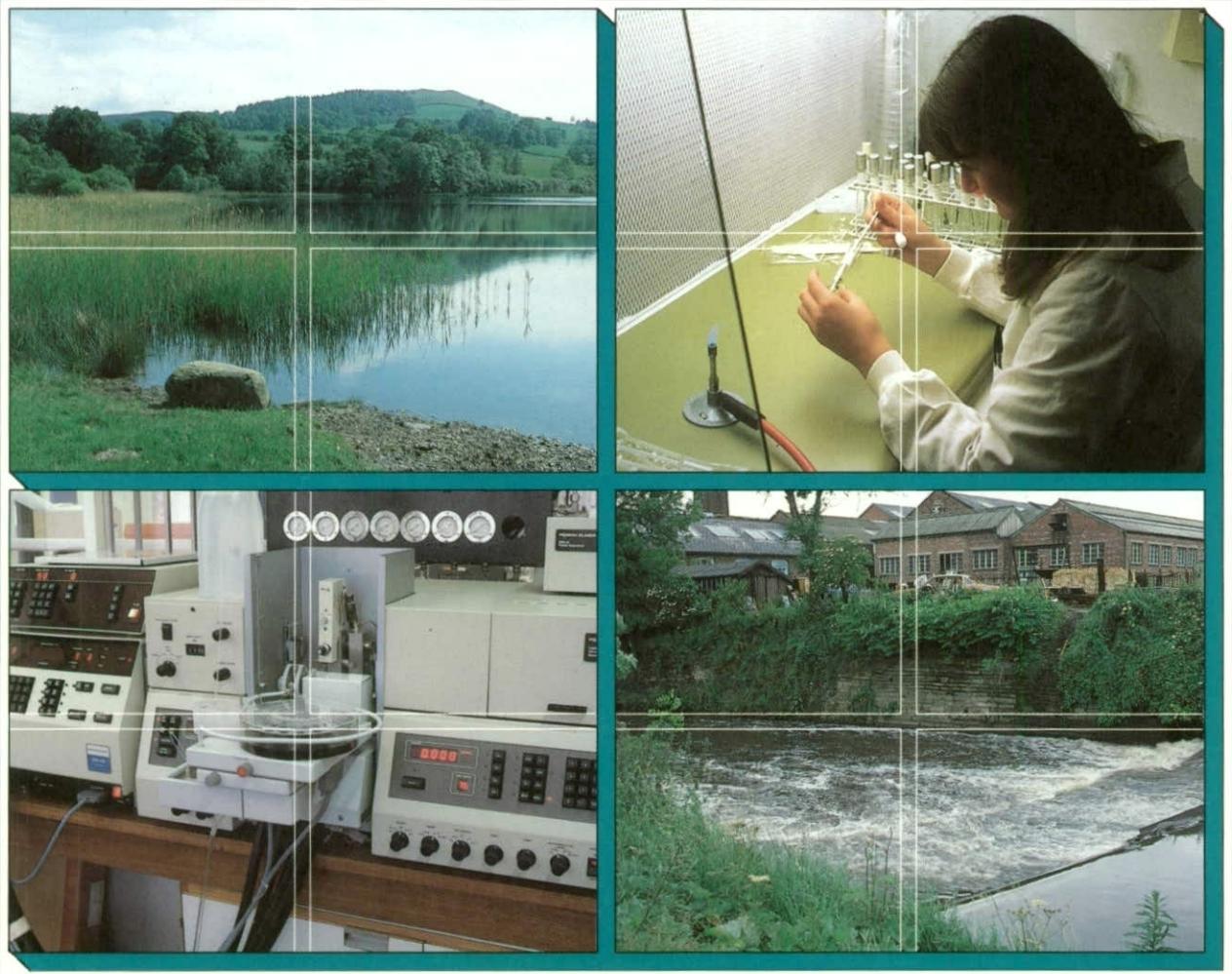




Institute of
Freshwater
Ecology

An audit of performance in the processing of macro-invertebrate samples in 1991. NRA Anglian Region

