FHI 059, Version 13	ł	Issued by: FHI	Date of issue: 12/05/2020
Case No: 2023-0431			Date of visit: 12/09/2023
Time spent on site: 3	Hours	Main Inspec	stor:
Site No: FIS0412 Business No: FIB0352	Site Name: Business Name:	Coyle Water Fishery The Waterfront Trout Fisher	у
Case Types: 1 REG	2 DIA 3	4 5	6
Water Temp (°C): 18.84	Thermometer No:	T309	FHI 045 completed
Observations:	Region: ST	Water type: F	CoGP MA
Dead/weak/abnormally behaving Clinical signs of disease observe Gross pathology observed?	•	Y If yes, see additional inf	ormation/clinical score sheet. ormation/clinical score sheet. ormation/clinical score sheet.
Diagnostic samples taken?		Y	
UNI/REG only - if unable to carry	out intended visit detail	l reason below:	

### Additional Case Information:

Site inspection conducted by and & DIA conducted by

The site was visited in order to update the fisheries registrtion details following a change in site ownership and management.

Coyle water fishery has been renamed to The waterfront Trout Fishery following the change of ownership and mangment. The fishery was taken over by the current manager in 2019, fishery registation details were updated during the inspection.

The Waterfront Trout Fishery is composed of a 1.3 acre bait pond, a 4.2 acre fly pond and a 0.25 acre fish holding facillity. The fish holding facillity has not been stocked or used since the handover of managment in 2019 however there are a some wild brown trout within this facillity.

On the date of inspection, the bait pond was stocked with 45 Rainbow trout and the fly pond was stocked with approximatly 600 rainbow, brown and blue trout. There is also small wild population of brown trout within the fly pond. Upon the physical inspection of the site's fishery ponds, visability was clear, dispite current ongoing manual weeding oportations which were occuring on site at the time. Rainbows and wild brown trout were observed moving about in the upper water colum close to the edges of the pond. Fish appeared slightly lethargic due to the ongoing high water tempratures the site has been subject to recently due to warmer than average weather. The fishery has only been open for angling for approximatly 5 and a half weeks since the beginning of June this year due to water tempratures exceeding 20 degrees celsius.

From the physical inspection of the bait pond, fewer fish were observed due to reduced visability from the weeding activities taking place during the inspection, most of the fish that were observed appeared lethargic and lean. Three fish were observed with physical damage caused by poor handing from anglers. One fish was observed as being severly moribund, lethargic and was observed gasping prior to being removed for diagnostic sampling.

As the site is a fishery and not a registered APB, there is no requirement to hold some records detailed on this case sheet.

FHI 059, Version 13			Issu	ued by: FHI			Date of issu	ue: 12/05/2020
Case No:	2023-0431	]	Site No:	FIS0412	2			
Date of Visit:		12/09/2023	]		Inspector(s)	:		
Registration/Autho								_
<ol> <li>Business/site det</li> <li>Changes made to</li> </ol>	•	checked by s	ite represent	ative?			Y Y	-
Site Details (includ	le cleaner fis	sh for all sect	ions)					-
Total No facilities		N/A	Facilities sto	ocked	N/A	No facilitie	es inspected	N/A
Species	N/A						T	
Age group	N/A							
No Fish	N/A						1	
Mean Fish Wt	N/A							
Next Fallow Date (S	lite)	Unknown	-	Next Input Da	ate (Site)	Unknow		
Recent (last 4 wks)	disease prob	lems?		Y	Any escape	s (since last	visit)?	N
If yes, detail:								
<ol> <li>Date of last inspective of last inspec</li></ol>	blete and corr cords availab blete and corr cates for intro s nts carried ou	ble for dead fis rectly entered? ductions (outw ut by (or on be	h and waste? ? vith GB) avail half) of the bu	able? usiness (not us			N/A	N/A N/A N/A N/A
Mortality Records								
1. Mortality records		•						N/A
2. How are mortalitie	es aisposea a	DT?						
If other detail:		l correctly out	ared?					
3. Mortality records	•	r correctly ente						N/A
4. Recent mortality		at mined monta		records kept				NI/A
5. Evidence of recei				dragoon;				N/A
If yes, facility nos/no	b monality per	Tacility/no sto	ск регласни	/reason.				
6. Any other peaks i	in mortality du	Iring pariod of	anakad2					N/A
If yes, detail:		anng penoa ci	leckeu?					
7. Have increased (		mortalities be	en reported t	o vet or FHI2				N/A
If yes, detail action:	unexplained)	inortanties be	chreponed t					
8. Have 'mortality ev	ents' been re	eported to EHI	? If no, enter	details on mor	tality events s	heet		N/A
0. Have montality c	rents been re	poned to r r n	: in no, criter	uctails on mor	tanty events s	nicci.		

