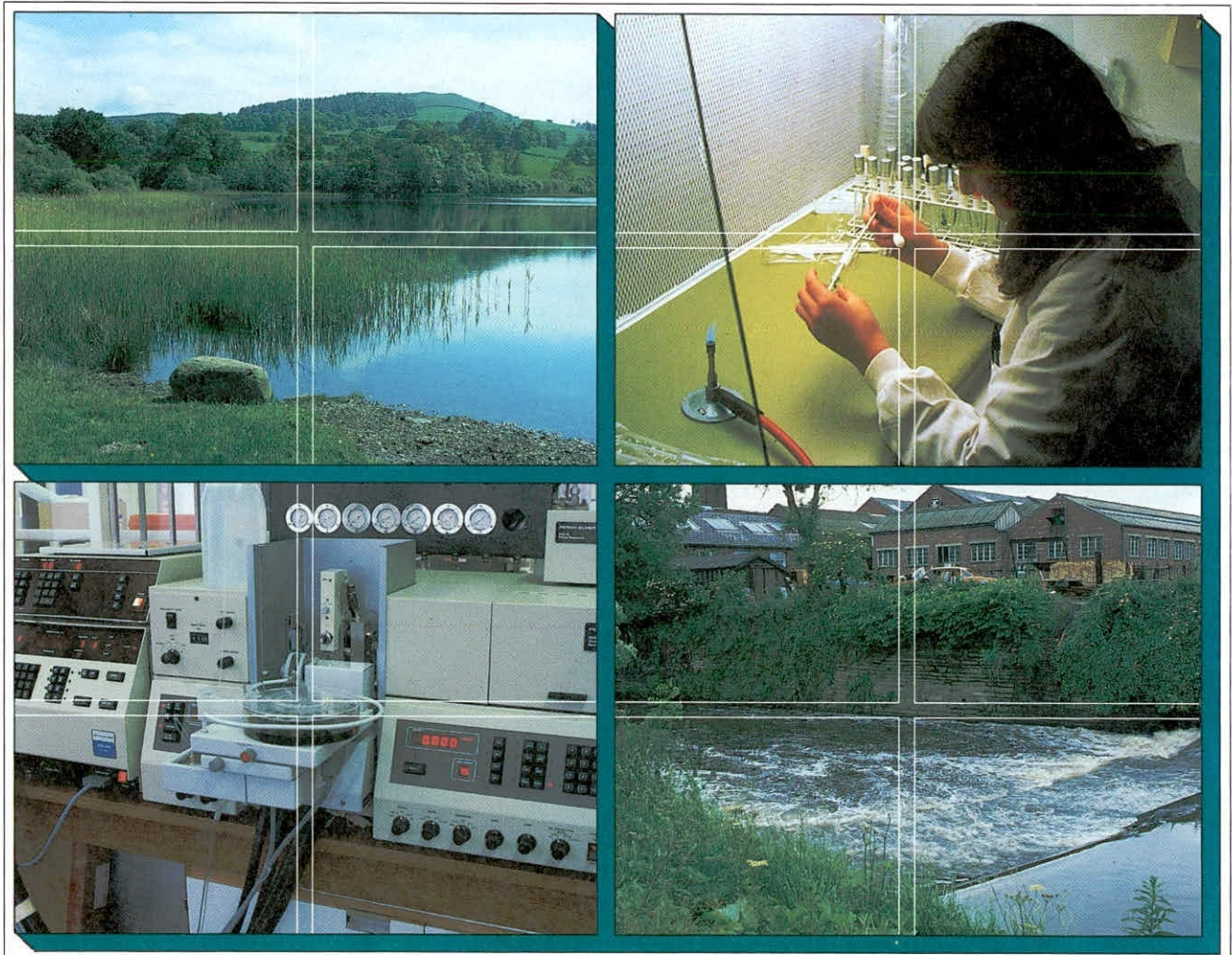


1996 SURVEY OF THE COARSE FISH OF THE RIVER TEES

Progress Report

**J S Welton; W R C Beaumont; A C Pinder;
M Ladle; J E G Masters**

Report To: Environment Agency, North East Region
IFE Report Ref.No: RL/T11064F7/5



**Centre for
Ecology &
Hydrology**

Institute of Freshwater Ecology
Institute of Hydrology
Institute of Terrestrial Ecology
Institute of Virology & Environmental Microbiology

Natural Environment Research Council



**Institute of
Freshwater
Ecology**

River Laboratory
East Stoke
Wareham
Dorset BH20 6BB

1996 SURVEY OF THE COARSE FISH OF THE RIVER TEES

Progress Report

J S Welton, BSc, PhD, CBiol, MIBiol
W R C Beaumont, LMIFM
A C Pinder
M Ladle, BSc, PhD
J E G Masters, BSc

