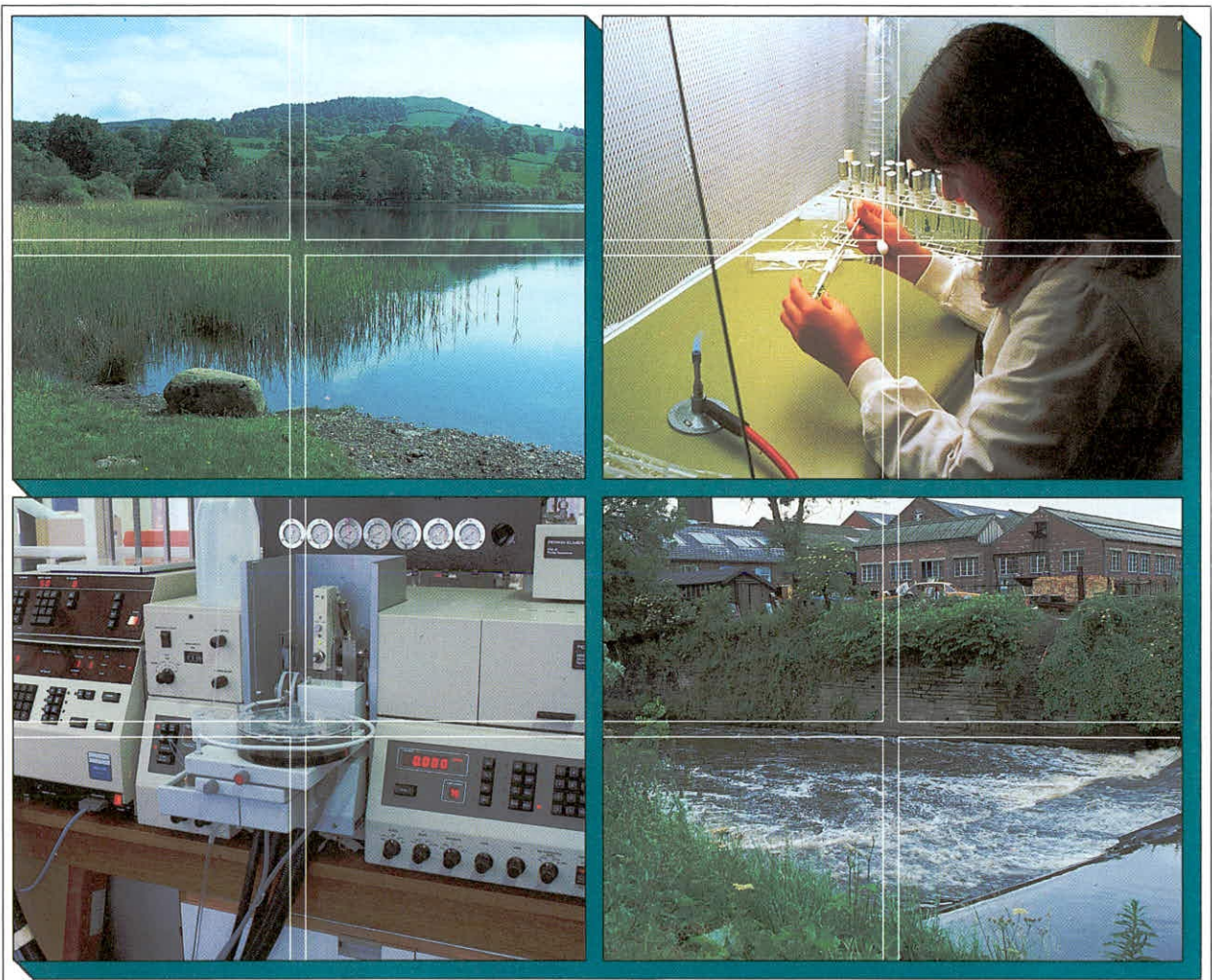




**Institute of
Freshwater
Ecology**

An audit of performance in the processing of macro-invertebrate samples in 1993. NRA Wessex Region

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NRA Wessex Region**

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Project leader:	R.J.M. Gunn
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1. INTRODUCTION

In 1993 the sampling of aquatic macro-invertebrates for the biological assessment of river quality continued throughout the United Kingdom. This task was undertaken by the National Rivers Authority (NRA) in England and Wales, the River Purification Boards (RPBs) in Scotland and the Industrial Research & Technology Unit (IRTU) in Northern Ireland.

