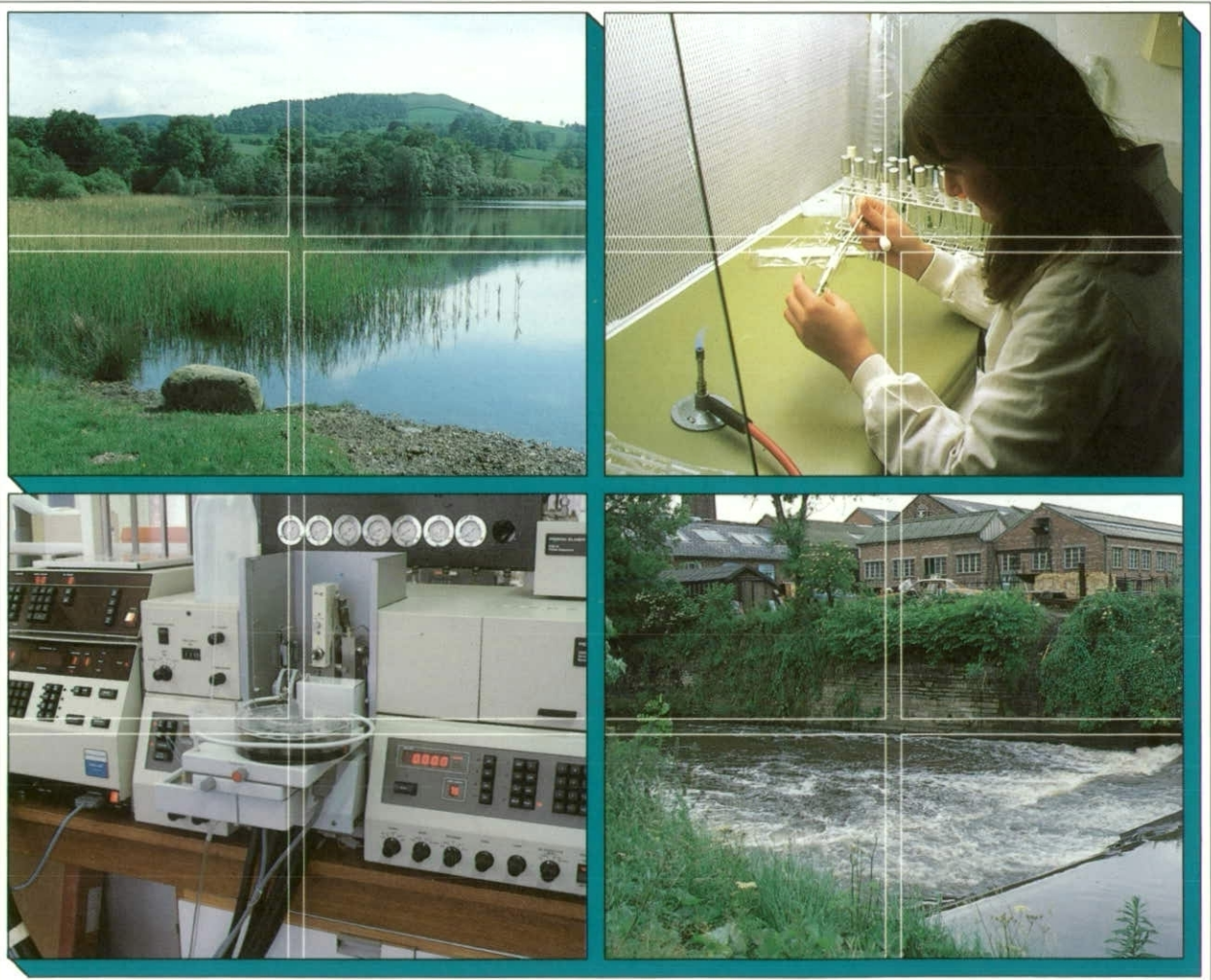




Institute of
Freshwater
Ecology

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

R.J.M Gunn, BA
J.F. Wright, PhD
J.M. Winder, BSc
J.H. Blackburn, BSc



INSTITUTE OF FRESHWATER ECOLOGY
River Laboratory, East Stoke, Wareham, Dorset BH20 6BB

Tel: 0929 462314

Fax: 0929 462180

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

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

Project leader:	J.F. Wright
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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 Yorkshire Region of the NRA. The IFE was not required to perform any statistical analyses nor interpretation of the results of the audit.

