



An audit of performance in the processing of macro-invertebrate samples in 1994. NRA Anglian Region

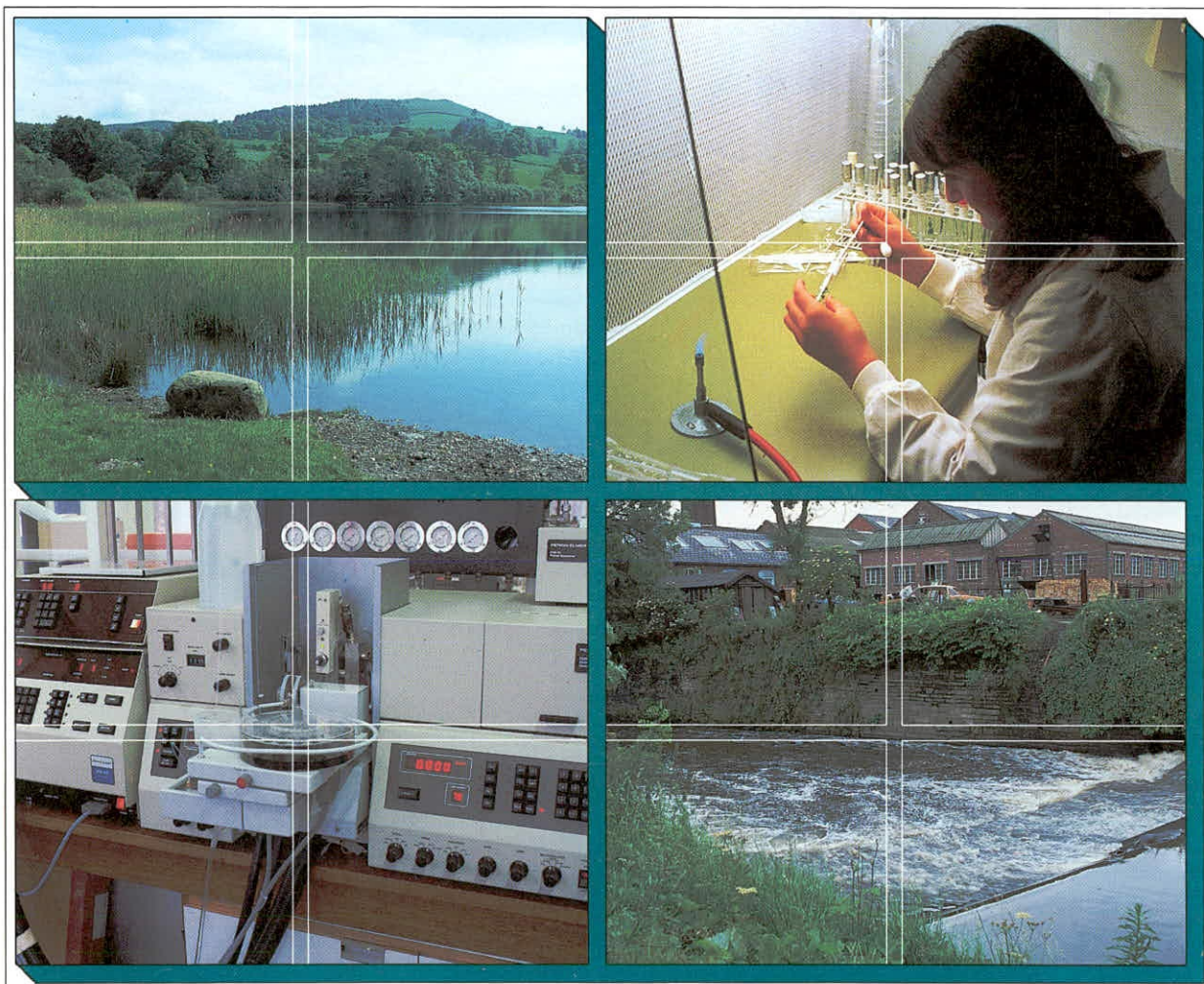
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An audit of performance in the processing of macro-invertebrate samples in 1994. NRA Anglian Region

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1. INTRODUCTION

In 1994 the sampling of aquatic macro-invertebrates for the biological assessment of river quality continued throughout the United Kingdom. This task was undertaken by the National Rivers Authority (NRA) in England and Wales, the River Purification Boards (RPBs) in Scotland and the Industrial Research & Technology Unit (IRTU) in Northern Ireland.

