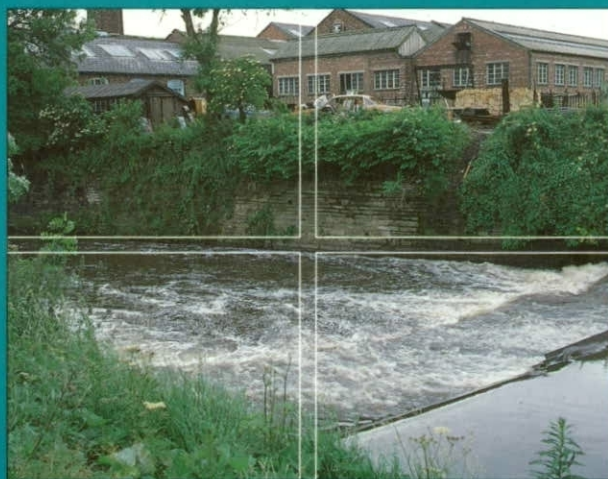
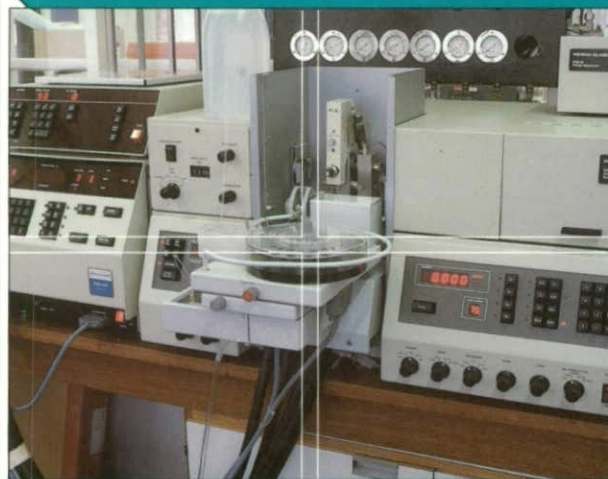
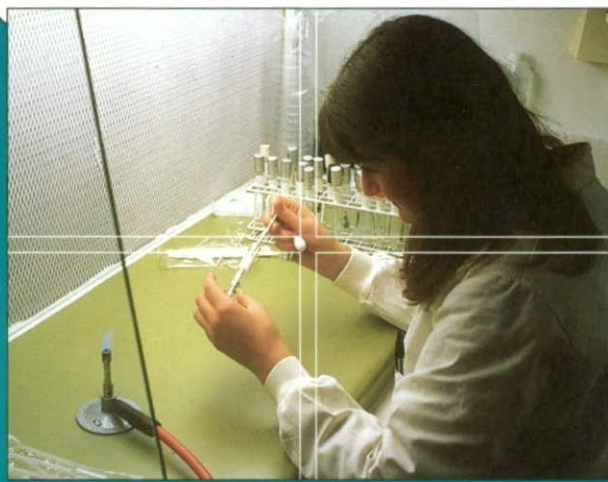
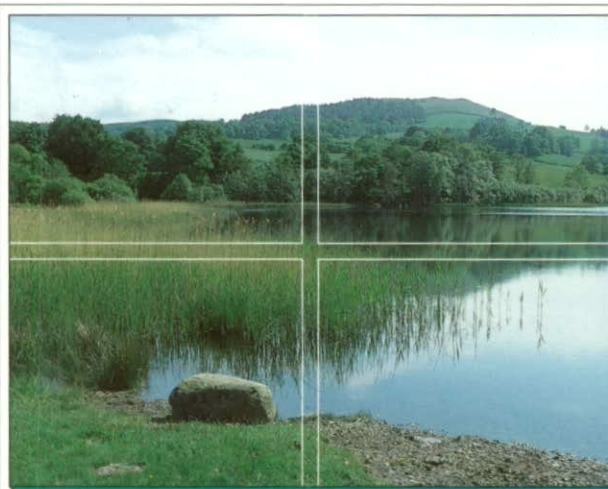




