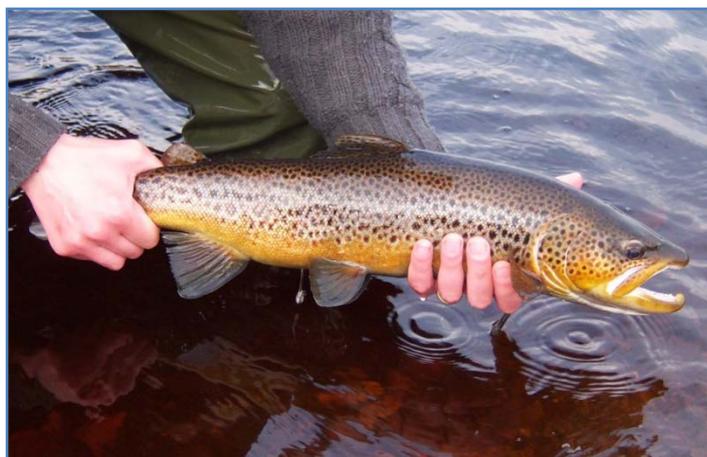


A pilot tracking project on the River Deveron has revealed that some of the large brown trout that this river is renowned for are making significant annual migrations throughout the catchment. This collaborative project between Marine Scotland Science (MSS) and the Deveron Bogie and Isla Rivers Trust (DBIRT) was coordinated by the Moray Firth Trout Initiative (MFTI) to improve understanding of how resident brown trout are using the catchment.



(L) A view of the Blackwater catchment, dominated by heather & peat, (R) a typical Blackwater trout in September; large and spotty!

The trout used in the study were from the Blackwater tributary of the River Deveron which has a strong run of large fast-growing trout. These fish have historically been thought of as sea trout; however, analysis of scales suggests that they are more likely to be fast growing brown trout.

A sample of ten large trout (>44cm long) were caught in the small spawning tributary of the Deveron called the Blackwater at 380m above sea level. This upland catchment is dominated by wet heath and blanket bog and managed primarily for grouse and red deer. The trout were subsequently tagged with transmitters (9mm diameter, 29mm long). These each emit unique acoustic high frequency pulses which identify the specific fish when picked up by suitable receivers and were programmed to transmit the signal for 1 year. The tagged trout were released at the capture site on the Blackwater on 31st October 2012. Thirteen acoustic receivers were deployed along the length of the Deveron in large pools at key locations (see map). When a tagged fish passed a receiver, its tag code was logged together with time and date. These data were later downloaded to build up a picture of the trout's migration route.



(L) A Blackwater trout with the 9mm VEMCO tag, (R) Data being downloaded from the VR2 Receiver (loaned by MSS) at Montcoffer.

Mob: 07500602216;

Email: marcus@morayfirthtrout.org;

Web: www.morayfirthtrout.org

The MFTI is supported by local Fisheries Trusts, Boards and Angling Associations and funded by:

Of the trout tagged five were logged as far downstream as Avochie, having migrated 42 km from the release site right into the middle of the Deveron Catchment. Of these, one particular trout, a 55cm female (ID22239), recorded a remarkable track; migrating 84km from the Blackwater to Montcoffer nearly at the mouth of the Deveron within a month of release. This fish then stayed in the vicinity of the gorge at Montcoffer and was regularly logged on the receiver positioned right underneath the fishing hut until July. During this time it was never logged on either of the receivers positioned further downstream. The last log at this location was the 8th of July when she began to move upstream and was logged subsequently at Muireisk and Avochie before eventually being logged back at the release site a year later on 16th October 2013 (see map).

This pilot study has revealed how this one brown trout has used the entire Deveron catchment throughout the year and not resided in one area as might have previously been expected. Although the study provides a fascinating insight into the behaviour of these trout further work is required to truly understand the overall variation in movement strategies within the population and to determine whether similar migrations are routinely made by large trout in other catchments too. Furthermore, when considering protection for such fish it stresses the importance of considering habitats throughout the entire catchment and not just those in distinct locations.



(L) DBIRT Volunteer Colin Grant releasing one of the tagged fish in the Upper Blackwater, (R) DBIRT Biologist Richard Miller uses the VEMCO VR100 remote receiver (loaned by MSS) to track the tagged trout manually.

Many thanks must go to MSS for supplying the equipment and making this project possible, to the DBIRT trustees who funded tags and also to the volunteers for their help; in particular Colin Grant for helping to catch the trout and Kevin Barron for routinely checking the receivers.