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, several RPBs and the IRTU. This report presents the results of 60 samples audited for NRA Anglian Region. The IFE was not required to perform any statistical analyses nor interpretation of the results of the audit.

Each organisation employed standard collection procedures, as used in the 1990 River Quality Survey, 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).

Samples were sorted by NRA, RPB and IRTU 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.

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 IRTU 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. Chrysomelidae and Curculionidae, which appear in the BMWP list, were also to be excluded for the purposes of the audit. 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.

TABLE 1. The IFE Report form

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	<input type="text"/>	RIVER	<input type="text"/>
DATE	<input type="text"/>	SITE	<input type="text"/>
SORTER	<input type="text"/>	CODE	<input type="text"/>

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES

NET GAINS

OMISSIONS

NOTES:

TABLE 2. The 19 spring samples audited for Anglian Region.

River	Site	Sorter	Losses	Gains	Omissions
Ivel	Beeston	SEH	0	1	0
Fancott Brook	Cranford Bridge	TNA	0	2	2
Running Waters	Ruxox Bridge	TNA	0	0	1
Welland	Spalding	RPC	0	2	0
Upper Witham	Aubourn	LJS	0	1	0
Lud	Louth Trout Farm	RPC	0	0	0
Boultham Catchwater	Boultham	CAE	0	0	1
Tiffield Brook	A43 Bridge	TNA	1	1	1
Wensum	Fye Bridge	CSA	1	4	0
Lymn	Stockwith Mill	RPC	0	1	0
Helmdon Brook	Helmdon Road Bridge	TNA	0	0	0
Stour Brook	Sturmer Bridge	JMG	0	1	0
Bumpstead Brook	Watsoe Bridge	JMG	0	0	0
Exton Arm	u/s North Brook	RPC	0	1	0
Stour	Bush Boake Allen	JMG	0	0	0
Stour	Great Bradley Hall Bridge	JMG	0	3	0
Chad Brook	Long Melford	JMG	0	0	0
Yare	Intwood Ford	TMT	0	4	0
Stour	Little Thurlow Church Bridge	JMG	0	3	0

TABLE 3. The 20 summer samples audited for Anglian Region.

River	Site	Sorter	Losses	Gains	Omissions
Mare Fen Drain	Head Fen Farm	TNA	0	3	1
Lark	Sicklemere Road Bridge	SJL	0	1	0
Hempnall Beck	Tasburgh Hall Ford	PNC	1	3	0
Longstanton Brook	High Causeway Bridge	TNA	1	4	1
Birchwood Brook	Birch Church	CSA	1	3	0
Box	Boxford	PNC	0	6	0
Salary Brook	Blue Barns Farm	JMG	0	1	0
Nar	Kings Lynn	SJL	0	2	3
Buckenham Stream	Fettle Bridge	TNA	0	2	1
Colne	Nunnery Bridge	CSA	0	2	0
Elstow Brook	Harrowden Bridge	SEH	0	2	0
Stutton Brook	Stutton Bridge	EDT	0	2	0
Cock Brook	Matchams Bridge	SEH	0	2	0
Ouse	Tempsford	TNA	0	4	7
Welland	Rockingham	RPC	0	4	0
East Glen	Braceborough	LJS	0	4	0
Harpers Brook	Little Oakley	LJS	1	0	0
Eye Brook	B664 Bridge	RPC	0	2	0
Weedon Brook	u/s Weedon STW	RPC	0	1	0
Legsby Beck	Snelland	RPC	0	1	0

TABLE 4. The 21 autumn samples audited for Anglian Region.

