

Case No:	<input type="text" value="2021-0324"/>	Date of visit:	<input type="text" value="21/09/2021"/>			
Time spent on site:	<input type="text" value="3 hours"/>	Main Inspector:	<input type="text" value=""/>			
Site No:	<input type="text" value="FS0269"/>	Site Name:	<input type="text" value="Kames Hatchery"/>			
Business No:	<input type="text" value="FB0134"/>	Business Name:	<input type="text" value="Kames Fish Farming Ltd"/>			
Case Types:	1 <input type="text" value="ECI"/>	2 <input type="text" value="CNI"/>	3 <input type="text" value="DIA"/>	4 <input type="text" value=""/>	5 <input type="text" value=""/>	6 <input type="text" value=""/>
Water Temp (°C):	<input type="text" value="12.6"/>	Thermometer No:	<input type="text" value="T172"/>	FHI 045 completed	<input type="text" value=""/>	
Observations:	Region:	ST	Water type:	F	CoGP MA	
Dead/weak/abnormally behaving fish present?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="text" value="Y"/>					

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

Remote inspection conducted by [REDACTED], observed by [REDACTED] (for training purposes) and [REDACTED] (for the purpose of auditing [REDACTED]) on 15/09/2021. Physical inspection carried out on 21/09/2021 by [REDACTED] (observed by [REDACTED] and [REDACTED]). Diagnostic sampling carried out by [REDACTED].

First batch of fish moving out in Autumn 2021 and another in spring 2022 all going to Loch Craignish
Import of ova from AquaSearch in March 2019. Observed health certificate during physical inspection
Waste collected at a shared disposal point at Kames pier

Increased mortality events:

2019 wk 18, 4,500 deformed alvins removed

2020 wk 2, 3,500 unviable eggs (referred to as "glass eggs" by the site contact) removed: 3.38% mortality over the site

2020 wk 17, unviable eggs removed: 6.99% mortality. Not reported to FHI. Mortality sheet updated and site representative reminded of requirement to notify FHI of mortality in ova over 6% per week.

2021 wk 6: ~11,500 fish dead due to RTFS (10.25%). Florocol used as a treatment and it was successful. Mortality soon returned to background levels in the following week.

2021 wk 15: unviable eggs removed, 3,808 eggs (2.96%)

July 13th fish vaccinated with Alphaject 22 (just larger fish vaccinated). The rest of the fish will be vaccinated in Oct or Nov 2021

No more eggs from AquaSearch in Denmark. All future eggs will come from Northern Trout in England.

Case No: **2021-0324** Site No: **FS0269**
 Date of Visit: **21/09/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

1. Business/site details summary checked by site representative? **Y**
 2. Changes made to details? **Y**

Site Details (include cleaner fish for all sections)

Total No facilities	15	Facilities stocked	8	No facilities inspected	15
Species	RTR	RTR			
Age group	2021	2021			
No Fish	50,886	35,738			
Mean Fish Wt	42g	130g			
Next Fallow Date (Site)	No plans		Next Input Date (Site)	December 2021	
Recent (last 4 wks) disease problems?			Y	Any escapes (since last visit)?	N
If yes, detail:	RTFS, see mortality section below for further details				

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **26/02/2019**
 3. Are records complete and correctly entered? **Y**
 4. Are movement records available for dead fish and waste? **Y**
 5. Are records complete and correctly entered? **Y**
 6. Are health certificates for introductions (outwith GB) available? **Y**

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)? **Y**
 If yes, is there a system in place for maintenance of transportation records? **Y**

Mortality Records

1. Mortality records available for inspection? **Y**
 2. How are mortalities disposed of? **Other (detail)**
 If other detail: **All mortality taken to shared ensiler at pier.**
 3. Mortality records complete and correctly entered? **Y**
 4. Recent mortality (last 4 wks): **RTFS diagnosed on site. Only specific tanks affected: tanks 11 and 12. Diagnosed by company vet. Fish vet group prescribed treatment of florocol. Third party vet taken samples from 4 fish and has diagnosed RTFS based on histology observed on 07/09/2021. RTFS confirmed using agar plates by company vet. wk 37: 0.11% (96 fish), wk 36: 0.46% (401 fish) , wk 35: 0.69% (610 fish), wk 34: 0.99% (889 fish).**
 5. Evidence of recent increased/atypical mortalities? **Y**
 If yes, facility nos/no mortality per facility/no stock per facility/reason:

See additional information

6. Any other peaks in mortality during period checked? **Y**
 If yes, detail: **See additional information**
 7. Have increased (unexplained) mortalities been reported to vet or FHI? **N/A**
 If yes, detail action: **No unexplained mortality**
 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet. **N**