In view of the number of staff involved and the variability of sample processing techniques, it was recognised that an independent quality control exercise was necessary to promote a consistently high level of reliability. The IFE was contracted to undertake an audit of the sample sorting and identification performance of each NRA region, several RPBs and the IRTU. This report presents the results of 60 samples audited for Wessex Region of the NRA. The IFE was not required to perform any statistical analyses nor interpretation of the results of the audit.

Each organisation employed standard collection procedures, as used in the 1990 River Quality Survey, and the sampling strategy was therefore compatible with RIVPACS (River InVertebrate Prediction And Classification System), which has been developed by the Institute of Freshwater Ecology (IFE).

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

2. SAMPLE SELECTION

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

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

3. SAMPLE PROCESSING

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

- i) a list of the BMWP families found in the sample
- ii) a vial containing representatives from each family
- iii) the preserved sample

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

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

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

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

4. REPORTING

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

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

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

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

ACKNOWLEDGEMENTS

Thanks to Diana Morton for typing the report.

TABLE 1. The IFE Report form

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

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

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

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

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	

NOTES: NET LOSSES ☐ NET GAINS ☐

TABLE 2. The 6 spring samples audited for Wessex Region.

River	Site	Sorter	Losses	Gains	Omissions
Stour	Parley Green	MSM	0	4	0
Stour	Longham	GPG	0	1	0
Odcombe Stream	Norton Subhamdon	GPG	0	2	1
Moors	Hurn Court	GPG	0	1	0
Cowage Brook	Ratford	DAC	0	2	0
Rodden Brook	Divers Bridge	DLS	0	3	0

TABLE 3. The 4 summer samples audited for Wessex Region

River	Site	Sorter	Losses	Gains	Omissions
Cale	u/s Wincanton STW	MSM	0	3	0
Somerset Peat	Site 4	MSM	0	3	0
Moors	Hurn Court	MSM	0	2	0
Somerset Frome	Iron Mill Farm	JW	0	3	0

TABLE 4. The 50 autumn samples audited for Wessex Region

River	Site	Sorter	Losses	Gains	Omissions
Stour	Parley Green	DAC	0	7	0
Stour	Homelands	PRH	0	4	0
Stour	Iford Golf Course	MSM	0	1	2
Stour	Iford Bridge	DLS	1	1	1
Back Brook	Cockhill Bridge	MSM	0	2	0
Doverte Brook	Newport	JW	1	0	0
Moors	u/s Palmersford STW	MSM	0	2	0
Crane	Doe's Hatch	PRH	1	4	0
Cale	d/s Wincanton STW	MSM	0	1	0
Odcombe Stream	Little Norton	GPG	0	1	0
Stour	Blackwater Junction	GPG	0	5	0
Stour	Berry Hill	JW	0	3	0
Stour	West Parley	DAC	0	2	1
Rodden Brook	Corsley Mill	DLS	0	0	0
Rodden Brook	Freeze Farm	DLS	0	2	0
Rodden Brook	Rodden Manor	DLS	0	1	0
Stour	Longham	GPG	0	4	0
Stour	Caravan Park	JW	0	4	0
Moors	Hurn Court	GPG	0	3	0
Crane	Romford Bridge	JW	0	3	0
Uddens Water	Ameysford	PRH	0	1	1
Stour	Julians Bridge	JW	0	1	0
Stour	Muscliff	DLS	0	1	0
Stour	Dudsbury	DLS	0	4	0
Stour	Holdenhurst	MSM	0	4	0
Stour	Beaulieu Gardens	JW	0	1	0
Stour	Hampreston	DAC	1	4	2