Institute of
Freshwater
Ecology

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

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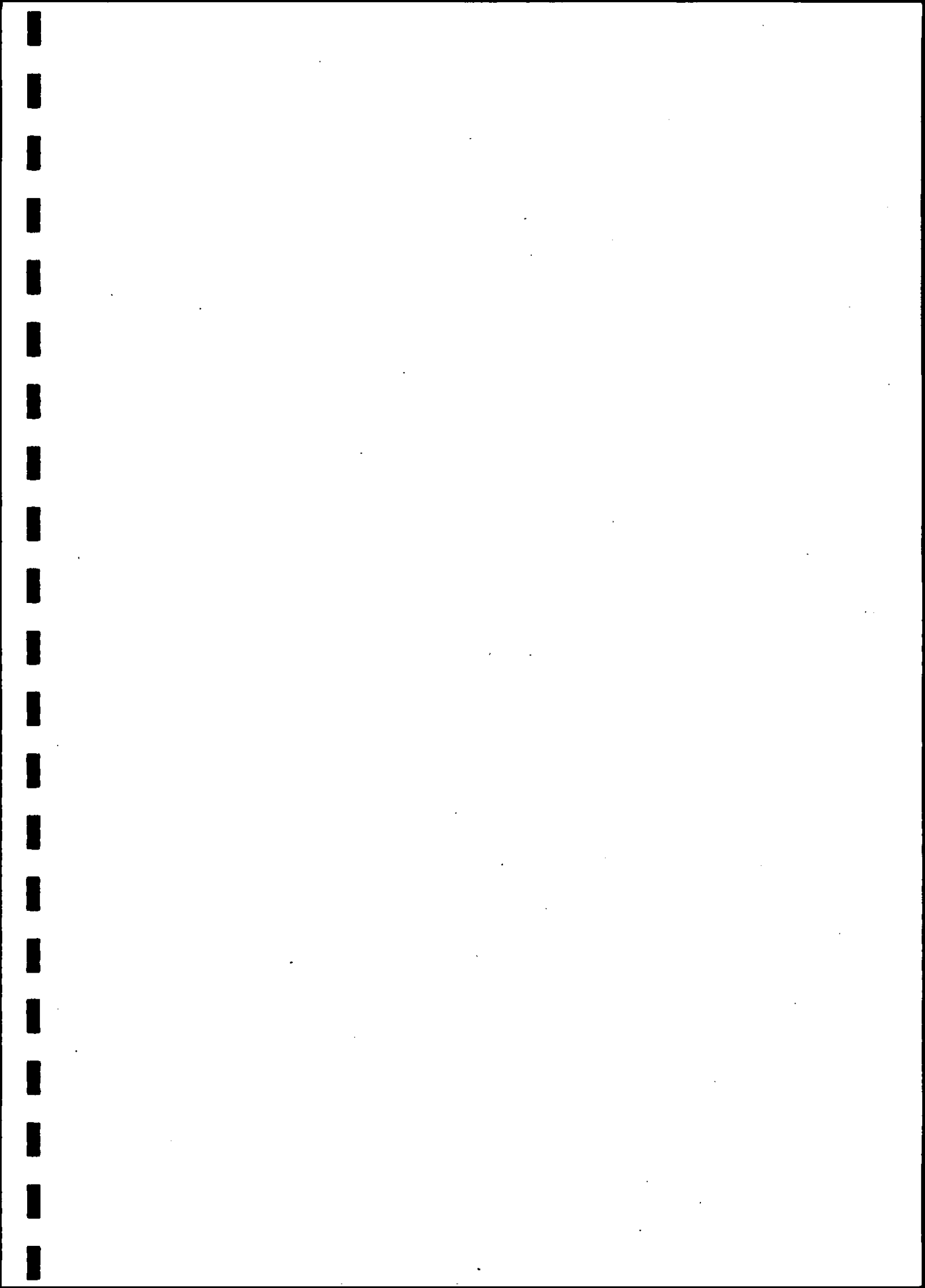
**An audit of performance in the processing
of macro-invertebrate samples in 1991.
NRA South-West Region**

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 South-West Region
IFE Report Ref:	RL/T04053x1/06
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 South-West 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 for typing the manuscript.

TABLE 1. The IFE Report form

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION <input style="width: 100%;" type="text"/>	RIVER <input style="width: 100%;" type="text"/>
DATE <input style="width: 100%;" type="text"/>	SITE <input style="width: 100%;" type="text"/>
SORTER <input style="width: 100%;" type="text"/>	SAMPLE CODE <input style="width: 100%;" type="text"/>

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

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

NET LOSSES NET GAINS

NOTES

TABLE 2. The 20 spring samples audited for South-West Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'

River	Site	Sorter	Losses	Gains	Omissions
Camel	Slaughterbridge	TJR	0	1	0
Crooked Oak	Ashmill	LB	0	0	0
South Pool Stream	South Pool	AA	2	0	0
Dunkeswell Stream	U/s Madford confluence	LB	0	2	0
Mole	Meethe Barton	PG	0	1	0
St Erth Stream	Treloweth	NB	0	0	0
Red Lake	U/s Erme confluence	RG	0	0	0
Churchstow Stream	Redford	LB	0	0	0
Gara	Woodford	PG	0	2	0
Little Mere	Wooladon Moor	RG	0	0	0
Camel	Helland Bridge	ST	0	2	0
Camel	Polbrock	ST	0	2	0
Lynher	Bicton Mill Bridge	ST	1	1	0
Teign	Clifford Bridge	JBS	0	1	0
St Merryn Brook	Treveglos	PAB	1	1	0
Lee	Lee Bay Hotel	PG	3	3	0
Seaton	Seaton Beach	PAB	0	0	0
Plym	D/s Blackabrook	RG	0	2	0
Walkham	Bedford Bridge	AA	0	1	0
Fal	Tregoss Bridge	DJP	0	1	0

