



Briefing note on invasive Ponto-Caspian shrimps in Britain, October 2015

Current situation

The purpose of this briefing note is to provide an overview of the situation regarding two invasive Ponto-Caspian shrimps in Great Britain: *Dikerogammarus haemobaphes* and *D. villosus*.

D. villosus was first discovered in 2010 at Grafham Water in Cambridgeshire, followed by two additional locations in Wales (Cardiff Bay and Port Talbot) in the same year. Biosecurity measures were introduced (e.g. the Check, Clean, Dry campaign) and are believed to have helped slow the spread. Nevertheless it was subsequently discovered in the Norfolk Broads (2012) and has recently been discovered in Pitsford Reservoir, Northamptonshire (2015), which is connected to a tributary of the River Nene. Anglian Water has taken initial steps to increase biosecurity at Pitsford Reservoir and is working closely with the Environment Agency, Natural England and others to assess the risk of spread and the feasibility of mitigation.

Another shrimp, *D. haemobaphes*, was confirmed in the River Severn in September 2012. Subsequent monitoring found that this species was fairly well distributed throughout the canal network and since 2012 has spread rapidly throughout the network and to connected rivers.

An up-to-date distribution map is provided at Annex 1. Further information, identification guides, risk assessments and biosecurity advice are available at: <http://www.nonnativespecies.org/alerts/killershrimp>

Environmental risk

In response to the arrival of *D. haemobaphes* and *D. villosus*, risk assessments have been produced by experts from Cambridge University, which concluded that the potential ecological risk from both species is high (with high confidence). The assessments note that the impact of these species in GB is likely to be high (with medium confidence) and could result in marked ecological change, leading to decreased diversity in the invaded range by competing with or preying upon a broad range of invertebrates.

For more information about the risk posed by these species the risk assessments are available online at: <http://www.nonnativespecies.org/alerts/killershrimp>

Surveillance and monitoring

Surveillance efforts have been increased since the arrival of the *D. villosus* in 2010 and further guidance issued on the identification of this and similar species. An alert system was

established for the reporting of suspect sightings and the first record of *D. haemobaphes* was reported through this system.

More information on the identification of *Dikerogammarus* species and other invasive shrimps can be found online: <http://www.nonnativespecies.org/alerts/killershrimp>

Sightings of either species should be reported to: alertnonnative@ceh.ac.uk

Strategy

There is no known means of effectively managing *Dikerogammarus* species at this time and the strategy remains to slow the spread of both species by improving biosecurity supported by an effective awareness campaign. Biosecurity is important at affected sites, but it is equally important for all other water bodies and for all water users. This will not only reduce the risk of introducing or spreading *Dikerogammarus* species, but other invasive species as well. Those who manage waterbodies are encouraged to adopt methods for improving biosecurity, for example by increasing awareness and providing wash down facilities, while those that use water bodies are encouraged to adopt good biosecurity practice, specifically 'Check, Clean, Dry' (www.nonnativespecies.org/checkcleandry). The work of landowners and stakeholders so far affected by these shrimps has been exemplary and we should follow their example.

While it is important to apply biosecurity measures in all cases when using our waterways, it is particularly important in areas where *D. haemobaphes* is found and of even higher priority at the five locations where the 'killer shrimp', *D. villosus* has been found, which is still relatively limited in its distribution.

The response to *Dikerogammarus* species is being led by a Task Group involving staff from Defra, the Welsh Government, the Environment Agency, Natural England, Natural Resources Wales and The Scottish Environment Protection Agency. The Task Group co-ordinates the implementation of national response measures and key actions to contain species, prevent further spread and protect vulnerable sites from invasion.

Future

Future government efforts will consist primarily of promoting biosecurity nationally and at affected sites, working with land owners and stakeholders. While biosecurity will help slow the spread of these invasive shrimps, it is anticipated that new water bodies will be affected. The Environment Agency (in England) continues to monitor populations and will provide updated distribution maps showing further locations. Likewise agencies in Scotland and Wales are alert for new sightings. This briefing note will be updated periodically (i.e. annually or in the case of important developments).

More information

More information about these shrimps and the response to them can be found online at: www.nonnativespecies.org

Resources available for land managers and water users to improve biosecurity are available here:

- [Alert posters](#)
- Identification [guide](#) and [booklet](#)
- Biosecurity guidance for [anglers](#), [boat owners](#) and [submerged structures](#)
- [Check Clean Dry posters, leaflets, pop-up stands and other materials](#)

- [Biosecurity e-learning](#)
- Videos for [anglers](#), [boat owners and canoeists](#)

Annex 1

Current (as of August 2015) distribution map showing locations of confirmed *Dikerogammarus villosus* (red dots) and *Dikerogammarus haemobaphes*.