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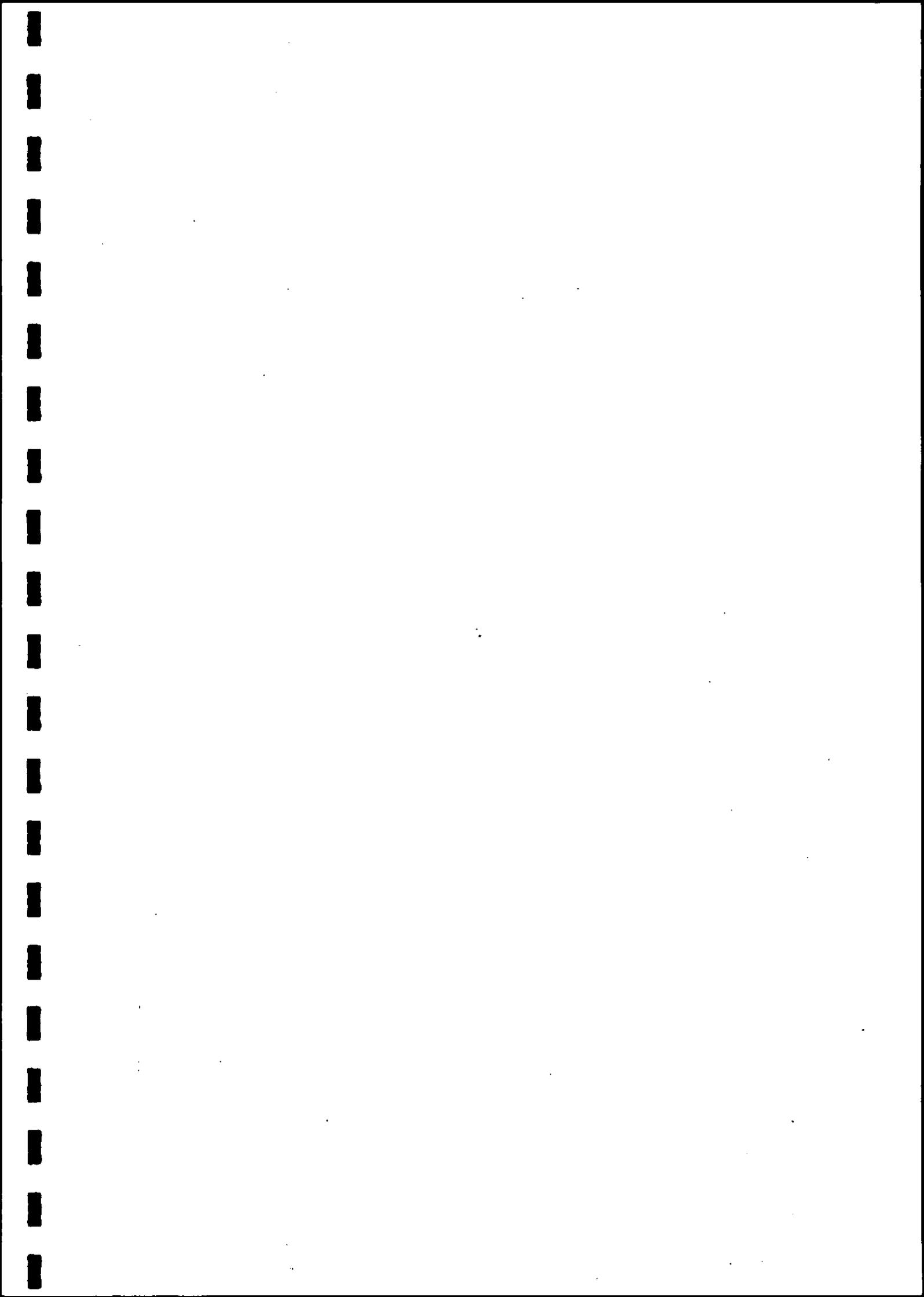
**An audit of performance in the processing
of macro-invertebrate samples in 1991.
NRA Anglian Region**

R.J.M. Gunn, J.F. Wright, J.M. Winder & J.H. Blackburn

Project leader:	J.F. Wright
Report date:	May 1992
Report to:	National Rivers Authority Anglian Region
IFE Report Ref:	RL/T04053x1/01
TFS Project No:	T04053x1

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The Institute of Freshwater Ecology is part of the Terrestrial and Freshwater Sciences Directorate of the Natural Environment Research Council.



1. INTRODUCTION

In 1991 the sampling of aquatic macro-invertebrates for the biological assessment of river quality continued throughout the United Kingdom. In England and Wales this task 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.

The majority of sites were sampled in spring, summer and autumn. Standard collection procedures, as used in the 1990 River Quality Survey, were retained and the sampling strategy was therefore compatible with RIVPACS (River InVertebrate Prediction And Classification System), which has been developed by the Institute of Freshwater Ecology (IFE). For a variety of reasons, a few locations were sampled in just one or two seasons.

Samples were sorted by NRA, RPB and DED personnel 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 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. As in 1990, the IFE was contracted to undertake an audit of the sample sorting and identification performance of each NRA region, several RPBs and the DED. This report presents the results of 60 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

Samples for audit were selected internally by each of the agencies being monitored. The biologists processing these samples had no prior knowledge of the samples to be audited.

The manner of sample selection, which biologists would be monitored and the number of audit samples from each season, were left to the discretion of the agency, within the limits of the total number of samples that IFE was contracted to audit.

3. SAMPLE PROCESSING

The normal protocol for NRA, RPB and DED biologists was to sort their samples within the laboratory and to 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 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 data sheet. Others arrived with the vial damaged in transit such that the representative examples were no longer separated. For these samples, 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 posterior 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 in which the vial of animals was damaged or missing, 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 the Appendix.

ACKNOWLEDGEMENTS

Thanks to Mike Furse for help and advice, to Kay Symes and Angela Matthews for assistance with cataloguing and storage of samples and to Valerie Palmer and Diana Morton for typing the manuscript.

TABLE 1. The IFE Report form

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION		RIVER	
DATE		SITE	
SORTER		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;">ADDITIONAL FAMILIES FOUND BY IFE</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="font-size: small;">(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

TABLE 2. The 18 spring samples audited for Anglian Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'

River	Site	Sorter	Losses	Gains	Omissions
Blackwater	B1019 Bridge	FCB	1	0	0
Old Course Nene	B1098 Bridge	BW	1	5	1
Stowlangtoft Stream	A1088 Bridge	SEH	0	3	0
Welland	D/s Collyweston STW	PH	0	1	1
Pitsford Arm	A508 Bridge	IG	0	1	0
West Fen Drain	Fishtoft Drove	CAE	0	0	2
County Drain	Occupation Bridge	JN	0	4	1
Wattisham W/c	Badley Bridge	EB	1	2	0
Sixteen Foot Drain	Cottons Corner	TNA	1	1	0
Nar	A10 Bridge	JN	0	1	0
Rattlesden	Burford Bridge	EB	0	0	0
Gwash	Tickencote	PH	0	2	0
*Delph Ditch	Hadleigh Sea Wall	PJM	0	1	0
Bain	U/s Coningsby STW	SJL	1	1	0
*Pitsea Flect	Access Road WDS	PJM	0	1	0
Welton Beck	Welton/Dunholme Road	SJL	0	0	2
Ore	Marlesford Bridge	MJ	0	2	0
Stonebridge Drain	Sibsey	CAE	0	0	0

