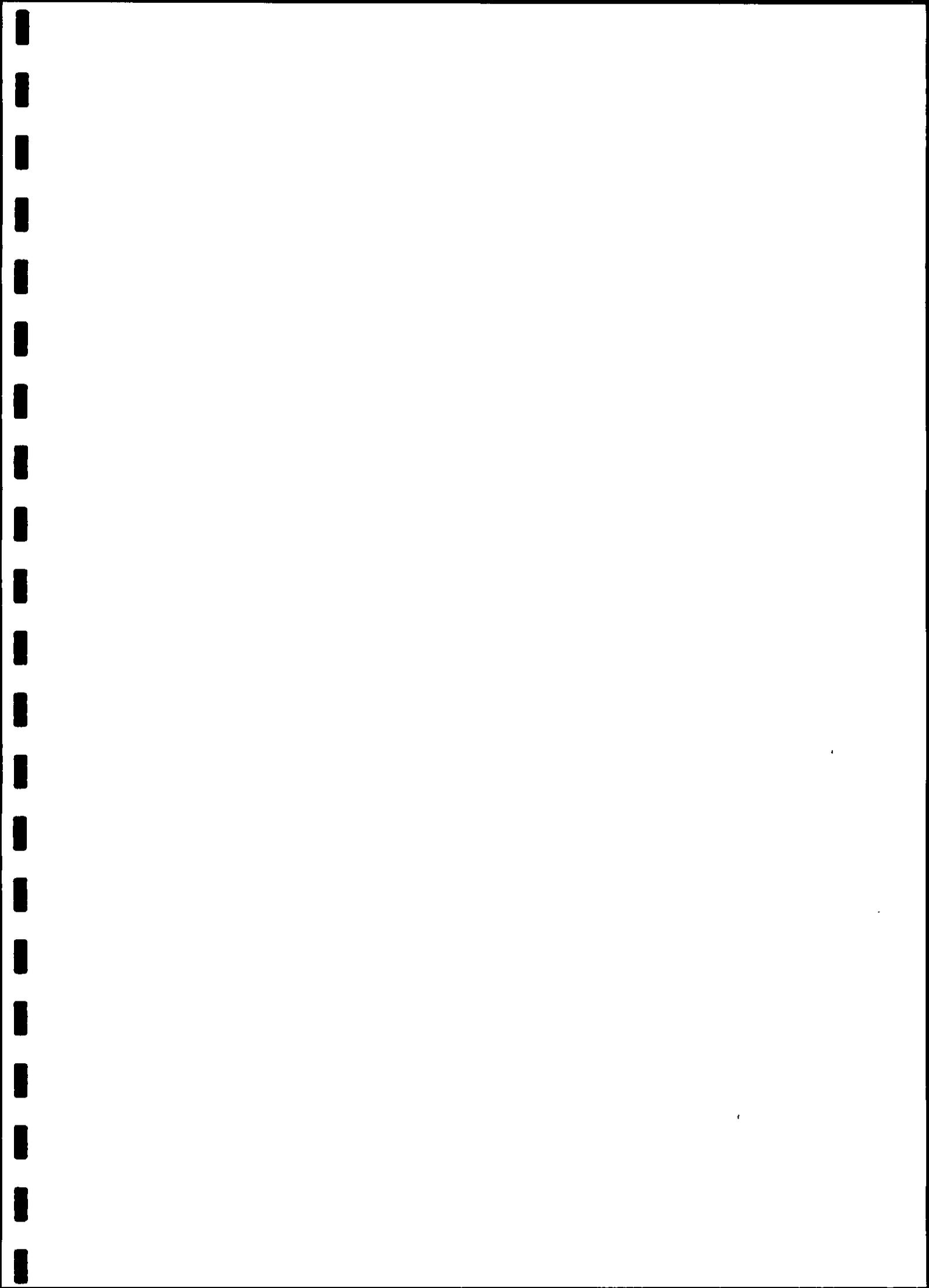
		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	No vial - not applicable	No vial - not applicable

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	

NET LOSSES        NET GAINS   

NOTES

Sample analysed by I.F.E. on 31.05.90  
 No data sheet for this site received, despite repeated requests  
 Therefore comparison of results impossible



# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Nene
SEASON	Summer	SITE	Nether Heyford
SORTER	RPC	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: 1) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Erpobdellidae	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: 1) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Elmidae

