

# The pioneering Pearl Mussel Project



\*The Pearl Mussel Project is a European Innovation Partnership (EIP), developing an innovative pilot agri-environment programme that seeks to improve the quality of watercourses through a results-based payment approach. The project, with a budget of €10m, is funded by the Department of Agriculture, Food and the Marine as part of Ireland's Rural Development Programme 2014-2020. The PMP Team is led by Dr Patrick Crushell. A steering group including DAFM, NPWS, Teagasc and other experts oversees the project.

LEFT: Teagasc advisor Joanne Masterson, who carries out Pearl Mussel Project assessments in Co Galway, thinks agricultural advisors are well placed to provide a key role in this biodiversity work, and acknowledges excellent support from the PMP team.

**Catherine Keena**  
Teagasc Crop, Environment and Land Use Programme



**E**ight river catchments were selected for the Pearl Mussel Project\* due to their importance in supporting the largest remaining freshwater pearl mussel populations in Ireland and western Europe. Contracts have been offered to 365 farmers across the eight catchments based on their proximity to water courses. Farmers will receive their first payment this autumn.

## Pearl mussel

The freshwater pearl mussel (*Margaritifera margaritifera*) is a large filter-feeding bivalve, which is found in near-pristine freshwater habitats. Just like all bivalve molluscs, it has a shell with two halves enclosing the soft body of the animal. These animals can live for up to 140 years, making them Ireland's longest-living animal.

Adults can reach lengths of 15cm, and they live buried, or partially buried in the river bed. Freshwater pearl mussels are filter feeders, inhaling and expelling up to 50l of water per day, retaining food particles. This filtering activity means that pearl mussels can help to maintain and improve water quality.

## Pearl Mussel Project

This is a results-based programme and peatland, grassland, and woodland habitats are used as "result indicators". The higher the quality of these habitats, the higher the payment farmers receive. The quality of watercourses on the farm will also influence the final payment. This approach has the effect of creating a market for biodiversity, and provides an opportunity and incentive for farmers to manage their farm habitats to produce higher-quality biodiversity.

Farmer Martin Gavin (pictured) is delighted that the Pearl Mussel Project has finally opened on the Bundor-

ragha river which supports the best population of the Pearl Mussel in Europe. According to Martin: "While it is early days, there is great positivity towards it locally and while no doubt there will be challenges, the key thing is that they can now be met with the support of the project."

Mary McAndrew of the Pearl Mussel project team said: "The feeling among farmers is that it is a very fair approach, with a clear link between the payments and what's happening on the ground. Many farmers enjoy learning about the various plants and habitats on their farms and how habitat condition influences their payments." As one farmer said, "in the past we only heard what we were not allowed to do; now we are given advice on what we can do to improve our local environment."

Farmers with land within one of the eight catchments who wish to enter the programme can still submit an expression of interest to join the project – more farmers will be accepted into the project in 2020.