



Other collaborating organisations: Association of Rivers Trusts, Isle of Man (ADFF), Solway Sea Trout Group, Fisheries Trust, Eastern Regional Fisheries Board, Southern Regional Fisheries Board, Southwestern Regional Fisheries Board, Loughs Agency, AFBI, University of Cork

THE CELTIC SEA TROUT PROGRAMME: AN INTRODUCTION FOR ANGLER PARTICIPANTS

1. Aim of this note

To inform fishermen of the Celtic Sea Trout Programme (CSTP) and to ask for their help in carrying it out.

2. What is the CSTP?

The programme is a collaborative effort across fishermen, conservation and regulating bodies, universities, government agencies, Trusts and clubs in Ireland, Wales, England and Scotland. The programme is seeking funding through INTERREG IV, an EU funding mechanism, and the work is focussed on the needs of the Ireland-Wales axis. Lead agencies in the bid are the Central Fisheries Board (Ireland) and Bangor University (Wales, and the overall lead partner).

3. Aims of the programme

The Celtic Sea Trout Programme aims are:

- To understand and describe sea trout stocks in the Irish Sea and thereby to enhance sea trout fisheries and strengthen their contributions to quality of life, to rural economies and to national biodiversity.
- To explore the use of sea trout life history variation as a tool to detect and understand the effects of climate change.

4. Background

The sea trout is the sea migratory form of the brown trout and is a popular target fish in rod and net fisheries of rivers and coastal waters around the Irish Sea. Adult sea trout lay their eggs in river gravels, the young stages live for 1 to 3 years in freshwater before emigrating (as smolts) to sea where they feed hard and return after

varying periods as mature adults, homing to the rivers of their birth to repeat the cycle. Thus the sea trout life cycle requires good environmental quality in freshwater, estuaries and at sea. Moreover, current understanding suggests that the incidence of sea trout and the composition and status of their stocks is sensitive to changes in the environments in which they live. These life history features and the sea trout's widespread occurrence, makes it a unique and potentially sensitive indicator of environmental change.

However, there are major questions in the understanding of sea trout, namely:

- where do they go at sea and how are their stocks structured and interlinked?
- what is their marine ecology (feeding, growth, survival and life history variation)?
- what environmental and other pressures are they exposed to?
- how do their life histories (and thus fishery quality) respond to environmental variation?

Sea trout fisheries in parts of Western Britain, including the Irish Sea, are suffering decline; but the pattern is mixed and, because we need answers to questions such as those above, in most cases the causes of change and thus the solutions are poorly understood.

The CSTP intends to provide this missing knowledge and to translate it into fishery and conservation benefits for countries bordering the Irish Sea.

5. The programme content

In summary the programme involves collection of sea trout samples from 80 rivers (of which 20 have been targeted for the detailed sampling for which we are seeking help here), estuaries, coastal waters and further offshore, over three years. The samples will be mostly of fin clips and scales accompanied by accurate size

information; but whole fish will also be taken to examine feeding and other aspect of biology. The samples will be processed to study stock structuring and distribution. From these data and reviews of the fisheries and trout production in rivers a picture will be assembled of the quality and quantity of sea trout stocks and fisheries around the Irish Sea. Various modelling approaches will be used to pull this information together to show the interactions between stocks, fisheries and the environment at sea and in freshwater, and thus to help to explore management options.

6. What help is required

Collecting fish, scales and size data from 20 rivers in sufficient numbers (300+ per river over two years) and, importantly, in a scientifically unbiased way is a tall order. The CSTP has a costed sampling programme by the participating agencies; but it also crucially needs the participation and help of fishermen, mainly anglers fishing in rivers. **We need fishermen to collect scales and take length measurements from sea trout that they catch, systematically, i.e. as far as possible from all fish sizes and spread throughout the angling season.** The fish do not need to be killed; scales can be taken harmlessly from fish and with care fish can be measured safely and accurately. In principle this is straightforward, but there are some significant points to note.

- The data collected MUST be reliable.
- The lengths need to be accurate and measured in the same way by different people.
- Scales need to be taken from the same location on the fishes' flanks and no cross contamination of scales must occur
- Many sea trout are taken at night and many are to be returned alive and safe to the water. This brings some practical problems which are surmountable, but at some (small) cost to fishing time.
- From the above it can be seen that the best way to achieve the programme's aims will be to secure the help from individuals or small groups of anglers who are willing to be committed and prepared to take the samples in the required way.

(using micro-chemistry and genetic methods), stock features such as age and sex composition, life history, growth and survival (from scale reading) and feeding.

Detailed procedures and equipment (very simple!) will be made available and a small element of training or discussion with the programme organisers will be needed. Advice and practical support will be given throughout to any individuals or groups. This note is to prompt interest, feedback and offers of participation from anglers, clubs, syndicates or individuals.

7. What you get

Full feedback of the analyses of any samples you provide. Regular updates of the overall programme. Overwhelming satisfaction at having made a practical contribution towards improving sea trout understanding and fisheries for yourself, others and future generations.

8. Provisional Timetable

Start of programme: May 2009
End of sampling programme: October 2011.
End of CSTP: April 2013

9. Contacts

The overall CSTP sampling Coordinator is Dr Willie Roche, Central Fisheries Board (tel: 0876620479).

Local CSTP contacts for particular rivers are shown on the attached sheet. These people will be available to help in advice, equipment and training and to give talks or *ad hoc* assistance to groups or individuals as required.

CSTP contacts on rivers for detailed stock composition (scales& length) sampling.

Region/Country	River	CSTP contacts
Ireland	Castletown	Willie Roche (0876620479)
	Dee (White River)	Ditto
	Boyne	Ditto
	Dargle	Ditto
	Slaney	Ditto
	Colligan	Ditto
	Bandon	Ditto
	Argideen	Ditto
	Currane	Ditto
Wales	Tawe	
	Tywi	
	Teifi	
	Dyfi	
	Dwyfawr	
	Conwy and Clwyd	
	Dee	
Northern Ireland	Moneycarragh	
	Shimna	
	White Water	
England	Border Esk (England)	
	Derwent	
	Ehen	
	Lune	
Scotland	Border Esk (Scotland)	
	Annan	
	Nith	
	Cree	
Isle of Man	Fleet	
	TBD	
	TBD	