River	Site	Sorter	Losses	Gains	Omissions
West Tofts Mere Stream	A1065 Bridge	SJL	0	4	0
Caswell Brook	Greens Norton Road	SEH	0	3	0
Whittle	East Harling Common	SEH	0	2	0
Kelsey Drain	Bakers Bridge	LJS	0	0	0
Welland	Marston Trussell	RPC	0	4	1
Old Nene	Marmont Priory Lock	SJL	1	0	0
West Fen Drain	Fishtoft Drove	LJS	0	0	0
Old Ancholme	Brigg	LJS	1	1	0
Ouzel	Simpson Bridge	TNA	0	3	1
Dallington Brook	Dallington	LJS	1	0	0
Colne	Does Corner	JMG	0	0	0
Barlings Eau	Hardy Gang Wood	LJS	0	1	0
Shotesham Beck	Malt Kiln Farm	CSA	0	3	0
Ore	Beversham Bridge	JMG	0	2	0
Yare	Intwood Ford	CSA	0	0	1
Stour Brook	Sturmer Bridge	CSA	0	0	0
Willow Brook	Lodge Farm	CAE	0	1	0
Colne	Chapel Road	CSA	0	4	1
Salcey Brook	Ashdon-Bozenham Mill	SEH	0	0	2
Colne	d/s Halstead STW	CSA	0	2	1
Glen	Surfleet	RPC	0	1	0

APPENDIX

Results of individual sample audits

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Ivel
DATE	28.4.94	SITE	New Road, Beeston
SORTER	SEH	CODE	NRA01 BF19M04

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Hydrophilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Indet Hydrophilid (larva) 1 only

Note on data sheet that Gerridae and Notonectidae "not in pot". Not found by IFE in vial or sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Fancott Brook
DATE	27.4.94	SITE	Cranford Bridge
SORTER	TNA	CODE	NRA01 BF16M06

A	VIAL	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 Sphaeriidae* 2 Oligochaeta*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	3 Sphaeriidae* 4 Oligochaeta* 5 Baetidae 6 Hydroptilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

2

OMISSIONS

2

NOTES:

1,3 Empty shell in vial, Pisidium sp. in sample
4 Tubificidae, Lumbricidae
5 Cloeon dipterum 1 only
6 Hydroptila sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Running Waters
DATE	27.4.94	SITE	Ruxox Bridge
SORTER	TNA	CODE	NRA01 BF16M08

A	VIAL	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*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Planariidae*

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

2 Polycelis sp. (damaged specimen) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Welland (Coronation Cut)
DATE	14.4.94	SITE	B1165 Bridge, Spalding
SORTER	RPC	CODE	NRA01 R05BFWELL490B

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Elmidae 2 Leptoceridae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Oulimnius sp. (larva) 1 only
2 Oecetis ochracea 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Upper Witham
DATE	26.4.94	SITE	Aubourn
SORTER	LJS	CODE	NRA01 R03BFWITH510A

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Elmidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Elmis aenea (adult) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Lud
DATE	16.5.94	SITE	Louth Trout Farm
SORTER	RPC	CODE	NRA01 R03BFRLUD030L

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Boultham Catchwater
DATE	4.5.94	SITE	Boultham
SORTER	CAE	CODE	

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Physidae*

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

0

OMISSIONS

1

NOTES:

2 Physa fontinalis

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Tiffield Brook
DATE	17.5.94	SITE	A43 Bridge
SORTER	TNA	CODE	NRA01 BF04M21

A	VIAL	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 Psychomyiidae*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	3 Elmidae 4 Psychomyiidae*

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

1

NET GAINS

1

OMISSIONS

1

NOTES:

3 Elmis aenea (adults + larvae)
4 Tinodes waeneri 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Wensum
DATE	17.5.94	SITE	Fye Bridge
SORTER	CSA	CODE	NRA01 R04BFWEN270

A	VIAL 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	ADDITIONAL FAMILIES FOUND BY IFE
		1 Dytiscidae	None

B	SAMPLE 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	ADDITIONAL FAMILIES FOUND BY IFE
		(This box is only completed when no vial is supplied with the sample)	2 Planorbidae 3 Coenagriidae 4 Haliplidae 5 Hydroptilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

2 Gyraulus albus 1 only
3 Pyrrhosoma nymphula 1 only
4 Haliplus sp. (larva) 1 only
5 Hydroptila sp.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Lymn
DATE	10.3.94	SITE	Stockwith Mill
SORTER	RPC	CODE	NRA01 R03BFLYMN090S

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Goeridae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

1

OMISSIONS

0

NOTES:

1 Silo pallipes

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Helmdon Brook
DATE	17.5.94	SITE	Helmdon Road Bridge
SORTER	TNA	CODE	NRA01 BF04M17

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Stour Brook
DATE	13.4.94	SITE	Sturmer Bridge
SORTER	JMG	CODE	NRA01 R01BFST13