NET LOSSES   

NET GAINS   

NOTES

2 Oulimnius sp. (larva) 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Hobhole Drain
SEASON	Summer	SITE	Freiston Bridge
SORTER	CAE	SAMPLE CODE	NRA01 0187

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>

<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">1 Hydrophilidae</p>
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NET LOSSES        NET GAINS   

NOTES

1 Laccobius biguttatus

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Tiffey
SEASON	Summer	SITE	Carlton Forehoe
SORTER	EJB	SAMPLE CODE	

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">1 Corixidae</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">                         2 Planariidae                          3 Lymnaeidae                          4 Physidae                          5 Baetidae                          6 Notonectidae                     </p>

NET LOSSES        NET GAINS   

NOTES

2 Polycelis sp. 1 only  
 3 Lymnaea peregra 1 only  
 4 Physa fontinalis 1 only  
 5 Baetis sp. 1 only  
 6 Notonecta sp. (nymph) 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Chater
SEASON	Summer		SITE	Lyndon Rd Br
SORTER	AS		SAMPLE CODE	NRA01 0209

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	BMWP FAMILIES NOT FOUND BY IFE  1 Sphaeriidae* 2 Erpobdellidae* 3 Notonectidae 4 Limnephilidae*	ADDITIONAL FAMILIES FOUND BY IFE  5 Haliplidae 6 Simuliidae
B	<u>SAMPLE</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	BMWP FAMILIES NOT FOUND BY IFE  (This box only completed when no vial supplied with sample)	ADDITIONAL FAMILIES FOUND BY IFE  7 Sphaeriidae* 8 Erpobdellidae* 9 Baetidae 10 Calopterygidae 11 Gerridae 12 Elmidae 13 Hydroptilidae 14 Limnephilidae*

NET LOSSES        NET GAINS   

- NOTES
- 7 Pisidium sp.
  - 8 Erpobdella octoculata 1 only
  - 9 Baetis sp. (abdomens only)
  - 10 Calopteryx splendens
  - 11 Gerris lacustris 1 only
  - 12 Oulimnius tuberculatus (adults), Elmis aenea (larva)
  - 13 Hydroptila sp.
  - 14 Limnephilus sp. 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Ouse
SEASON	Summer	SITE	Haversham Bridge
SORTER	RFS	SAMPLE CODE	NRA01 0406

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>

<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: left; font-size: 0.9em;">                         1 Valvatidae                          2 Physidae                          3 Oligochaeta                          4 Baetidae                          5 Coenagriidae                          6 Hydroptilidae                          7 Leptoceridae                          8 Simuliidae                     </p>
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NET LOSSES        NET GAINS   

- NOTES
- |   |
|---|
| <ul style="list-style-type: none"> <li>1 Valvata piscinalis</li> <li>2 Physa fontinalis</li> <li>4 Baetis scambus/fuscatus</li> <li>5 Ischnura elegans 1 only</li> <li>6 Hydroptila sp.</li> <li>7 Ceraclea dissimilis</li> </ul> |
|---|

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Everdon Brook
SEASON	Summer	SITE	Everdon
SORTER	AS	SAMPLE CODE	NRA01 0250

AQC OF BMWP FAMILIES    A. IN VIAL     +    B. IN SAMPLE     +

	LOSSES	GAINS
A	<u>VIAL</u>	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	BMWP FAMILIES NOT FOUND BY IFE  1 Sphaeriidae* 2 Elmidae*
B	<u>SAMPLE</u>	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)  3 Lymnaeidae 4 Sphaeriidae* 5 Nouridae 6 Hydrophilidae 7 Elmidae* 8 Polycentropodidae 9 Limnephilidae

NET LOSSES     0    NET GAINS     5

- NOTES
- 3 Lymnaea peregra 1 only
  - 4 Pisidium sp.
  - 5 Amphinemura sp. 1 only
  - 6 Helophorus sp. 1 only
  - 7 Elms, Limnius, Oulimnius, Riolus
  - 8 Polycentropus sp. 1 only
  - 9 Indet Limnephilid 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Dobbs Beck
SEASON	Summer	SITE	Dobbs Lane
SORTER	MJ	SAMPLE CODE	NRA01 0763

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p>None</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>None</p>
<b>B</b>	<p><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>1 Planariidae                      2 Valvatidae                      3 Caenidae                      4 Hydrophilidae</p>

