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## FINAL FISH HEALTH INSPECTORATE VISIT REPORT

### SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	FB0544	<b>DATE OF VISIT</b>	18/08/2015
<b>SITE No</b>	FS1244	<b>SITE NAME</b>	Strathclyde
<b>INSPECTOR</b>	Andy Mayes	<b>CASE No</b>	20150317

#### Section 1: Summary

The River Gryffe was visited after a call from a The Clyde River Foundation informing the fish health inspectorate of a number of dead or moribund fish being found in a section of the river known locally as the 'The Pots'. Four moribund fish were sampled for a diagnostic investigation. Another moribund fish was removed before the inspector arrived and frozen. This fish was also sampled at a later date.

A histopathological examination revealed that losses were attributed to osmotic haemodilution resulting from oomycete infected skin tissue.

Interpretation of bacteriology plates revealed *Saprolegnia* sp. and three colonies of bacteria identified as *Aeromonas hydrophila*, *cavia*, and *sobria*. These motile aeromonads are known to be fish pathogens however in this case the mixed nature of the growth suggests they have occurred initially as an opportunist and increased to result in a significant bacterial infection.

Examination of fins and vents took place under a microscope. Examination of the fins found the fish to be negative for *Gyrodactylus* species. Examination of the vents identified a number of the parasitic nematode *Anisakis simplex*. The vents had varying levels of infestation with between 9 to 43 individuals identified per vent.

Please contact myself or the duty inspector should you require any further information, have any queries regarding this report or if any problems develop.

#### Section 2: Case Detail

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## Observations

A call was received on Monday August 17<sup>th</sup> by the duty inspector from Dr William Yeomans, biologist at the River Clyde Foundation. The reason for the call was to notify the inspectorate of number of Atlantic salmon that have been found dead or moribund on the river Gryffe. These fish had been observed and removed by the river Gryffe bailiffs. Dr Yeomans was able to remove a fish on August 17<sup>th</sup>, this fish was frozen.

An inspector was at the River Gryffe the day after this phone call. Approximately 12 moribund fish were observed on the river, at a stretch known locally was 'The Pots'. The area consisted of a number of large potholes and small waterfalls, a formidable obstacle for a salmon migrating upstream. The moribund fish were observed in the potholes with grey lesions and suspected fungus on the heads and flanks of the fish. Clinically healthy fish were also observed in these pools.

Four moribund fish were removed for diagnostic sampling. Closer examination revealed that all the fish had pale gills and fish four had an inflamed vent. Internally, all four fish had slightly pale livers, a lack of fat associated with the pyloric caeca, yellow pseudo-faeces and no food present in the gut. Fish 1 also had bloody ascites and a grey and granular kidney. Fish 1 – 3 had slightly pale hearts.

The fish frozen by Dr Yeomans was fish 5. This fish was reportedly found moribund in a pool on August 17<sup>th</sup>. The fish was frozen later that day and collected by the inspector the following day (August 18<sup>th</sup>). The fish was taken back to the lab, defrosted and sampled on August 21<sup>st</sup>. Histology samples were not taken from this fish due to post mortem changes.

## Samples

Samples were collected from five fish according to the table below:

Fish number	Pool number	Species	Stage	Origin
F1 - 5	1	Atlantic salmon	Adult / ~1.5kg	River Gryffe

## Results

The outstanding results for this case are:

**Virology:** A general screen was conducted on tissue samples to test for the presence of viral pathogens by cell culture.

The result of this test was negative.

For all other results please refer to the interim fish health report issued on 07/09/15

Signed: *A.S. Mayes*  
Fish Health Inspector

Date: 30/09/2015

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at [www.gov.scot/Topics/marine/Fish-Shellfish/FHI/charter](http://www.gov.scot/Topics/marine/Fish-Shellfish/FHI/charter)

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