2. SAMPLE SELECTION

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

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

3. SAMPLE PROCESSING

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

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

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

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

For a number of different reasons, some samples did not include a vial containing representative examples of the families listed on the data sheet. Others arrived with the vial damaged in transit such that the representative examples were no longer separated. For these samples, only operations a), d) and e) above were appropriate.

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

4. REPORTING

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

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

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

Results of the audits of individual samples are presented in the Appendix.

ACKNOWLEDGEMENTS

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

TABLE 1. The IFE Report form

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION RIVER DATE SITE SORTER SAMPLE CODE AQC OF BMWP FAMILIES A. IN VIAL ☐B. IN SAMPLE ☐

		LOSSES	GAINS
A	<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 Yorkshire Region, with sample sorter initials and numbers of taxa 'lost', 'gained' and 'omitted'

River	Site	Sorter	Losses	Gains	Omissions
Calder	Lydgate	FC	1	1	0
Kyle	Alne	RM	1	1	0
Holme	Holmbridge	JBS	0	2	0
Wharfe	Castley	FC	0	1	0
Cover	Middleham	FN	0	0	0
Hawke Brook	Shuttlewood	VH	0	1	0
Ure	Wensley	LM	0	0	0
Little Don	D/s Langsett WTW	RPC	1	0	0
Ure	Aysgarth	CG	0	2	0
Dove	Darfield	SAL	0	1	1
Marske Beck	Marske	CG	0	1	0
Don	Dunford Bridge	JBS	0	0	1
Eller Beck	Long Dam	LMB	1	4	0
Dearne	Adwick-upon-Dearne	SAL	0	1	0
Calder	Copley	VH	0	2	0
Cod Beck	Borrowby	EA	1	0	0
Crimple	Follifoot	EA	1	2	0
Nidd	Ornamental Bridge	FN	0	1	0
Derwent	Low Hutton	RM	0	3	0
Stonegate Beck	Glaisdale	CG	0	7	0

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

River	Site	Sorter	Losses	Gains	Omissions
Billingley Dike	B6273 Bridge	SGT	0	2	0
Little Beck	U/s Woundales Beck	FN	0	2	0
Spinksburn Beck	Wydra	JBS	0	1	0
Sand Beck	U/s Badger Beck	RM	0	1	0
Wharfe	Tadcaster	SGT	1	0	1
Wharfe	Hubberholme	JCP	0	2	0
Cover	Braidley	EA	0	0	0
Fleemis Gill	Gammersgill	FN	0	3	0
Sutherland Beck	U/s Little Beck	EA	0	3	0
Smelt Mill Beck	Near Hartforth	EA	0	3	0
Silkstone Beck	Pothouse Bridge	SAL	0	1	0
Dearne	Marles Bridge	JCP	0	0	0
Carlesmoor Beck	Carlesmoor	FN	0	1	0
Capelshaw Beck	Dukes Hill	RPC	1	0	1
Linton Beck	Bow Bridge	JCP	0	1	0
Wharfe	U/s Pool Paper Mill	RPC	0	1	0
Wharfe	Ilkley	VH	0	1	0
Ouse	Acaster Malbis	FN	0	0	0
Upland Stell	Near Wath	FN	0	0	0
Barney Beck	Redmire	EA	0	0	0

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

River	Site	Sorter	Losses	Gains	Omissions
Ouse	Acaster Malbis	FN	0	0	0
Ottringham Drain	Far Marsh Farm	JM	0	1	0
Knoll Beck	Old Moor Bridge	SAL	0	2	0
Kex Beck	Beamsley	JK	0	0	0
Lumbutts Clough	D/s Tip leachates	FC	0	0	2
Wood Gutter	Redhouse Wood	JM	0	1	0
Went Beck	U/s Hessle Beck	SAL	0	0	0
Carr Close Beck	Near Murton	FN	0	0	0
Alcomden Water	U/s Graining Water	VH	0	2	1
White Beck	East Newton	RM	2	2	0
Frodingham Beck	Emmotland	RM	1	0	0
Don	Springvale	RPC	0	0	0
Lul Beck	Near Ramsgill	RM	0	2	0
Hew Beck	U/s Double Dike	JM	0	0	1
Wharfe	Barden Bridge	JK	1	1	0
Stonesdale Beck	Near West Stonesdale	JM	0	3	0
Ramsden Clough	Holmbridge	SGT	0	3	1
Huby Burn	D/s STW Burn Hall	EA	0	0	0
Hebden Water	U/s Grimsworth Dean	FC	1	0	0
Manywells Beck	U/s Harden Beck	SGT	0	2	0

APPENDIX

Results of individual sample audits

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Yorkshire

RIVER Calder

DATE 11.4.91

SITE Lydgate

SORTER FC

SAMPLE CODE NRA10 0060

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
		ADDITIONAL FAMILIES FOUND BY IFE
		1 Simuliidae
		2 Leuctridae

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
		ADDITIONAL FAMILIES FOUND BY IFE
		(This box only completed when no vial supplied with sample)

NET LOSSES 1

NET GAINS 1

NOTES

1 Leuctra inermis

Simuliidae entered on data sheet as abundance category A.
Although box not ticked, it appears to be included in the
total of 10 taxa. Not found in vial or sample.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

B. IN SAMPLE

LOSSES		GAINS
A	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 1 Hydrobiidae
		ADDITIONAL FAMILIES FOUND BY IFE 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 (This box only completed when no vial supplied with sample)
		ADDITIONAL FAMILIES FOUND BY IFE 2 Planorbidae

NET LOSSES

NET GAINS

NOTES

1 Empty Potamopyrgus jenkinsi shell in vial
2 Gyraulus albus 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Holme**

DATE **24.4.91**

SITE **Holmbridge**

SORTER **JBS**

SAMPLE CODE **NRA10 0182**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

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

NET LOSSES **0**

NET GAINS **2**

NOTES

1 Isoperla grammatica 1 only
2 Polycentropus flavomaculatus

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES		GAINS	
A	<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 Ephemerellidae

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

NET LOSSES

NET GAINS

NOTES

1 Ephemerella ignita 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

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

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

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

NET LOSSES

NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES		GAINS	
A	<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

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

RIVER

DATE

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES

A. IN VIAL

B. IN SAMPLE

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

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

NET LOSSES

NET GAINS

NOTES

1 Brachyptera sp.
2 Halesus sp.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

NET LOSSES

NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Marske Beck**

DATE **9.4.91**

SITE **Marske**

SORTER **CG**

SAMPLE CODE **NRA10 0208**

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 Ithytrichia sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

NET LOSSES

NET GAINS

NOTES

2 Crangonyx pseudogracilis

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Eller Beck**

DATE **8.4.91**

SITE **Long Dam**

SORTER **LMB**

SAMPLE CODE **NRA10 0141**

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>	2 <i>Tipulidae</i>

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

NET LOSSES **1**

NET GAINS **4**

NOTES

- 2 *Tipula montium* group
- 3 *Anisus vortex*
- 4 *Rhithrogena* sp.
- 5 *Orectochilus villosus*

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

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

NET LOSSES

NET GAINS

NOTES

1991. RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES		GAINS
A	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 None
		ADDITIONAL FAMILIES FOUND BY IFE 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 (This box only completed when no vial supplied with sample)
		ADDITIONAL FAMILIES FOUND BY IFE 1 Hydrobiidae 2 Elmidae

NET LOSSES

NET GAINS

NOTES

1 Potamopyrgus jenkinsi 1 only
 2 Elms aenea (larva) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

Yorkshire

RIVER

Cod Beck

DATE

17.4.91

SITE

Borrowby

SORTER

EA

SAMPLE CODE

NRA10 0073

AQC OF BMWP FAMILIES

A. IN VIAL

+

B. IN SAMPLE

+

LOSSES

GAINS

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

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

NET LOSSES

1

NET GAINS

0

NOTES

1 Terrestrial beetle (Nitidulidae) in vial

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Crimple**

DATE **11.4.91**

SITE **Follifoot**

SORTER **EA**

SAMPLE CODE **NRA10 0404**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

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

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

NET LOSSES **1**

NET GAINS **2**

NOTES

- 1 Terrestrial beetle (Nitidulidae) in vial
- 2 Pisidium sp. 1 only
- 3 Hydropsyche sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

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

NET LOSSES

NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Yorkshire

RIVER Derwent

DATE 23.4.91

SITE Low Hutton

SORTER RM

SAMPLE CODE NRA10 0102

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
	None	None
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	

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

NET LOSSES 0

NET GAINS 3

NOTES

1 Planaria torva, Polycelis nigra/tenuis
2 Caenis horaria 1 only
3 Lype sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Yorkshire

RIVER Stonegate Beck

DATE 24.4.91

SITE Glaisdale

SORTER CG

SAMPLE CODE NRA10 0287

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
	None	1 Polycentropodidae
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	

LOSSES		GAINS
B	<u>SAMPLE</u>	
	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	(This box only completed when no vial supplied with sample)	2 Planariidae 3 Sphaeriidae 4 Caenidae 5 Scirtidae 6 Limnephilidae 7 Goeridae
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	

NET LOSSES 0

NET GAINS 7

NOTES

- 1 Polycentropus flavomaculatus
- 2 Polycelis felina 1 only
- 3 Pisidium sp.
- 4 Caenis rivulorum 1 only
- 5 Elodes sp. (larvae)
- 6 Drusus annulatus, Ecclisopteryx guttulata
- 7 Silo sp. (juvenile) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Yorkshire

RIVER Billingley Dike

DATE 17.7.91

SITE B6273 Bridge

SORTER SGT

SAMPLE CODE NRA10 2066

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
	None	None
	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
	(This box only completed when no vial supplied with sample)	1 Hydrobiidæ 2 Haliplidae
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	

NET LOSSES 0

NET GAINS 2

NOTES

1 Potamopyrgus jenkinsi 1 only
2 Haliplus sp. (adult + larvac)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Yorkshire

RIVER Little Beck

DATE 15.7.91

SITE U/s Woundales Beck

SORTER FN

SAMPLE CODE NRA10 0658

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
	None	None
	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
	(This box only completed when no vial supplied with sample)	1 Lymnaeidae 2 Leptoceridae
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	

NET LOSSES 0

NET GAINS 2

NOTES

1 Lymnaea peregra 1 only
2 Athripsodes cinereus, A.albifrons/bilineatus

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES

GAINS

A	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 only completed when no vial supplied with sample)	1 Leptophlebiidae

NET LOSSES

NET GAINS

NOTES

1 Paraleptophlebia sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Yorkshire

RIVER Sand Beck

DATE 6.8.91

SITE u/s Badger Beck

SORTER RM

SAMPLE CODE NRA10 0697

AQC OF BMWP FAMILIES A. IN VIAL +

B. IN SAMPLE +

LOSSES

GAINS

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 only completed when no vial supplied with sample)	1 Caenidae

NET LOSSES 0

NET GAINS 1

NOTES

1 Caenis rivulorum 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES		GAINS	
A	<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 Tipulidae* 2 Viviparidae	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 only completed when no vial supplied with sample)	3 Tipulidae*

NET LOSSES

NET GAINS

NOTES

1,3 Atherix ibis in vial, Antocha vitripennis in sample

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES

GAINS

A	<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	ADDITIONAL FAMILIES FOUND BY IFE
		None	1 Rhyacophilidae 2 Limnephilidae

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	ADDITIONAL FAMILIES FOUND BY IFE
		(This box only completed when no vial supplied with sample)	None

NET LOSSES

NET GAINS

NOTES

1,2 Pupae.

Comments section of NRA form suggests that these two families were identified but not added to BMWP list.
Sericostramatidae pupa not found in vial.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

		LOSSES	GAINS
A	<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	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 only completed when no vial supplied with sample)	None

NET LOSSES

NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION Yorkshire

RIVER Fleemis Gill

DATE 21.6.91

SITE Gammersgill

SORTER FN

SAMPLE CODE NRA10 0629

AQC OF BMWP FAMILIES A. IN VIAL +

B. IN SAMPLE +

LOSSES

GAINS

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 Oligochaeta

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 only completed when no vial supplied with sample)	2 Odontoceridae 3 Leptoceridae

NET LOSSES 0

NET GAINS 3

NOTES

1 Lumbricidae (including Eiseniella tetraedra).
Noted in Comments section of NRA form but not added to BMWP list.
2 Odontocerum albicorne
3 Athripsodes aterrimus 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

B. IN SAMPLE

LOSSES

GAINS

A	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 only completed when no vial supplied with sample)	1 Planorbidæ 2 Glossiphoniidae 3 Leptoceridae

NET LOSSES

NET GAINS

NOTES

- 1 Indet Planorbid (decalcified) 1 only
- 2 Helobdella stagnalis 1 only
- 3 Mystacides azurea (pupa) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

B. IN SAMPLE

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

NET LOSSES

NET GAINS

NOTES

- 1 Nemoura avicularis 1 only
- 2 Elodes sp. (larva) 1 only
- 3 Tinodes waeneri 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES		GAINS
A	<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

NET LOSSES

NET GAINS

NOTES

1 Glossiphonia complanata 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES

A. IN VIAL

B. IN SAMPLE

LOSSES

GAINS

A	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 only completed when no vial supplied with sample)	None

NET LOSSES

NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

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

NET LOSSES

NET GAINS

NOTES

1 Baetis sp. (head + thorax) 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES

A. IN VIAL

B. IN SAMPLE

LOSSES

GAINS

A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Scirtidae 2 Glossiphoniidae*	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 Glossiphoniidae*

NET LOSSES

NET GAINS

NOTES

1 Cast skin in vial
3 Glossiphonia complanata

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES

GAINS

A	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 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

RIVER

DATE

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

B. IN SAMPLE

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

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

NET LOSSES

NET GAINS

NOTES

1 Hydropsyche siltalai (pupae)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

Yorkshire

RIVER

Wharfe

DATE

29.7.91

SITE

Ilkley

SORTER

VH

SAMPLE CODE

NRA10 2086

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 Tipulidae

NET LOSSES

0

NET GAINS

1

NOTES

1 Dicranota sp. 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES

GAINS

A	<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

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

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

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

NET LOSSES

NET GAINS

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Barney Beck**

DATE **7.6.91**

SITE **Redmire**

SORTER **EA**

SAMPLE CODE **NRA10 0599**

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
	None	None
	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
	(This box only completed when no vial supplied with sample)	None
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	

NET LOSSES **0**

NET GAINS **0**

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Ouse**

DATE **30.10.91**

SITE **Acaster Malbis**

SORTER **FN**

SAMPLE CODE **NRA10 0236**

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
	None	None
	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
	(This box only completed when no vial supplied with sample)	None
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	

NET LOSSES **0**

NET GAINS **0**

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Ottringham Drain**

DATE **6.11.91**

SITE **Far Marsh Farm**

SORTER **JM**

SAMPLE CODE **NRA10 0886**

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
		ADDITIONAL FAMILIES FOUND BY IFE
		None
		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	ADDITIONAL FAMILIES FOUND BY IFE
		(This box only completed when no vial supplied with sample)	1 Hydrobiidae

NET LOSSES **0**

NET GAINS **1**

NOTES

1 Potamopyrgus jenkinsi

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Knoll Beck**

DATE **11.11.91**

SITE **Old Moor Bridge**

SORTER **SAL**

SAMPLE CODE **NRA10 0457**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

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

NET LOSSES **0**

NET GAINS **2**

NOTES

1 Armiger crista, Planorbis carinatus
2 Pisidium sp.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Kex Beck**

DATE **17.10.91**

SITE **Beamsley**

SORTER **JK**

SAMPLE CODE **NRA10 0190**

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 **Yorkshire**

RIVER **Lumbutts Clough**

DATE **16.10.91**

SITE **D/s Tip Leachates**

SORTER **FC**

SAMPLE CODE **NRA10 2254**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

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

NET LOSSES **0**

NET GAINS **0**

NOTES

3 Polycelis nigra/tenuis
4 Pisidium sp.

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Wood Gutter**

DATE **3.10.91**

SITE **Redhouse Wood**

SORTER **JM**

SAMPLE CODE **NRA10 0805**

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 Asellidae
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 **1**

NOTES **1 Asellus meridianus**

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Went Beck**

DATE **1.10.91**

SITE **U/s Hessele Beck**

SORTER **SAL**

SAMPLE CODE **NRA10 2135**

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 **0**

NET GAINS **0**

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Carr Close Beck**

DATE **1.10.91**

SITE **Nr Murton**

SORTER **FN**

SAMPLE CODE **NRA10 0794**

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 **Yorkshire**

RIVER **Alcomden Water**

DATE **7.10.91**

SITE **U/s Graining Water**

SORTER **VH**

SAMPLE CODE **NRA10 2238**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

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

NET LOSSES **0**

NET GAINS **2**

NOTES

- 2 Athripsodes sp. (juvenile)
- 3 Pisidium sp 1 only
- 4 Lumbriculus variegatus, Stylodrilus heringianus