NET LOSSES        NET GAINS   

NOTES

1 Indet Planariidae 1 only  
 2 Valvata piscinalis 1 only  
 3 Caenis horaria 1 only  
 4 Indet larvae

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Heacham
SEASON	Summer	SITE	Heacham Mill
SORTER	WTC	SAMPLE CODE	NRA01 0724

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	BMWP FAMILIES NOT FOUND BY IFE  1 Glossiphoniidae*	ADDITIONAL FAMILIES FOUND BY IFE  2 Baetidae 3 Corixidae
<b>B</b>	<u>SAMPLE</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	BMWP FAMILIES NOT FOUND BY IFE  (This box only completed when no vial supplied with sample)	ADDITIONAL FAMILIES FOUND BY IFE  4 Planariidae 5 Valvatidae 6 Sphaeriidae 7 Glossiphoniidae* 8 Asellidae 9 Hydroptilidae

NET LOSSES        NET GAINS   

NOTES	3 Micronecta sp. 4 Polycelis sp. 1 only 5 Valvata piscinalis 1 only 6 Pisidium sp. 1 only 7 Helobdella stagnalis, Glossiphonia complanata 8 Asellus aquaticus 1 only 9 Oxyethira sp.
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# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Granta
SEASON	Summer	SITE	Hildersham Ford
SORTER	GTF	SAMPLE CODE	NRA01 0539

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Caenidae* 2 Elmidae*	3 Hydrophilidae
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	4 Hydrobiidae 5 Caenidae* 6 Elmidae* 7 Hydroptilidae 8 Goeridae 9 Tipulidae

NET LOSSES        NET GAINS   

NOTES

- 3 Hydraena nigrita in vial, Helophorus brevipalpis in sample
- 4 Potamopyrgus jenkinsi
- 5 Caenis luctuosa group
- 6 Elmis aenea (adults + larvae), Oulimnius sp (larvae)
- 7 Hydroptila sp. (pupa) 1 only
- 8 Indet Goeridae (pupa) 1 only
- 9 Dicranota sp.

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	N Level Main Drain
SEASON	Summer	SITE	A 1101 Tydd Gote
SORTER	RPC	SAMPLE CODE	NRA01 0356

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Oligochaeta

NET LOSSES        NET GAINS   

NOTES	<p>1 Nais sp. 1 only</p> <p>Prawns are Palaemon longirostris, not Neomysis integer</p>
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# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Glen
SEASON	Summer	SITE	Scotchford Bridge
SORTER	PJM	SAMPLE CODE	NRA01 0905

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: left; padding-left: 10px;">                         1 Ephemereallidae                          2 Haliplidae                          3 Hydrophilidae                          4 Linnephilidae                          5 Leptoceridae                     </p>

NET LOSSES        NET GAINS   

NOTES

1 Ephemereella ignita 1 only  
 2 Haliplus sp. (larvae)  
 3 Helophorus brevipalpis  
 4 Linnephilus lunatus 1 only  
 5 Athripsodes sp. (pupa) 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Stretham Catchwater
SEASON	Summer	SITE	Pumping Station
SORTER	SEH	SAMPLE CODE	NRA01 0525

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>
<b>B</b>	<p><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>1 Haliplidae                      2 Hydroptilidae                      3 Leptoceridae</p>

NET LOSSES        NET GAINS   

NOTES

1 Haliplus sp. (larva) 1 only  
 2 Agraylea multipunctata  
 3 Triaenodes bicolor 1 only

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION  RIVER   
 SEASON  SITE   
 SORTER  SAMPLE CODE

AQC OF BMWF FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMW FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWF families listed on sample data sheet and ii) BMWF families found in VIAL by IFE	1 Physidae	None
B	<u>SAMPLE</u>	BMW FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWF families listed on sample data sheet and ii) BMWF families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Sphaeriidae 3 Hydrophilidae

NET LOSSES  NET GAINS

NOTES  
 2 Pisidium sp., Sphaerium sp.  
 3 Indet larva 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Nar
SEASON	Summer	SITE	West Acre
SORTER	WTC	SAMPLE CODE	NRA01 0703

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>1 Valvatidae 2 Limnephilidae</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>3 Sericostomatidae</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>4 Haliplidae 5 Dytiscidae 6 Rhyacophilidae 7 Hydroptilidae 8 Simuliidae</p>