TABLE 3. The 20 summer samples audited for South-West Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'

River	Site	Sorter	Losses	Gains	Omissions
Fairoak	Upottery	PG	0	1	0
Yarty	Longbridge	RG	0	2	0
Cober	Coverack Bridge	DJP	0	1	0
Tiddy	Tilland Mill Bridge	TJR	0	4	0
Sancreed Brook	Little Sellan Bridge	DJP	1	1	0
Otter	Dotton Mill	PG	0	1	0
Budleigh Brook	Yettington	PG	1	1	0
Menalhyl	Mawgan Porth Bridge	ST	1	3	0
Cober	D/s Helston STW	PAB	0	3	0
Woolacombe	U/s Bridge	PG	0	4	0
Pin Brook	Mosshayne	PG	2	1	2
Culm	D/s Silverton Mill	LB	0	4	0
Holywell Stream	Trelaske	DJP	0	0	0
Bokiddick Stream	Lowerton Farm	PAB	1	1	0
Camel	Helland Bridge	ST	0	0	0
Inny	Trekelland Bridge	ST	0	0	0
Plym	Slough Bridge	LB	0	1	0
Chillington Stream	Chillington	NB	0	0	0
Fowey	Draynes Bridge	TAB	0	1	0
West Webburn	Ponsworthy Bridge	AA	0	0	0

TABLE 4. The 20 autumn samples audited for South-West Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'

River	Site	Sorter	Losses	Gains	Omissions
East Looe	Trussel Bridge	ST	0	1	0
Bokiddick Stream	Lowerton Farm	PAB	0	0	0
Rosevath Stream	Rosevath	TAB	1	0	0
Crackington Stream	Crackington Haven	KAD	0	1	0
Henwood Stream	U/s Axe confluence	RG	2	1	0
Colaton Raleigh Stream	Pophams	PG	0	2	0
Lamberal Water	Forda	AA	0	1	0
Tamar	D/s Deer confluence	TAB	1	3	0
Tamar	Bridgerule	ST	0	0	0
Taw	Chenson	RG	0	0	0
Taw	Kersham	NB	1	1	0
Okement	A3072 Bridge	RG	0	0	0
Mountjoy Stream	Trewassick Bridge	PAB	0	3	0
Penwartha Stream	Pendragon	KAD	0	0	0
Strat	Stratton	ST	0	0	0
Mullion Stream	Mullion Cove	ST	0	0	0
Tregillowe Stream	Gwallon	TJR	0	0	0
Porthowan Stream	Menagissey Bridge	PAB	1	3	0
Perranporth Stream	Mithian	TAB	0	0	0
Melalhyl	Mawgan Porth Bridge	TAB	1	0	0

APPENDIX

Results of individual sample audits

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Camel
SEASON	3.4.91	SITE	Slaughterbridge
SORTER	TJR	SAMPLE CODE	NRA06 2537

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 Hydroptilidae

NET LOSSES NET GAINS

NOTES

1 Oxyethira sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Crooked Oak
SEASON	13.3.91	SITE	Ashmill
SORTER	LB	SAMPLE CODE	NRA06 3062

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	South West		RIVER	South Pool Stream
SEASON	25.4.91		SITE	South Pool
SORTER	AA		SAMPLE CODE	NRA06 0816

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 Erpobdellidae 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)	None

NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West	RIVER Dunkeswell Stream
SEASON 12.4.91	SITE U/s Madford Confluence
SORTER LB	SAMPLE CODE NRA06 0579

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

	LOSSES	GAINS								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">A</td> <td style="width: 30%; text-align: center;"><u>VIAL</u></td> <td style="width: 30%; text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</td> <td style="width: 35%; text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</td> </tr> <tr> <td></td> <td style="vertical-align: top;"> Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE </td> <td style="text-align: center; vertical-align: middle;">None</td> <td style="text-align: center; vertical-align: middle;">None</td> </tr> </table>	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		
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							

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">B</td> <td style="width: 30%; text-align: center;"><u>SAMPLE</u></td> <td style="width: 30%; text-align: center;">BMWP FAMILIES NOT FOUND BY IFE</td> <td style="width: 35%; text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</td> </tr> <tr> <td></td> <td style="vertical-align: top;"> Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE </td> <td style="vertical-align: top;"> (This box only completed when no vial supplied with sample) </td> <td style="vertical-align: top;"> 1 Perlodidae 2 Lepidostomatidae </td> </tr> </table>	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 Perlodidae 2 Lepidostomatidae		
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 Perlodidae 2 Lepidostomatidae							

