

WESTER ROSS FISHERIES TRUST

Conserving, restoring & developing wild fisheries in Wester Ross

NEWSLETTER



December 2010, no 26

Improved grilse catches follow year with abundant sandeels

The rod catch of salmon for Wester Ross for the 2010 season for rivers looks set to be the highest for more than 20 years.

Over 410 salmon were caught from the River Carron. This is by far the highest total rod catch of salmon for the river on record, exceeding the previous figure of just over 260 taken in 2007. The largest fish was a cock salmon of 28.5lb taken by WRFT Trustee, Richard Wilson. However, the majority were grilse.

While fish biologists and geneticists continue to assess the pros and cons of large-scale stocking programmes, Bob Kindness, supported by the River Carron proprietors and local fish farm companies, has demonstrated that a river which has all but lost its salmon fishery can be revived. Each year, many thousands of salmon fry, parr and smolts are released into the River Carron to supplement natural production. To learn more from the Carron stocking programme, a new WRFT biologist post has been set up in partnership with the University of Highlands and Islands (see column on right).

Elsewhere, around 300 salmon were caught from the Gruinard River, and around

230 from the River Ewe system. The Dundonnell, Balgy and Glenmore rivers (many of which do not operate major stocking programmes) also reported good or exceptional catches of salmon. All rivers in Wester Ross release the majority of rod caught fish. Further afield, particularly around the north and east of Scotland, records have also been broken.

Why the improvement?

Wet summers are good for salmon fishing in Wester Ross. In most rivers salmon can only be caught when rivers levels are higher than normal, following rainfall. The SEPA graph for the River Ewe (below) shows how levels rose at the beginning of July 2010 and remained favourable for both the entry of fish and for angling through much of July, August and September. However, reports of exceptional grilse runs and the earlier arrival of grilse indicate that there was more to the 2010 bumper angling season than good fishing conditions.

During the summer of 2009, exceptionally 'fat' sea trout were caught around Wester Ross. The explanation was that there was a great abundance of sandeels in coastal



Jim Raffell of Marine Scotland taking a scale sample from a male grilse at the Shildaig Fish trap on 23rd September 2010. This fish was only the third wild adult salmon taken in the trap in 10+ years of the Shildaig project.

waters in summer 2009, both Lesser sandeel age 0+ (young of the year) of only a few cm long, and larger Greater sandeel of 10cm or more.

Not only do the 0+ sandeels provide a perfect food source for wee post-smolt salmon (Haugland *et al.*, 2006), sandeels are also eaten by many of the potential predators of salmon smolts as they enter the sea (Svenning *et al.*, 2005). An abundance of sandeels may be a key factor in reducing high salmon smolt and post-smolt mortality.

Changes in sea temperatures may partly explain fluctuations in sandeel abundance. Sandeels, herring and sprats all lay their eggs on the seabed.

The Marine (Scotland) Act 2010 and the UK Marine and Coastal Access Act both contain new powers to designate Marine Protected Areas [MPAs] around Scotland. Can MPAs help to secure an abundance of juvenile 'food fish' for salmon, sea trout and other marine wildlife around our coasts?

WRFT News

• New Trust biologist to be based at Strathcarron.

We are delighted to welcome Jonah Tosney as the second Biologist, filling a post shared with Inverness College.

Jonah is joining WRFT from Yorkshire Water and Durham University, where he has been working on a PhD in salmonid and invertebrate ecology, which he has thoroughly enjoyed. Jonah grew up in Yorkshire and has also previously worked for the Yorkshire Dales National Park. He will be moving to Lochcarron with his young family and retired greyhound and is looking forward to working with both the Trust and Inverness College.

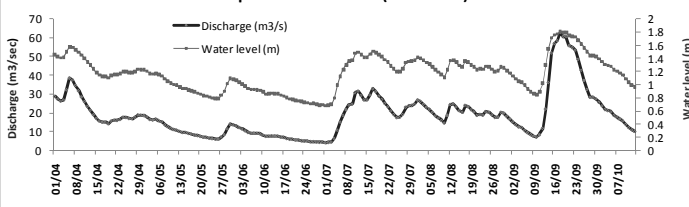


Jonah on the Yorkshire moors.

• **Tournai trap (funded by Marine Harvest).** The smolt run was one of the smallest in recent years with just 183 salmon and 64 sea trout smolts. This was partly due to cold spring and subsequent very low river levels obstructing smolt passage to sea. Later in the year, the upstream trap recorded 12 grilse; and 9 finnock and sea trout including a fish of 47cm in length, the largest sea trout caught at the trap in recent years.

• **River Ewe Rotary screw trap** (supported by Scottish Government) Nearby, the Ewe trap recorded 525 salmon smolts and 227 sea trout, of which about 3/4 were assumed to be smolts; the remained over-wintered finnock and older fish. Peak catches were recorded after the middle of May. 89 (17%) of the salmon smolts and 20 (9%) of the sea trout were recorded as 'bird damaged'.

River Ewe (Poolewe Guaging Station) water levels
April - October 2010 (SEPA Data)



Juvenile salmon and trout populations remain healthy in core areas

The primary aim of the annual WRFT juvenile fish survey is to maintain an understanding of the distribution and abundance of wild salmon within the WRFT area. We attempt to visit all rivers where salmon may be present at least once every two years.

Following an early summer drought, high water hampered progress. However, sites were surveyed in the following rivers: Kanaird, Ullapool, Lael, Dundonnell, Gruinard, Tournaig system, Ewe; Bruachaig (prior to stocking), Garbhaig and Slatadale; Sguod, Sand, Badachro, Kerry, Torridon, Balgy, Carron (Strathcarron Country Day) and Kinlochhour during the summer and autumn of 2010.

In addition, the River Elchaig was surveyed by the SEPA electro-fishing team led by Anthony Watkins.

Results were generally good. Many sites were in 'marginal' habitat where in some years salmon may be unable to spawn because of low water. Salmon fry were found at high Catch Per Unit Effort (CPUE) [more than 2 salmon fry per minute fishing] at some sites in the Ullapool, Kerry, Badachro, parts of the Dundonnell River, Abhainn Dearg (Balgy),



David Mullaney about to return a bucket of juvenile salmon and trout to a tributary of the Torridon River in August 2010, with slopes of Beinn Eighe NNR in the background. Juvenile salmon and trout were found throughout the system.

lower Garbhaig (Ewe), and at the Carron site. Salmon parr were also present at these sites at CPUE indicative of healthy populations.

Salmon fry were present at more modest CPUE in the Kanaird (Runie), Torridon River, and Slattadale river. Salmon fry were not found in the upper Bruachaig where a stocking programme continues. Late in the season, salmon parr and fry were found in the Allt Loch Ghuibhsachain (Gruinard system) above the cascade section, near the loch.

Trout fry and parr were present in all systems; and at higher CPUE than in previous years in the Dundonnell River (including mainstem sites) and possibly in the

Torridon River than in previous years. This suggests that last year's reports of more adult sea trout in the Dundonnell River led to increased egg deposition and trout fry production.

More detailed results will be compiled and analysed later in the year.

The 2010 e-fishing team was Peter Cunningham assisted by David Mullaney, Garry Bulmer, Roger McLachlan, Ben Rushbrooke, Karen Starr, Rose Norman and Clint Barker. For volunteer help, thank you to SNH Beinn Eighe NNR volunteers, Mark Williams and family, Chris Daphne, Prof David Barclay and keepers and ghillies. Thanks to all.

Larger sea trout taken, but fish generally thinner than in 2009

In Loch Ewe, 32 sea trout were taken during the sweep netting programme between June and September. These were mostly small post-smolt sea trout with fewer than 10 lice; the largest a fat fish of 351mm with 67 sea lice including 16 ovigerous females taken in early August from the shore by Inverasdale where sandeels were also seen.

In Gairloch, 69 sea trout were caught. Lice levels were generally moderate, but there were exceptions; the lousiest fish was a post-smolt with 126 chalinus lice taken at the end of May. 10 larger sea trout (av. 36cm) caught in June carried an average of 34 lice (mainly older 'mobile' lice). The sample included a trout of 57cm, the largest caught by sweep netting to date.

93 trout, a mix of small brownies, estuarine trout and sea trout including finnock were sampled from the Carron estuary. Only 5 fish carried more than 20 lice, most were lice free though thin. The sweep netting programme was funded by TWG.



Bill and Fraser Anderson, Rose Norman, Peter Cunningham (with sea trout) and Marcus Simpson in the Flowerdale estuary, just in front of the WRFT office. The estuary, much of which is mussel bed, attracts a variety of other wildlife at different stages in the tide. Some of the sea trout were heavily infected with larvae of the parasite *Cryptocotyle lingua*, the life-cycle of which includes both birds and periwinkles.

In Brief

• Responses to salmon farm applications

WRFT drafted responses to applications to enlarge salmon farms in Upper Loch Torridon and at Ardintoul (Loch Alsh) to 2,500 tonnes biomass, and to the Loch Torridon Aquaculture Framework Plan. The Trust remains concerned that sea lice management targets as set in the industry's Code of Good Practice [CoGP] are inadequate to safeguard wild salmon and sea trout. Marine Scotland Science's sea louse regulation programme is based on the CoGP and takes no account of the number of fish on a farm or within an area. It is therefore unclear how the health of wild fish can be safeguarded as the salmon farming industry expands.

• Marine Protected Areas in the seas around Wester Ross?

Could MPAs be of benefit to sea trout and salmon? At a meeting in Gairloch on 15th December, we learned more from the SNH MPA team of the 'Ullapool Approaches' sea bed survey. Katie Gillham and Colin Trigg from SNH explained how the Scottish Government's MPA process for nature conservation works, and the results of a survey of the seabed from Loch Gairloch to Loch Broom were presented, included video clips of underwater habitats. The survey recorded larger areas of sea grass and maerl in Loch Gairloch than anticipated. In Loch Ewe however, extensive maerl beds were in poorer condition. Debate focused on the concerns of commercial fishermen working within the area. The over-riding outcome of a thought provoking evening was, perhaps, that the importance of consultation cannot be over-emphasised.

• Sea trout scale reading workshop, WRFT, Harbour Centre, 17th February 2011.

This workshop will review protocols for aging and recording West Coast sea trout (and brown trout), from collections of scales taken from fish during the TWG funded sweep netting programme. Dr Andy Walker has kindly offered to provide instruction and support. Please contact the WRFT biologist if you would like to attend.

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