

## Freshwater Pearl Mussel

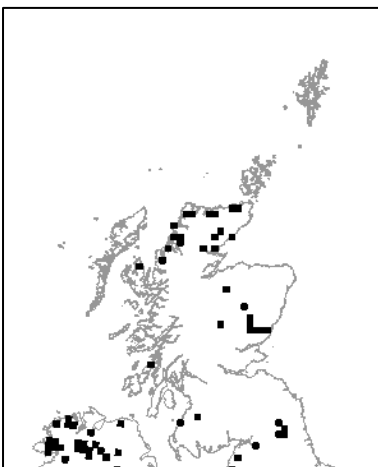
### DESCRIPTION

Fresh water pearl mussels are similar in shape to the more familiar marine mussels, but grow larger and can live as long as 100 years making them among the longest lived invertebrates. They live at the bottom of clean, fast-flowing rivers with coarse sand or gravel. They are filter feeders, extracting tiny particles of nutrients from the water. The Fresh water pearl mussel has a fascinating and complex 4 stage lifecycle. Larvae are brooded by the females in their gills and released into the water between July and September. The larvae must then be inhaled by salmon or trout and attach to their gills. During this time they will develop into young mussels, before detaching early the next summer, to live independently. They must burrow into the river bed to survive as adults. Fresh water pearl mussels also have an interesting place in our cultural history, as their first historical reference in Britain was by Julius Caesar's biographer around 55BC.

The Fresh water pearl mussel is one of the most critically endangered molluscs in the world. Angus, the Cairngorms and North West Scotland has half the world's remaining population. Over the last 100 years over one third of rivers that used to contain Fresh water pearl mussels no longer do. Of the remaining populations, one third have been unable to reproduce as a result of a deterioration of the freshwater ecosystem. All but one of the remaining colonies are considered small and vulnerable and despite full legal protection, they continue to be threatened.

UK Biodiversity Action Plan Species and Scottish Action Plan Species

### DISTRIBUTION MAP



### FURTHER READING

[Scottish Natural Heritage](#)  
[Buglife](#)



### THREATS

Overexploitation by pearl fishing has played the largest part in their decline. Other threats include pollution and changes to river structure that can affect sediment. Due to their complex life cycle they are dependent on salmon and trout populations for young to develop and disperse.

### ACTION REQUIRED

- Control of illegal pearl fishing, including involving the public in reporting cases
- Wider measures to conserve and restore clean, fast flowing rivers and their associated ecosystems
- Continuation of the current captive breeding programme

### MSP SPECIES CHAMPION



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