NET LOSSES 0 NET GAINS 2

NOTES

1 *Isoperla grammatica* 1 only
 2 *Crunoecia irrorata* 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Mole
SEASON	26.3.91	SITE	Meethe Barton
SORTER	PG	SAMPLE CODE	NRA06 3060

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

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

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

NET LOSSES NET GAINS

NOTES

1 Armiger crista 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West		RIVER	St Erth Stream
SEASON	1.3.91		SITE	Treloweth
SORTER	NB		SAMPLE CODE	NRA06 2217

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	South West	RIVER	Red Lake
SEASON	26.4.91	SITE	U/s Erme Confluence
SORTER	RG	SAMPLE CODE	NRA06 0909

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	South West	RIVER	Churchstow Stream
SEASON	25.4.91	SITE	Redford
SORTER	LB	SAMPLE CODE	NRA06 0818

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 South West

RIVER Gara

SEASON 25.4.91

SITE Woodford

SORTER PG

SAMPLE CODE NRA06 0814

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 Leuctridae 2 Simuliidae

NET LOSSES 0

NET GAINS 2

NOTES

1 Leuctra hippopus, L.geniculata
2 Simulium cryophilum group (larva) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Little Mere

SEASON 22.4.91

SITE Wooladon Moor

SORTER RG

SAMPLE CODE NRA06 2941

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	South West	RIVER	Camel
SEASON	17.4.91	SITE	Helland Bridge
SORTER	ST	SAMPLE CODE	NRA06 2543

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 Caenidae 2 Hydrophilidae

NET LOSSES NET GAINS

NOTES

1 Caenis rivulorum 1 only
2 Hydraena gracilis

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West		RIVER	Camel
SEASON	16.4.91		SITE	Polbrock
SORTER	ST		SAMPLE CODE	NRA06 2546

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 Caenidae 2 Hydrophilidae

NET LOSSES NET GAINS

NOTES

1 Caenis rivulorum 1 only
2 Hydraena gracilis

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Lynher
SEASON	18.4.91	SITE	Bicton Mill Bridge
SORTER	ST	SAMPLE CODE	NRA06 12135

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 Hydrobiidae	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 Hydrophilidae

NET LOSSES NET GAINS

NOTES

1 Empty shell
2 Hydraena gracilis 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Teign
SEASON	23.4.91	SITE	Clifford Bridge
SORTER	JBS	SAMPLE CODE	NRA06 0631

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 Gyrinidae

NET LOSSES NET GAINS

NOTES

1 Orectochilus villosus (larva) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West		RIVER	St Merryn Brook
SEASON	13.3.91		SITE	Trevegnos
SORTER	PAB		SAMPLE CODE	NRA06 2534

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

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

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

NET LOSSES NET GAINS

NOTES

1 Succinea sp. found in vial
2 Stictotarsus duodecimpustulatus (adult) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Lee
DATE	1.3.91	SITE	Lee Bay Hotel
SORTER	PG	SAMPLE CODE	NRA06 3103

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>1 Sphaeriidae 2 Erpobdellidae 3 Lepidostomatidae</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>(This box only completed when no vial supplied with sample)</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p>4 Leptophlebiidae 5 Dryopidae 6 Tipulidae</p>

NET LOSSES NET GAINS

NOTES

1 Empty Sphaeriid shells in vial
 4 Paraleptophlebia sp. 1 only
 5 Dryops sp. (larva) 1 only
 6 Limnophila (Eloeophila) sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Seaton
DATE	17.4.91	SITE	Seaton Beach
SORTER	PAB	SAMPLE CODE	NRA06 1306

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

NET LOSSES

NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Plym
DATE	24.4.91	SITE	D/s Blackabrook
SORTER	RG	SAMPLE CODE	NRA06 1111

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 Rhyacophilidae 2 Hydroptilidae

NET LOSSES NET GAINS

NOTES

1 Rhyacophila sp. 1 only
2 Hydroptila sp.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Walkham
DATE	23.4.91	SITE	Bedford Bridge
SORTER	AA	SAMPLE CODE	NRA06 1287

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; font-size: 1.2em;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>
B	<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; font-size: 1.2em;">1 Sphaeriidæ</p>

NET LOSSES NET GAINS

NOTES

1 Pisidium sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Fal
DATE	27.3.91	SITE	Tregoss Bridge
SORTER	DJP	SAMPLE CODE	NRA06 1958