Treatments and Medicines Records	
1. Recent treatments (see comment)?	
If yes, detail:	
If other, detail:	
2. Medicines records available for inspection?	
3. Are records complete and correctly entered?	
4. Are fish in a withdrawal period?	
5. If yes, what treatment(s)?	
If other, detail:	
6. Are medicines stored appropriately?	
<ul> <li>Biosecurity Records <ol> <li>Biosecurity records available for inspection?</li> <li>Has the manner and frequency of mortality removal, recording and safe disposal been considered?</li> <li>Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?</li> <li>Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?</li> <li>Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?</li> </ol> </li> </ul>	
<ul> <li>6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?</li> <li>7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?</li> <li>8. Have the biosecurity procedures been adequately implemented on site?</li> <li>If no, detail:</li> </ul>	
Results of Surveillance 1. Has any animal health surveillance been carried out by, or on behalf of, the business? 2. If yes, are results available for inspection? 3. Any significant results? If yes, datail (if not datailed under recent disease problems)	N/A
If yes, detail (if not detailed under recent disease problems).	
Records checked between: N/A	

F۲	H 059, Version 13							lss	ued by:	FHI			
	Case no:	2023-04	431	Site No:		FIS0412	2		Date of		12/	09/2023	12/(
l	Priority samples:	VI		BA		PA		MG	Samplir	ig: HI		I	
	Time sampling starts/ends:	16:1	0:00	16:3	0:00	1	Inspecto	or:		l	VMD No	o. 🚺	0
	Environmental conditions:	1	Sunny	2	Calm	3	Dry	4		5			
	Summary samples	HIST	Y	BA	Y	MG	Y	VI		PA	Y	Total Sa	mples
A	dd Fish/Pools - click												
	Pool/Fish No	F1	P1										
	Fish nos	1	1										
	Pool Group	P1	P1										
	Species	RTR	RTR										
	Average weight	1kg	1kg										
	Sex	N/A	N/A										
	Water Type	FW	FW										
Stock Details		L West Mill	L West Mill										

2 Total Tests assigned 2	

FHI 059, Version 13			Issued by: FHI					Date of issue: 12/05/202				5/2020
Case no:	2023-0431		Site No: FIS0412			Method of killing: Percussive						
Date of visit:	12/09/20	023	Inspec	tor(s):				s	heet Re	elevant:	Y	
S for strong preser	nce: M for medium presence: W	for weak pres	sence									
Fish Number	ice. In for medium presence. W		Sence	1	_	<b></b>	I					
	er death (if > 45 minutes)											
External Signs												
Behaviour	Moribund	S										
	Lethargic	S										
	Hanging vertical	_			_							
	Spiralling	_	_		_							
	Flashing Loss of equilibrium	м	_		_							
Body	Dark	w	-		_							
Douy	Distended abdomen											
	Anorexic	S										
	Scale Oedema											
Opercula	Shortened											
	Flared											
Haemorrhaging	Throat											
	Ventrum Ress of fine				<u> </u>							
	Base of fins Elsewhere											
Eyes	Exophthalmic											
2,00	Enophthalmic (sunken)	_										
	Cataract											
	Haemorrhagic											
Gills	Pale											
	Zoned											
	Necrotic		_		_							
Lesions	Flank	_	_		_							
Vent	Elsewhere Inflamed	-	_		_							
Vent	Trailing faeces	_			_							
Lice Load	Estimate numbers	-										
Internal Signs												
Ascites	Clear											
-	Bloody											
Oedema	In tissues				_							
Heart	Pale/anaemic Granulomas	_	_		_							
	Deformed	м	_									
Liver	Petechial haem											
	Gross haem											
	Tissue breakdown											
	Enlarged											
	Colour number(s)	6										
	Granulomas											
Pularia assas	Lesions Retachial beam	_	_		_							
Pyloric caeca	Petechial haem Tubules mauve											
	Lack of fat	s										
Spleen	Enlarged											
	Granulomas											
Gut	No food present	W										
	Yellow pseudo-faeces											
	External haem											
Dadaver	Internal haem											
Body wall	Haemorrhaging				_							
Swim bladder	Haemorrhaging Fluid filled											
Kidney	Swollen											
	Grey											
	Granular											
	Liquefied											
General	Parasites present											
	Anaemia											

Case no:	2023-0431

L

Date of visit:

12/09/2023

S for strong presence: M for medium presence: W for	Ν
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	nce: M for medium presence: W fo	1 10	 	 _		_	-
Fish Number							
	er death (if > 45 minutes)						
External Signs							
Behaviour	Moribund						
	Lethargic						
	Hanging vertical						
	Spiralling						
	Flashing						
	Loss of equilibrium						
Body	Dark						
,	Distended abdomen						
	Anorexic						
	Scale Oedema	_	 				
Opercula	Shortened						
Opercula	Flared	_					
		_			 		
Haemorrhaging	Throat	_					
	Ventrum						
	Base of fins						
_	Elsewhere						
Eyes	Exophthalmic						
	Enophthalmic (sunken)						
	Cataract						
	Haemorrhagic						
Gills	Pale						
	Zoned						
	Necrotic						
Lesions	Flank						
	Elsewhere						
Vent	Inflamed						
	Trailing faeces						
Lice Load	Estimate numbers						
Internal Signs							
Ascites	Clear						
	Bloody	_					
Oedema	In tissues						
Heart	Pale/anaemic						
Tiourt	Granulomas						
	Deformed	_					
Liver	Petechial haem						
LIVEI	Gross haem	_					
		_					
	Tissue breakdown	_					
	Enlarged		 				
	Colour number(s)						
	Granulomas						
	Lesions						
Pyloric caeca	Petechial haem						
	Tubules mauve						
	Lack of fat						
Spleen	Enlarged						
	Granulomas						
Gut	No food present						
	Yellow pseudo-faeces						
	External haem						
	Internal haem						
Body wall	Haemorrhaging						
Swim bladder	Haemorrhaging						
	Fluid filled						
Kidney	Swollen						
	Grey						
	Granular						
	Liquefied						
General	Parasites present						
Selicial	Anaemia						

# Additional comments:

Flaccid heart, raised scales.

Site No: FIS0412

Case No: 2023-0431

Nature of non-compliance:

Action taken (FHI):

Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology

Case No:	2023-0431			Date of visit:	12/09/2023			
Site No:	FIS0412			Inspector:		l		
Results Summary	Freq.			Dat	te of Notificat	ion		
,		Database	Insp	Phone		Writing	Insp	2 <sup>nd</sup> Insp
SKIN	1/1	26/09/2023		26/09/2023		30/10/2023		
IHN	0/1	26/09/2023		26/09/2023		30/10/2023		
IPN	0/1	26/09/2023		26/09/2023		30/10/2023		
SAV	0/1	26/09/2023		26/09/2023		30/10/2023		
VHS	0/1	26/09/2023		26/09/2023		30/10/2023		
Report Summary								
Case Type	Date	Insp	2 <sup>nd</sup> Insp					
DIA	30/10/2023							



# FISH HEALTH INSPECTORATE VISIT REPORT

# SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NO FIB0352 FIS0412 SITE NO CASE NO 20230431

**DATE OF VISIT** 12/09/2023 SITE NAME INSPECTOR

**Coyle Water Fishery** 

# Section 1: Summary

During a routine fish health inspection at Coyle Water fishery, one fish was removed for diagnostic sampling.

Histopathological examination revealed features of dermatitis resembling puffy skin disease.

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

#### **Observations**

A routine fish health inspection was conducted at Coyle Water Fishery. During the inspection of the site's fishery ponds, one fish displaying clinical signs of disease was observed within the site's bait pond and was removed for diagnostic sampling.

Prior to removal for sampling, the fish observed was very lean, moribund and lethargic. It also had loss of equilibrium in regards to its swimming behaviour and was observed gasping at the surface.

Externally, the fish was dark to the body and had shortened opercula. Upon internal examination, a small hook and a split shot fishing weight was found lodged deep within the fish's throat, the heart was flaccid and a lack of fat was observed to the pyloric caeca.

#### Samples

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

Fish number	Facility	Species	Origin
F1	Bait pond	Rainbow Trout	Westmill Fish Farm (FS0606)

#### Results

Bacteriology: Kidney and spleen material from one fish was inoculated onto appropriate media for the isolation of bacteria.

No significant growth was observed.

R09 UKAS accredited testing laboratory No. 1964 Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB Tel - 0131 244 3498 Fax - 0131 244 0944 Email - ms.fishhealth@gov.scot Website - www.gov.scot/Topics/marine/science

**Virology:** Tissue samples were tested for segments of nucleic acid indicative of the presence of the pathogens specified below using real-time PCR (qPCR).

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), infectious pancreatic necrosis virus (IPNV), salmonid alphavirus (SAV) and viral haemorrhagic septicemia virus (VHSV).

**Parasitology:** Fins were collected to determine the presence of *Gyrodactylus salaris* using light microscopy.

No G. salaris parasites were detected in the samples examined.

**Histology:** Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from F1. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

**Gill:** Lamellar hyperplasia, mild, multifocal and filament branchitis, mainly observed at the tips. Presence of one ciliate between two adjacent lamellae. Free blood among gill filaments (potentially associated to the killing method).

**Skin & Muscle:** Epidermal oedema and marked scale pocked oedema with evidence of scale absorption.

Gut and pyloric caeca: Within normal range.