NET LOSSES        NET GAINS   

- NOTES
- 1 Terrestrial species in vial
  - 3 Sericostoma personatum
  - 4 Brychius elevatus (adults + larva)
  - 5 Potamonectes sp. (larvae)
  - 6 Rhyacophila dorsalis 1 only
  - 7 Ithytrichia sp.
  - 8 Simulium ornatum group

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Brampton Branch
SEASON	Summer	SITE	Nene, Kingsthorpe
SORTER	IG	SAMPLE CODE	NRA01 0280

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>
<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">                         1 Physidae                          2 Asellidae                          3 Ephemerellidae                          4 Caenidae                     </p>

NET LOSSES   

NET GAINS   

NOTES	<p>1 Physa fontinalis 1 only                      2 Asellus aquaticus                      3 Ephemerella ignita 1 only                      4 Caenis luctuosa/macrura</p>
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# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Stour
SEASON	Summer	SITE	Point B BBA Ltd
SORTER	FCB	SAMPLE CODE	NRA01 0902

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p><u>VIAL</u></p> <p>Differences between:</p> <p>i) BMWP families listed on sample data sheet and</p> <p>ii) BMWP families found in VIAL by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">None</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">None</p>
<b>B</b>	<p><u>SAMPLE</u></p> <p>Differences between:</p> <p>i) BMWP families listed on sample data sheet and</p> <p>ii) BMWP families found in SAMPLE by IFE</p>	<p>BMWP FAMILIES NOT FOUND BY IFE</p> <p>(This box only completed when no vial supplied with sample)</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>1 Physidae 2 Baetidae 3 Ephemerellidae 4 Hydrophilidae 5 Sialidae 6 Simuliidae</p>

NET LOSSES        NET GAINS   

NOTES

1 Physa fontinalis 1 only

2 Baetis scambus/fuscatus, Centroptilum luteolum

3 Ephemerella ignita

4 Indet larvae

5 Sialis sp. 1 only

6 Simulium noelleri 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Willow Brook South
SEASON	Summer	SITE	South Priors Hall
SORTER	IG	SAMPLE CODE	NRA01 0331

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	None

NET LOSSES        NET GAINS   

NOTES

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	<input type="text" value="Anglian"/>	RIVER	<input type="text" value="Greyfleet Drain"/>
SEASON	<input type="text" value="Summer"/>	SITE	<input type="text" value="Queens Bridge"/>
SORTER	<input type="text" value="PH"/>	SAMPLE CODE	<input type="text" value="NRA01 0053"/>

AQC OF BMWP FAMILIES    A. IN VIAL     B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	None

NET LOSSES     NET GAINS

NOTES

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Long Eau
SEASON	Summer	SITE	Little Carlton
SORTER	PH	SAMPLE CODE	NRA01 0057

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Sphaeriidae 2 Gammaridae 3 Psychomyiidae 4 Hydroptilidae 5 Simuliidae

NET LOSSES        NET GAINS   

NOTES

- 1 Sphaerium sp., Pisidium sp.
- 2 Crangonyx pseudogracilis
- 3 Tinodes waeneri 1 only
- 4 Agraylea multipunctata 1 only
- 5 Simulium angustitarse group, S. ornatum group

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Great Eau
SEASON	Summer	SITE	Cloves Bridge
SORTER	PH	SAMPLE CODE	NRA01 0059

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Mesoveliidae	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet. and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Valvatidae 3 Sphaeriidae 4 Glossiphoniidae 5 Elmidae

NET LOSSES        NET GAINS   

NOTES

- 1 Terrestrial Hemipteran in vial
- 2 Valvata cristata, V. piscinalis
- 3 Pisidium sp.
- 4 Helobdella stagnalis
- 5 Elmis aenea (larva), Oulimnius sp.(larva)

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION  RIVER   
 SEASON  SITE   
 SORTER  SAMPLE CODE