MORAY
FIRTH
TROUT
INITIATIVE

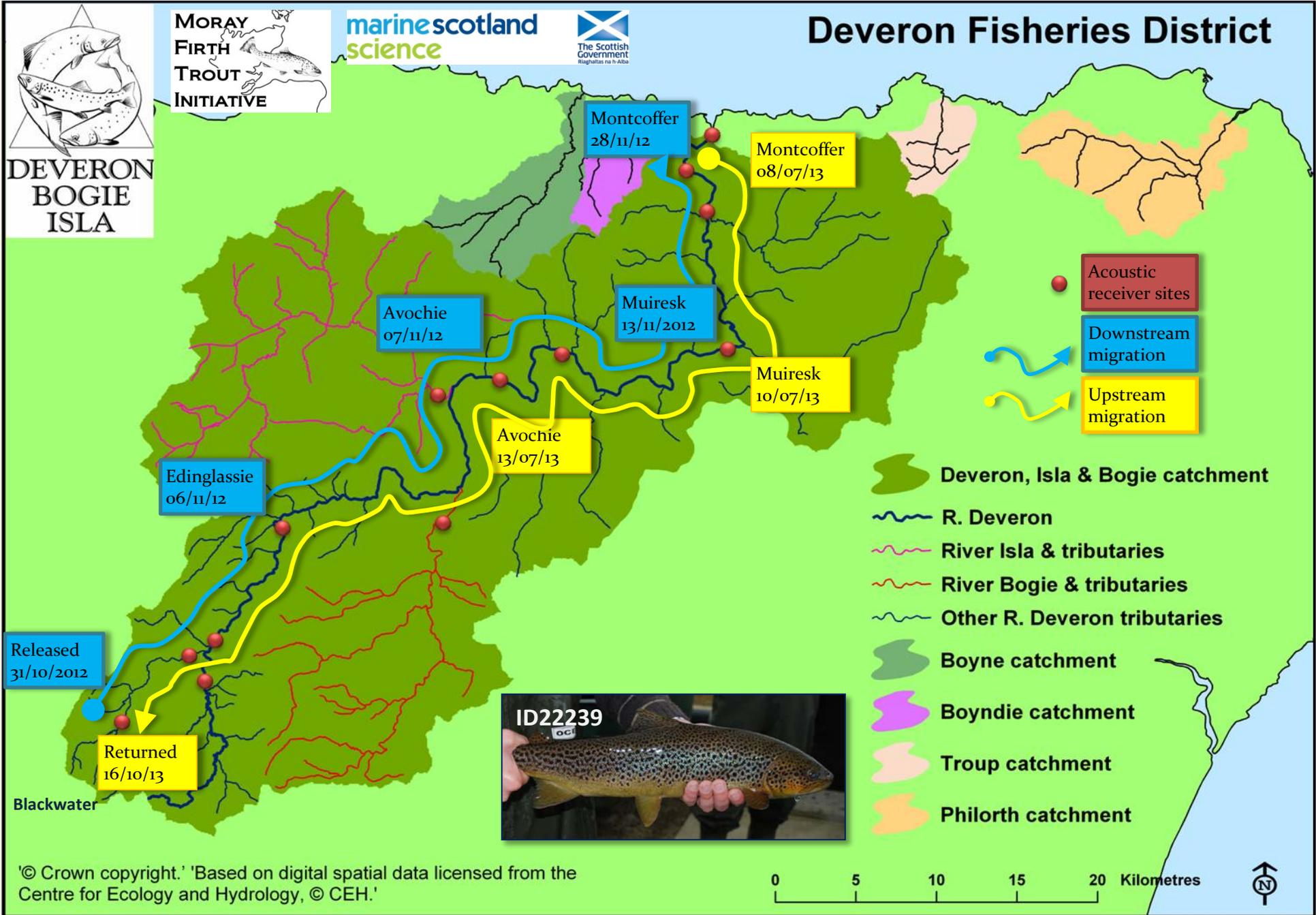
marinescotland
science



The Scottish
Government
Riaghaltas na h-Alba

Deveron Fisheries District

DEVERON
BOGIE
ISLA



Montcoffer
28/11/12

Montcoffer
08/07/13

Avochie
07/11/12

Muiresk
13/11/2012

Muiresk
10/07/13

Avochie
13/07/13

Edinglassie
06/11/12

Released
31/10/2012

Returned
16/10/13

ID22239



Acoustic
receiver sites

Downstream
migration

Upstream
migration

Deveron, Isla & Bogie catchment

R. Deveron

River Isla & tributaries

River Bogie & tributaries

Other R. Deveron tributaries

Boyne catchment

Boyndie catchment

Troup catchment

Philorth catchment

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