Pancreas: Within normal range.

Liver: Within normal range.

Kidney: Within normal range.

Spleen: Within normal range

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

Signed:

Fish Health Inspector

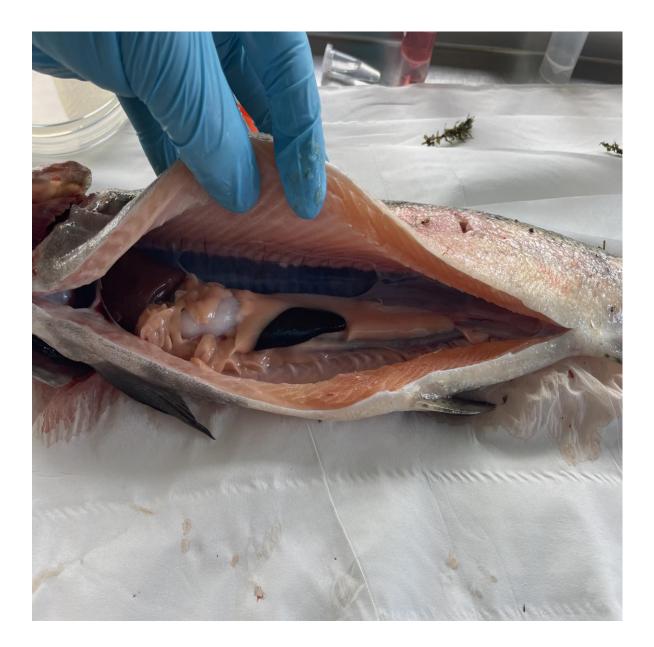
Date: 30/10/2023

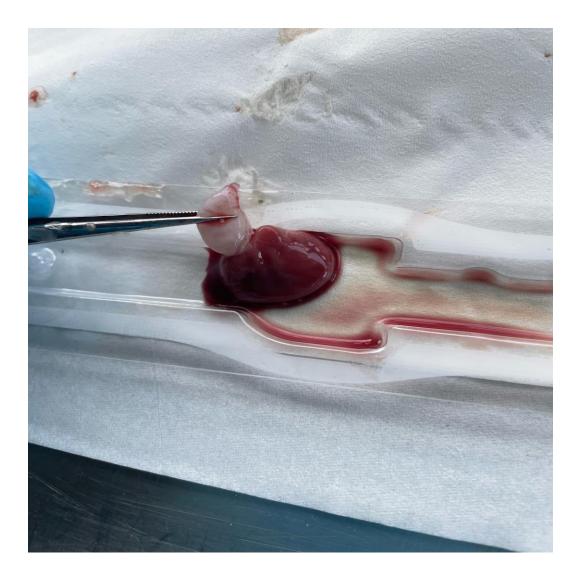
The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at Fish Health Inspectorate Service Charter - gov.scot (www.gov.scot)











FHI 059, Version 13	ŀ	ssued by: FHI	Date of issue: 12/05/2020
Case No: 2023-0436			Date of visit: 13/09/2023
Time spent on site:	1.5 hours	Main Inspe	ector:
Site No: FS1239 Business No: FB0544	Site Name: Business Name:	Grampian Scotland	
Case Types: 1 DIA	2 REP 3	4 5	6
Water Temp (°C): N/A	Thermometer No:	T172	FHI 045 completed N/A
Observations:	Region: GR	Water type: B	CoGP MA:
Dead/weak/abnormally behavin Clinical signs of disease observ Gross pathology observed? Diagnostic samples taken?	• •	Y If yes, see additional in	nformation/clinical score sheet. nformation/clinical score sheet. nformation/clinical score sheet.
UNI/REG only - if unable to carr	ry out intended visit detail	reason below:	

#### Additional Case Information:

Spey Fisheries Board visited after they reported a significant number of dead fish observed along the River Spey. All dead or moribund fish from main channel of Spey. Despite moribund fish being kept over the weekend before the visit, all fish were either dead or had gone by the time of the visit. No moribund fish were observed by inspector. The bailiff estimates the water temp was between 16-19 degrees C (approx.) at the time of the inspection.

Water level low at the time of the inspection.

Some staff from the Spey Fisheries Board believe that the mortality event may have been caused by a pollution event. SEPA have been contacted by the board. They have since attended the river and taken water samples. Dead fish have been reported by river stakeholders since Saturday.

Water bailiff removed 19 dead fish recently. All dead fish observed by inspector and none exhibited signs of disease (apart from fungus). Reportedly, it has been estimated that around 50 dead fish have been observed from the main Spey channel. No signs of notifiable disease reported by stakeholders.

Fish found between Grantown-on-Spey and Craigellachie

There have been few reports of dead or dying fish since the weekend.

