

First record of quagga mussel in UK

Briefing note 1.1

8 October 2014

Introduction

Environment Agency ecologists have found a population of quagga mussel in a tributary of the River Colne in the Thames catchment near Staines. This record was confirmed by Dr David Aldridge of Cambridge University on the 1st October 2014. Further investigation has revealed a population of the mussels in Wraysbury reservoir. The quagga mussel (*Dreissena rostriformis bugensis*) is a highly invasive non-native species the arrival of which in the UK has been expected for a number of years. Like the now widespread zebra mussel, this species comes from the Ponto-Caspian region (an area around the Black and Caspian seas).

Due to its filtering capacity and ability to produce dense populations, it can significantly reduce native biodiversity, and alter whole freshwater ecosystems. It is expected to occupy similar habitats to the zebra mussel, but can survive in some places that zebra mussel can't and can even displace them. 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.

What is being done?

There is no effective eradication method for quagga mussel once it has established in a reservoir and the downstream river system. As recommended in a recent review commissioned by Defra of options to deal with the arrival of quagga mussel, **the best method of slowing the spread of the quagga mussel is by applying better biosecurity through the [Check, Clean, Dry](#) approach**. We have contacted relevant stakeholders to make them aware of the new arrival and our response to it, and have begun extra monitoring to investigate the extent of the population.

Biosecurity

The larvae of quagga mussel (veligers) are not visible to the naked eye which makes drying a critical step in applying good biosecurity. There's good evidence that rinsing or soaking in hot water improves the chances of killing larvae and adults, and is a suggested addition to the Check, Clean, Dry approach.

Check, Clean, Dry is important not only to help slow the spread of this species, but also other invasive species that might be present in our waterways. It is especially important to prevent the spread of invasive non-native species to isolated locations (not connected to other water bodies) and protected areas such as SSSIs. Any structures or equipment such as jetties or boats which have been submerged in water for a time, pose a higher risk of spreading invasive species and so extra care should be taken when moving or working with them. There is specific biosecurity guidance for different water users on the non-native species secretariat [Check, Clean, Dry](#) pages.

Identifying the quagga mussel

Quagga mussels can be hard to distinguish from zebra mussels, which are widespread in England and Wales. They are able to colonise freshwater rivers, canals and lakes. They are small in size (similar to zebra mussel) but lack the strong ridge that gives zebra mussel its 'D' shape. Quagga mussel is more rounded and so when placed on its front it will roll to one side, unlike the zebra mussel. More information on the quagga mussel and its identification is available from the [species alert](#) pages of the Non-native Species Secretariat.

If you spot a Quagga Mussel, you must report it:

Use the dedicated online recording form that has been set up for this species, available at: www.nonnativespecies.org/alerts/quaggamussel.

Remember: Quagga mussels are hard to distinguish from the more common zebra mussel. Ensure your specimen has some of the key features of quagga before sending in your record.