* 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
Skerth Drain	A1121 Bridge	PH	0	2	0
Ancholme	Bishopsbridge	SJB	0	2	0
Virley Brook	Hall Road Bridge	FCB	0	0	0
Lower Witham	Five Mile House	SJL	1	1	1
Spickets Brook	Scraley Road	FCB	0	0	0
Kyme Eau	Halfpenny Hatch	CAE	0	2	0
Hintlesham W/c	Church Lane Bridge	MJ	1	0	0
Car Dyke	Potterhanworth Wood	SJL	0	1	0
Nettleton/Caistor	North End	SJB	1	1	0
Soham Lode	Barway Bridge	BW	0	3	0
Grand Union Canal	A43 Bridge	IG	0	1	2
Blackwater	Kings Bridge	PJM	0	0	0
Tenpenny Brook	E.of Stable Wood	PJM	0	0	0
Wootton Brook	Preston Deanery	IG	1	2	0
Sixteen Foot Drain	Cottons Corner	TNA	0	0	1
Waveney	Billingford Bridge	EJB	1	0	0
Newmarket No.1 Drain	Snailwell	BW	1	0	1
Ouse	Haversham	PDB	2	5	0
Coddenham W/c	A140 Bridge	MJ	0	2	0
Stoke Brook	D/s Lower Locks	PDB	1	1	0
Old Course Nene	B1098 Bridge	TNA	0	2	0

TABLE 4. The 21 autumn samples audited for Anglian Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'.

River	Site	Sorter	Losses	Gains	Omissions
Sandon Brook	U/s East Arm	PJM	2	6	2
Hackthorn Beck	Cold Hanworth	JR	0	0	0
Grand Union Canal	East of A5	SJL	1	2	1
Lymn	Salmonby/Sowerby Bridge	PH	1	2	1
Helkington Head Dyke	B1395 Bridge	CAE	0	1	0
Holbrook	B1080 culvert	FCB	0	0	0
East Weir Dyke	Saxby Bridge	SJB	0	4	0
Bourne Eau	Tongue End	IG	0	0	0
Billinghay Skerth	Walcott Dales	CAE	0	1	2
Woldgrift Drain	Old Railway Bridge	PH	0	0	0
Newmarket No.1 Drain	D/s STW	SEH	0	2	0
The Beck	Chambers Hill	EB	0	1	1
Glaven	Edgefield Bridge	MJ	0	2	0
Barlings Eau	Langworth	JR	0	2	0
Grand Union Canal	B4036 Bridge	SJL	1	1	0
Sandon Brook	Little Baddow	PJM	0	3	0
Stoke Brook	D/s Lower Locks	PDB	0	1	0
Elstow/Cople Brook	Dog Farm	JN	1	3	1
Kennet	Beck Bridge	TNA	0	0	2
Renhold Brook	A428 Bridge	JN	1	2	1
Trib. Ramsey	Upwood Farm Road culvert	SEH	0	1	0

APPENDIX

Results of individual sample audits

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION <input style="width: 100%;" type="text" value="Anglian"/>	RIVER <input style="width: 100%;" type="text" value="Blackwater"/>
DATE <input style="width: 100%;" type="text" value="17.4.91"/>	SITE <input style="width: 100%;" type="text" value="B1019 Bridge"/>
SORTER <input style="width: 100%;" type="text" value="FCB"/>	SAMPLE CODE <input style="width: 100%;" type="text" value="R01BFBL0070"/>

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 Curculionidae	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

1 Not included in 1991 survey

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Old Course Nene
DATE	17.4.91	SITE	Pophams Eau B1098 Br
SORTER	BW	SAMPLE CODE	NRA01 0687

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 Viviparidae 2 Haliplidae*	3 Hydrobiidae 4 Oligochaeta 5 Leptoceridae 6 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)	7 Haliplidae* 8 Psychomyiidae

NET LOSSES NET GAINS

NOTES

1,3 Bithynia leachi
6 Mystacides longicornis/nigra
7 Haliplus lineolatus (adults)
8 Ecnomus tenellus

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Stowlangtoft Stream
DATE	17.4.91	SITE	A1088 Ixworth Wolpit
SORTER	SEH	SAMPLE CODE	NRA01 0603

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	None	1 Chironomidae

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 Hydrobiidae 3 Tipulidae

NET LOSSES NET GAINS

NOTES

1 Tanypodinae, Tanytarsini
 2 Bithynia tentaculata
 3 Palaria sp.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Welland
DATE	16.4.91	SITE	D/s Collyweston STW
SORTER	PH	SAMPLE CODE	R05BFWELL260C

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;">1 Chironomidae*</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;">2 Chironomidae* 3 Simuliidae</p>

NET LOSSES NET GAINS

NOTES

3 Simulium posticatum (larva) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian	RIVER Pitsford Arm
DATE 12.4.91	SITE A508 Bridge
SORTER IG	SAMPLE CODE R05BFPITS020P

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 Lymnaeidae

NET LOSSES 0 NET GAINS 1

NOTES 1 Lymnaea palustris

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	West Fen Drain
DATE	16.4.91	SITE	Fishtoft Drove
SORTER	CAE	SAMPLE CODE	R03BFWEFN080F

