

Zebra Mussel

Species Description

Scientific name: *Dreissena polymorpha*
AKA: *Dreissensia polymorpha*, Misglen resog (Welsh)

Native to: South-east Russia

Habitat: Slow rivers, canals, docks, lakes, reservoirs and sometimes water pipes and cooling systems

Zebra mussel is a freshwater mussel species with a distinctive striped colouration and shape.

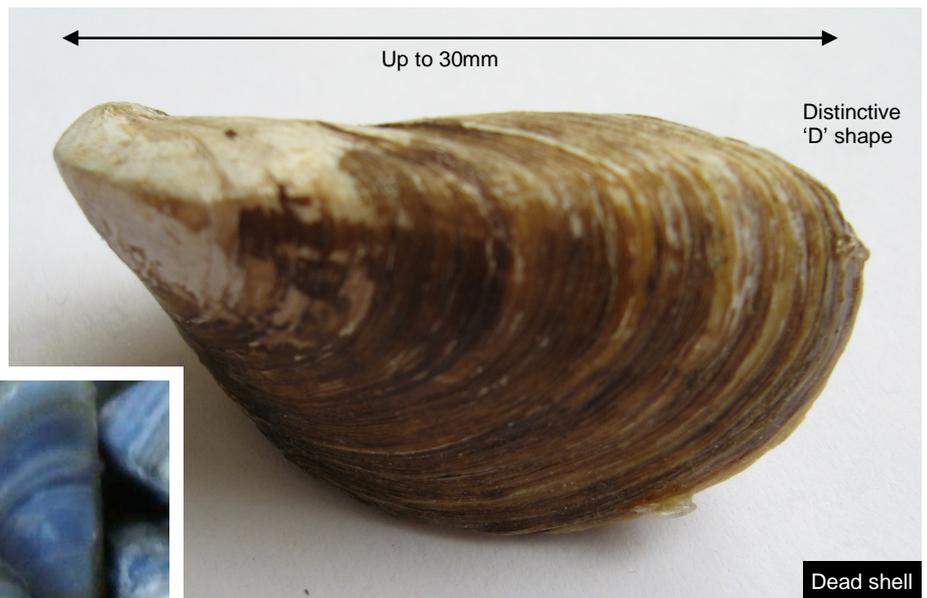
It inhabits a range of clean and well-oxygenated freshwaters but can tolerate weakly brackish waters. It attaches, usually in groups, by sticky threads known as byssus, to anything solid underwater such as masonry, stones, wooden posts, tree roots or shells. This attachment can block pipework, affect lock gates and other hard structures in the water. They can also significantly alter ecosystems by smothering native species and rapidly filtering out nutrients from the water. The growth of these colonies is similar to that of marine mussels.

Zebra mussel is similar in shape to marine mussels but smaller in size (usually about 30mm), has a distinctive "D" shape and is ornamented with blue or brown and yellow-white alternating zig-zag or wavy bands. Its shell is asymmetrical, strong, thick and keeled. Its shell does not have teeth on its hinge. It can grow up to 50 mm long though much smaller specimens are often found.

For details of legislation go to www.nonnativespecies.org/legislation.



Key ID Features



Live mussel



Light and dark bands of colour

Identification throughout the year

Zebra mussels do not vary in their appearance throughout the year.