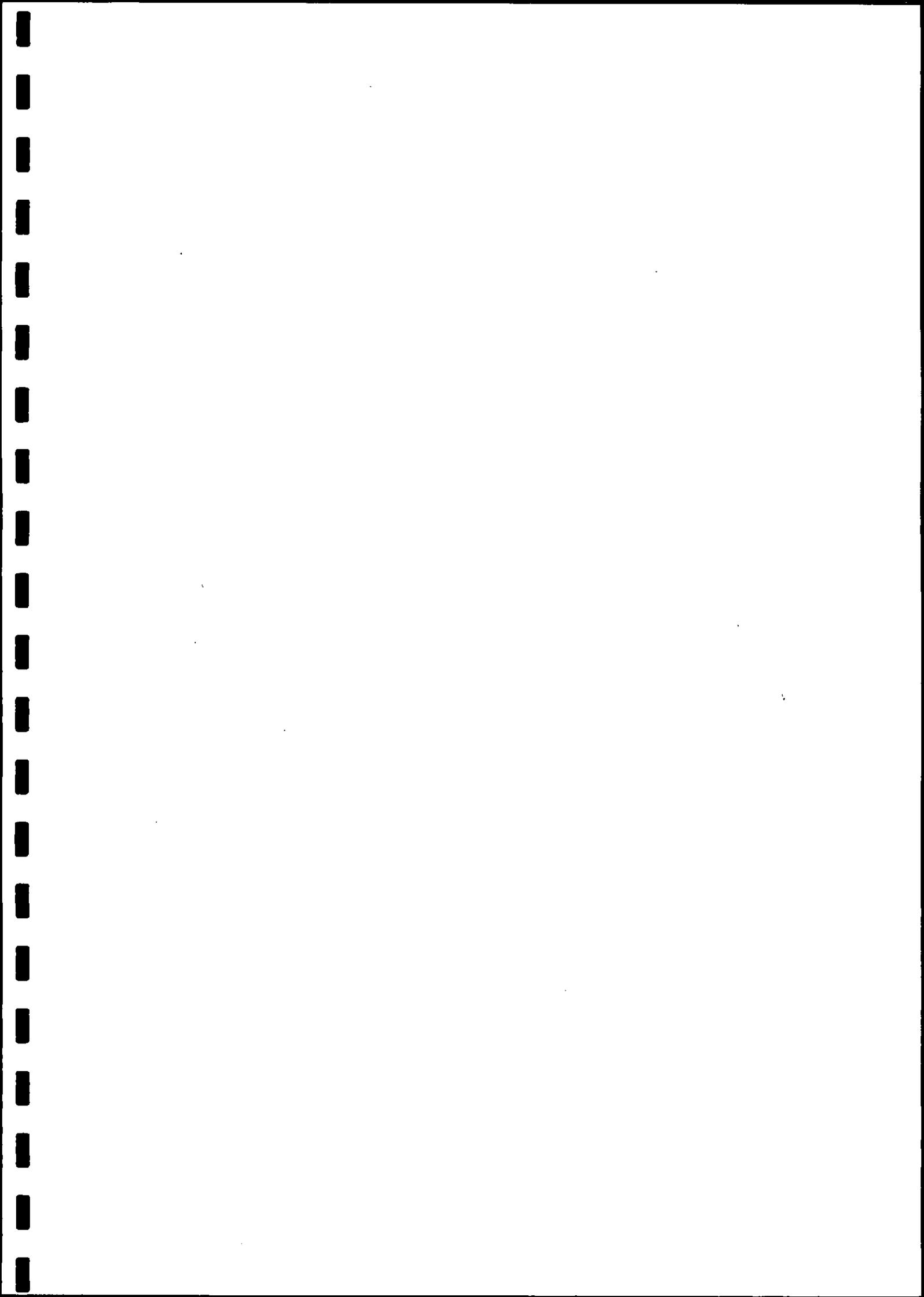
AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Hydrobiidae 2 Physidae 3 Gammaridae 4 Baetidae 5 Elmidae

NET LOSSES  NET GAINS

- NOTES
- 1 Potamopyrgus jenkinsi
  - 2 Physa fontinalis
  - 3 Gammarus pulex 1 only
  - 4 Cloeon dipterum
  - 5 Elmis aenea (adult) 1 only



1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

SEASON

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Simuliidae

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	None

NET LOSSES

NET GAINS

NOTES

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Alconbury Brook

SEASON Autumn

SITE Alconbury Ford

SORTER RFS

SAMPLE CODE NRA01 0502

AQC OF BMWP FAMILIES    A. IN VIAL    +

B. IN SAMPLE    +

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Physidae 2 Planorbidae 3 Sphaeriidae 4 Glossiphoniidae

NET LOSSES 0

NET GAINS 4

NOTES

- 1 Physa fontinalis 1 only
- 2 Gyraulus albus 1 only
- 3 Pisidium sp.
- 4 Theromyzon tessulatum 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	East Fen Catchwater
SEASON	Autumn		SITE	Stickney
SORTER	SJB		SAMPLE CODE	NRA01 0176