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 Oligochaeta* 2 Elmidae*	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)	3 Oligochaeta* 4 Elmidae*

NET LOSSES NET GAINS

NOTES

4 Oulimnius sp. (adults)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	County Drain
DATE	20.5.91	SITE	Occupation Bridge d/s STW
SORTER	JN	SAMPLE CODE	NRA01 0709

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 Ephemerellidae 3 Leuctridae

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 Lymnaeidae 5 Glossiphoniidae 6 Caenidae*

NET LOSSES NET GAINS

NOTES

2 Ephemerella ignita 1 only
 3 Leuctra nigra 1 only
 4 Lymnaea peregra 1 only
 5 Helobdella stagnalis 1 only
 6 Caenis horaria

Label in vial says "Baetidae"; none found by IFE in sample.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Wattisham Watercourse
DATE	15.5.91	SITE	Badley Bridge
SORTER	EB	SAMPLE CODE	NRA01 0884

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 Corixidae	2 Notonectidae 3 Sphaeriidae

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

2 Indet Notonectid nymph
3 Pisidium sp., Sphaerium sp.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Sixteen Foot Drain
DATE	17.4.91	SITE	Cottons Corner
SORTER	TNA	SAMPLE CODE	NRA01 0684

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 Viviparidae	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 Oligochaeta

NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Nar
DATE	20.5.91	SITE	A10 Bridge Setchey
SORTER	JN	SAMPLE CODE	NRA01 0705

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

		LOSSES	GAINS
A	<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>BMW P FAMILIES NOT FOUND BY IFE</p> <p>None</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>None</p>

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>BMW P 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 Sphaeriidae</p>
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NET LOSSES NET GAINS

NOTES

1 Pisidium sp.

Labels in vial suggest that Lymnaeidae, Asellidae, Pleidae and Gyrinidae were found by NRA

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION <input style="width: 100%;" type="text" value="Anglian"/>	RIVER <input style="width: 100%;" type="text" value="Rattlesden"/>
DATE <input style="width: 100%;" type="text" value="15.5.91"/>	SITE <input style="width: 100%;" type="text" value="Burford Bridge"/>
SORTER <input style="width: 100%;" type="text" value="EB"/>	SAMPLE CODE <input style="width: 100%;" type="text" value="NRA01 0880"/>

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	None	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)	none

NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Gwash
DATE	16.4.91	SITE	Tickencote
SORTER	PH	SAMPLE CODE	R05BFGWSH230T

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

		LOSSES	GAINS
A	<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>1 Sphaeriidae</p>
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 Goeridae</p>

NET LOSSES NET GAINS

NOTES

1 Pisidium sp.
2 Goera pilosa 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Delph Ditch
DATE	30.5.91	SITE	Hadleigh Sea Wall
SORTER	PJM	SAMPLE CODE	R01BFHADLY012

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 of animals provided - hence not applicable	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)	1 Limnephilidae

NET LOSSES NET GAINS

NOTES

1 Limnephilus sp (pupa) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Bain
DATE	22.5.91	SITE	U/s Coningsby STW
SORTER	SJL	SAMPLE CODE	No code given

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;">1 Elmidae</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">2 Hydrophilidae</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;">None</p>

NET LOSSES NET GAINS

NOTES

1 Terrestrial beetles found in vial
 2 Laccobius minutus (adult) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Pitsea Fleet
DATE	30.5.91	SITE	Access Road WDS
SORTER	PJM	SAMPLE CODE	R01BFPITSE005

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 of animals provided - hence not applicable	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)	1 Hydrophilidae

NET LOSSES NET GAINS

NOTES

1 Indet Hydrophilid larva 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Welton Beck
DATE	20.5.91	SITE	Welton/Dunholme Road
SORTER	SJL	SAMPLE CODE	No code given

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 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)	3 Oligochaeta* 4 Baetidae*

NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Ore
DATE	16.5.91	SITE	Marlesford Bridge
SORTER	MJ	SAMPLE CODE	NRA01 0859