Stour	Hurn Court	JW	0	2	0
Stour	Tuckton	DLS	0	1	0
Cale	u/s Wincanton STW	MSM	0	1	0
Rowdeford Stream	Wick Farm, u/s STW	PRH	0	3	1
Edbrook	u/s Confluence Fiddington	MSM	0	3	0
Rowdeford Stream	Wick Farm, d/s STW	PRH	0	3	0
Avon	Britford Carrier, d/s STW	DAC	0	2	0
*Rowdeford Stream	Rowde Garage	MSM	0	1	0
Cale	Batch Pool Bridge	MSM	0	2	1
Rowdeford Stream	Rowdeford School	MSM	0	1	0
Summerham Brook	A361 Bridge	MSM	0	5	0
Uddens Water	West Moors	JW	0	6	0
Uddens Water	Tricketts Cross	MSM	0	3	1
Edbrook	Edbrook	MSM	0	4	0
Rowdeford Stream	Tanis	MSM	0	2	0
Rodden Brook	d/s Cley Hill	DLS	0	1	0
Moors	Woolsbridge	JW	1	2	1
Summerham Brook	Seend Bridge	MSM	0	0	1
Rodden Brook	Divers Bridge	DLS	1	1	0
Crane	d/s Surface Drain	MSM	0	0	1
Crane	Bridge Farm	MSM	0	3	0
Mannington Brook	Newmans Farm	MSM	0	1	0
Edbrook	d/s Oatley Farms	MSM	0	0	0

*indicates no vial of animals in sample

APPENDIX

Results of individual sample audits

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	19.4.93	SITE	Parley Green
SORTER	MSM	SAMPLE CODE	NRA09 4337 STR 110

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 Ephemerellidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Planorbidae 3 Glossiphoniidae 4 Ephemeridae

NET LOSSES

0

NET GAINS

4

NOTES:

- 1 Ephemerella ignita
- 2 Anisus vortex 1 only
- 3 Helobdella stagnalis 1 only
- 4 Ephemera danica 1 only

Note on data sheet that Libellulidae returned to river. Not found by IFE in vial or sample.

Sample contained Leptocerus lucitanicus (RDB2 status).

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	13.5.93	SITE	Longham
SORTER	GPG	SAMPLE CODE	NRA09 4337 STR 160

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Brachycentridae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Brachycentrus subnubilus

Sample contained Leptocerus lucitanicus (RDB2 status).

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Odcombe Stream
DATE	29.3.93	SITE	Norton Subhamdon
SORTER	GPG	SAMPLE CODE	NRA09 5203 ODC -

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

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Haliplidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Ancyliidae 3 Leptophlebiidae 4 Haliplidae*

NET LOSSES NET GAINS

NOTES:

2 Ancylos fluviatilis
3 Paraleptophlebia sp. 1 only
4 Brychius elevatus (adults)

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Moors
DATE	6.5.93	SITE	Hurn Court
SORTER	GPG	SAMPLE CODE	NRA09 4336 MOO 008

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

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
	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 is supplied with sample)	1 Psychomyiidae

NET LOSSES NET GAINS

NOTES:

1 Tinodes waeneri 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Cowage Brook
DATE	28.4.93	SITE	Ratford
SORTER	DAC	SAMPLE CODE	NRA09 5308 COW 007

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

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
	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 is supplied with sample)	1 Nemouridae 2 Rhyacophilidae

NET LOSSES NET GAINS

NOTES:

1 Amphinemura standfussi 1 only
2 Rhyacophila dorsalis (pupa) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

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

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
	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 is supplied with sample)	1 Planariidae 2 Scirtidae 3 Simuliidae

NET LOSSES NET GAINS

NOTES:

- 1 Polycelis sp. 1 damaged specimen only
- 2 Elodes sp. (larva) 1 only
- 3 Simulium ornatum group (pupa) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Cale
DATE	14.6.93	SITE	u/s Wincanton STW
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Baetidae 2 Psychomyiidae 3 Hydroptilidae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Baetis rhodani 1 only
 2 Tinodes waeneri 1 only
 3 Hydroptila sp. (pupa) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Somerset Peat
DATE	14.6.93	SITE	Site 4
SORTER	MSM	SAMPLE CODE	

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

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
	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 is supplied with sample)	1 Lymnaeidae 2 Notonectidae 3 Chironomidae