Sub Project Leader:	J S Welton
Report Date:	October 1996
Report To:	Environment Agency, North East Region
IFE Report Ref.No:	RL/T11064F7/5

INTELLECTUAL PROPERTY RIGHTS

CONFIDENTIALITY STATEMENT

'In accordance with our normal practice, this report is for the use only of the person to whom it is addressed, and no responsibility is accepted to any third party for the whole or any part of its contents. Neither the whole nor any part of this report or any reference thereto may be included in any published document, circular or statement, nor published or referred to in any way without our written approval of the form and context in which it may appear.'

1. INTRODUCTION

This report outlines the 1996 summer fry survey and the autumn adult survey on the lower R. Tees. This is the second sampling year after closure of the barrage.

2. SURVEY OF COARSE FISH FRY

This was planned for June and as previously, the timing was a compromise between sampling the dace before they left the margins and the appearance of all coarse fish species. 2500 fish fry of seven species were sampled, although of these only dace, roach, barbel and gudgeon were of angling importance. No chub fry were found at any site. Numbers of each species are shown in Table 1. The distribution of fry was unusual with very few fry found in the lower sections. The dace show a bimodal length frequency distribution indicating two separate spawning times. The fact that no chub were sampled, and the lack of fry in the lower sections, suggested that not all hatching was complete. For this reason, the lower sections were sampled again in July. Relatively few fry were found (Table 1) although chub were now present. Two bream fry were found. This is a new species for the project although bream were known to be in the river.

Table 1. Number of fry of each species sampled in the R.Tees in June and July 1996

	June	July	Total
Barbel	64	0	64
Bream	0	2	2
Chub	0	31	31
Dace	932	20	952
Gudgeon	27	21	48
Roach	812	106	918
Minnow	432	4	436
Stone loach	177	5	182
Stickleback	60	4	64
Total	2504	193	2697

3. SURVEY OF ADULT COARSE FISH SEPTEMBER 1996

Over 4000 fish of 14 species were sampled from the lower R. Tees. Section 25 (Low Dinsdale) was not fished, due to the increased sampling effort in the lower reaches of the river. Section 1 was split into 10 subsections, with alternate subsections being fished. This amounted to an extra 3.2 Km of river of which both banks were fished. The numbers of each species caught are given in Table 2.

Table 2. Species list for the R. Tees and number of each species caught - September 1996

Species	Totals
Barbel <i>Barbus barbus</i> (L.)	17
Chub <i>Leuciscus cephalus</i> (L.)	1106
Dace <i>Leuciscus leuciscus</i> (L.)	1713
Eel <i>Anguilla anguilla</i> (L.)	>>500
Flounder <i>Platichthys flesus</i> (L.)	69
Gudgeon <i>Gobio gobio</i> (L.)	307
Ide <i>Leuciscus idus</i> L.	1
Minnow <i>Phoxinus phoxinus</i> (L.)	202
Perch <i>Perca fluviatilis</i> L.	9
Pike <i>Esox lucius</i> L.	1
Roach <i>Rutilus rutilus</i> (L.)	798
Salmon <i>Salmo salar</i> L.	1
Stone loach <i>Barbatula barbatula</i> (L.)	3
Three spined stickleback <i>Gasterosteus aculeatus</i> L.	many
Trout (brown) <i>Salmo trutta</i> L.	19
Total (without eels and stickleback)	4246

4. TEMPERATURE

Originally, there were four temperature loggers in operation in the lower Tees. The Stockton logger was removed when the marina was shut following closure of the barrage. No new site has been identified. The logger in the Low Worsall ORSU was stolen last year and has not been replaced. The thermistor cable at Low Moor was broken by sheep (presumably) and the logger at Ingleby Barwick Farm, although functioning, is not accurate.

This situation has been discussed with the Project Leader but no solution was reached.

5. COST OF WORK DURING THE PERIOD APRIL 1996 - SEPTEMBER 1996

The cost of the work for the above period is £16023. It is noted here that IFE has not been paid for the extra work to review all pre-barrage data in the last financial year.

6. ANTICIPATED COSTS OF THE WORK IN THE PERIOD UP TO FEBRUARY 1997

As in the previous financial year, the costs are expected to be above that agreed in the contract.

7. PROGRAMME FOR THE NEXT REPORTING PERIOD

The data will be analysed and presented in the Interim Report in February, following the format used in previous years. An executive summary will be produced which will be of the format required for the RFAC meeting.