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 Hydroptilidae

NET LOSSES NET GAINS

NOTES

1 Bithynia leachi
2 Hydroptila sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

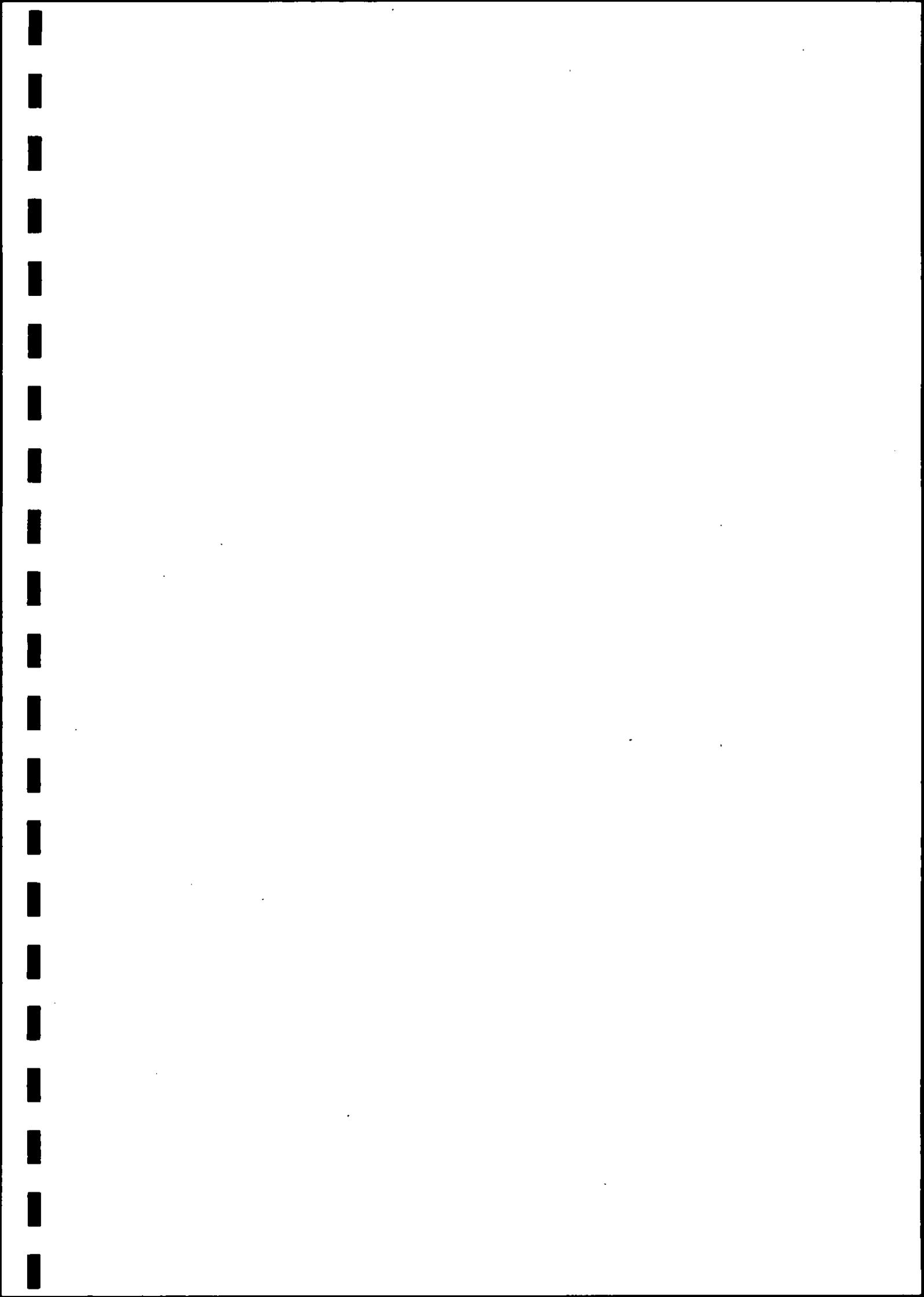
REGION	Anglian	RIVER	Stonebridge Drain
DATE	16.4.91	SITE	Sibsey
SORTER	CAE	SAMPLE CODE	R03BFSTON030S

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>BMWP FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center;">None</p>	<p>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>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 style="text-align: center;">None</p>

NET LOSSES NET GAINS

NOTES



1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Skerth Drain
DATE	18.7.91	SITE	A1121 Bridge
SORTER	PH	SAMPLE CODE	R03BFSKER060A

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 Lymnaeidae 2 Lestidae
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NET LOSSES NET GAINS

NOTES

1 Lymnaea sp.
2 Lestes sponsa 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Ancholme
DATE	17.7.91	SITE	Bishopsbridge
SORTER	SJB	SAMPLE CODE	R03BFANCN060B

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 Baetidae 2 Hydrometridae

NET LOSSES NET GAINS

NOTES

1 Baetis vernus, Cloeon dipterum
2 Hydrometra sp. (nymph) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Virley Brook
DATE	10.7.91	SITE	Hall Road Bridge Virley
SORTER	FCB	SAMPLE CODE	R01BFMT1220

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

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Lower Witham
DATE	10.6.91	SITE	Five Mile House
SORTER	SJL	SAMPLE CODE	Unknown

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 2 Sphaeriidae*	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)	3 Sphaeriidae* 4 Notonectidae

NET LOSSES 1 NET GAINS 1

NOTES

3 Sphaerium sp., Pisidium sp.
4 Notonecta sp. (nymphs)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Spicketts Brook

DATE 10.7.91

SITE Scraley Road

SORTER FCB

SAMPLE CODE R01BFMT8626

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 0

NET GAINS 0

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian	RIVER Kyme Eau
DATE 9.7.91	SITE Halfpenny Hatch
SORTER CAE	SAMPLE CODE Unknown

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 Hydrometridae 2 Haliplidae

NET LOSSES NET GAINS

NOTES

1 Hydrometra sp. (nymph) 1 only
2 Haliplus sp. (larvae)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Hintlesham Watercourse
DATE	18.6.91	SITE	Church Lane Bridge
SORTER	MJ	SAMPLE CODE	R04BFBEL030

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 Scirtidae	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

Glossiphoniidae not found in vial but "+ Glossiphoniidae" written on label.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Car Dyke
DATE	10.6.91	SITE	Potterhanworth Wood
SORTER	SJL	SAMPLE CODE	Unknown

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

		LOSSES	GAINS
A	<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	<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 Tipulidae</p>
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NET LOSSES NET GAINS

NOTES

1 Indet Tipulid larva 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Nettleton Beck/Caistor Canal
DATE	17.7.91	SITE	North End
SORTER	SJB	SAMPLE CODE	R03BFCAIC020N

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 Veliidae	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 Elmidae

