



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

Press Release

10th December 2013

Review of Work to Benefit Sea Lamprey in 2013

As the year draws to an end, MulkearLIFE will present reviews of the major areas of work the project has engaged in and will present these reviews over the next number of weeks. One of the main target species which MulkearLIFE has focused on over the past four years has been Sea Lamprey. While the season was different to recent years, it was an exceptional year for MulkearLIFE’s work with Sea Lamprey. The cold spring weather broke in late May and one of finest summers in recent memory unfolded. The first sea lamprey were observed below Annacotty Weir on the 30th May when the water temperature reached 13.6 °C. The warm water temperatures had signalled the start of sea lamprey spawning within the Mulkear system.



Annacotty Weir, 3 June 2013, with lamprey passes clearly visible (Image: R. Ó Conchúir)

While monitoring of sea lamprey was ongoing from mid May, the sighting of the first sea lamprey triggered an intense and comprehensive programme of monitoring at Annacotty and Ballyclogh weirs. Significant numbers started to arrive into the catchment in early June. With this the MulkearLIFE Team began early morning (from 04:00 to 08:00 hrs) and night-time (from 21:00 to 01:00) monitoring sessions to observe sea lamprey ascending Annacotty Weir using the lamprey passes specifically designed and installed by MulkearLIFE in 2011. The monitoring was by way of recording sea lamprey ascending the face of the weir as indicated in the diagram below.

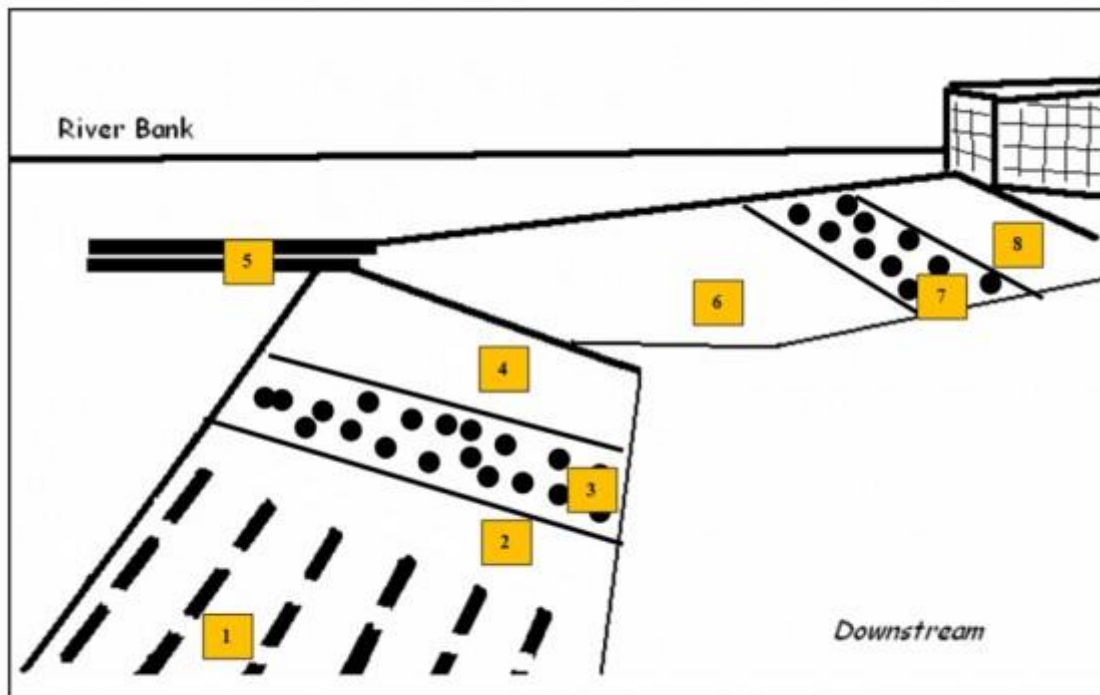


Diagram 1. Annacotty weir outlining the 8 observation zones. (1. Chicane baffles; 2. No pass; 3. Lamprey pass; 4. No pass; 5. Denil fish pass; 6. No pass; 7. Lamprey pass; 8. No pass)

Diagram No. 1: Sea Lamprey monitoring sectors on the face of Annacotty weir

During the initial sessions in early June, a large number of sea lamprey were documented successfully passing Annacotty weir. In terms of zones used, 95% of the sea lamprey achieving passage over Annacotty weir did so using the two sea lamprey passes. These figures correspond with similar figures for the early days of monitoring in 2011 (6 sessions, 33 fish ascending, 100% utilised the two sea lamprey passes) and in 2012 (two sessions: 34 fish ascending 94% utilised the two sea lamprey passes). It should be noted there was limited sea lamprey monitoring at Annacotty weir in 2012 owing to severe flooding.



Extensive Sea Lamprey Spawning Survey Work in 2013 (Image: Glen Wightman)

Thus for early June 2013, successful passage had been achieved over the first man-made barrier to their migration on the Lower Mulkear River, opening up the possibility of almost 200km of additional habitat for sea lamprey throughout the catchment.