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Erpobdellidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Erpobdella octoculata 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Bumpstead Brook
DATE	13.4.94	SITE	Watsoe Bridge
SORTER	JMG	CODE	NRA01 R01BFST1032

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Exton Arm
DATE	4.3.94	SITE	u/s North Brook
SORTER	RPC	CODE	NRA01 R05BFEXAR070U

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Goeridae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Silo pallipes 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Stour
DATE	22.4.94	SITE	Point B, Bush Boake Allen
SORTER	JMG	CODE	NRA01 R01BFST0814

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Stour
DATE	13.4.94	SITE	Great Bradley Hall Bridge
SORTER	JMG	CODE	NRA01 R01BFST1522

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Caenidae 2 Hydroptilidae 3 Tipulidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

- 1 Caenis luctuosa/macrura
- 2 Hydroptila sp.
- 3 Nephrotoma sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Chad Brook
DATE	22.4.94	SITE	A134 Bridge, Long Melford
SORTER	JMG	CODE	NRA01 R01BFCD0106

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Yare
DATE	9.3.94	SITE	Intwood Ford
SORTER	TMT	CODE	NRA01 R04BFYAR150

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Baetidae 2 Leptophlebiidae 3 Elmidae 4 Hydropsychidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

- 1 Baetis rhodani
- 2 Habrophlebia fusca 1 only
- 3 Limnius volckmari (larva) 1 only
- 4 Hydropsyche siltali 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Stour
DATE	13.4.94	SITE	Little Thurlow Church Bridge
SORTER	JMG	CODE	NRA01 BFST1518

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Hydrometridae 2 Hydroptilidae 3 Leptoceridae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES

0

NET GAINS

3

OMISSIONS

0

NOTES:

1 Hydrometra stagnorum 1 only
2 Hydroptila sp. 1 only
3 Athripsodes cinereus 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Mare Fen Drain
DATE	23.8.94	SITE	Head Fen Farm
SORTER	TNA	CODE	NRA01 BF26M55

A	VIAL	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 Haliplidae*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Erpobdellidae 3 Haliplidae* 4 Tipulidae 5 Simuliidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES 0 NET GAINS 3 OMISSIONS 1

NOTES:

2 Erpobdella octoculata 1 only
3 Halipplus fluviatilis, H.immaculatus (adults)
4 Dicranota sp. 1 only
5 Simulium ornatum group 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Lark
DATE	16.8.94	SITE	Sicklemere Road Bridge
SORTER	SJL	CODE	NRA01 BF37M04

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Caenidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES

0

NET GAINS

1

OMISSIONS

0

NOTES:

1 Caenis luctuosa/macrura 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Hempnall Beck
DATE	6.7.94	SITE	Tasburgh Hall Ford
SORTER	PNC	CODE	NRA01 R04BFTAS072

A	VIAL 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	ADDITIONAL FAMILIES FOUND BY IFE
		1 Gyrinidae	2 Dytiscidae

B	SAMPLE 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	ADDITIONAL FAMILIES FOUND BY IFE
		(This box is only completed when no vial is supplied with the sample)	3 Caenidae 4 Elmidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

1

NET GAINS

3

OMISSIONS

0

NOTES:

2 Potamonectes sp. (larvae)
3 Caenis luctuosa/macrura 1 only
4 Elmis aenea, Oulimnius sp. (larvae)

Note on data sheet that Unionidae "seen at site". Not found by IFE in vial or sample; assumed that specimen was returned to river.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Longstanton Brook
DATE	15.8.94	SITE	High Causeway Bridge
SORTER	TNA	CODE	NRA01 BF26M20

A	VIAL	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 Polycentropodidae	3 Psychomyiidae

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	4 Valvatidae 5 Planorbidae 6 Oligochaeta* 7 Elmidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

1

NET GAINS

4

OMISSIONS

1

NOTES:

3 Tinodes waeneri
4 Valvata cristata
5 Anisus vortex 1 only
6 Naididae, Tubificidae
7 Oulimnius sp. (larvae)

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Birchwood Brook
DATE	13.6.94	SITE	Birch Church
SORTER	CSA	CODE	NRA01 R01BFRR0127

A	VIAL 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	ADDITIONAL FAMILIES FOUND BY IFE
		1 Gerridae	None