NET LOSSES NET GAINS

NOTES

1 Velia sp. present in vial but not included in BMWP system
2 Elmis aenea (adult) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Soham Lode
DATE	10.6.91	SITE	Barway Bridge
SORTER	BW	SAMPLE CODE	NRA01 0576

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 Physidae 2 Gerridae 3 Leptoceridae

NET LOSSES NET GAINS

NOTES

1 *Physa fontinalis* 1 only
 2 *Gerris* sp. (nymph) 1 only
 3 *Athripsodes* sp. (pupa) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian	RIVER Grand Union Canal
DATE 11.7.91	SITE A43 Blisworth
SORTER IG	SAMPLE CODE Unknown

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 Hydrobiidae* 2 Lymnaeidae*	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 3 Hydrobiidae* 4 Lymnaeidae* 5 Glossiphoniidae
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NET LOSSES NET GAINS

NOTES
 3 Bithynia tentaculata
 4 Lymnaea peregra
 5 Helobdella stagnalis 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Blackwater
DATE	10.7.91	SITE	Kings Bridge
SORTER	PJM	SAMPLE CODE	R01BFBL08

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

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Tenpenny Brook
DATE	10.7.91	SITE	East of Stable Wood
SORTER	PJM	SAMPLE CODE	R01BFTG1405

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

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION <input style="width: 80%;" type="text" value="Anglian"/>	RIVER <input style="width: 80%;" type="text" value="Wootton Brook"/>
DATE <input style="width: 80%;" type="text" value="11.7.91"/>	SITE <input style="width: 80%;" type="text" value="Preston Deanery"/>
SORTER <input style="width: 80%;" type="text" value="IG"/>	SAMPLE CODE <input style="width: 80%;" type="text" value="Unknown"/>

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 <i>Velidae</i>	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 <i>Valvatidae</i> 3 <i>Ancylidae</i>

NET LOSSES NET GAINS

NOTES

1 *Velia* sp. present in vial but not included in BMWP system
 2 *Valvata cristata*
 3 *Acroloxus lacustris* 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Sixteen Foot Drain
DATE	24.6.91	SITE	Cottons Corner
SORTER	TNA	SAMPLE CODE	NRA01 0684

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

		LOSSES	GAINS
A	<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>1 Oligochaeta*</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>None</p>
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>2 Oligochaeta*</p>

NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Waveney
DATE	8.7.91	SITE	Billingford Bridge
SORTER	EJB	SAMPLE CODE	R04BFWAV040

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 Piscicolidae	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

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Newmarket No 1 Drain
DATE	10.6.91	SITE	D/s STW Snailwell
SORTER	BW	SAMPLE CODE	NRA01 0572

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 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)	3 Oligochaeta*

NET LOSSES NET GAINS

NOTES

2 Empidid larva (Wiedemannia group) in vial

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Ouse
DATE	10.6.91	SITE	Haversham
SORTER	PDB	SAMPLE CODE	NRA01 0406

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>BMWP FAMILIES NOT FOUND BY IFE</p> <p>1 Gerridae 2 Hydrometridae</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>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>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>3 Physidae 4 Ephemerellidae 5 Aphelocheiridae 6 Leptoceridae 7 Tipulidae</p>

NET LOSSES NET GAINS

NOTES

3 Physa fontinalis
 4 Ephemerella ignita
 5 Aphelocheirus aestivalis 1 only
 6 Athripsodes cinereus, Ceraclea dissimilis
 7 Palaria sp. (pupa) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Coddensham Watercourse
DATE	18.6.91	SITE	A140 Bridge
SORTER	MJ	SAMPLE CODE	R04BFGIP147

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 Elmidae

NET LOSSES NET GAINS

NOTES

1 Pisidium sp.
2 Elmis aenea (larva) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Stoke Brook
DATE	10.6.91	SITE	D/s Lower Locks
SORTER	PDB	SAMPLE CODE	NRA01 0404

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>BMWP FAMILIES NOT FOUND BY IFE</p> <p>1 Gerridae</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p>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>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 Hydrobiidæ</p>
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NET LOSSES NET GAINS

NOTES

2 Potamopyrgus jenkinsi

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian	RIVER Old Course Nene
DATE 24.6.91	SITE Pophams Eau B1098 Bridge
SORTER TNA	SAMPLE CODE NRA01 0687

