

# Interim guidance - Biosecurity for watercraft users

Avoiding the spread of quagga mussel on the clothes and equipment of watercraft users

The best way to control this species is to Check, Clean, 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.

**This guidance should be adopted by everyone using boats, canoes, kayaks and any other forms of watercraft. It should also be followed by those managing sites where watercraft are used.**

## Principles

- Watercraft users should familiarise themselves with what the [mussel looks like](#) and how they can avoid spreading it.
- There is no evidence that boaters or other water users have spread quagga mussel, but there is a real risk that careless behaviour may spread quagga mussel, harming the environment, damaging fisheries, increasing the biofouling of vessels and potentially damaging the reputation of the sport.
- Quagga mussel produce abundant populations of microscopic (“veliger”) larvae. Any water in proximity to quagga mussel must be assumed to have these invisible larvae, which are easily transported to other waterbodies.

## Actions

- Adequate signage or guidance should be in place, making all watercraft users 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](http://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 water users should be limited, preferably to a single point at the site. Users 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 watercraft, equipment and clothing, so good biosecurity when visiting a site (even if it already has quagga mussel) is important, too. When defouling vessels and equipment all organisms should be removed and disposed of safely.
- 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.

### 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](http://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.