



“Restoration of the Lower Shannon SAC (Mulkear River) for Sea Lamprey, Atlantic Salmon and the European Otter”

## Press Release

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### Lamprey Passage 2011

As part of MulkearLIFE work programme particular attention has focused on enhancing the upstream passage (migration) of Sea Lamprey in the Mulkear catchment. A remarkable success has been achieved this summer with the installation of three new fish passes, specifically designed for sea lamprey passage on Annacotty and Ballyclogh weirs.

The fish pass design has now been shown to work with dramatic results. The design and manufacture of the fish pass is the result of almost two years of work by MulkearLIFE and Inland Fisheries Ireland.

Sea lamprey are perhaps the most fascinating, yet least understood, fish in Irish water. They are found both in fresh water and at sea. They are diadromous, that is to say they act much like Atlantic Salmon, in that they migrate to sea as adults and return to freshwater rivers to breed. Found along the Atlantic seaboard of Europe and North America they are considered a relic species in that they have been around for thousands of years, since the time of the dinosaurs. They are a protected species and the designation of the Lower Shannon as a Special Area of Conservation, including the Mulkear, is in part to help protect the remaining population of Sea Lamprey in Ireland.

In Irish rivers they usually spawn in May or June but this may vary according to a range of factors including water temperature. They are sizeable fish in their adult phase – some in excess of one metre in length and up to two kilogram in weight. The weir at Annacotty acts as the first major barrier to the sea lamprey on the Mulkear system. It excludes lamprey from their traditional spawning grounds. At the same time it leaves them extremely vulnerable to attack by otter and possibly mink.

The work of MulkearLIFE and Inland Fisheries Ireland with sea lamprey began last year with the radio tagging of over 50 fish. The subsequent radio tracking of these fish by Glen Wightman and Dr. Sean Rooney highlighted the need to address the problem they faced in getting over the old mill weirs on the lower section of the Mulkear River.

Having studied the extent of the problem last year, MulkearLIFE set about solving the problem in time for the upstream migration of sea lamprey this summer. MulkearLIFE worked with international researchers and a leading French fish pass design expert, Dr. Antoine Legault. Ultimately, MulkearLIFE's project manager Ruairí Ó Conchúir and project officer Glen Wightman came up with a design to use in an Irish context. An Irish based company was selected by MulkearLIFE to manufacture hardened ABS plastic substrata sheets, with an interlocking design, containing hundreds of pegs to assist fish passage.

James .J. O'Donnell Engineering manufactured single stainless steel sub-frames moulded to the dimensions of the weirs. The interlocking sheets were attached to the stainless steel sub-frame and the entire structure was then secured onto the face of the weir with bolts. The plastic sheets or substrata contain large numbers of knobs that reduce the velocity of the water as it flows over the face of the weir. The sea lamprey are therefore attracted to an easier route up the weir where the water velocity is considerably lower and the pegs help the fish gain traction as they move there way slowly up the face of the weir.

MulkearLIFE has now successfully installed the sea lamprey passes onto the face of Annacotty and Ballyclogh weirs. This is the first for Ireland. It is the first ever instance where a fish pass has been specifically designed to help sea lamprey passage. Two of the sea lamprey fish passes have been installed onto Annacotty weir and third was fitted at Ballyclogh weir. This backbreaking work was made considerably less arduous due to the support of Noel Sheehan and Flan Ryan (IFI) and our colleagues in the Office of Public Works.

Following installation and to find out how effective the passes were MulkearLIFE undertook night-time and early morning monitoring of passage. Monitoring sessions were undertaken from 8pm to 12 midnight and 04.00am to 9.00am to see the extent of usage and the level of upstream passage. The results have been extremely encouraging. One monitoring session on Annacotty weir recorded a total of 168 sea lamprey, the overwhelming majority (140 fish) were recorded on the new fish passes. During this monitoring session, a minimum of 27 fish successfully ascended the weir using the new substrate while no fish were successful elsewhere on the face of the weir.

These developments represent a major project milestone for MulkearLIFE and Inland Fisheries Ireland and our project partners. It is also a good news story and a significant development in terms of sea lamprey conservation in an Irish and European context.

Further information regarding the project's work with Sea Lamprey may be viewed on this website including extensive video footage in the projects Video Gallery and on the project's new YouTube Channel.

#### Notes for Editors

1. High Resolution Digital Images are available to accompany this Press Release.
2. Interviews can be arranged with the Project Manager by using the contact details below.
3. MulkearLIFE is a new €1.75 million European Commission funded LIFE Nature project working on the restoration of the Lower Shannon Special Area of Conservation (with a focus on the Mulkear River catchment) for Atlantic Salmon, Sea Lamprey and European Otter. Further details may be viewed on the project website [www.mulkearlifeproject.com](http://www.mulkearlifeproject.com)
4. Inland Fisheries Ireland (Limerick) is lead partner together with the OPW and Limerick County Council. Additional funding support comes from National Parks and Wildlife Service. Other supporters include Teagasc, IFA, ICMSA, and local angling groups.
5. The project is one of the first and most important integrated catchment management projects in Ireland. It is a flagship EU LIFE Nature project –covering some 650 sq km which contain a variety of habitats and protected species. Much of the area is designated as a Special Areas of Conservation (SACs) under the EU Habitats Directive and forms part of the Natura 2000 Network.

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