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

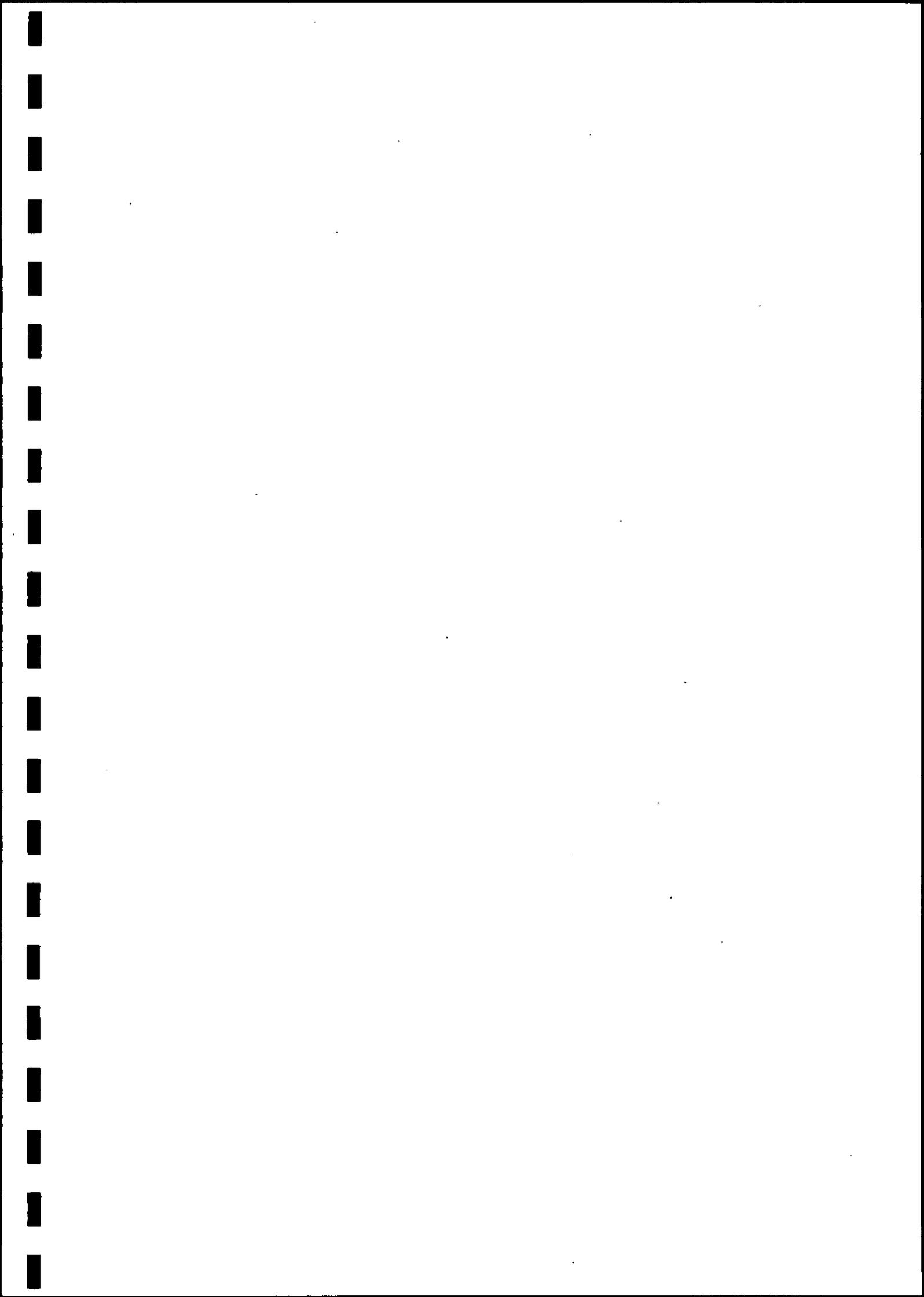
	LOSSES	GAINS
A	<u>VIAL</u> Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	BMWP FAMILIES NOT FOUND BY IFE None
		ADDITIONAL FAMILIES FOUND BY IFE None

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 Dendrocoelidae

NET LOSSES NET GAINS

NOTES

1 *Dugesia tigrina*
2 *Dendrocoelum lacteum* 1 only



1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Sandon Brook

DATE 30.10.91

SITE U/s Sandon Brook East Arm

SORTER PJM

SAMPLE CODE R01BFSB0110

AQC OF BMWP FAMILIES A. IN VIAL +

B. IN SAMPLE +

LOSSES		GAINS
<p>A</p> <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 Hydrobiidae 2 Piscicolidae 3 Coenagriidae* 4 Hydropsychidae*</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>5 Platycnemididae 6 Aeshnidae 7 Chironomidae</p>

<p>B</p> <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 Gammaridae 9 Coenagriidae* 10 Psychomyiidae 11 Hydropsychidae* 12 Hydroptilidae</p>
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NET LOSSES 2

NET GAINS 6

NOTES

5 Platycnemis pennipes	9 Pyrrhosoma nymphula? (juvenile) 1 only
6 Aeshna sp.	10 Tinodes waeneri 1 only
7 Indet Chironomini	11 Hydropsyche angustipennis
8 Gammarus pulex 1 only	12 Hydroptila sp.

Unionid assumed returned to river

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Hackthorn Beck
DATE	3.10.91		SITE	Cold Hanworth
SORTER	JR		SAMPLE CODE	R01BFHACK070C

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

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Grand Union Canal
DATE	8.10.91		SITE	East of A5
SORTER	SJL		SAMPLE CODE	R05BGGUCL005E

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* 2 Dytiscidae	3 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)	4 Dendrocoelidae* 5 Elmidae

NET LOSSES 1

NET GAINS 2

NOTES

3 Planaria torva in vial, Dugesia tigrina in sample
 4 Dendrocoelum lacteum 1 only
 5 Oulimnius sp. (larvae)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Lynn

DATE 3.10.91

SITE Salmonby/Sowerby Road Bridge

SORTER PH

SAMPLE CODE R03BFLYMN060S

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 <i>Nemouridae</i> * 2 <i>Veliidae</i>	3 <i>Taeniopterygidae</i>

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 <i>Nemouridae</i> * 5 <i>Scirtidae</i>

NET LOSSES 1

NET GAINS 2

NOTES

- 2 *Velia* sp. present in vial but not included in BMWP system
- 3 *Taeniopteryx nebulosa*
- 4 *Nemoura avicularis*
- 5 *Elodes* sp. (larvae)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Helkington Head Dyke
DATE	4.10.91		SITE	B1395 Bridge
SORTER	CAE		SAMPLE CODE	R03BFHECK050B

