

SEA LAMPREY (PETROMYZON MARINUS)



WHAT IS A SEA LAMPREY?

Lampreys (Petromyzontidae) are some of the most primitive vertebrates alive today, being over 360 million years old. They are known as cyclostomes ('round mouths') which refers to the fact that they are jawless, having instead a round sucker-like mouth. Another interesting feature is that the skeleton of a lamprey consists of cartilage (like sharks and rays) and not bone (like many other fishes e.g. salmon, trout, etc.) There are 3 species of lamprey in Ireland (river lamprey *Lampetra fluviatilis*, brook lamprey *Lampetra planeri* and the sea lamprey *Petromyzon marinus*. There is also a 'dwarf' form of the sea lamprey which is found in a number of lakes (L. Derg, L. Conn, L. Cullin and L. Corrib, some Killarney lakes) around Ireland. Sea lamprey adults live in the open ocean, migrating into freshwater to spawn where their larvae live in soft stream sediments.



WHY ARE SEA LAMPREYS IMPORTANT?

Sea lamprey, are found only in the Mediterranean and North Atlantic, off the North East coast of USA and Canada, southern Greenland, the UK, Ireland and Scandinavia and also French, Portuguese and Spanish coasts. Sea lamprey are an important part of our ecosystem and provide part of the diet of many species such as: Otters, Herons, and many fish (feed on larvae). They are eaten in parts of Europe and are thought of as a delicacy. They are commercially valuable on the French and Portuguese Atlantic coasts. Most importantly, they are a species of conservation concern meaning that it is our job to help protect them in Irish rivers- to do this we first need to gather all the information we can about them.



SEA LAMPREY IN IRELAND

The return of adult sea lampreys to spawn in Irish rivers is an annual event. Sea lamprey travel upriver to find suitable spawning sites. However, man-made structures such as weirs and dams can prevent upstream migration of returning Sea Lampreys and aggregations



of these fish may often be seen at the bases of these barriers. Sea lamprey are regularly seen downstream of the weirs at Annacotty (R. Mulkear), in Ennis (R. Fergus) and Clonmel (R. Suir). Adults begin entering fresh water as early as April but are primarily visible late May and June. On return to freshwater they begin to construct large spawning nests (similar in size to salmon redds or nests!) in shallow, fast-flowing stony sections of channel. Lampreys move cobbles and stones to excavate a nest which is a bowl-like structure. Spawning, which is temperature triggered, usually occurs between May and July each year, with the adult fish dying immediately afterwards. Although we know some of the places where sea lamprey spawn, we

need to gather more information about the other spawning sites in Ireland so that we can make sure they get the protection they need. We urgently need YOUR help to do this!

HOW DO I IDENTIFY A SEA LAMPREY?

Sea lamprey are an eel-like fish which can be up to 1m in length and mottled brown/grey in colour on their upper side. They are characterised by having a sucker-like mouth instead of jaws. Lampreys are similar in shape to eels but have a distinctive series of uncovered round gill openings (known as gill pores) on the sides of the head and a single nostril on the upper surface of the head. Sea lamprey are easily distinguished from the other lampreys by their larger size, the marbling of the greyish-green back, and the two dorsal fins, which are widely separated.



HOW CAN I HELP?

Please let us know if 1) **You see Sea lamprey spawning (or any nests- see our nest identification information sheet) in any river in Ireland** or 2) **You see any Sea lamprey in any river in Ireland.**



You can send us information by visiting our website www.ucd.ie/rarefishreporter, or emailing us with a picture, date and description of your exact location and how many fish/nests you are seeing - rarefishreporter@gmail.com

