Interim guidance - Biosecurity for anglers

Avoiding the spread of quagga mussel on the clothes and equipment of anglers

The best way to control this species is to Check, Clean and Dry with the addition of a hot water wash.

Check, Clean, Dry is the most effective method for preventing the spread of invasive non-native species and should be applied everywhere. This guidance sets out simple instructions for measures to prevent the accidental transfer of quagga mussel from sites that have either been identified as containing it or have a high risk of doing so.

Similar guidance is being given to other water users. If you are fishing from a boat, please also read the biosecurity guidance for watercraft users.

This guidance should be adopted by all anglers and those managing angling sites.

Principles

- Anglers and fishery managers should familiarise themselves with what the mussel looks like and how they can avoid spreading it.
- There is no evidence that anglers have spread quagga mussel, but there is a real risk that careless behaviour may do so, harming the environment, damaging fisheries and potentially damaging the reputation of the sport.
- Quagga mussels produce abundant populations of microscopic veliger (free-swimming) larvae. Any water in proximity to quagga mussel must be assumed to have these invisible larvae, which are easily transported to other water bodies.

Actions

- Adequate signage or guidance should be in place, making all anglers aware of the risk, and providing advice on recognising quagga mussel and how to prevent its spread. There is an alert poster and other information available on the www.nonnativespecies.org/alerts/quaggamussel
- Ideally, all cleaning and inspection operations should be supervised by a volunteer or member of staff.

- Access and egress for anglers (and other water users) should be limited, where practical, preferably to a single point at the site. Anglers should log in and out, confirming that they have cleaned and inspected their equipment.

- There are diseases and other invasive species (including plants) that can be spread by contaminated clothes and equipment, so good biosecurity when visiting a site (even if it already has quagga mussel) is important, too.

- If you are visiting a site where an invasive non-native species is known to be present, you must ensure you don't spread it.

- Risk can be reduced by reducing the contact time in which equipment is exposed to the water. Areas around hard substrates, or submerged objects, are particularly likely to support abundant quagga mussel populations.

- If possible, nets and drogues should be provided at the site and used in preference to personal angling equipment.

- Where personal equipment is brought to the water, the use of keep nets should be avoided and all nets and unhooking mats should be checked, cleaned and dried before being used at a different venue.

Check, Clean, Dry

- All equipment that has been in contact with the water should be thoroughly checked, cleaned and dried, but *any equipment that has been deployed in the water for more than 24 hours will need extra precautions taking before leaving the site.* Guidance on cleaning of submerged structures is available separately.

- Equipment should be **checked** for the presence of adult mussels which should be removed and disposed of safely, away from uninfected water bodies.

- Equipment should be thoroughly **cleaned**. If facilities allow, equipment should be subjected to immersion in hot water (at least 45 degrees Celsius) for 15 mins. The washings should be contained and not allowed to enter any watercourse or uncontained drainage system. Larger objects can be cleaned using a hot pressure wash at least 45 degrees Celsius for one minute per area under the jet.

- Equipment should be **dry** for 48 hours before it is used elsewhere. Drying is not very effective against adult quagga mussel, but is expected to be effective against the larval stages.

Report sightings

- If you think you have found quagga mussel, send in a report using the online recording form at: www.nonnativespecies.org/alerts/quaggamussel

- 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.