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 0 NET GAINS 1

NOTES

1 Oulimnius sp. (larvae)

Note on NRA data sheet that Gerridae not in vial. None found by IFE in sample

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Holbrook
DATE	25.9.91	SITE	B1080 Road Culvert
SORTER	FCB	SAMPLE CODE	R01BFHK0817

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

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER East Weir Dyke

DATE 19.11.91

SITE Saxby Bridge

SORTER SJB

SAMPLE CODE R01BFEAST050H

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 Neritidae 2 Corophiidae 3 Gammaridae 4 Tipulidae

NET LOSSES 0

NET GAINS 4

NOTES

- 1 Theodoxus fluviatilis 1 only
- 2 Corophium sp.
- 3 Crangonyx pseudogracilis, Gammarus tigrinus
- 4 Helius sp.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Bourne Eau
DATE	3.10.91		SITE	Tongue End
SORTER	IG		SAMPLE CODE	R05BFEAU040T

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

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Billinghay Skerth

DATE 4.10.91

SITE Walcott Dales

SORTER CAE

SAMPLE CODE R03BFSKE060W

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 Caenidae*	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)	3 Oligochaeta* 4 Caenidae* 5 Hydrophilidae

NET LOSSES 0

NET GAINS 1

NOTES

3 Indet tubificids
4 Caenis horaria
5 Laccobius biguttatus (adult) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Woldgrift Drain
DATE	3.10.91		SITE	Old Railway Bridge
SORTER	PH		SAMPLE CODE	R03BFWOLD110R

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 None
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NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Newmarket No 1 Public Drain

DATE 23.9.91

SITE D/s STW

SORTER SEH

SAMPLE CODE NRA01 0572

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 Tipulidae

NET LOSSES 0

NET GAINS 2

NOTES

1 Pisidium sp. 1 only
2 Tipula montium group 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER The Beck

DATE 26.9.91

SITE Chambers Hill

SORTER EB

SAMPLE CODE NRA01 0827

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 Valvatidae

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 Oligochaeta*

NET LOSSES 0

NET GAINS 1

NOTES

2 Valvata cristata
3 Naididae, Tubificidae

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Glaven
DATE	26.9.91		SITE	Edgefield Bridge
SORTER	MJ		SAMPLE CODE	NRA01 0737

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 Asellidae 2 Nemouridae

NET LOSSES NET GAINS

NOTES

1 Asellus meridianus 1 only
2 Nemoura cinerea 1 only

Note in NRA vial that Erpobdellidae "lost". Erpobdella octoculata found by IFE in sample.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Barlings Eau
DATE	3.10.91	SITE	Langworth
SORTER	JR	SAMPLE CODE	R01BFBARL110L

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 Piscicolidae 2 Hydrophilidae

NET LOSSES NET GAINS

NOTES

1 *Piscicola geometra* 1 only
2 *Octhebius minimus* (adult) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Grand Union Canal
DATE	8.10.91	SITE	B4036 Bridge
SORTER	SJL	SAMPLE CODE	R05BGGUCM280W

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 Oligochaeta	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 2 Hydrobiidae
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NET LOSSES NET GAINS

NOTES 2 Potamopyrgus jenkinsi

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Sandon Brook
DATE	30.10.91		SITE	Little Baddow
SORTER	PJM		SAMPLE CODE	R01BFSB01

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 Piscicolidae 2 Psychomyiidae 3 Limnephilidae

NET LOSSES NET GAINS

NOTES

1 *Piscicola geometra* 1 only
 2 *Tinodes waeneri* 1 only
 3 Indet limnephilid (juvenile) 1 only

Note in NRA vial that Lymnaeidae "lost". *Lymnaea peregra* found by IFE in sample.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Stoke Brook

DATE 20.9.91

SITE D/s Lower Locks

SORTER PDB

SAMPLE CODE NRA01 0404

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 0

NET GAINS 1

NOTES

1 Oulimnius sp. (larva) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Elstow/Cople Brook
DATE	8.10.91		SITE	Dog Farm Cople
SORTER	JN		SAMPLE CODE	NRA01 0452

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 Corixidae	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)	3 Sphaeriidae 4 Oligochaeta* 5 Erpobdellidae 6 Coenagriidae

NET LOSSES

NET GAINS

NOTES

3 Pisidium sp.
5 Erpobdella octoculata 1 only
6 Coenagrion puella/pulchellum 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian		RIVER	Kennet
DATE	23.9.91		SITE	Beck Bridge
SORTER	TNA		SAMPLE CODE	NRA01 0598

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

	LOSSES	GAINS
A	VIAL	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 Oligochaeta* 2 Chironomidae*	None

B	SAMPLE	ADDITIONAL FAMILIES FOUND BY IFE
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)	3 Oligochaeta* 4 Chironomidae*

NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Anglian

RIVER Renhold Brook

DATE 8.10.91

SITE A428 Bridge Renhold

SORTER JN

SAMPLE CODE NRA01 0442

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 2 Chironomidae*	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)	3 Sphaeriidae 4 Erpobdellidae 5 Chironomidae*

NET LOSSES 1

NET GAINS 2

NOTES

3 Pisidium sp.
4 Erpobdella octoculata

Note in NRA vial that Hydrometridae present. Not found by IFE in vial or sample.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	Anglian	RIVER	Trib Ramsey
DATE	8.10.91	SITE	Upwood Farm Road culvert
SORTER	SEH	SAMPLE CODE	NRA01 0673

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 Limnephilidae

NET LOSSES NET GAINS

NOTES

1 Micropterna sp. (juvenile) 1 only

Note in NRA vial that Haliplidae present. Not found by IFE in vial or sample.