B	SAMPLE 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	ADDITIONAL FAMILIES FOUND BY IFE
		(This box is only completed when no vial is supplied with the sample)	2 Oligochaeta 3 Baetidae 4 Elmidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES 1 NET GAINS 3 OMISSIONS 0

NOTES:

1 Velia sp. (nymph) in vial
2 Tubificidae
3 Baetis rhodani 1 only
4 Oulimnius sp. (larvae)

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Box
DATE	29.6.94	SITE	Boxford
SORTER	PNC	CODE	NRA01 R01BFBX0126

A	VIAL	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 Hydropsychidae

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Planariidae 3 Oligochaeta 4 Caenidae 5 Limnephilidae 6 Goeridae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

- 1 Hydropsyche siltalai
- 2 Polycelis nigra/tenuis
- 3 Tubificidae
- 4 Caenis luctuosa/macrura
- 5 Limnephilus lunatus 1 only
- 6 Goera pilosa (pupa) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Salary Brook
DATE	11.7.94	SITE	Blue Barns Farm
SORTER	JMG	CODE	NRA01 R01BFTG25

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Planorbidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Armiger crista

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Nar
DATE	20.6.94	SITE	Kings Lynn
SORTER	SJL	CODE	NRA01 BF58M11

A	VIAL	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 Physidae* 3 Asellidae*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	4 Planariidae* 5 Physidae* 6 Asellidae* 7 Hydrophilidae 8 Hydroptilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

2

OMISSIONS

3

NOTES:

4 Dugesia tigrina 1 only
5 Physa fontinalis
6 Asellus aquaticus, A.meridianus
7 Indet Hydrophilid (larva) 1 only
8 Hydroptila sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Buckenham Stream
DATE	21.6.94	SITE	Fettle Bridge
SORTER	TNA	CODE	NRA01 BF44M18

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Baetidae* 3 Leptophlebiidae 4 Dytiscidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES

0

NET GAINS

2

OMISSIONS

1

NOTES:

2 Baetis rhodani
3 Habrophlebia fusca
4 Agabus sp. (larva) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Colne
DATE	7.6.94	SITE	Nunnery Bridge
SORTER	CSA	CODE	NRA01 R01BFCL08

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Planorbidae 2 Simuliidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Anisus vortex, Armiger crista, Bathyomphalus contortus, Gyraulus albus
2 Simulium aureum group (larva), S.erythrocephalum (pupa)

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Elstow Brook
DATE	28.6.94	SITE	Harroden Bridge
SORTER	SEH	CODE	NRA01 BF12M19

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Oligochaeta 2 Hydropsychidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Tubificidae 1 only
2 Hydropsyche angustipennis

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Stutton Brook
DATE	22.8.94	SITE	Stutton Bridge
SORTER	EDT	CODE	NRA01 R01BFHK1405

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Gyrinidae 2 Hydroptilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

2

OMISSIONS

0

NOTES:

1 Orectochilus villosus (larvae)
2 Ithytrichia lamellaris 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Cock Brook
DATE	7.6.94	SITE	Matchams Bridge
SORTER	SEH	CODE	NRA01 BF2307

A	VIAL	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 Sphaeriidae

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Elmidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

2

OMISSIONS

0

NOTES:

1 Pisidium sp.
2 Oulimnius tuberculatus (adult) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Ouse
DATE	1.6.94	SITE	Tempsford
SORTER	TNA	CODE	NRA01 BF20M02

A	VIAL	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 Ancylidae* 2 Oligochaeta* 3 Erpobdellidae* 4 Gammaridae* 5 Coenagriidae* 6 Dytiscidae* 7 Chironomidae*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	8 Ancylidae* 9 Oligochaeta* 10 Erpobdellidae* 11 Corophiidae 12 Gammaridae* 13 Baetidae 14 Caenidae 15 Coenagriidae* 16 Dytiscidae* 17 Elmidae 18 Chironomidae*

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

4

OMISSIONS

7

NOTES:

8 Acroloxus lacustris	17 Oulimnius sp. (larva) 1 only
9 Tubificidae	18 Tanypodinae, Prodiamesinae,
10 Erpobdella octoculata 1 only	Orthocladiinae
11 Corophium curvispinum 1 only	
12 Gammarus pulex, Crangonyx pseudogracilis	
13 Baetis sp. 1 only	
14 Caenis luctuosa/macrura	
15 Ischnura elegans	
16 Potamonectes depressus (adults)	

