

## Fish and fisheries work in the Forth area conducted by a charitable body

The work of the Forth Fisheries Foundation continues to be based from offices within the Institute of Aquaculture at Stirling and excellent progress is being made towards the objectives laid out in the Strategic Plan.

During 2002, seven major projects were undertaken to obtain data on the species composition and relative abundance of freshwater fish communities within a number of habitat types.

Multiple-depletion and timed electric fishing was conducted at 124 sites during the summer, highlighting the status of the juvenile salmonid populations and the distribution of several non-native species such as dace (*Leuciscus leuciscus*), bullhead (*Cottus gobio*) and grayling (*Thymallus thymallus*). Fish communities were typically dominated by salmonids in areas of high water and habitat quality (such as those in areas to the West of the region), but dominance was shifted towards more tolerant species such as stone loach (*Neomacheilus barbatulus*) where local pollution or man-made barriers place limits on salmonid populations. This was typically seen in rivers that are in a state of recovery following their use as waste-disposal systems for industry surrounding Edinburgh and other large conurbations within the central belt. This data has resulted in the Foundation progressing several recommendations for action to tackle man-made barriers and issues of poor habitat quality. SEPA continue to lead efforts at improving water quality in rivers and stream in the area.

Our surveys of the fish communities of eight Trossachs lochs provided more evidence of a possible recent extinction of Arctic char (*Salvelinus alpinus*) from Lochs Katrine, Achray and Venachar and discovered the presence of an established population of non-native roach (*Rutilus rutilus*) in Loch Ard. The method of its introduction is unclear but possibly occurred via the transfer of livebait by



Examination of a wild salmon smolt collected during population assessment on the River Teith

pike anglers. Further investigation is required regarding this introduction and its effects on the native fish fauna.

Our initial habitat surveys in key tributaries of the Forth system pinpointed several problem areas and in addition to taking direct action ourselves, we have provided recommended action plans to the relevant bodies to enable them to progress remedial works.

In 2002, the Foundation was involved with producing data for the Scottish Executive on the distribution of non-salmonid fish within the Forth area and with the Scottish Fisheries Coordination Centre in a contract to provide SEPA with an assessment of the status of salmonid fish populations with regard to the forthcoming EU Water Framework Directive.

We are continuing to work with many partners both locally and nationally, to improve the management of freshwater environments and to provide a sustainable freshwater fishery resource in the Forth area. Our data is proving invaluable in this process but as ever finding the funds to maintain our efforts in this area are proving a difficult challenge. We have achieved a great deal in the past year and wish to keep up the pace to facilitate change, and for this we would welcome the support from any companies or individuals who feel they can help us.

For donations or to join the Foundation, please contact Dr Colin Bull, Forth Fisheries Foundation, Institute of Aquaculture, University of Stirling, Stirling FK9 4LA Tel 01786 466581 email: c.d.bull@stir.ac.uk

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