Sea Lamprey ascending lamprey pass at Annacotty Weir (Image: Ruairí Ó Conchúir)

With the Project Team satisfied with the results at Annacotty weir, attention quickly turned upstream to Ballyclogh weir, the next significant barrier on the Lower Mulkear River. Initial monitoring work in early June, which entailed two early morning sessions and one nighttime session, documented a minimum of 24 sea lamprey achieving passage over the barrier. A new mobile sea lamprey pass, which was specially designed to provide sea lamprey passage at Ballyclogh, on a temporary basis for the 2013 season, was installed in May 2013. It was designed and fully assembled off-site. It was made in such a way that it could be fitted within the existing breach in the weir and yet, given its mobile nature, be removed entirely after the sea lamprey season was over and used elsewhere. Thus, having installed this mobile unit in May 2013, it was removed, fully intact, in mid July 2013 during the initial construction work to partially remove Ballyclogh weir. The work was undertaken only after MulkearLIFE had determined that there were no sea lamprey present and that no sea lamprey were spawning downstream of the weir.



Extensive sea lamprey monitoring work undertaken at Ballyclogh incl. snorkelling

The work at Ballyclogh, which involved up to 18 months of pre-planning and monitoring work, including a detailed Screening Report for Appropriate Assessment, is now complete. The work was a joint project between MulkearLIFE / Inland Fisheries Ireland and the Office of Public Works.



Panoramic view of the completed work at Ballyclogh weir (Image: Martin O' Grady)

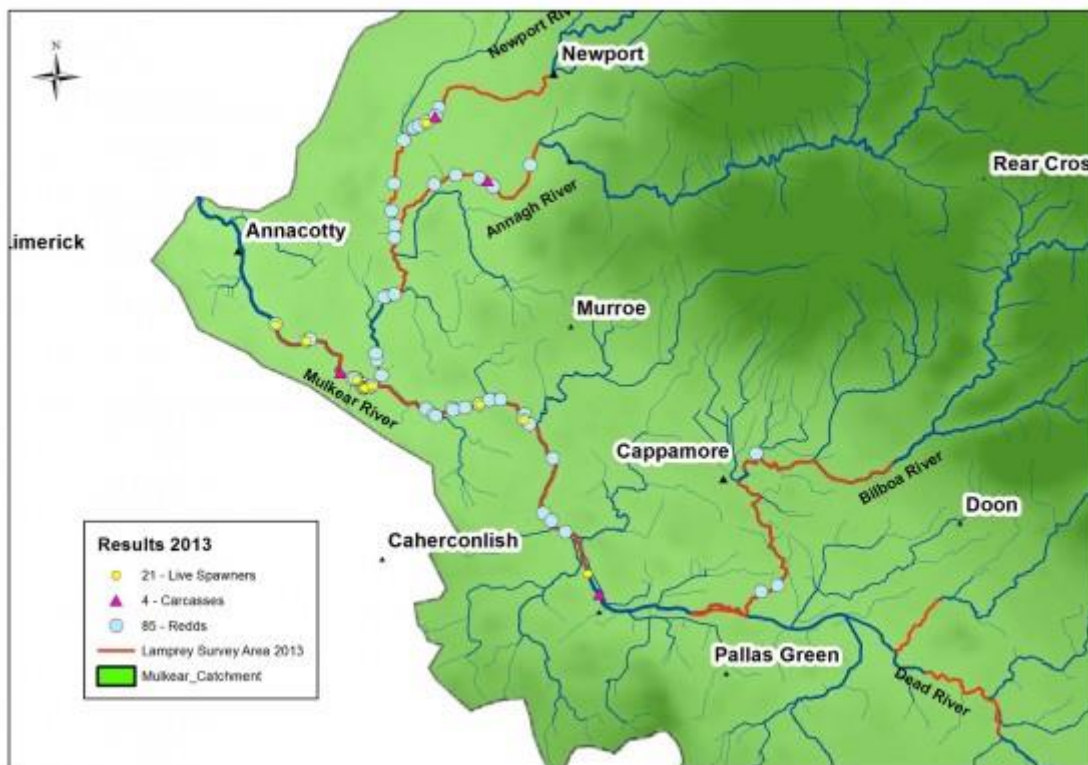
The 2013 season was different from other years for several reasons. Sea lamprey moved into the system somewhat later than normal and the season was much shorter than recent years. The monitoring work clearly indicated that the vast majority of sea lamprey passage was achieved in the first 10 days of June, with the bulk of sea lamprey achieving passage in the period 3rd to 9th June. Water temperatures peaked at 17.7 °C on June 9th, dropped to 12.2 °C on June 16th and averaged about 14.7 °C from June 20th to July 4th. Comprehensive monitoring from the 20th June through until the 10th July revealed minimum activity at the two barriers. This clearly indicates that the bulk of the lamprey passage was achieved from the 3rd June to the 9th June and highlights a shorter season than previous years.

To compliment the project's comprehensive observational work at Annacotty and Ballyclogh, MulkearLIFE undertook a number of spawning surveys throughout the catchment. This work involves walking along the river and counting the number of redds, lampreys and lamprey carcasses found. A redd is a depression in the gravel of the river created by the lamprey using their oral disk and is where the eggs are laid by the female and fertilized by the male lamprey.