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	BMWP FAMILIES NOT FOUND BY IFE  None	ADDITIONAL FAMILIES FOUND BY IFE  None

<b>B</b>	<u>SAMPLE</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	BMWP FAMILIES NOT FOUND BY IFE  (This box only completed when no vial supplied with sample)	ADDITIONAL FAMILIES FOUND BY IFE  None
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NET LOSSES        NET GAINS   

NOTES

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Nene
SEASON	Autumn	SITE	Flore Road Bridge
SORTER	PH	SAMPLE CODE	NRA01 0256

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<p style="text-align: center;"><u>VIAL</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in VIAL by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">None</p>

<b>B</b>	<p style="text-align: center;"><u>SAMPLE</u></p> <p>Differences between:                      i) BMWP families listed on sample data sheet and                      ii) BMWP families found in SAMPLE by IFE</p>	<p style="text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">1 Ancylidae 2 Caenidae</p>
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NET LOSSES        NET GAINS   

NOTES

1 Ancylus fluviatilis  
 2 Caenis luctuosa/macrura 1 only

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION  RIVER   
 SEASON  SITE   
 SORTER  SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Glossiphoniidae

NET LOSSES  NET GAINS

NOTES

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Grand Union Canal

SEASON Autumn

SITE East of A5

SORTER S JL

SAMPLE CODE NRA01 0366

AQC OF BMWP FAMILIES    A. IN VIAL    +

B. IN SAMPLE    +

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Glossiphoniidae

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Planariidae 3 Physidae 4 Erpobdellidae 5 Haliplidae 6 Sialidae

NET LOSSES 0

NET GAINS 6

- NOTES
- 1 *Glossiphonia complanata*
  - 2 *Dugesia tigrina*
  - 3 *Physa fontinalis* 1 only
  - 4 *Erpobdella octoculata*
  - 5 *Haliplus fluviatilis*, *H. lineolatus* (adults + 1 larva)
  - 6 *Sialis lutaria* 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Stour

SEASON Autumn

SITE Lt Thurlow Church Bridge

SORTER FCB

SAMPLE CODE NRA01 0893

AQC OF BMWP FAMILIES    A. IN VIAL    +

B. IN SAMPLE    +

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Planorbidae

NET LOSSES 0

NET GAINS 1

NOTES 1 Gyraulus albus 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Nene

SEASON Autumn

SITE Cogenhoe

SORTER CAE

SAMPLE CODE NRA01 0284

AQC OF BMWP FAMILIES A. IN VIAL +

B. IN SAMPLE +

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE		1 Phryganeidae	2 Molannidae

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE		(This box only completed when no vial supplied with sample)	3 Valvatidae 4 Physidae 5 Elmidae 6 Psychomyiidae

NET LOSSES 1

NET GAINS 5

NOTES

- 2 Molanna angustata
- 3 Valvata piscinalis 1 only
- 4 Physa fontinalis
- 5 Elmis aenea (larva), Oulimnius sp. (larva)
- 6 Tinodes waeneri

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Box Tr (Groton)
SEASON	Autumn	SITE	Horners Green
SORTER	PJM	SAMPLE CODE	NRA01 0922

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

<b>B</b>	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	None

NET LOSSES        NET GAINS   

NOTES

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Stirtloe Brook
SEASON	Autumn		SITE	Access Rd Offord Intake
SORTER	JN		SAMPLE CODE	NRA01 0498

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Baetidae* 2 Sialidae* 3 Polycentropodidae*	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	4 Hydrobiidae 5 Sphaeriidae 6 Glossiphoniidae 7 Asellidae 8 Baetidae* 9 Gerridae 10 Sialidae* 11 Polycentropodidae* 12 Psychomyiidae 13 Hydropsychidae 14 Simuliidae

NET LOSSES   

NET GAINS   

NOTES	<ul style="list-style-type: none"> <li>4 Potamopyrgus jenkinsi</li> <li>5 Pisidium sp.</li> <li>6 Helobdella stagnalis</li> <li>7 Asellus aquaticus</li> <li>9 Indet Gerrid nymph 1 only</li> <li>12 Lype sp.</li> <li>13 Hydropsyche angustipennis</li> <li>14 Simulium angustitarse group</li> </ul>
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1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION  RIVER   
 SEASON  SITE   
 SORTER  SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Erpobdellidae 2 Baetidae