Field Signs

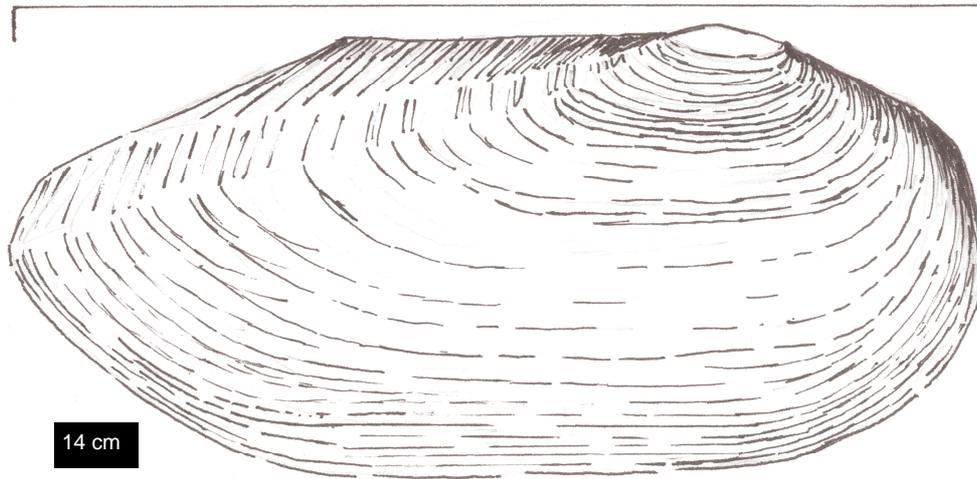
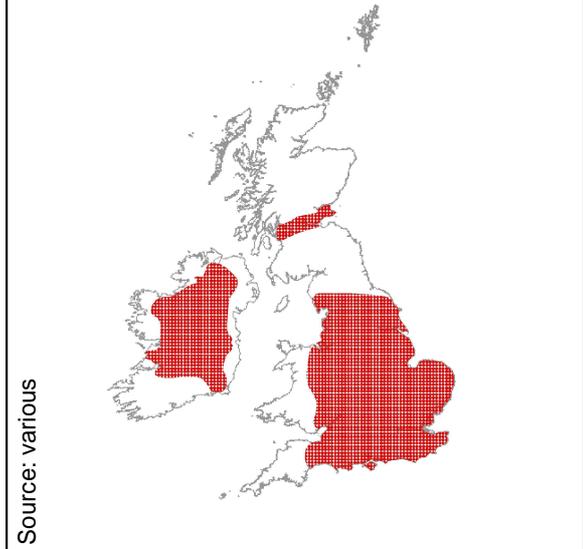
Zebra mussels do not leave any field signs except their dead shells which are identified in the same way as live shells. These shells may be covering hard objects. Dead shells can be found on the bed of water bodies or washed up on the margins, sometimes as single shells but occasionally, as in life, with two shells joined. Even when dead, the shells retain their stripy appearance. The zebra mussel has a short-lived, free-living larval stage but it cannot easily be detected in the water and so only adult mussels can be used for identification.

Similar Species

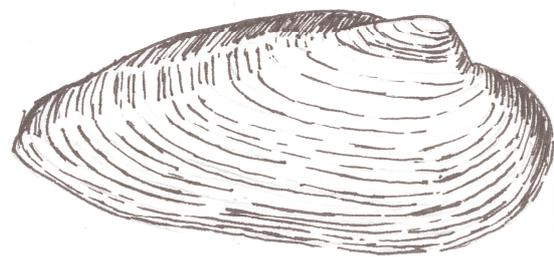
Compared to zebra mussel, other freshwater species of mussel are not found fixed to surfaces and do not grow in colonies but are free-living in the sediment. The smaller species are found amongst water plants. The larger mussel species, e.g. swan, painter's, duck and pearl mussels could only be confused with zebra mussels as juveniles but shells are much thinner and lack the zebra-like stripes. Orb cockles (*Sphaerium* species) and pea cockles (*Pisidium* species) are much smaller than zebra mussels and are unlikely to be confused.

Distribution

Zebra Mussels are found commonly across England, Ireland and at limited locations in Scotland and Wales.



Swan Mussel
Native
(*Anodonta cygnea*)



Painter Mussel
Native
(*Unio pictorum*)



Zebra Mussel
Non-native
(*Dreissena polymorpha*)
For comparison

Orb Cockle
Native
(*Sphaerium* sp)



1.5 - 7 mm

Pea Cockle
Native
(*Pisidium* sp)



References and further reading:

Ellis, AE (1978) "British Freshwater Bivalve Mollusca". Academic Press

Kerney. M (1999) "Atlas of the Land and Freshwater Molluscs of Britain and Ireland". Harley Books