NET LOSSES NET GAINS

NOTES:

1 Lymnaea peregra 1 only
2 Notonecta sp. (nymph) 1 only
3 Chironomus sp.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Moors
DATE	21.7.93	SITE	Hurn Court
SORTER	MSM	SAMPLE CODE	NRA09 4336 MOO 008

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Planariidae 2 Valvatidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Dugesia tigrina 1 only
2 Valvata piscinalis 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Somerset Frome
DATE	21.6.93	SITE	Iron Mill Farm
SORTER	JW	SAMPLE CODE	NRA09 5311 SFR 260

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Glossiphoniidae 2 Caenidae 3 Goeridae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Indet Glossiphoniids (juveniles)
2 Caenis rivulorum 1 only
3 Goera pilosa

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	20.10.93	SITE	Parley Green
SORTER	DAC	SAMPLE CODE	NRA09 4337 STR 110

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 Simuliidae

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 is supplied with sample)	2 Planariidae 3 Valvatidae 4 Caenidae 5 Gyrinidae 6 Elmidae 7 Lepidostomatidae

NET LOSSES

0

NET GAINS

7

NOTES:

1 Simulium aureum group in vial, S.ornatum group in sample
 2 Polycelis nigra/tenuis 1 only
 3 Valvata cristata, V.piscinalis
 4 Caenis luctuosa/macrura
 5 Orectochilus villosus (larvae)
 6 Elmis aenea (larva), Oulimnius tuberculatus (adult + larva)
 7 Lepidostoma hirtum 1 only
 Note on data sheet that Leptoceridae removed for reference.
 Mystacides azurea, Athripsodes aterrimus found by IFE in sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	19.10.93	SITE	Homelands
SORTER	PRH	SAMPLE CODE	NRA09 4337 STR 020

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

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
	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 is supplied with sample)	1 Lymnaeidae 2 Erpobdellidae 3 Baetidae 4 Hydroptilidae

NET LOSSES NET GAINS

NOTES:

1 Lymnaea peregra 1 only
 2 Erpobdella octoculata 1 only
 3 Baetis scambus/fuscatus 1 only
 4 Hydroptila sp. (pupa) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	18.10.93	SITE	Iford Golf Course
SORTER	MSM	SAMPLE CODE	NRA09 4337 STR 040

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Oligochaeta* 2 Leptoceridae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	3 Oligochaeta* 4 Psychomyiidae 5 Leptoceridae*

NET LOSSES

0

NET GAINS

1

NOTES:

3 Stylaria lacustris, Nais sp.
4 Psychomyia pusilla 1 only
5 Mystacides azurea 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	18.10.93	SITE	Iford Bridge
SORTER	DLS	SAMPLE CODE	NRA09 4337 STR 030

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Caenidae* 2 Leptoceridae	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	3 Caenidae* 4 Haliplidae

NET LOSSES

1

NET GAINS

1

NOTES:

2 Empty Oecetis case in vial
 3 Caenis luctuosa/macrura
 4 Haliphus fluviatilis (adult) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Back Brook
DATE	27.9.93	SITE	Cockhill Bridge
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Sphaeriidae 2 Elmidae

NET LOSSES

0

NET GAINS

2

NOTES:

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

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Doverte Brook
DATE	6.10.93	SITE	Newport
SORTER	JW	SAMPLE CODE	

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

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 Chrysomelidae	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 is supplied with sample)	None

NET LOSSES NET GAINS

NOTES:

1 IFE instructed to exclude Chrysomelidae from listing

Note on data sheet that Lymnaeidae "lost, not in vial". Empty shells only found by IFE in sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Moors
DATE	18.10.93	SITE	u/s Palmersford STW
SORTER	MSM	SAMPLE CODE	NRA09 4336 MOO 070

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

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 Coenagriidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Piscicolidae

NET LOSSES

NET GAINS

NOTES:

1 Pyrrhosoma nymphula
2 Piscicola geometra 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

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

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

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Hydrobiidae 3 Planorbidae 4 Hydroptilidae 5 Leptoceridae

NET LOSSES NET GAINS

NOTES:

2 Potamopyrgus jenkinsi 1 only
 3 Bathyomphalus contortus 1 only
 4 Hydroptila sp. 1 only
 5 Athripsodes albifrons 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Cale
DATE	15.10.93	SITE	d/s Wincanton STW
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 is supplied with sample)	1 Leptoceridae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Athripsodes aterrimus 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Odcombe Stream
DATE	15.9.93	SITE	Little Norton
SORTER	GPG	SAMPLE CODE	NRA09 5203 ODC 028

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

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
	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 is supplied with sample)	1 Lepidostomatidae

NET LOSSES NET GAINS

NOTES:

1 *Lepidostoma hirtum* 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	20.10.93	SITE	Blackwater Junction
SORTER	GPG	SAMPLE CODE	NRA09 4337 STR -

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 is supplied with sample)	1 Asellidae 2 Caenidae 3 Calopterygidae 4 Elmidae 5 Tipulidae

NET LOSSES

0

NET GAINS

5

NOTES:

- 1 Asellus aquaticus
- 2 Caenis luctuosa/macrura
- 3 Calopteryx splendens 1 only
- 4 Elmis aenea, Oulimnius sp. (larvae)
- 5 Tipula sp. (juvenile) 1 only

Note on data sheet that Unionidae returned to river. Anodonta sp. found by IFE in sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	20.10.93	SITE	Berry Hill
SORTER	JW	SAMPLE CODE	NRA09 4337 STR 095

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

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
	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 is supplied with sample)	2 Ancyliidae 3 Hydrophilidae

NET LOSSES NET GAINS

NOTES:

1 Nais sp.
2 Acroloxus lacustris 1 only
3 Indet Hydrophilid (larva) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	25.10.93	SITE	West Parley
SORTER	DAC	SAMPLE CODE	NRA09 4337 STR 125

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Simuliidae*	2 Planorbidae

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 is supplied with sample)	3 Hydroptilidae 4 Simuliidae*

NET LOSSES

0

NET GAINS

2

NOTES:

2 Anisus vortex + Planorbis sp. in vial, Bathyomphalus contortus + Gyraulus albus in sample
 3 Ithytrichia sp. 1 only
 4 Simulium erythrocephalum 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rodden Brook
DATE	27.10.93	SITE	Corsley Mill
SORTER	DLS	SAMPLE CODE	NRA09 5311 RDD 035

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 is supplied with sample)	None

NET LOSSES

0

NET GAINS

0

NOTES:

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EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rodden Brook
DATE	27.10.93	SITE	Freeze Farm
SORTER	DLS	SAMPLE CODE	NRA09 5311 RDD 030

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

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
	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 is supplied with sample)	1 Perlodidae 2 Hydrophilidae

NET LOSSES NET GAINS

NOTES:

- 1 Isoperla grammatica 1 only
2 Indet Hydrophilid (larva) 1 only

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

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

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

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 is supplied with sample)	1 Hydrobiidae

NET LOSSES NET GAINS

NOTES:

1 Potamopyrgus jenkinsi 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	25.10.93	SITE	Longham
SORTER	GPG	SAMPLE CODE	NRA09 4337 STR 160

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

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
	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 is supplied with sample)	1 Corixidae 2 Psychomyiidae 3 Hydroptilidae 4 Lepidostomatidae

NET LOSSES NET GAINS

NOTES:

- 1 Sigara fossarum 1 only
- 2 Psychomyia pusilla
- 3 Hydroptila sp. 1 only
- 4 Lepidostoma hirtum 1 only

Unionidae not found by IFE in vial or sample. Assumed returned to river.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	20.10.93	SITE	Caravan Park
SORTER	JW	SAMPLE CODE	NRA09 4337 STR 045

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Ancylidae 2 Caenidae 3 Aphelocheiridae 4 Lepidostomatidae

NET LOSSES

0

NET GAINS

4

NOTES:

- 1 Acroloxus lacustris 1 only
- 2 Caenis luctuosa/macrura 1 only
- 3 Aphelocheirus aestivalis (nymph) 1 only
- 4 Lepidostoma hirtum 1 only