FHI 059, Version 13				Issued by: FHI	l	
Case no:	2023-0436	Site No:	FS1239	Date of visi Sampling:	t/ 13/09/20	23 13/(
Priority samples:	VI	BA	PA	MG	HI	
Time sampling starts/ends:	13:30:00	14:00:00	Inspector:		VMD No.	0
Environmental conditions:	1 Dry	2 Cloudy	3 Calm	4	5	
Summary samples	HIST	ВА	MGY	VI	PA Y Total	Samples

# Add Fish/Pools - click

	Pool/Fish No	F1	F2	F3	F4	F5				
	Fish nos	1	2	3	4	5				
	Pool Group									
	Species	TRO	TRO	TRO	TRO	SAL				
	Average weight	0.8000	1.2000	0.8000		1.3000				
	Sex	N/A	N/A	N/A	N/A	N/A				
	Water Type	FW	FW	FW	FW	FW				
Stock Details	Stock Origin Facility No	≧ Beat: Kinermony (River Spey)	∠ Beat: Easter Elchies (River Spey)	Z Beat: Lower Pitchroy (River Spey)	S Beat: Tulchan D Beat (River Spey)	≷ Beat: Carron (River Spey)				

)9/2023	09/2023 Additional Sample Information:											
5		Total Te	aste ase	ianed	7	ľ						
0	l	Total It	5313 233	igned	1	I						

FHI 059, Version 13			Issued by: FHI					Date of issue: 12/05/20				5/202
Case no:	2023-0436		Site No	D:	FS123	39	Met	hod of	killing:	Unknov	wn	]
Date of visit:	13/09/202	23	Inspec	tor(s):				S	heet Re	elevant:	Y	
S for strong proper	aa: M far madium proganaa: W fa	r wook proc										
Fish Number	nce: M for medium presence: W fo	1 weak pres		3	4	5	_					7
	er death (if > 45 minutes)	Days	Days	Days	Days	Days						İ.
External Signs	·											1
Behaviour	Moribund											Į
	Lethargic											ļ
	Hanging vertical				-							ļ
	Spiralling	_			_		_					
	Flashing Loss of equilibrium											ł
Body	Dark				м							ł
Body	Distended abdomen											ł
	Anorexic											1
	Scale Oedema											Ì
Opercula	Shortened											I
	Flared											Ι
Haemorrhaging	Throat											I
	Ventrum											ļ
	Base of fins											ļ
<b>F</b>	Elsewhere											ł
Eyes	Exophthalmic											ł
	Enophthalmic (sunken) Cataract											ł
	Haemorrhagic											ł
Gills	Pale	S	S	S	S	S						ł
Ollis	Zoned		<b>–</b>		<u>۲</u>							ł
	Necrotic											
Lesions	Flank											Ì
	Elsewhere			M		M						1
Vent	Inflamed											1
	Trailing faeces											I
Lice Load	Estimate numbers											I
												ļ
Internal Signs												ļ
Ascites	Clear											ł
Oedema	Bloody In tissues											
Heart	Pale/anaemic											ł
licart	Granulomas											ł
	Deformed											1
Liver	Petechial haem											1
-	Gross haem											1
	Tissue breakdown											1
	Enlarged											I
	Colour number(s)											ļ
	Granulomas											ļ
<b>.</b>	Lesions											ļ
Pyloric caeca	Petechial haem											ł
	Tubules mauve Lack of fat											ł
Spleen	Enlarged											ł
opieen	Granulomas											ł
Gut	No food present											ł
	Yellow pseudo-faeces											t
	External haem											1
	Internal haem											1
Body wall	Haemorrhaging											I
Swim bladder	Haemorrhaging											ļ
	Fluid filled											ļ
Kidney	Swollen											ļ
	Grey											ļ
	Granular											ł
Comerci	Liquefied		м									ł
General	Parasites present											ł
	Anaemia											L

Date of visit:

Case no:	2023-0436
	-

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13/09/2023

S for strong presence: M for medium presence: W for w

	ce: M for medium presence: W for	N					
Fish Number							
Time sampled afte	er death (if > 45 minutes)						
External Signs							
Behaviour	Moribund						
	Lethargic						
	Hanging vertical						
	Spiralling						
	Flashing						
	Loss of equilibrium						
Body	Dark						
	Distended abdomen						
	Anorexic						
	Scale Oedema						
Opercula	Shortened						
	Flared						
Haemorrhaging	Throat						
	Ventrum						
	Base of fins						
	Elsewhere						
Eyes	Exophthalmic						
	Enophthalmic (sunken)						
	Cataract						
	Haemorrhagic						
Gills	Pale						
	Zoned						
	Necrotic						
Lesions	Flank						
	Elsewhere						
Vent	Inflamed						
	Trailing faeces						
Lice Load	Estimate numbers						
Internal Signs							
Ascites	Clear						
	Bloody						
Oedema	In tissues						
Heart	Pale/anaemic						
	Granulomas				 		
	Deformed		 			 	
Liver	Petechial haem		 	 	 		
	Gross haem		 				
	Tissue breakdown						
	Enlarged						
	Colour number(s)						
	Granulomas						
Puloric coose	Lesions Retechial beam						
Pyloric caeca	Petechial haem						
	Tubules mauve Lack of fat						
Splaar							
Spleen	Enlarged Granulomas						
Gut	No food present						
Gut							
	Yellow pseudo-faeces External haem						
	Internal haem						
Pody woll							
Body wall Swim bladder	Haemorrhaging						
	Haemorrhaging						
Kidnov	Fluid filled						
Kidney	Swollen						
	Grey						
	Granular						
	Liquefied						
	Dorocitoo present						
General	Parasites present Anaemia						

# Additional comments:

Unidentified artefact observed in the eye of F2, possibly a parasite. Sampled into 70% ethanol (see image 2 in photos tab)

Site No: FS1239

Case No: 2023-0436

Nature of non-compliance:

Action taken (FHI):

Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology

Case No:	2023-0436			Date of visit:	13/09/2023			
Site No:	FS1239	1		Inspector:				
	<b>B</b>			I.				
Results Summary	Freq.			Da	te of Notifica			
		Database	Insp	Phone	Insp	Writing	Insp	2 <sup>nd</sup> Insp
IHNQ	0/5	20/09/2023		20/09/2023		13/10/2023		
IPN PCR	0/5	20/09/2023		20/09/2023		13/10/2023		
SAV PCR	0/5	20/09/2023		20/09/2023		13/10/2023		
VHS PCR	0/5	20/09/2023		20/09/2023		13/10/2023		
Anisakis sp.	4/5	05/10/2023		05/10/2023		13/10/2023		
Saprolegnia sp.	3/5	05/10/2023		05/10/2023		13/10/2023		
Calliphoridae sp. eggs	1/1	01/11/2023		05/10/2023		13/10/2023		
				-				
Report Summary								
Case Type	Date	Insp	2 <sup>nd</sup> Insp					
DIA, REP	13/10/2023							

Report Summary			
Case Type	Date	Insp	2 <sup>nd</sup> Insp
DIA, REP	13/10/2023		
	_		
	_	-	
	_	-	
	_		
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	-	-	



# FISH HEALTH INSPECTORATE VISIT REPORT

# SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No FB0544 SITE NO FS1239 CASE NO

20230436

**DATE OF VISIT** 13/09/2023 Grampian- River Spey SITE NAME INSPECTOR

## Section 1: Summary

The Spey Fisheries Board was visited after reports were received from the board informing the Fish Health Inspectorate of higher than average fish mortality along the River Spey. No moribund fish were available so dead sea trout and salmon were viewed by the inspector and samples were submitted for analysis by molecular genetics and parasitology laboratories.

No result could be determined for samples aimed to test for segments of nucleic acid indicative of the presence of pathogens using real-time PCR (gPCR). This was due to the degradation of the ribonucleic acid.

No monogenean parasites were observed. Significant cream coloured hyphae were observed on F1, F4 and F5, consistent with Saprolegnia sp. and this was confirmed by sequencing.

Four of the five fish were observed to have coiled encysted nematode larvae in the musculature around the vent consistent with Anisakis sp. F1 and F5 were also observed to have Saprolegnialike hyphae.

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

#### **Observations**

The Spey Fisheries Board was visited after reports were received from the board informing the Fish Health Inspectorate of higher than average fish mortality along the River Spey. Reportedly, about 50 fish were reported to have died over the 6 days prior to the inspection. Most reports were received between 09/09/2023 - 10/09/2023. All fish were removed from the main channel of the Spey between Grantown-on-Spey and Craigellachie.

All the dead fish removed from the River Spey by the bailiff were observed at the Spey Fisheries Board office. Of the 19 fish observed about 5 displayed a fungal infection consistent with Saprolegnia sp. Due to the partial decay and postmortem changes to the fish, no other signs of disease could be identified.

No moribund fish were available, so dead sea trout and salmon were viewed and samples removed by the inspector. If moribund fish were available, histology samples (samples of fish tissue to be viewed under a microscope) and samples for viral cell culture could have been taken. Due to the level of decomposition of the dead fish available, these samples could not be taken.

# Samples

Samples were collected from 5 fish according to the table below:

Fish number	Species	Stage	Beat name origin
1	Sea trout (Salmo trutta)	Adult	Kinermony
2	Sea trout (Salmo trutta)	Adult	Easter Elchies
3	Sea trout (Salmo trutta)	Adult	Lower Pitchroy
4	Sea trout (Salmo trutta)	Adult	Tulchan D Beat
5	Atlantic salmon (Salmo salar)	Adult	Carron

## **Results**

**Virology:** Tissue samples were tested for segments of nucleic acid indicative of the presence of the pathogens specified below using real-time PCR (qPCR).

No result could be determined from these samples due to degradation of the segment of ribonucleic acid.

**Parasitology:** Fins were collected to determine the presence of *Gyrodactylus salaris* using light microscopy.

No G. salaris parasites were detected in the samples examined.

Signed:

Fish Health Inspector

Date: 13/10/2023

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at Fish Health Inspectorate Service Charter - gov.scot (www.gov.scot)



Image 1: Fish 1 - 5



Image 2: Fish 2 - artifact in eye (possible parasite)

FHI 059, Version 13	Issue	ed by: FHI	Date of issue: 12/05/2020
Case No: 2023-0450			Date of visit: 29/09/2023
Time spent on site:	1 Hour	Main Inspec	ctor:
Site No: SS0973 Business No: SB0574	Site Name: Business Name:	Loch Carloway Loch Carloway Shellfish Ltd	
Case Types: 1 ECI	23	4 5	6
Water Temp (°C): N/A	Thermometer No:		FHI 045 completed
Observations:	Region: WI	Water type: S	CoGP MA
Dead/weak/abnormally behavir Clinical signs of disease observ Gross pathology observed? Diagnostic samples taken? UNI/REG only - if unable to car	ved?	N If yes, see additional inf N If yes, see additional inf N	formation/clinical score sheet. formation/clinical score sheet. formation/clinical score sheet.

### **Additional Case Information:**

Site inspected in a rough sea state with high winds and rain. Only one line of mussel stock inspected.

The site has recently just commenced its first production cycle, the site is stocked via natural spat fall. Two 220m seawater longlines are currently stocked, mussels are within their first year of growth. The stock looked heathy, with no open shells observed. Fouling was minimal and confined to the top meter of each line. No tube worm or any obvious signs of invasive predation was noted on the stocks inspected.

FHI 059, Version 13			ไรรเ	ied by: FHI			Date of issu	e: 12/05/2020
Case No:	2023-0450	]	Site No:	SS0973				
Date of Visit:		29/09/2023	3		Inspector(s):			
Registration/Author 1. Business/site deta 2. Changes made to	ails summary		site representa	ative?			Y Y	]
Site Details (includ Total No facilities	le cleaner fi	sh for all sect	t <b>ions)</b> Facilities sto	akad	·)	No fooilitic	a increated	7
Species	MED	4	Facilities sit	ocked	2	NO TACIIILIE	es inspected	4
Age group	2023							
No Fish	2 Lines							
Mean Fish Wt	2 - 3cm							
Next Fallow Date (S		Never fallow	1	Next Input Da	ite (Site)	N/A		
Recent (last 4 wks)	disease prob	lems?		N	Any escapes	(since last	visit)?	N
If yes, detail:								
Movement Record 1. Movement record 2. Date of last inspe 3. Are records comp 4. Are movement re 5. Are records comp 6. Are health certific Transport Records 1. Are any movement If yes, is there a system	Is available for oction: oblete and correctords available oblete and correctors oblete and correctors of the correctors	rectly entered ole for dead fis rectly entered iductions (outw ut by (or on be	sh and waste? ? vith GB) avail half) of the bu	able? usiness (not usi			First ECI ins	Y spection Y N/A N/A N/A
Mortality Records 1. Mortality records	available for	inspection?						N/A
2. How are mortalitie					Other (detail)			
If other detail:		s fall to sea flo						
3. Mortality records		d correctly ent						N/A
4. Recent mortality	• •		No mortality	has been obse	erved onsite.			N1/A
5. Evidence of recen		· ·		1100000				N/A
If yes, facility nos/no	monality pe	r raciiity/no sto	ber per facility	meason:				
6. Any other peaks i	in mortality d	uring period ch	necked?					N/A
It yes, detail:								
7. Have increased (	unexplained)	mortalities be	en reported to	o vet or FHI?				N/A
If yes, detail action:	,							
8. Have 'mortality ev	/ents' been re	eported to FHI	? If no, enter	details on mort	ality events sl	neet.		N/A

Treatments and Medicines Records	
1. Recent treatments (see comment)?	
If yes, detail:	
If other, detail:	
2. Medicines records available for inspection?	
3. Are records complete and correctly entered?	
4. Are fish in a withdrawal period?	
5. If yes, what treatment(s)?	
If other, detail:	
6. Are medicines stored appropriately?	
Biosecurity Records	
1. Biosecurity records available for inspection?	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any	
increased (unexplained) mortality at the site been included?	Y
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease	
is detected been included and how and when that will be notified to Scottish Ministers?	Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher	Y
health status, certification if required)?	
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise	Y
transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of	Y
aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site?	Y
It no, detail:	
Results of Surveillance	
1. Has any animal health surveillance been carried out by, or on behalf of, the business?	N
2. If yes, are results available for inspection?	
3. Any significant results?	
If yes, detail (if not detailed under recent disease problems).	
Records checked between: 29/09/2023 - First ECI inspection.	