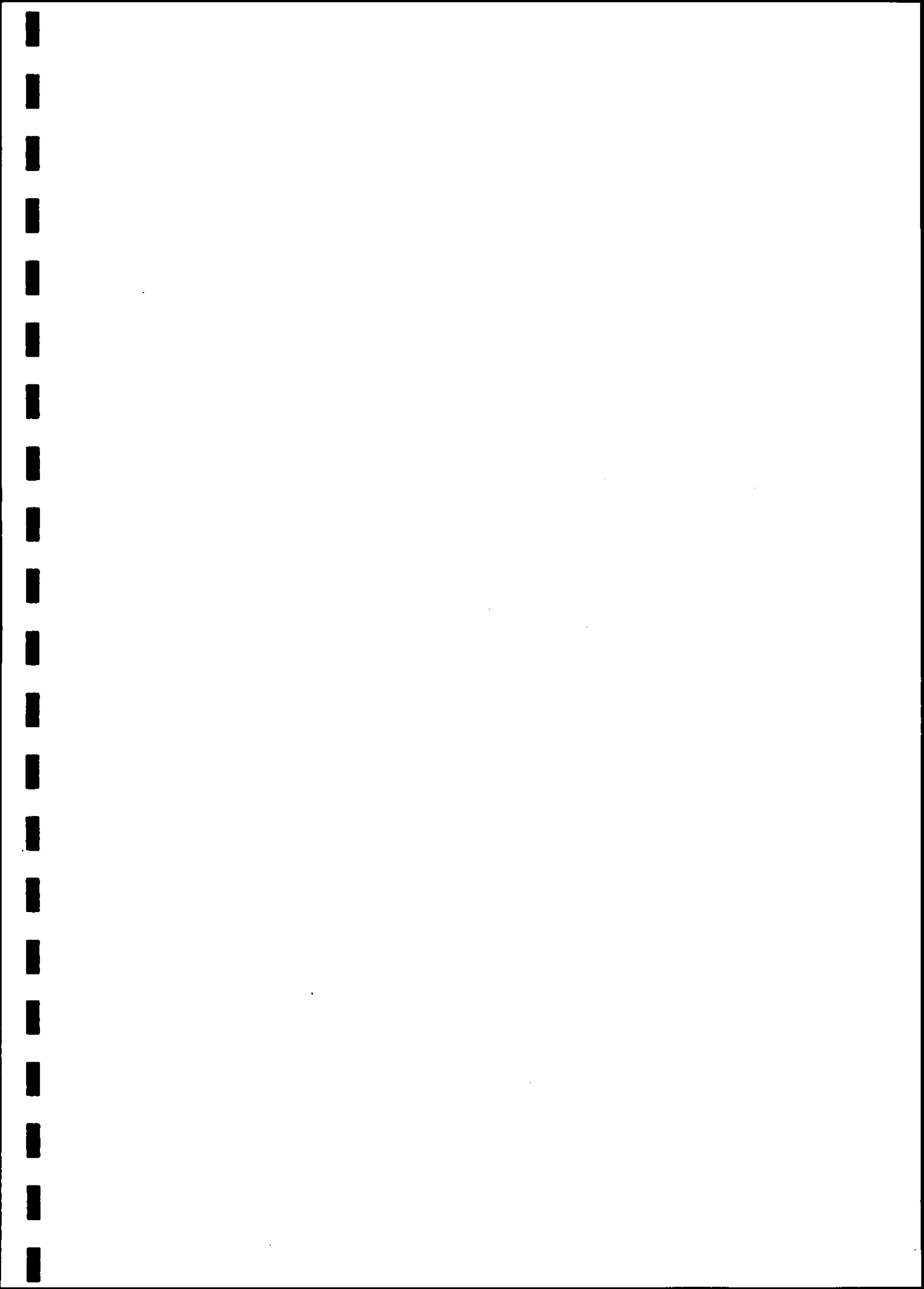
AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

		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; font-weight: bold;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">1 Libellulidae</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; font-weight: bold;">None</p>

NET LOSSES NET GAINS

NOTES

1 Libellula depressa 1 only



1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West	RIVER Fairoak
DATE 28.6.91	SITE Upottery
SORTER PG	SAMPLE CODE NRA06 0416

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 Hydrophilidae
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NET LOSSES NET GAINS

NOTES 1 Hydraena gracilis (adults)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Yarty
DATE	21.6.91	SITE	Longbridge
SORTER	RG	SAMPLE CODE	NRA06 0243

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; font-weight: bold;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">None</p>
B	<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; font-weight: bold;">1 Planorbidae 2 Hydrophilidae</p>

NET LOSSES NET GAINS

NOTES

1 *Bathyomphalus contortus* 1 only
 2 *Hydraena gracilis* (adults)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Cober
DATE	4.6.91	SITE	Coverack Bridge
SORTER	DJP	SAMPLE CODE	NRA06 2005

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

NET LOSSES NET GAINS

NOTES

1 Pisidium sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Tiddy
DATE	16.7.91	SITE	Tilland Mill Bridge
SORTER	TJR	SAMPLE CODE	NRA06 2141

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

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

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

NET LOSSES NET GAINS

NOTES

1 Polycelis felina 1 only
 2 Ancyclus fluviatilis 1 only
 3 Pisidium sp.
 4 Ceraclea dissimilis

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Sancreed Brook
DATE	5.6.91	SITE	Little Sellan Bridge
SORTER	DJP	SAMPLE CODE	NRA06 2120