Notes on data sheet: Unionidae "returned to river". Not found by IFE in vial or sample. Lymnaeidae "missing from vial". Lymnaea peregra found by IFE in sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Moors
DATE	18.10.93	SITE	Hurn Court
SORTER	GPG	SAMPLE CODE	NRA09 4336 MOO 008

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

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
	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 is supplied with sample)	1 Glossiphoniidae 2 Coenagriidae 3 Lepidostomatidae

NET LOSSES NET GAINS

NOTES:

1 Glossiphonia complanata
2 Pyrrhosoma nymphula 1 only
3 Lepidostoma hirtum 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

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

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
	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 is supplied with sample)	1 Ephemerellidae 2 Leptoceridae 3 Goeridae

NET LOSSES NET GAINS

NOTES:

1 Ephemerella ignita 1 only
2 Athripsodes albifrons 1 only
3 Silo pallipes 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Uddens Water
DATE	27.10.93	SITE	Ameysford
SORTER	PRH	SAMPLE CODE	NRA09 4336 UDD 020

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Simuliidae*	2 Limnephilidae

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 is supplied with sample)	3 Simuliidae*

NET LOSSES

0

NET GAINS

1

NOTES:

2 Limnephilus extricatus
3 Simulium ornatum group

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	25.10.93	SITE	Julians Bridge
SORTER	JW	SAMPLE CODE	NRA09 4337 STR 260

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

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 is supplied with sample)	1 Polycentropodidae

NET LOSSES NET GAINS

NOTES:

1 Polycentropus flavomaculatus 1 only

Note on data sheet that Unionidae "returned to river". Not found by IFE in vial or sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	25.10.93	SITE	Muscliff
SORTER	DLS	SAMPLE CODE	NRA09 4337 STR 115

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

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 is supplied with sample)	1 Hydroptilidae

NET LOSSES NET GAINS

NOTES:

1 Ithytrichia sp. 1 only

Sample contains Stenelmis canaliculata (RDB2 status) and Oulimnius major (RDB3 status).

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	25.10.93	SITE	Dudsbury
SORTER	DLS	SAMPLE CODE	NRA09 4337 STR 150

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

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
	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 is supplied with sample)	1 Piscicolidae 2 Glossiphoniidae 3 Dryopidae 4 Hydroptilidae

NET LOSSES NET GAINS

NOTES:

1 Piscicola geometra 1 only
 2 Glossiphonia complanata 1 only
 3 Dryops sp. (larva) 1 only
 4 Hydroptila sp. (pupa) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	1.11.93	SITE	Holdenhurst
SORTER	MSM	SAMPLE CODE	NRA09 4337 STR 065

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

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
	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 is supplied with sample)	1 Hydrobiidae 2 Caenidae 3 Leptoceridae 4 Lepidostomatidae

NET LOSSES NET GAINS

NOTES:

1 Bithynia leachi 1 only
 2 Caenis luctuosa/macrura 1 only
 3 Oecetis testacea 1 only
 4 Lepidostoma hirtum 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

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

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 is supplied with sample)	1 Ancylidae

NET LOSSES

NET GAINS

NOTES:

1 Ancylus fluviatilis 1 only

No recognisable Planariid in vial although some decomposed material was present. Benefit of doubt given to NRA so no loss recorded.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	25.10.93	SITE	Hampreston
SORTER	DAC	SAMPLE CODE	NRA09 4337 STR 190

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 Valvatidae* 2 Caenidae* 3 Dytiscidae	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	4 Valvatidae* 5 Physidae 6 Caenidae* 7 Coenagriidae 8 Psychomyiidae 9 Lepidostomatidae

NET LOSSES

1

NET GAINS

4

NOTES:

4 Valvata cristata, V.piscinalis
 5 Physa fontinalis 1 only
 6 Caenis luctuosa/macrura
 7 Ischnura elegans 1 only
 8 Lype sp. 1 only
 9 Lepidostoma hirtum

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	1.11.93	SITE	Hurn Court
SORTER	JW	SAMPLE CODE	NRA09 4337 STR 008

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

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
	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 is supplied with sample)	1 Valvatidae 2 Goeridae