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **White Beck**

DATE **9.10.91**

SITE **East Newton**

SORTER **RM**

SAMPLE CODE **NRA10 0766**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

LOSSES		GAINS
A	<u>VIAL</u>	BMWP FAMILIES NOT FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	ADDITIONAL FAMILIES FOUND BY IFE
		1 Aeshnidae 2 Goeridae
		3 Libellulidae
B	<u>SAMPLE</u>	BMWP FAMILIES NOT FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	ADDITIONAL FAMILIES FOUND BY IFE
		(This box only completed when no vial supplied with sample)
		4 Nemouridae

NET LOSSES **2**

NET GAINS **2**

NOTES
 2 Empty pupal case in vial
 3 Sympetrum nigrescens/striolatum
 4 Nemoura avicularis

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Frodingham Beck**

DATE **19.11.91**

SITE **Emmotland**

SORTER **RM**

SAMPLE CODE **NRA10 0903**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

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

RIVER **Don**

DATE **4.11.91**

SITE **Springvale**

SORTER **RPC**

SAMPLE CODE **NRA10 2105**

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 **Yorkshire**

RIVER **Lul Beck**

DATE **10.10.91**

SITE **Nr Ramsgill**

SORTER **RM**

SAMPLE CODE **NRA10 0822**

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
	None	None
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	

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

NET LOSSES **0**

NET GAINS **2**

NOTES

1 Polycelis felina
2 Paraleptophlebia submarginata 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Hew Beck**

DATE **29.10.91**

SITE **U/s Double Dike**

SORTER **JM**

SAMPLE CODE **NRA10 0892**

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 Hydrobiidae*

NET LOSSES **0**

NET GAINS **0**

NOTES

1,2 Empty shell in vial, Potamopyrgus jenkinsi in sample

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Wharfe**

DATE **9.10.91**

SITE **Barden Bridge**

SORTER **JK**

SAMPLE CODE **NRA10 0346**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

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

NET LOSSES **1**

NET GAINS **1**

NOTES

1 Terrestrial beetle (Aphodius sp, adult) in vial
2 Acroloxus lacustris

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Stonesdale Beck**

DATE **26.9.91**

SITE **Nr West Stonesdale**

SORTER **JM**

SAMPLE CODE **NRA10 0790**

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 Leptophlebiidae 2 Dytiscidae 3 Limnephilidae

NET LOSSES **0**

NET GAINS **3**

NOTES

- 1 Paraleptophlebia submarginata
- 2 Platambus maculatus (larva) 1 only
- 3 Ecclisopteryx guttulata 1 only

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Ramsden Clough**

DATE **23.10.91**

SITE **Holmbridge**

SORTER **SGT**

SAMPLE CODE **NRA10 2279**

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 Limnephilidae*	2 Lymnaeidae

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 Asellidae 4 Hydroptilidae 5 Limnephilidae*

NET LOSSES **0**

NET GAINS **3**

NOTES

- 2 Lymnaea peregra
- 3 Asellus aquaticus 1 only
- 4 Oxyethira sp. 1 only
- 5 Indet limnephilids (juveniles)

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

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

LOSSES		GAINS	
A	<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 **Yorkshire**

RIVER **Hebden Water**

DATE **7.10.91**

SITE **U/s Grimsworth Dean**

SORTER **FC**

SAMPLE CODE **NRA10 2240**

AQC OF BMWP FAMILIES A. IN VIAL **+**

B. IN SAMPLE **+**

LOSSES		GAINS
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 Limnephilidae	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 only completed when no vial supplied with sample)	None

NET LOSSES **1**

NET GAINS **0**

NOTES

1991 RIVER QUALITY SURVEY

AQC - BIOLOGICAL SAMPLES

REGION **Yorkshire**

RIVER **Manywells Beck**

DATE **26.9.91**

SITE **U/s Harden Beck**

SORTER **SGT**

SAMPLE CODE **NRA10 2201**

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	ADDITIONAL FAMILIES FOUND BY IFE
		None	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	ADDITIONAL FAMILIES FOUND BY IFE
		(This box only completed when no vial supplied with sample)	1 Planariidae 2 Polycentropodidae

NET LOSSES **0**

NET GAINS **2**

NOTES

1 Polycelis felina
2 Plectrocnemia sp. (juvenile) 1 only