Treatments and Medicines Records

- | | | |
|--|--------------------------|---|
| 1. Recent treatments (see comment)? | <input type="checkbox"/> | Y |
| If yes, detail: | Florfenicol | |
| If other, detail: | | |
| 2. Medicines records available for inspection? | <input type="checkbox"/> | Y |
| 3. Are records complete and correctly entered? | <input type="checkbox"/> | Y |
| 4. Are fish in a withdrawal period? | <input type="checkbox"/> | Y |
| 5. If yes, what treatment(s)? | Florfenicol | |
| If other, detail: | | |
| 6. Are medicines stored appropriately? | <input type="checkbox"/> | Y |

Biosecurity Records

- | | | |
|--|--------------------------|---|
| 1. Biosecurity records available for inspection? | <input type="checkbox"/> | Y |
| 2. Has the manner and frequency of mortality removal, recording and safe disposal been considered? | <input type="checkbox"/> | Y |
| 3. 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? | <input type="checkbox"/> | 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 <i>how</i> and <i>when</i> that will be notified to Scottish Ministers? | <input type="checkbox"/> | Y |
| 5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)? | <input type="checkbox"/> | Y |
| 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.)? | <input type="checkbox"/> | Y |
| 7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site? | <input type="checkbox"/> | Y |
| 8. Have the biosecurity procedures been adequately implemented on site? | <input type="checkbox"/> | Y |
| If no, detail: | | |

Results of Surveillance

- | | | |
|---|---|---|
| 1. Has any animal health surveillance been carried out by, or on behalf of, the business? | <input type="checkbox"/> | Y |
| 2. If yes, are results available for inspection? | <input type="checkbox"/> | Y |
| 3. Any significant results? | <input type="checkbox"/> | Y |
| If yes, detail (if not detailed under recent disease problems). | RTFS diagnosed (see additional information) | |

Records checked between:	22/06/2019 - 21/09/2021
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Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	F4	F5	P1						
Fish nos	1	2	3	4	5	1-5						
Pool Group	P1	P1	P1	P1	P1	P1						
Species	RTR	RTR	RTR	RTR	RTR	RTR						
Average weight	120g	120g	120g	60g	100g							
Sex	N/A	N/A	N/A	N/A	N/A							
Water Type	FW	FW	FW	FW	FW							
Stock Details		Brow well	Brow well	Brow well	Brow well	Brow well						
	Stock Origin											
Facility No	11	11	12	6	7							

Case no: 2021-0324

Site No: FS0269

Method of killing: Anaesthetic

Date of visit: 21/09/2021

Inspector(s):

Sheet Relevant: Y

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

Fish Number		1	2	3	4	5				
Time sampled after death (if > 45 minutes)										
External Signs										
Behaviour	Moribund	S	S	S	S	S				
	Lethargic			W						
	Hanging vertical									
	Spiralling									
	Flashing									
	Loss of equilibrium			M						
Body	Dark									
	Distended abdomen			S						
	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									
	Lesions									
Pyloric caeca	Petechial haem									
	Tubules mauve									
	Lack of fat	M	M	M	M	M				
Spleen	Enlarged									
	Granulomas									
Gut	No food present	M	M	M	M	M				
	Yellow pseudo-faeces									
	External haem									
	Internal haem									
Body wall	Haemorrhaging									
Swim bladder	Haemorrhaging									
	Fluid filled									
Kidney	Swollen									
	Grey									
	Granular									
	Liquefied									
General	Parasites present									
	Anaemia									

Additional comments:

Tale of fish 1 and 3 deformed. Physical damage on the lower jaw of fish 5. F3 swollen atrium

Case Number:	2021-0324	Site No:	FS0269	Insp:		
Date of Visit	21/09/2021	No of movements/supp./dest.			Score	
Live fish movements		0	1-5	6-10	>10	
Movements on (from out with GB) of susceptible species	Frequency of movements on from equivalent MS	0	5	10	14	5
	Frequency of movements on from equivalent zone or compartment including third country	0	9	18	26	
	Number of suppliers	0	5	10	14	5
Movements off	Frequency of movements off	0	3	6	10	6
	Number of destinations	0	3	6	10	3
Exposure via water	Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species susceptible to same diseases)	Farm is protected (secure water supply through disinfection or borehole)	0				
	Farm is on-line or in a coastal zone with category I farms upstream or within 1 tidal excursion	1	2	4		1
	Farm is on-line or in a coastal zone with category III farms upstream or within 1 tidal excursion	1	3	6		
	Farm is on-line or in a coastal zone with category V farms upstream or within 1 tidal excursion	1	4	8		
Management practices		None	Secure	Unsecure		
Water contacts with processors	Any processing plant discharging into adjacent waters	0	1	2		0
On farm processing within the rules of the directive	No on farm processing	0				0
	Processing own fish (re-cycling risk)	1				
	Processing fish from MS of equivalent status	2				
	Processing fish from zone or compartment of equivalent status	4				
	Processing fish from Category III farm	8				
	Processing fish from Category V farm	10				
Disposal of fish and fish by-products	Site's own waste only processed.	0				
	Common processes with other farms	3				3
	Collection point for waste from other farms	5				
Use of unpasteurised feeds	No feeding of unpasteurised feed	0				0
	Feeding unpasteurised feed	5				
Biosecurity	Number of sites	1	2 or 3	≥ 4		
Contacts with other sites	Sites operating from single shorebase	0	1	2		2
	Sites sharing staff and equipment	0	1	2		2
Disinfection of equipment between sites, use of footbaths etc	Yes	0				0
	No	1				
CoGP/Regulator						
Practices in accordance with regulator or industry code of practice	Yes	0				0
	No	3				
Platform access to cages	Yes	0				0
	No	2				
Total Rank					27	HIGH