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Welland
DATE	6.7.94	SITE	Rockingham
SORTER	RPC	CODE	

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Physidae 2 Gerridae 3 Hydroptilidae 4 Limnephilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

4

OMISSIONS

0

NOTES:

1 Physa fontinalis 1 only
2 Gerris sp. (nymph) 1 only
3 Hydroptila sp. 1 only
4 Limnephilus lunatus 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	East Glen
DATE	20.6.94	SITE	Braceborough
SORTER	LJS	CODE	

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Valvatidae 2 Sphaeriidae 3 Elmidae 4 Psychomyiidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

4

OMISSIONS

0

NOTES:

- 1 Valvata cristata 1 only
- 2 Pisidium sp.
- 3 Elmis aenea (larva) 1 only
- 4 Tinodes waeneri (pupa) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Harpers Brook
DATE	25.7.94	SITE	Little Oakley
SORTER	LJS	CODE	

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Eye Brook
DATE	7.6.94	SITE	B664 Bridge
SORTER	RPC	CODE	

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Caenidae 2 Leptoceridae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES

0

NET GAINS

2

OMISSIONS

0

NOTES:

1 Caenis luctuosa/macrura
2 Athripsodes cinereus 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Weedon Brook
DATE	17.8.94	SITE	u/s Weedon STW
SORTER	RPC	CODE	

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Haliplidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES

0

NET GAINS

1

OMISSIONS

0

NOTES:

1 Brychius elevatus (adult) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Legsby Beck
DATE	14.7.94	SITE	Snelland
SORTER	RPC	CODE	

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Elmidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES

0

NET GAINS

1

OMISSIONS

0

NOTES:

1 Oulimnius sp. (larva) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	West Tofts Mere Stream
DATE	2.11.94	SITE	A1065 Bridge, Mundford
SORTER	SJL	CODE	NRA01 BF48M20

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Lymnaeidae 2 Sphaeriidae 3 Caenidae 4 Sialidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

- 1 Lymnaea peregra, L.palustris
- 2 Pisidium sp. 1 only
- 3 Caenis luctuosa/macrura 1 only
- 4 Sialis lutaria 1 anterior end only

Note on data sheet that Nepidae "not in vial". Not found by IFE in vial or sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Caswell Brook
DATE	11.10.94	SITE	Greens Norton Road
SORTER	SEH	CODE	NRA01 BF04M13

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Asellidae 2 Leptophlebiidae 3 Psychomyiidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

- 1 Asellus meridianus 1 only
- 2 Paraleptophlebia submarginata 1 only
- 3 Lype sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Whittle
DATE	3.11.94	SITE	East Harling Common
SORTER	SEH	CODE	NRA01 BF44M26

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Planariidae 2 Valvatidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES

0

NET GAINS

2

OMISSIONS

0

NOTES:

1 Polycelis nigra/tenuis
2 Valvata cristata

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Kelsey Drain
DATE	5.10.94	SITE	Bakers Bridge
SORTER	LJS	CODE	NRA01 R03BFEKELS040B

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

Note on data sheet that "no Unionidae in AQC vial". Assumed that specimen was returned to river.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Welland
DATE	31.10.94	SITE	Marston Trussel
SORTER	RPC	CODE	NRA01 R05BFWELL030L

A	VIAL	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*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Hydrobiidae 3 Planorbidae 4 Glossiphoniidae 5 Caenidae* 6 Limnephilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

2 Potamopyrgus jenkinsi, Bithynia tentaculata
3 Anisus vortex 1 only
4 Helobdella stagnalis 1 only
5 Caenis luctuosa/macrura
6 Indet Limnephilid (juvenile) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Old Nene
DATE	26.10.94	SITE	Marmont Priory Lock
SORTER	SJL	CODE	NRA01 R02BF53M58

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	West Fen Drain
DATE	5.10.94	SITE	Fishtoft Drove
SORTER	LJS	CODE	NRA01 R03BFWEFN080F

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

Note on data sheet that "no Unionidae in AQC vial". Shell fragments with muscle attached found by IFE in sample. Assumed that a complete specimem was returned to river.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Old Ancholme
DATE	25.10.94	SITE	Brigg
SORTER	LJS	CODE	NRA01 R03BFANCO030B