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 Gyrinidae	2 Hydrophilidae

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

NET LOSSES NET GAINS

NOTES

2 Helophorus brevipalpis, H.alternans, Hydraena gracilis (all adults)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Otter
DATE	2.7.91	SITE	Dotton Mill
SORTER	PG	SAMPLE CODE	NRA06 0415

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 Sericostomatidae

NET LOSSES NET GAINS

NOTES

1 Sericostoma personatum 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Budleigh Brook
DATE	2.7.91	SITE	Yettington
SORTER	PG	SAMPLE CODE	NRA06 0425

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 Chloroperlidae	2 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)	None

NET LOSSES NET GAINS

NOTES

2 Leuctra fusca

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Menalhyl
DATE	21.6.91	SITE	Mawgan Porth Bridge
SORTER	ST	SAMPLE CODE	NRA06 2530

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>Lymnaeidae</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>Leuctridae</i> 3 <i>Leptoceridae</i> 4 <i>Lepidostomatidae</i>

NET LOSSES NET GAINS

NOTES	<ul style="list-style-type: none"> 1 <i>Succinea</i> sp. in vial 2 <i>Leuctra fusca</i> 1 only 3 <i>Mystacides azurea</i> (pupa) 1 only 4 <i>Lepidostoma hirtum</i> 1 only
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1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Cober
DATE	4.6.91	SITE	D/s Helston STW
SORTER	PAB	SAMPLE CODE	NRA06 2007

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 Glossiphoniidae 2 Coenagriidae 3 Rhyacophilidae

NET LOSSES NET GAINS

NOTES

1 *Helobdella stagnalis* 1 only
 2 *Ischnura elegans* 1 only
 3 *Agapetus* sp. (pupa) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Woolacombe
DATE	4.6.91	SITE	U/s Bridge
SORTER	PG	SAMPLE CODE	NRA06 3040

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 1 Ancylidae

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 Asellidae 3 Heptageniidae 4 Leptophlebiidae
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NET LOSSES NET GAINS

NOTES

1 Ancylus fluviatilis
 2 Asellus meridianus 1 only
 3 Rhithrogena sp., Ecdyonurus sp.
 4 Paraleptophlebia sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West	RIVER Pin Brook
DATE 11.7.91	SITE Mosshayne
SORTER PG	SAMPLE CODE NRA06 0570

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

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

NET LOSSES 2 NET GAINS 1

NOTES

1 Terrestrial snail in vial
 2,5 Succinea sp. in vial, Lymnaea peregra in sample
 4,6 Terrestrial larva in vial, Helophorus brevipalpis (adults) in sample
 7 Elmis aenea (adult) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Culm
DATE	5.7.91	SITE	D/s Silverton Mill
SORTER	LB	SAMPLE CODE	NRA06 0577

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 Valvatidae 2 Ancyliidae 3 Hydrophilidae 4 Sialidae

NET LOSSES NET GAINS

NOTES

1 Valvata piscinalis 1 only
 2 Acroloxus lacustris
 3 Indet Hydrophilid larva 1 only
 4 Sialis lutaria

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Holywell Stream
DATE	20.6.91	SITE	Trelaske
SORTER	DJP	SAMPLE CODE	NRA06 2328

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; font-size: 1.2em;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>

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

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Bokiddick Stream
DATE	3.7.91	SITE	Lowerton Farm
SORTER	PAB	SAMPLE CODE	NRA06 1612

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 Mesoveliidae</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 Sphaeriidae</p>

NET LOSSES NET GAINS

NOTES

1 Velia sp. (nymphs) in vial
 2 Pisidium sp.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Camel
DATE	8.7.91	SITE	Helland Bridge
SORTER	ST	SAMPLE CODE	NRA06 2543

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	South West	RIVER	Inny
DATE	17.7.91	SITE	Trekelland Bridge
SORTER	ST	SAMPLE CODE	NRA06 12131

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; font-weight: bold;">None</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-weight: bold;">None</p>
B	<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; font-weight: bold;">None</p>

NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Plym

DATE 24.7.91

SITE Slough Bridge

SORTER LB

SAMPLE CODE NRA06 1112

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 Chironomidae

NET LOSSES 0

NET GAINS 1

NOTES

1 Tanypodinae (larva) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Chillington Stream
DATE	26.7.91	SITE	Chillington
SORTER	NB	SAMPLE CODE	NRA06 0817

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

NET LOSSES NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West	RIVER	Fowey
DATE	9.7.91	SITE	Draynes Bridge
SORTER	TAB	SAMPLE CODE	NRA06 1513

