

# Quagga mussel

Scan for more information



## Species Description

**Scientific name:** *Dreissena rostriformis bugensis*

**AKA:** *Dreissena bugensis*, Asiatic Clam, Golden Clam, Pygmy Clam

**Native to:** Ponto-Caspian region, Black, Caspian and Aral Sea

**Habitat:** Fresh and weakly brackish waters

The quagga mussel is a small bivalve mollusc similar to the invasive non-native zebra mussel.

Adults have a triangular shell and up to 50 mm in length. In new populations, most individuals are young and therefore very small (less than 8mm).

They survive in both muddy and hard substrates, and tolerates a range of water conditions, from shallow and warm to deep and cold. They attached to anything solid underwater, e.g. stones, shells, wooden posts, hulls, concrete.

Due to its filtering capacity and ability to produce dense populations, it can alter whole freshwater ecosystems. It can outcompete and significantly reduce native biodiversity. It feeds on the varieties of algae that compete with blue-green algae, often resulting in toxic algal blooms. It is also a nuisance and economic problem when growing in pipes of water treatment plants or commercial ships.

Quagga mussel was discovered in the Shannon River in July 2021, providing a direct route for spread into Northern Ireland. The presence of quagga mussel was confirmed in Lower Lough Erne in December 2025. Following 'Check, Clean, Dry' guidance is the most effective way to prevent its introduction here.

Likely pathways of introduction to Northern Ireland include; fouling of boats and other machinery, hitch hiking on equipment associated with angling or recreational activities and ballast water. Once established there is no effective eradication method for quagga mussel.



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## Key ID Features

Rounded in cross section, when placed on its front (hinge edge) it tends to roll onto its side



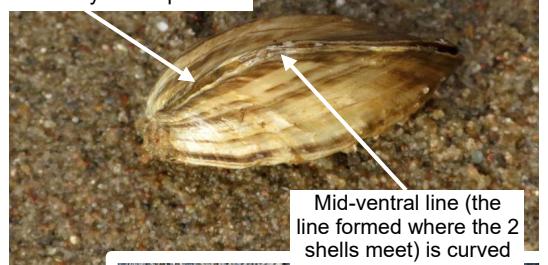
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Byssal groove (small notch in shell associated with byssal threads) close to hinge and relatively inconspicuous



Mid-ventral line (the line formed where the 2 shells meet) is curved



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# Field signs

When established quagga mussel can occur in high densities; coupled with a thin shell and a high break-up rate within beds, can result in large quantities of dead shell washing up on the edge of an affected water body.



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# Distribution

Records in the UK are focused in London.



Source: NBN atlas

<https://species.nbnatlas.org/search/?q=Dreissena+rostriformis+bugensis>

Check website for current distribution

## Similar Species

### Zebra mussel

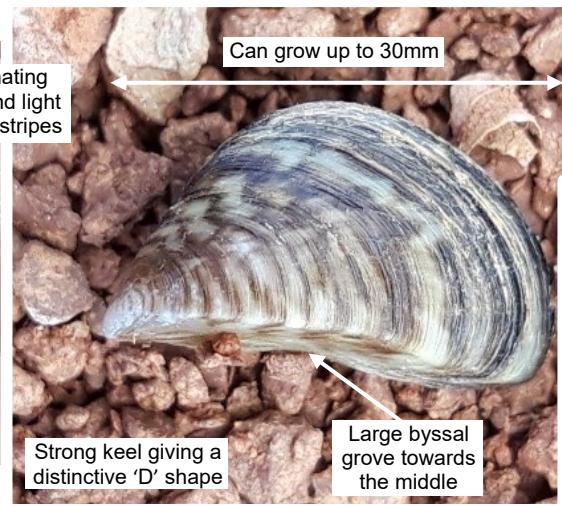
Invasive non-native  
(*Dreissena polymorpha*)



Similar size and pattern  
to quagga mussel

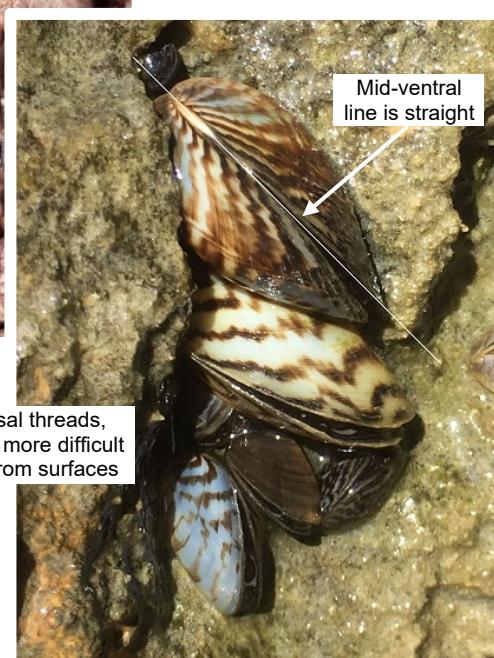
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When placed on its front (hinge edge), zebra mussel usually remains upright, whereas quagga mussel tends to roll on its side



More byssal threads,  
therefore is more difficult  
to detach from surfaces

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<https://www.gbif.org/occurrence/1880474563>

### Blue mussel

Native  
(*Mytilus edulis*)



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## References and further reading:

- Aldridge, D. 2011. GB Non-Native Organism Risk Assessment Scheme of Quagga mussel (*Dreissena rostriformis bugensis*). Available <https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1372>
- Booy, O., Wade, M. and Roy, H. 2015. Field Guide to Invasive Plants and Animals in Britain. Bloomsbury. London.
- CABI *Dreissena rostriformis bugensis* (quagga mussel) data sheet. Available <https://www.cabi.org/isc/datasheet/107770>