A	VIAL	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 Psychomyiidae	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Limnephilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Last few abdominal segments only. IFE instructed not to include
posterior ends of specimens for purposes of audit.
2 Glyptotaelius pellucidus 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Ouzel
DATE	7.10.94	SITE	Simpson Bridge
SORTER	TNA	CODE	NRA01 BF08M08

A	VIAL	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 Chironomidae*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Physidae 3 Ancyliidae 4 Coenagriidae 5 Chironomidae*

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

2 Physa sp. 1 only
3 Ancyclus fluviatilis
4 Indet Coenagriid (juvenile) 1 only
5 Orthocladiinae 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Dallington Brook
DATE	6.9.94	SITE	Dallington
SORTER	LJS	CODE	NRA01 R05BFDALL080D

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Abdomen only. IFE instructed not to include posterior ends of specimens for purposes of audit.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Colne
DATE	25.10.94	SITE	Does Corner
SORTER	JMG	CODE	NRA01 R01BFCL07

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Barlings Eau
DATE	14.11.94	SITE	Hardy Gang Wood
SORTER	LJS	CODE	NRA01 R03BFBARL120H

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Hydrobiidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Potamopyrgus jenkinsi 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Shotesham Beck
DATE	5.9.94	SITE	Malt Kiln Farm
SORTER	CSA	CODE	NRA01 R04BFTAS094

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Elmidae 2 Hydropsychidae 3 Beraeidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES

0

NET GAINS

3

OMISSIONS

0

NOTES:

1 Elmis aenea (adults + larva)
2 Hydropsyche sp. (juvenile) 1 only
3 Beraeodes minutus 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Ore
DATE	12.12.94	SITE	Beversham Bridge
SORTER	JMG	CODE	NRA01 R04BFORE040

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Lymnaeidae 2 Scirtidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Lymnaea sp. (juveniles)
2 Elodes sp. (larva) 1 only

Note on data sheet that Ancyliidae "not in pot". Acroloxus lacustris found by IFE in sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Yare
DATE	19.9.94	SITE	Intwood Ford
SORTER	CSA	CODE	NRA01 R04BFYAR150

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Baetidae*

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

2 Baetis rhodani

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Stour Brook
DATE	31.10.94	SITE	Stumer Bridge
SORTER	CSA	CODE	NRA01 R01BFST13

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	None

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Willow Brook South
DATE	15.11.94	SITE	Lodge Farm
SORTER	CAE	CODE	NRA01 R05BFWILS060P

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Hydroptilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Hydroptila sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Colne
DATE	2.11.94	SITE	Chapel Road
SORTER	CSA	CODE	NRA01 R01BFCL0357

A	VIAL	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 Simuliidae*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	2 Ancyliidae 3 Hydroptilidae 4 Molannidae 5 Tipulidae 6 Simuliidae*

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

2 Ancyclus fluviatilis
3 Hydroptila sp. (pupa), Agraylea multipunctata
4 Molanna angustata
5 Tipula sp. (juveniles)
6 simulium erythrocephalum

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Salcey Brook
DATE	19.9.94	SITE	Ashdon-Bozenham Mill Bridge
SORTER	SEH	CODE	NRA01 04M22

A	VIAL	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 Gammaridae*	None

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	3 Oligochaeta* 4 Gammaridae*

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

3 Lumbriculus variegatus, Indet Tubificidae
4 Gammarus pulex

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Colne
DATE	25.10.94	SITE	d/s Halstead STW
SORTER	CSA	CODE	NRA01 R01BFCL05

A	VIAL	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 Coenagriidae	2 Calopterygidae

B	SAMPLE	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 is only completed when no vial is supplied with the sample)	3 Limnephilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E. in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

2 Calopteryx splendens
3 Indet Limnephilids (juveniles)

Note on data sheet that Elmidae "not in pot". Elmis aenea and Oulimnius sp. (larvae) found by IFE in sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1994

REGION	Anglian	RIVER	Glen
DATE	21.11.94	SITE	Surfleet A16
SORTER	RPC	CODE	NRA01 R05BFGLN560S

A	VIAL	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	SAMPLE	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 is only completed when no vial is supplied with the sample)	1 Hydroptilidae

* Taxa recorded on data sheet but absent from vial and found by I.F.E.
in sample (omissions)

NET LOSSES NET GAINS OMISSIONS

NOTES:

1 Agraylea multipunctata 1 only

