

We need your help

Please help us stop the spread of invasive Killer Shrimp in the Broads.

Dikerogammarus villosus, commonly known as Killer Shrimp, has been found in certain parts of the Broads. This non-native species poses a serious threat to the aquatic wildlife found in our rivers, streams and lakes. There is no risk to public health or pets.

The Broads are a fantastic place to enjoy a wide range of water activities such as boating and fishing, attracting people from all over the country. This means that there is an increased risk of the shrimp being spread into new waters around the country where it is not currently found.



Killer Shrimp. Scientific Name: *Dikerogammarus villosus*

Once the shrimp has invaded a natural waterbody, such as a lake or a river, there is no way for us to remove it. We therefore need your help to prevent it spreading further.

Stop the spread

Any activity that takes place in the water is at risk of spreading Killer Shrimp. By following the simple advice in this leaflet, water users can really make a big difference and help us to prevent the spread of this shrimp.



Always follow the 'Golden Rules' to reduce the risk of spreading Killer Shrimp

Before leaving site:

Check your equipment and clothing for living organisms. Pay particular attention to areas that are damp or hard to inspect.

Clean all equipment, footwear and clothes thoroughly. If you do come across any organisms, leave them at the site where you found them.

Dry all equipment and clothing – Killer Shrimp will not survive in dry conditions for more than 48 hours. Make sure you don't transfer water elsewhere.

Advice for anglers

- If you are going fishing, familiarise yourself with what the shrimp look like and how to prevent their spread.
- All nets, unhooking mats, feeders, buckets, towels and clothing are suitable surfaces for shrimp to cling onto, especially if used in the margins of the watercourses. Killer Shrimp can survive for long periods on damp fishing equipment. Moving wet equipment into new waters could lead to the spread of the shrimp.
- When you have finished fishing, you must check all equipment for shrimp. Particular attention should be paid to folds in waders and the tread. Do not leave equipment in the water if you are not using it.
- To reduce the risk of moving shrimp, please avoid using keep nets unless really necessary, for example, when competing in fishing matches.

- When mixing groundbait, remember that water taken from the margins could contain shrimp. To reduce the risk, only mix small amounts of bait enough for that session and do not transfer mixed ground bait to new waters. If mixing large quantities of bait, consider using bottled tap water.
- Anglers using boats should follow the advice below.
- **Follow the Check, Clean, Dry policy for all equipment that has entered the water, especially if you plan to fish a different river system, broad or stillwater fishery.**
- Follow Check, Clean, Dry guidelines, especially if you are removing your boat from the water and taking it to a new site. Any attached algae, weed, mussels or other material could be hiding shrimps and must be thoroughly removed from all hulls and other submerged surfaces.
- Before removing your boat from the water, the engine should run for 5 minutes at above three quarters throttle to help clear any shrimp from within the exhaust system.
- Store the boat and engine where they will not drain into a water body. The engine should be returned to its vertical (down) position to drain.,
- Check the propeller bag regularly for shrimp. Clean and dry as required.
- If the propeller bag is not left on the engine, turn the bag inside out, check for shrimp and dry for 48 hours.

Advice for angling from boats

- If you are going out on a boat, familiarise yourself with what the shrimp looks like and how to prevent spreading it.
- Regularly check attached mooring ropes and mudweights for shrimp.
- Any water that collects in bilges or inside kayaks and canoes must be completely emptied before leaving the site.
- If equipment is washed down, please make sure that the water does not drain directly into another watercourse.
- Wetsuits and boots should be hung-up to dry. Equipment should be dried for 48 hours, ideally in sunlight before it is used elsewhere.
- Particular attention must be paid to areas that retain water, remain damp or are hard to inspect.
- Reduce the contact time in which equipment is exposed to the water. For example, when not in use, or stationary for a period of time, outboard motors should be raised completely out of water.



Raised outboard motor

If Killer Shrimp are found (dead or alive)

If you believe you have found Killer Shrimp at a site, please email a high quality photograph to the Non Native Species Secretariat at alert_nonnative@ceh.ac.uk

Let them know how many shrimp you found and where. This will help efforts to keep track and if possible contain the Killer Shrimp.

Wrap the shrimps in plastic and put them in a refuse bin. Do not pour them down a drain or put them back into the water.

Further information

Broads Authority

www.broads-authority.gov.uk/

Non Native Species Secretariat

www.nonnativespecies.org/alerts/killershrimp

Contact the Environment Agency

enquiries@environment-agency.gov.uk

03708 506 506 (Mon-Fri, 8am - 6pm)

By following the advice provided, you will helping reduce the spread and impact of this invasive species.

Thank you for your support.