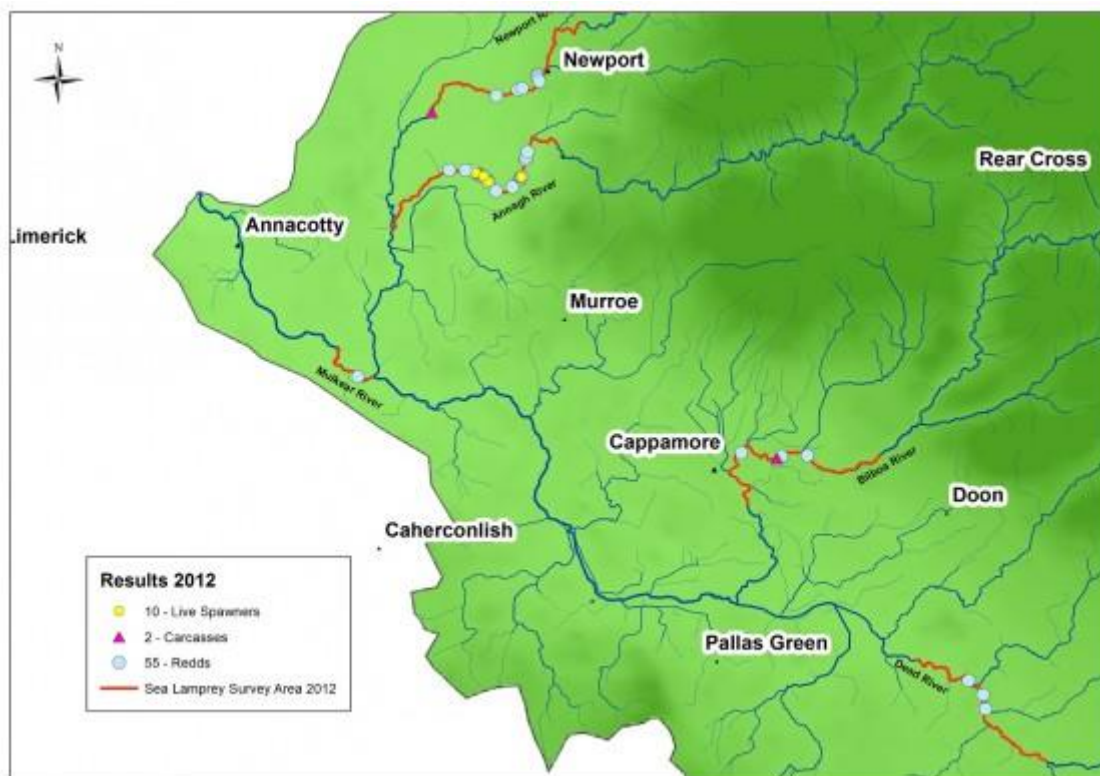
Survey work focused on redds, spawners and carcasses (Image: Ruairí Ó Conchúir)

Redds are quite distinct and can be mapped with a hand-help GPS. The main tributary rivers to the Mulkear River, Dead, Bilboa, Newport, and Annagh Rivers as well as most of the main channel were surveyed; a distance of 51.6kms of river channel was surveyed. The work documented a total of 85 redds, 21 live sea lamprey and 4 carcasses in the period from 10th June to 9th July 2013.



The 2013 Sea Lamprey spawning survey work took place in near perfect conditions

The results for 2013 compared very favourably with the results for 2012 but it should be noted that main stem of the Mulkear River was in flood for significant period of the summer of 2012.



The 2012 sea lamprey spawning survey work undertaken despite summer flooding

This work involved a significant human resource commitment by MulkearLIFE. The documentation of sea lamprey spawning in tributaries throughout the catchment represents a major project milestone for MulkearLIFE and the project partners.



The 2013 spawning survey work highlighted interesting results (Image: G. Wightman)

As noted, another significant highlight of MulkearLIFE's work to benefit Sea Lamprey during 2013 included the partial removal of a section of Ballyclogh weir. The partial removal of Ballyclogh weir has provided permanent passage for sea lamprey and Atlantic Salmon and reduced the risk of unauthorised fishing activity below Ballyclogh weir. This unauthorised fishing activity was occurring due to the fact that fish were being held up in deep pools directly below the weir. These pools have now been filled and the barrier to upstream migration removed. In addition, immediately upstream of Ballyclogh, excellent pool and riffle habitat has opened up for approximately 900m. This is of course in addition to the fact that an additional 184km of sea lamprey habitat has been opened up throughout the Mulkear catchment.



Skilled OPW operator removes dysfunctional fish pass (Image: Ruairí Ó Conchúir)

MulkearLIFE, together with our colleagues in Inland Fisheries Ireland, look forward to continuing our work to benefit Sea Lamprey. 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 here: [Video Gallery](#) and on the project's YouTube Channel [MulkearLIFE YouTube](#)

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.mulkearlife.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.

Issued by:

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