

Invasive species to look out for

Identifying invasive species

Five destructive invasive species are described in more detail below: [killer shrimp](#), [floating pennywort](#), [zebra mussel](#), [water primrose](#) and [quagga mussel](#). You can read descriptions of their identifying features and follow the links to identification sheets with photos.

For other invasive species, use the links below to download identification sheets, and to see pictures and videos.

- [Identification sheets for a range of invasive species](#)
- [Fold out identification guide to 10 invasive species](#)
- [Searchable gallery of photographs of invasive species](#)
- [Videos showing some invasive species](#)

If you spot an invasive non-native species

If you come across an invasive species, you should report it using this link:

- [Report a sighting of an invasive non-native species](#)

Killer shrimp (*Dikerogammarus villosus*)

One of the most invasive species in Europe, the killer shrimp can survive for up to 15 days in damp conditions. It kills a range of British species, including young fish, and can spread rapidly. It is a freshwater species, but can survive in brackish waters too.



A few tips for identifying killer shrimps:

- the main feature is a tail with distinctive cone-shaped bumps
- usually have striped backs, but can be more uniform in colour
- often larger than native freshwater shrimps
- can grow to 30 millimetres (mm), but are more commonly 10 to 20 mm

If you spot a killer shrimp, you should report it:

- email: alert_nonnative@ceh.ac.uk
- or go to: [Non-native species alert](#)

Other resources

- [Identification sheet for killer shrimp](#)

- [Species alert for killer shrimp](#)

Floating pennywort (*Hydrocotyle ranunculoides*)

This is also called 'water pennywort' or sometimes just 'pennywort'. It has shiny, kidney-shaped leaves with crinkled edges and is usually found floating on still or slow-moving fresh water. Floating pennywort can grow up to 20 centimetres a day, blocking out light and reducing the oxygen for other plants and animals.



If you spot a floating pennywort, you should report it:

- email: alert_nonnative@ceh.ac.uk
- or go to: [Non-native species alert](#)

Other resources

- [Identification sheet for floating pennywort](#)
- [Advice on invasive pond plants: Be Plant Wise website](#)

Zebra mussel (*Dreissena polymorpha*)

Zebra mussels are found in rivers, canals and lakes and can block pipe-work and affect lock gates. They can also smother native species and rapidly take nutrients from the water, altering ecosystems.



Zebra mussels:

- are very small - usually about 30 mm in length but can grow up to 50 mm
- have light and dark bands of colour, usually blue or brown and yellow-white
- are a distinctive 'D' shape
- attach, usually in groups, to anything solid underwater, like masonry, stones or tree roots

If you spot a zebra mussel, you should report it:

- email: alert_nonnative@ceh.ac.uk
- or go to: [Non-native species alert](#)

Other resources

- [Identification sheet for floating pennywort](#)
- [Video about zebra mussels](#)

Water primrose (*Ludwigia grandiflora*)

Water primrose is a highly invasive freshwater weed from South America. It has become a serious problem in France where it blocks water ways and overgrows ponds and lakes. It has only recently started to be found in Britain. but if it were to establish widely could cost as much as £242 million to manage. You should therefore make sure to report any sightings as soon as possible using the links below.



Water primrose:

- grows on the banks of rivers and lakes and floating on the surface of the water
- has a flower with 5 bright yellow flower and distinctive seed pods
- has a thick fleshy stem Has leaves which range from long and thin to almost completely round
- leaves brown hay like stems protruding from the water over winter

If you spot a water primrose, you should report it:

- email: alert_nonnative@ceh.ac.uk
- or go to: [Non-native species alert](#)

Other resources

- [Identification sheet for water primrose](#)
- [Video about water primrose](#)
- [Advice on invasive pond plants: Be Plant Wise website](#)
- [Species alert for water primrose](#)

Quagga Mussel (*Dreissena rostriformis*)

Closely related and very similar to the zebra mussel, but possibly even more invasive. It can survive in some places that zebra mussel can't and can even displace them. Like the zebra mussel and killer shrimp this species comes from the ponto-caspian region in south-east Europe. It's not yet present in Great Britain, but like the killer shrimp could turn up soon. Any suspected sighting should be reported as soon as possible using the guidance below.

Similar to zebra mussel and quite difficult to distinguish, if you suspect quagga mussel make sure to make a note of where you saw it and inform the relevant

organisation (the Environment Agency in England and Wales, the Scottish Environment Protection Agency in Scotland).

Identification tips:

- found in freshwater rivers, canals and lakes
- small - similar in size to zebra mussel
- lacks the strong ridge that gives zebra mussel its 'D' shape, quagga mussel is more rounded
- when you place quagga mussel on its front it will roll to one side, unlike zebra mussel
- a wavy line is created by the meeting of the two halves of the shell in quagga mussel, in zebra mussel the line is more straight
- living zebra mussels are quite hard to detach from a surface they are attached to, quagga mussels pull off more easily

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

- email: alert_nonnative@ceh.ac.uk
- or go to: [Non-native species alert](#)