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

NET LOSSES NET GAINS

NOTES

1 Indet Sphaeriid (decalcified) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

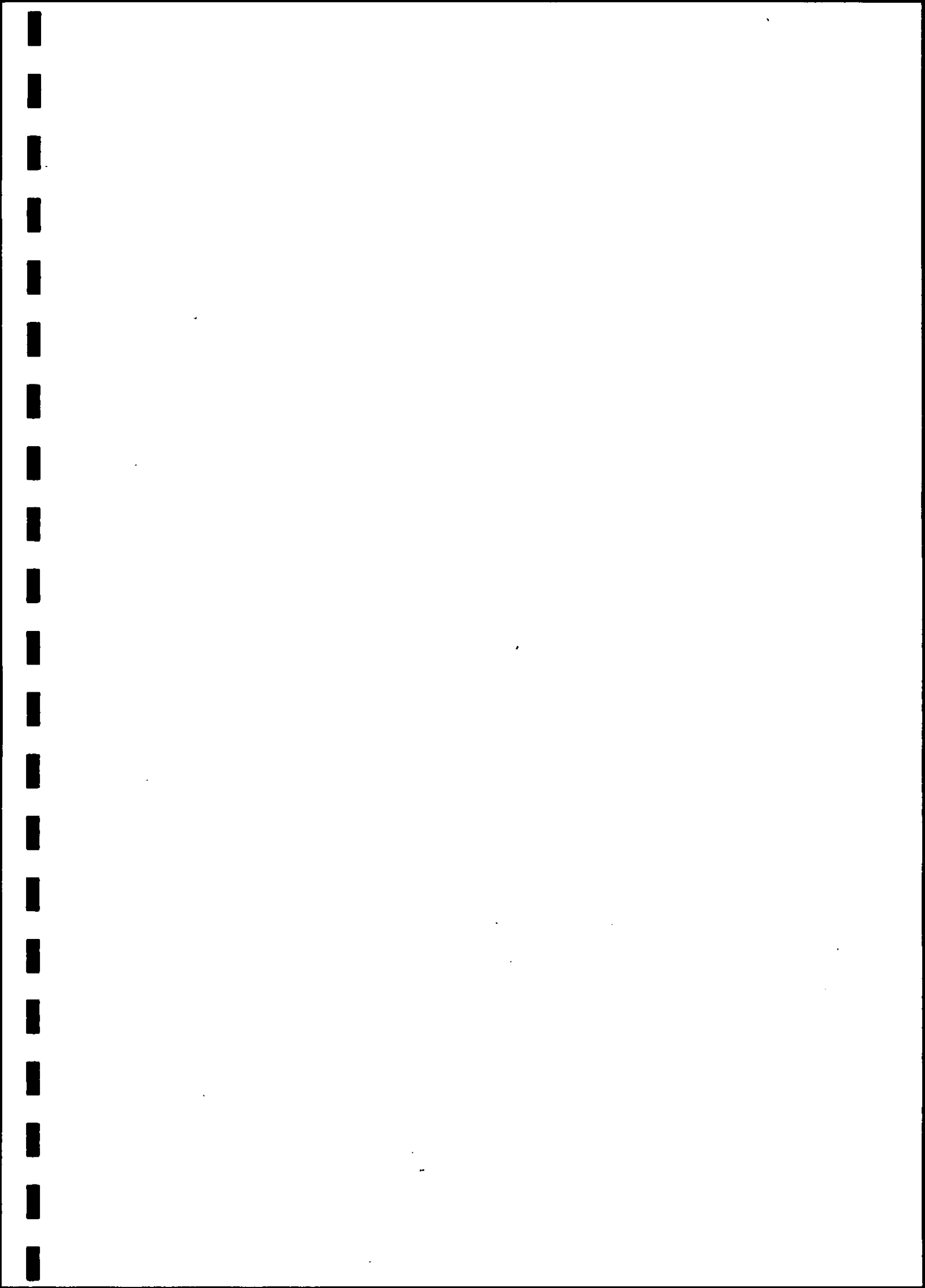
REGION	South West	RIVER	West Webburn
DATE	24.7.91	SITE	Ponsworthy Bridge
SORTER	AA	SAMPLE CODE	NRA06 0730

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	South West		RIVER	East Looe
DATE	24.9.91		SITE	Trussel Bridge
SORTER	ST		SAMPLE CODE	NRA06 1413

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 Ephemerelellidae

NET LOSSES

NET GAINS

NOTES

1 Ephemerelella ignita 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Bokiddick Stream

DATE 20.9.91

SITE Lowerton Farm

SORTER PAB

SAMPLE CODE NRA06 1612

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 South West

RIVER Rosevath Stream

DATE 23.9.91

SITE Rosevath

SORTER TAB

SAMPLE CODE NRA06 1616

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 Elmidae	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 1