NET LOSSES  NET GAINS

NOTES  
 1 Erpobdella octoculata 1 only  
 2 Cloeon simile 1 only

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

SEASON

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Planariidae* 2 Planorbidae* 3 Tipulidae	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	4 Planariidae* 5 Lymnaeidae 6 Planorbidae* 7 Dytiscidae

NET LOSSES

NET GAINS

NOTES  
 2, 6 Empty shell in vial, Gyraulus albus in sample  
 3 Tabanid (Chrysops group) in vial  
 5 Lymnaea stagnalis 1 only  
 7 Hyphydrus ovatus, Stictonectes lepidus (adults)

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

SEASON

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL  B. IN SAMPLE

LOSSES

GAINS

A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	<ul style="list-style-type: none"> <li>1 Sphaeriidae</li> <li>2 Oligochaeta</li> <li>3 Coenagriidae</li> <li>4 Hydrophilidae</li> <li>5 Elmidae</li> <li>6 Hydroptilidae</li> </ul>

NET LOSSES

NET GAINS

NOTES

- 1 Pisidium sp.
- 3 Indet Coenagriid (juvenile) 1 only
- 4 Ochthebius minimus (adults), 1 Indet larva
- 5 Oulimnius sp. (larvae)
- 6 Hydroptila sp. (pupae)

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Nar

SEASON Autumn

SITE By-Pass Br, Kings Lynn

SORTER WTC

SAMPLE CODE NRA01 0706

AQC OF BMWP FAMILIES A. IN VIAL +

B. IN SAMPLE +

### LOSSES

### GAINS

A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Oligochaeta* 2 Agriidae 3 Corixidae* 4 Rhyacophilidae 5 Goeridae	6 Physidae 7 Glossiphoniidae 8 Pleidae 9 Chironomidae

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	10 Ancyliidae 11 Oligochaeta* 12 Baetidae 13 Corixidae* 14 Hydrophilidae 15 Leptoceridae

NET LOSSES 3

NET GAINS 8

NOTES

Site name on pot and label (Old Sluice) differs from that on NRA sheet (By-Pass Bridge). Site Reference on bottle is 58M11.

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Mid Level Main Drain
SEASON	Autumn	SITE	Mullicourt Priory
SORTER	JN	SAMPLE CODE	NRA01 0689

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Dendrocoelidae 2 Valvatidae 3 Hydrophilidae

NET LOSSES   

NET GAINS   

NOTES

1 Dendrocoelum lacteum 1 only  
2 Valvata piscinalis 1 only  
3 Laccobius minutus 1 only

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Old West River
SEASON	Autumn	SITE	Old Streatham P.S.
SORTER	SEH	SAMPLE CODE	NRA01 0519

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	1 Dendrocoelidae 2 Hydrophilidae 3 Hydroptilidae

NET LOSSES        NET GAINS   

NOTES

1 Dendrocoelum lacteum  
2 Laccobius minutus 1 only  
3 Agraylea multipunctata 1 only

# 1990 RIVER QUALITY SURVEY

## AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Ripton Brook
SEASON	Autumn	SITE	Bury
SORTER	JN	SAMPLE CODE	NRA01 0675

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
<b>A</b>	<u>VIAL</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	BMWP FAMILIES NOT FOUND BY IFE  None	ADDITIONAL FAMILIES FOUND BY IFE  None

<b>B</b>	<u>SAMPLE</u>  Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	BMWP FAMILIES NOT FOUND BY IFE  (This box only completed when no vial supplied with sample)	ADDITIONAL FAMILIES FOUND BY IFE  1 Valvatidae 2 Physidae 3 Hydropsychidae
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NET LOSSES   

NET GAINS   

NOTES

1 Valvata piscinalis 1 only  
 2 Physa fontinalis  
 3 Hydropsyche sp. (headless) 1 only

1990 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Louth Canal
SEASON	Autumn	SITE	Ticklepenny Lock
SORTER	SJL	SAMPLE CODE	NRA01 0044

AQC OF BMWP FAMILIES    A. IN VIAL        B. IN SAMPLE   

		LOSSES	GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Dendrocoelidae*	None

B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial supplied with sample)	2 Dendrocoelidae* 3 Corixidae

NET LOSSES   

NET GAINS   

NOTES    **3 Sigara dorsalis/striata 1 only**

