

Explanatory note to Interim Biosecurity Report of the 6 October 2011

Red-spot disease has not been ruled out as the causative agent of the lesions seen on fish around the Gladstone area.

We believe the parasitic flatworm may be the major cause of redness and illness in the barramundi collected from the Harbour and may have led to some of the lesions we have seen.

The Biosecurity Queensland report from 6 October 2011 includes results from 8 fish tested from Gladstone Harbour.

Fish samples tested from Port Alma, which is just outside Gladstone Harbour, did test positive for red-spot disease.

The Harbour fish that showed lesions did not test positive for red-spot disease, however the symptoms of lesions were consistent with the disease. All these fish did test positive for the parasitic flatworm (fluke). The interim veterinary diagnostic assessments are focused on reporting on the samples that have been received for testing. It would be an error to draw conclusions from these results in isolation.

Experts strongly advise readers to refer to the earlier report dated 30 September 2011 which states *'although EUS (red-spot disease) was not found to be present in the lesions of these fish it does not exclude EUS causing lesions in other fish from Gladstone harbour'*. We believe that the estimated 30,000 barramundi washed over the spillway at Awoonga Dam between December 2010 and March 2011 due to overtopping has contributed significantly to the number of fish seen with symptoms.

The presence of these fish in the Harbour is reflected in the dramatically increased catches of barramundi by commercial fishers during this year.

Our hypothesis is fish suffered physical stress, which combined with the stress of the relocation, would have also made them susceptible to disease.

The addition of so many large barramundi in the Boyne River below the dam would have significantly increased competition for food and increased physical stress levels of all fish.

The likely significant increase in stress levels has lowered the ability of fish to tolerate these parasites on their skin. As a result, the fish attempt to remove them by rubbing against hard objects, causing the redness.

In severe cases the redness may become an open wound (lesion), which can attract secondary infections.

Further targeted sampling and testing seeks to confirm the relationship between the parasite and the redness.

The Department of Employment, Economic Development and Innovation remains open and transparent with our testing of fish in the Gladstone area showing signs of lesions and cloudy eyes.

That's why we make test results conducted by Biosecurity Queensland publicly available.

We will continue collecting more samples of barramundi and other fish for testing and will make the results of those tests publicly available.

The closure was lifted as we had identified the likely causes of the symptoms, and Queensland Health could not find any association with fish disease and human health concerns, and symptoms identified in the sick fishers.

The identification of likely diseases producing the symptoms led Queensland Health to determine that there was no risk to human health or unsafe food, providing safe food procedures are followed.