



Aquatic Non-native Species

Non-native species pose a large threat to our rare and threatened freshwater invertebrates. This webpage gives details about what they are, how they are affecting us and what we can do to help.

What are non-native invasive species?

Non-native species are those which have been brought into a place where they do not naturally occur. Many non-native species are not classified as 'invasive' as they cause minimal problems. Those that do cause problems by spreading more aggressively, threatening native wildlife through competition, disease or by preying on them are classified as invasive species.

Why are non-native invasive species a problem?

Invasive aquatic species can have a damaging impact on native plants, animals and ecosystems. In extreme cases this could lead to some species becoming extinct. The impacts of non-native invasive species is now so significant that they are considered to be one of the greatest threats to biodiversity worldwide – even more than pollution or climate change.

Non-native species can cause financial harm as dealing with the problems they cause can be very expensive. The financial costs of invasive species is estimated to cost the British economy at least £2 billion a year, as well as the irreplaceable cost to native wildlife.

How do they affect me?

Whether you are interested in the environment or not, the problems caused by aquatic invasive non-native species affect us all. They cost billions of pounds of taxpayers, individuals and industries money every year.

Recreational activities can suffer as a result of invasive species such as angling, water sports and boating and can add significantly to management costs.

Where are they found?

Unfortunately many invasive aquatic species are widespread across the UK. There are also many species that are still living in relatively isolated areas. It is important that all invasive species, whether widespread or isolated are not spread any further as this could have a significant negative impact on the freshwater ecosystem and native freshwater invertebrate species.

What can you do?

If you are a water user, you may unknowingly be helping to spread invasive plants and animals from one water body to another. Animals, eggs, larvae and plant fragments are easily transported in or on boats, equipment, shoes and clothing and can survive for a long time. For example, new research from the Environment Agency shows that a killer shrimp can survive in the moist fold of a wader for up to 15 days.

You can help stop the spread of aquatic invasive species by following three simple steps: check, clean and dry

equipment before leaving the water.

Advice should be sought before attempting to control any invasive species. If done incorrectly it could cause the problem to spread or get worse.

5 Aquatic Non-Native Invasive Species to Watch Out For.....

Signal Crayfish (*Pacifastacus leniusculus*)

Non-native crayfish are generally very aggressive and burrow into riverbanks; causing considerable impact on other freshwater organisms and habitat. Non-native crayfish will also consume large amounts of freshwater invertebrates and macrophytes and can be vectors of a disease which kills our endangered native crayfish.



© Suzannah Dangerfield

Killer Shrimp (*Dikerogammarus villosus*)

The killer shrimp is one of the most invasive species in Europe. It kills a range of native British species including invertebrates, particularly native shrimp and even young fish. Insects such as damselflies and mayflies could be at risk with knock-on effects on the species which feed on them.



© Environment Agency

Chinese Mitten Crab (*Eriocheir sinensis*)

Chinese mitten crabs burrow deep into river banks, causing riverbanks to collapse in some areas and causing damage to habitats.



© Fera

Zebra Mussel (*Dreissena polymorpha*)

Zebra mussels can block pipe-work, affect lock gates, damage ships and boats and water treatment plants. They can also smother native species and rapidly take nutrients from the water, altering ecosystems.



© GBNSS

Water Primrose (*Ludwigia grandiflora*)

Water primrose is a highly invasive freshwater weed from South America introduced to Europe as a garden water plant. It has become a serious problem in France where it blocks water ways, overgrows ponds and lakes and out-competes native species. It has only recently started to be found in Britain but could be very costly if it establishes widely.



(c) Trevor Renals

Floating Pennywort (*Hydrocotyle ranunculoides*)

Floating pennywort was originally brought into the UK as a garden water plant. It grows rapidly and makes dense mats of vegetation, blocking out light and reducing the oxygen in the water, altering the pond ecosystem for native plants and animals.



(c) Tim Pankhurst/Plantlife