NET GAINS 0

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Crackington Stream

DATE 30.9.91

SITE Crackington Haven

SORTER KAD

SAMPLE CODE NRA06 2607

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 Hydroptilidae

NET LOSSES 0

NET GAINS 1

NOTES

1 Hydroptila sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Henwood Stream

DATE 17.9.91

SITE U/s Axe confluence

SORTER RG

SAMPLE CODE NRA06 0240

AQC OF BMWP FAMILIES A. IN VIAL +

B. IN SAMPLE +

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

NET LOSSES 2

NET GAINS 1

NOTES

1 Succinea sp. in vial and sample
3 Pyrrhosoma nymphula 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Colaton Raleigh Stream

DATE 19.9.91

SITE Pophams

SORTER PG

SAMPLE CODE NRA06 0424

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 Nemouridae 2 Hydrophilidae

NET LOSSES 0

NET GAINS 2

NOTES

1 Nemurella picteti 1 only
2 Hydraena gracilis (adult) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Lambert Water

DATE 16.10.91

SITE Forda

SORTER AA

SAMPLE CODE NRA06 12117

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 Scirtidae

NET LOSSES 0

NET GAINS 1

NOTES 1 Elodes sp. (larvae)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West		RIVER	Tamar
DATE	7.10.91		SITE	D/s Deer confluence
SORTER	TAB		SAMPLE CODE	NRA06 12116

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 Rhyacophilidae</p>	<p style="text-align: center;">ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">2 Psychomyiidae</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;">3 Platycnemididae 4 Lepidostomatidae</p>

NET LOSSES NET GAINS

NOTES

2 Psychomyia pusilla
 3 Platycnemis pennipes
 4 Lepidostoma hirtum 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Tamar

DATE 7.10.91

SITE Bridgerule

SORTER ST

SAMPLE CODE NRA06 12114

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 FAMILIES NOT FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center; font-size: 1.2em;">None</p>
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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 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; font-size: 1.2em;">None</p>
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NET LOSSES 0

NET GAINS 0

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Taw

DATE 10.9.91

SITE Chenson

SORTER RG

SAMPLE CODE NRA06 3041

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 South West

RIVER Taw

DATE 9.9.91

SITE Kersham

SORTER NB

SAMPLE CODE NRA06 3042

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 Linnephilidae	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 Valvatidae

NET LOSSES 1

NET GAINS 1

NOTES 2 Valvata piscinalis

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Okement

DATE 12.9.91

SITE A3072 Bridge, Jacobstowe

SORTER RG

SAMPLE CODE NRA06 2965

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 South West

RIVER Mountjoy Stream

DATE 12.9.91

SITE Trewassick Bridge

SORTER PAB

SAMPLE CODE NRA06 2536

AQC OF BMWP FAMILIES A. IN VIAL +

B. IN SAMPLE +

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

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 Polycentropodidae 3 Beraeidae

NET LOSSES 0

NET GAINS 3

NOTES

- 1 Ancylus fluviatilis
- 2 Plectrocnemia conspersa 1 only
- 3 Beraea maurus 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West		RIVER	Penwartha Stream
DATE	10.9.91		SITE	Pendragon
SORTER	KAD		SAMPLE CODE	NRA06 2327

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	South West		RIVER	Strat
DATE	7.10.91		SITE	Stratton
SORTER	ST		SAMPLE CODE	NRA06 2711

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 South West

RIVER Mullion Stream

DATE 1.9.91

SITE Mullion Cove

SORTER ST

SAMPLE CODE NRA06 1955

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 style="text-align: center;">None</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="text-align: center;">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 style="text-align: center;">None</p>
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NET LOSSES 0

NET GAINS 0

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION	South West		RIVER	Tregillowe Stream
DATE	3.9.91		SITE	Gwallon
SORTER	TJR		SAMPLE CODE	NRA06 2114

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 South West

RIVER Porthtowan Stream

DATE 10.9.91

SITE Menagissey Bridge

SORTER PAB

SAMPLE CODE NRA06 2323

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 Planorbidae	2 Agriidae 3 Rhyacophilidae
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 Hydrophilidae

NET LOSSES 1

NET GAINS 3

NOTES

- 1 Terrestrial snail in vial
- 2 Calopteryx virgo
- 3 Rhyacophila dorsalis
- 4 Anacaena globulus, A. lutescens (adults)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION South West

RIVER Perranporth Stream

DATE 10.9.91

SITE Mithian

SORTER TAB

SAMPLE CODE NRA06 2326

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 South West

RIVER Melalhyl

DATE 17.9.91

SITE Mawgan Porth Bridge

SORTER TAB

SAMPLE CODE NRA06 2530

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 style="margin-top: 10px;">1 Asellidae</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="margin-top: 10px;">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 style="margin-top: 10px;">(This box only completed when no vial supplied with sample)</p>	<p>ADDITIONAL FAMILIES FOUND BY IFE</p> <p style="margin-top: 10px;">None</p>
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NET LOSSES 1

NET GAINS 0

NOTES

1 Posterior half only