

## ***Argulus mongolianus***

***Argulus mongolianus* is a newly detected species of the crustacean parasite, Argulus, or 'fish louse'. It has been found during recent disease investigations at the Environment Agency's National Fisheries Laboratory. These are the first findings of this parasite in the UK and potentially Europe.**

### **Background to Argulus**

Argulus is a freshwater crustacean parasite most commonly found on the skin of fish. There are currently three species established in the UK. These parasites can have serious impacts and are one of the biggest disease problems in stillwater trout fisheries. They cause considerable damage to fish through their attachment and feeding behaviour, leading to loss of appetite and condition, lethargy, and in some cases, mortality. Persistent infections can cause economic losses and even contribute to the closure of fisheries.

### **About *Argulus mongolianus***

*A. mongolianus* is a newly detected species of Argulus originating in eastern Asia. There is very little information available about this parasite, with literature largely confined to a single description of a specimen from the 1930s. An additional report documents significant carp mortalities in a Russian fishery.

We have detected *A. mongolianus* in a limited number of fisheries to date - sometimes in association with fish deaths. This suggests it could pose a significant threat to fisheries.

Unlike established species of this parasite, *A. mongolianus* appears to have a preference for the gills, gill cavity, mouth and head. It has been confirmed in common carp and their hybrids, roach and bream - but it is likely that the host range of this parasite is wider, with all freshwater fish species being considered potential hosts.



*Female A. mongolianus full of eggs*

### **Identifying *A. mongolianus***

*A. mongolianus* has very similar features to some other species of Argulus. Our National Fisheries Laboratory have identified detailed morphological and molecular characteristics, allowing identification of male, female, and juvenile parasites. Identification requires detailed microscopic examination of key features by a professional. Whilst Argulus parasites are often easy to spot, the species cannot be confirmed with the naked eye. The presence of lice in and around the gills, gill cavity, mouth and head of fish however can be important indicators that a closer look is required.

**customer service line 03708 506 506**

**incident hotline 0800 80 70 60**

**floodline 03459 88 11 88**

Page 1 of 2

## What we are doing

We have placed controls on movements of fish from sites known to contain *A. mongolianus* in order to prevent the spread of this parasite. We are monitoring its distribution and impact in conjunction with partners, consultants and experts in the UK and Asia, and working to understand potential routes of introduction. **We continue to monitor for new disease threats during all fish health checks and disease investigations.**



*A. mongolianus* in situ in its preferred locations (gills, mouth, head, and gill cavity)

## Reporting

Reporting potential infections is vital to us being able to monitor the spread of this parasite and protect fisheries. Please let us know if you see or suspect any Argulus infections matching the descriptions above, or causing distress to fish.

These parasites can usually be easily removed with a fingernail or tweezers and sent to us for examination, so please get in touch with our National Fisheries Laboratory or your local Environment Agency fisheries officer, and we will be happy to arrange sampling.

**Contact our incident hotline immediately to report dead or dying fish.**

**For more information on *A. mongolianus*, or any other fish health condition, please contact the National Fisheries Laboratory:**

**Tel: 02084 745244 or 07825 111723**

**Email: [fish.health@environment-agency.gov.uk](mailto:fish.health@environment-agency.gov.uk)**

**customer service line 03708 506 506**

**incident hotline 0800 80 70 60**

**floodline 03459 88 11 88**

Page 2 of 2