NET LOSSES NET GAINS

NOTES:

1 Valvata piscinalis 1 only
2 Goera pilosa

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Stour
DATE	18.10.93	SITE	Tuckton
SORTER	DLS	SAMPLE CODE	NRA09 4337 STR 015

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 is supplied with sample)	1 Tipulidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Tipula sp. (juvenile) 1 only

Cocoon containing Erpobdella octoculata juveniles present in sample.
Not counted as a gain since not free-living.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Cale
DATE	14.10.93	SITE	u/s Wincanton STW
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 is supplied with sample)	1 Elmidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Oulimnius tuberculatus (adult + larvae)

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rowdeford Stream
DATE	7.10.93	SITE	Wick Farm u/s STW
SORTER	PRH	SAMPLE CODE	

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

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Baetidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Planorbidae 3 Baetidae* 4 Elmidae 5 Simuliidae

NET LOSSES NET GAINS

NOTES:

2 Gyraulus albus 1 only
 3 Baetis rhodani 1 only
 4 Oulimnius sp. (larvae) 1 only
 5 Simulium ornatum group (larvae + pupae)

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Edbrook
DATE	25.10.93	SITE	u/s Confluence Fiddington
SORTER	MSM	SAMPLE CODE	

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

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
	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 is supplied with sample)	1 Caenidae 2 Scirtidae 3 Simuliidae

NET LOSSES

NET GAINS

NOTES:

- 1 Caenis luctuosa/macrura 1 only
- 2 Elodes sp. (larvae)
- 3 Simulium ornatum group 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rowdeford Stream
DATE	7.10.93	SITE	Wick Farm d/s STW
SORTER	PRH	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Hydrobiidae 2 Sphaeriidae 3 Leptophlebiidae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Potamopyrgus jenkinsi
2 Pisidium sp.
3 Paraleptophlebia sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Avon
DATE	28.9.93	SITE	Britford Carrier d/s STW
SORTER	DAC	SAMPLE CODE	

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

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
	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 is supplied with sample)	1 Physidae 2 Polycentropodidae

NET LOSSES NET GAINS

NOTES:

1 Physa fontinalis 1 only
2 Polycentropus flavomaculatus

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rowdeford Stream
DATE	5.10.93	SITE	Rowde Garage
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

☐

B. IN SAMPLE

☐

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	No vial of animals present in sample. Identification check not possible.	N/a

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 is supplied with sample) None	1 Planorbidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Anisus vortex, Gyraulus albus

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Cale
DATE	14.10.93	SITE	Batch Pool Bridge
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Haliplidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Glossiphoniidae 3 Haliplidae* 4 Simuliidae

NET LOSSES

0

NET GAINS

2

NOTES:

2 Glossiphonia complanata 1 only
 3 Halipus sp. (larva)
 4 Simulium aureum group (pupa) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rowdeford Stream
DATE	7.10.93	SITE	Rowdeford School
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 is supplied with sample)	1 Limnephilidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Micropterna seuxax, Indet Limnephilid (juvenile)

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Summerham Brook
DATE	7.10.93	SITE	A361 Bridge
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 Dytiscidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Planariidae 3 Planorbidae 4 Scirtidae 5 Hydroptilidae

NET LOSSES

0

NET GAINS

5

NOTES:

1 *Platambus maculatus*, *Ilybius* sp. (larvae). Note on data sheet in Dytiscidae box says "larvae" but no entry made in category box. Total no. of taxa consistent with this omission.

2 *Polycelis nigra/tenuis* 1 only

3 *Anisus vortex*, *Gyraulus albus*

4 *Elodes* sp. (larva) 1 only

5 *Hydroptila* sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Uddens Water
DATE	27.10.93	SITE	West Moors
SORTER	JW	SAMPLE CODE	NRA09 4336 UDD -

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

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
	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 is supplied with sample)	1 Lymnaeidae 2 Ancyliidae 3 Sphaeriidae 4 Calopterygidae 5 Sialidae 6 Leptoceridae

NET LOSSES

NET GAINS

NOTES:

1 Lymnaea peregra 1 only
 2 Acroloxus lacustris 1 only
 3 Pisidium sp.
 4 Calopteryx sp. (juvenile) 1 only
 5 Sialis lutaria 1 only
 6 Mystacides azurea 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Uddens Water
DATE	27.10.93	SITE	Tricketts Cross
SORTER	MSM	SAMPLE CODE	NRA09 4336 UDD 002

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

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 Hydroptilidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Erpobdellidae 3 Elmidae 4 Hydroptilidae* 5 Tipulidae

NET LOSSES NET GAINS

NOTES:

2 Indet Erpobdellid (juvenile) 1 only
3 Oulimnius sp. (larvae)
4 Oxyethira sp.
5 Limnophila (Eloeophila) sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Edbrook
DATE	25.10.93	SITE	Edbrook
SORTER	MSM	SAMPLE CODE	

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

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
	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 is supplied with sample)	1 Planariidae 2 Sphaeriidae 3 Nemouridae 4 Scirtidae

NET LOSSES NET GAINS

NOTES:

- 1 Polycelis nigra/tenuis 1 only
- 2 Pisidium sp.
- 3 Nemoura cambrica/erratica 1 only
- 4 Elodes sp. (larvae)

Note on data sheet that Hydrophilidae "missing from Pot". Not found by IFE in vial or sample.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rowdeford Stream
DATE	5.9.93	SITE	Tanis
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Elmidae 2 Simuliidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Elmis aenea (larvae)
2 Simulium ornatum group

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rodden Brook
DATE	2.11.93	SITE	d/s Cley Hill
SORTER	DLS	SAMPLE CODE	NRA09 5311 RDD 050

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

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
	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 is supplied with sample)	1 Sphaeriidae

NET LOSSES NET GAINS

NOTES:

1 Pisidium sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Moors
DATE	27.10.93	SITE	Woolsbridge
SORTER	JW	SAMPLE CODE	NRA09 4336 MOO 110

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

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 Glossiphoniidae* 2 Nemouridae	3 Taeniopterygidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	4 Glossiphoniidae* 5 Tipulidae

NET LOSSES

NET GAINS

NOTES:

3 Taeniopteryx nebulosa
4 Glossiphonia complanata 1 only
5 Dicranota sp.

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Summerham Brook
DATE	5.10.93	SITE	Seend Bridge
SORTER	MSM	SAMPLE CODE	

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

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 Ancyliidae*	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 is supplied with sample)	2 Ancyliidae*

NET LOSSES NET GAINS

NOTES:

1,2 Empty shell in vial, Ancyclus fluviatilis 1 only in sample

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Rodden Brook
DATE	2.11.93	SITE	Divers Bridge
SORTER	DLS	SAMPLE CODE	NRA09 5311 RDD 045

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

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 Hydrophilidae	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	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 is supplied with sample)	2 Lymnaeidae

NET LOSSES NET GAINS

NOTES:

2 Lymnaea palustris 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Crane
DATE	20.10.93	SITE	d/s Surface Drain
SORTER	MSM	SAMPLE CODE	

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

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 Sericostomatidae*	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 is supplied with sample)	2 Sericostomatidae*

NET LOSSES NET GAINS

NOTES:

2 Sericostoma personatum

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Crane
DATE	20.10.93	SITE	Bridge Farm
SORTER	MSM	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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
	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 is supplied with sample)	1 Planariidae 2 Leptophlebiidae 3 Leptoceridae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Polycelis nigra/tenuis 1 only
2 Paraleptophlebia sp. 1 only
3 Athripsodes sp. (juvenile) 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Mannington Brook
DATE	27.10.93	SITE	Newmans Farm
SORTER	MSM	SAMPLE CODE	NRA09 4336 MNN 020

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

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 is supplied with sample)	1 Rhyacophilidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Glossosoma sp. 1 only

EXTERNAL AUDIT OF BIOLOGICAL SAMPLES - 1993

REGION	Wessex	RIVER	Edbrook
DATE	25.10.93	SITE	d/s Oatley Farms
SORTER	MSM	SAMPLE CODE	

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

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
	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 is supplied with sample)	None

NET LOSSES NET GAINS

NOTES:

