LAMPREY SPAWNING/NEST IDENTIFICATION

LAMPREY SPAWNING

Lampreys spawn every year in freshwater. For the anadromous species (sea lamprey and river lamprey - which spend part of their lifecycle in both freshwater and marine environment) this involves a migration from the sea/estuary into rivers, and for the resident species (brook lamprey), this usually involves a smaller migration upstream to find suitable spawning habitat. To spawn, lampreys need suitable substrate (cobble, gravel or stones) and areas of fast flowing water full of oxygen (called riffles). Lampreys then move around the gravel/stones with their mouths to make a bowl-like depression (similar to a trout/salmon redd) and at the downstream end of the nest is the freshly turned mound of clean gravel with a deep pool just upstream. Lamprey will then spawn in these nests, and subsequently die. Nests are usually easy to spot due to the movement of the substrate creating depression which are more lightly coloured (this is because the unmoved stones are usually covered with a layer of algae - see picture). Nests vary in size and location in the river catchment, description for each specie is below - except for dwarf sea lamprey as we don’t yet know where they spawn!

SEA LAMPREY SPAWNING

In Irish rivers, sea lamprey spawning occurs form late May through to early July, and because sea lamprey excavate such large nests (over 1 metre wide and up to 50 cm deep), nests are often clearly visible from the river bank.

Where a lot of spawning is taking place, nests may be excavated side-by-side and wide sections of channel are used. Sea lampreys generally spawn in areas of fast flowing shallow water (riffles) among sand and large gravel or cobbles (1-5 cm diameter). In many places, the spawning sites are located below obstructions such as weirs. Sea Lampreys are often seen spawning in areas also used for spawning by salmon, trout and other lampreys. See here for video of spawning sea lamprey [https://www.youtube.com/watch?v=sI7sGSJzLR8](https://www.youtube.com/watch?v=sI7sGSJzLR8)
River lamprey and brook lamprey spawn between April and June (triggered by rising water temperatures) in streams and rivers all over Ireland. Nests are identified by a small, oval or circular depression of up to 40 cm in diameter that looks like a cleared area in the gravel. Brook lamprey nests are often little more than a few centimetres wide and long but may be twice that size for a river lamprey. Brook and river lamprey are likely to be spawning in a wide range of rivers and streams all over the country. River Lampreys generally spawn in deeper water than brook lampreys and have been recorded spawning at depths of 20-150 cm. However, river and brook lamprey are sometimes seen spawning the same nests (usually river lamprey nests). Typical Brook Lamprey spawning requirements include water depths of 3-30 cm. Lampreys are communal spawners usually nesting in groups of 2-10 but occasionally as many as 30 have been recorded using the same nest. Brook Lampreys are characteristically known to spawn at the lower ends of pools and sometimes favour shaded spawning sites, such as under bridges. Spawning activity may last over one week and adults die within one month of spawning.

**HOW CAN I HELP?**

Please let us know if; 1) You see lamprey spawning in any river in Ireland or 2) You see any lamprey nests in any river in Ireland. Information that would help us most would include name of river or stream, location (as much detail as you can), number of nests seen at the site and number of lamprey seen in the nest.

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