FHI 059, Version 13	Version 13 Issued by: FHI			Date	Date of issue: 12/05/202		
Case Number:	2023-0450 Site No:	SS0973					
Date of Visit	29/09/2023 Inspector:						
Number of Susceptib	ble species on site			_			
	es present = <u>LOW</u> risk						
	present, score for each pathogen		No	Yes			
	Susceptible to Bonamia ostrea (OED)		0	25	0		
	Susceptible to Marteilia refringens (OED, MED)		0	3	3		
	Susceptible to OsHV (CGI)		0	3	0		
Sites within a tidal e	kcursion	1	2-5	>6			
Site contacts	Number of sites holding susceptible species within a tidal						
	excursion	0	2	10	2		
_ive shellfish mover	0	1-2	>3				
Novements on	Frequency of movements on from equivalent MS	0	5	10	0		
	Frequency of movements on from equivalent zone or						
	compartment including third country	0	10	20	0		
	Number of suppliers	0	5	10	0		
lovements off							
	Frequency of movements off <u>within</u> MSS Management	0	4	2			
	Areas	0	1	2	2		
	Frequency of moviements off outwith MCC Menomenant						
	Frequency of movements off <u>outwith</u> MSS Management	0	2	6	0		
	Areas	0	3	6	0		
		0	3 3	6 6	0 3		
	Areas		3 Secure	6 Unsecure			
-	Areas	0	3 Secure (effluent	6 Unsecure (no effluent			
practices	Areas		3 Secure (effluent	6 Unsecure			
Water contacts with	Areas Number of destinations	0	3 Secure (effluent	6 Unsecure (no effluent			
oractices	Areas	0	3 Secure (effluent	6 Unsecure (no effluent			
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS	0 None	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	3		
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area	0 None	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	3		
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 None 0	3 Secure (effluent treatment) 1 2	6 Unsecure (no effluent treatment) 2 6	3 2 0		
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area	0 None 0	3 Secure (effluent treatment) 1	6 Unsecure (no effluent treatment) 2	3		
Water contacts with depuration facilities	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0 None 0	3 Secure (effluent treatment) 1 2	6 Unsecure (no effluent treatment) 2 6	3 2 0		
Water contacts with depuration facilities Biosecurity	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0 0	3 Secure (effluent treatment) 1 2 4	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4	3 2 0		
Water contacts with depuration facilities Biosecurity	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3	6 Unsecure (no effluent treatment) 2 6 8	3 2 0 0		
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0 0 0 0 1	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	3 2 0 0		
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 0 1	3 Secure (effluent treatment) 1 2 4 2 or 3 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	3 2 0 0		
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 1 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	3 2 0 0		
depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes 0	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	3 2 0 0 0		
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	3 2 0 0		

Case No:	2023-0450	]		Date of visit:	29/09/2023	]				
Site No:	SS0973	1		Inspector:						
Results Summary	Freq.	Database	Insp	Phone	Insp	tion Writing	Insp	2 <sup>nd</sup> Insp		
Report Summary										
Case Type ECI	Date	Insp	2 <sup>nd</sup> Insp							
ECI	31/10/2023									



# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

 BUSINESS No
 SB0574

 SITE NO
 SS0973

 CASE NO
 20230450

DATE OF VISIT 29/09/2023 SITE NAME Loch Carloway INSPECTOR

### Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected in accordance with the Aquatic Animal Health (Scotland) Regulations 2009.

All epidemiological units were inspected. On this occasion no samples were taken for disease analysis. The Inspector did not observe any clinical signs associated with the listed diseases as described in the Aquatic Animal Health (Scotland) Regulations 2009.

#### Records

The surveillance frequency category of the site was assessed as low. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every fourth year. The category of the site will be reassessed on a routine basis and updated as required.

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

No mortality had been observed on site since the last inspection by Marine Directorate .

No animal health surveillance had been carried out on behalf of the business and/or Marine Directorate since the last Marine Directorate inspection.

The biosecurity measures plan for the site was inspected and found to be adequately maintained and implemented.

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

Signed:



Fish Health Inspector

Date: 31/10/2023

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The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at <u>Fish Health Inspectorate Service Charter - gov.scot</u> (www.gov.scot)