Case No: **2021-0324**

Site No: **FS0269**

Sea Lice Inspection (Seawater Sites Only)

1. Has the site experienced sea lice problems in the previous 4 years?
2. Is the CoGP Farm Management Area (or equivalent) fallowed synchronously on a single year class basis?
3. Does the site have access to a range of licenced in-feed and bath sea lice medications (including deltamethrin, azamethiphos and emamectin benzoate) as well as access to suitable biological and/or mechanical control measures, and can these be deployed in a reasonable period of time?
4. Is there a signed documented farm management agreement or statement relevant to the site and CoGP Farm Management Area (or equivalent)?
5. Are sea lice count records available for inspection? (Legal SSI, CoGP Annex 6)
6. Do records adequately reflect the required standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6)
7. Are sea lice (*L. salmonis*) record levels below the suggested criteria for treatment in the CoGP during the period that records are inspected? (CoGP Annex 6)
8. Have average adult female sea lice (*L. salmonis*) numbers per fish been at a level of 3 or above (prior to w/b 10/6/19) or 2 or above (from w/b 10/6/19) during the period that records are inspected?
If yes, have these been reported to the Fish Health Inspectorate? If no, FHI see comment.
9. Is *C. elongatus* infestation at a level which is considered to cause significant welfare problems? (CoGP 4.3.81, 5.3.50)
10. Have therapeutic treatments been administered or other actions taken when *L. salmonis* levels have exceeded the suggested criteria for treatment or where *C. elongatus* is considered to have welfare implications? (CoGP 4.3.82, 5.3.51)
11. Has any other action been taken (where applicable)?
12. Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?
13. Are treatments, where conducted, carried out in cooperation between participating farms?
14. Is there a harvesting strategy for the site, where fewer populations or part populations are held without treatment for sea lice?
15. Is there a site specific written lice management procedure with waypoints describing set actions to deal with recognised scenarios during the escalation of a sea lice infestation?
16. Do the sea lice levels observed on stocks reflect sea lice count data? If no please detail reasons.

Containment Inspection

1. Has the site experienced equipment damage due to predators in the current or previous production cycles? N
2. Are measures in place to mitigate against the predation experienced on site? (Detail below) Y

If other, detail below:

Site inside, contract with pest control company, traps available for use if required (not required at the time of the inspection)

3. Have escape incidents or events been experienced on or in the vicinity of the site since the last FHI inspection? N
If Yes proceed with questions 4 – 9. If No skip to question 10
4. Have these been reported to Scottish Ministers?
5. Have these been reported to local DSFB forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
6. Have these been reported to the SSPO and local fisheries trusts forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
7. Were methods (if any) used to recover escapees? If yes give detail
8. If gill nets were deployed was this action agreed with local wild fish interests and was permission given by Scottish Ministers? (Legal, CoGP – 4.4.38, 5.4.18)
9. What action was taken to prevent and minimise the risk of further escapes? (Not covered in code but could be considered under satisfactory measures of the Act)
10. Is the site inspected as satisfactory with regards to containment? If no, please detail reason(s) Y

Site No: FS0269
Case No: 2021-0324
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0134	DATE OF VISIT	21/09/2021
SITE No	FS0269	SITE NAME	Kames Hatchery
CASE No	20210324	INSPECTORS	[REDACTED]

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.

Samples were taken for diagnostic purposes. A separate report will be issued detailing the results of these tests.

Records

The surveillance frequency category of the site was assessed as high. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted annually. 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.

Records in relation to aquaculture animals transported by the business were inspected and found to be adequately maintained.

Mortality records were inspected and found to be adequately maintained.

Mortality levels had exceeded the reporting criteria since the last inspection and had not been reported to the Fish Health Inspectorate. I would like to remind you of the industry agreement in relation to mortality reporting as detailed in A Code of Good Practice for Scottish Finfish Aquaculture.

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

R04

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

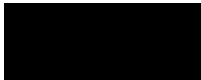
Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007 with respect to section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory.

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

Signed:



Date: 06/10/2021

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0134	DATE OF VISIT	21/09/2021
SITE No	FS0269	SITE NAME	Kames Hatchery
CASE No	20210324	INSPECTOR	[REDACTED]

Section 1: Summary

During a routine inspection, moribund fish were observed. Five fish were removed from the water for diagnostic purposes.

Histopathology examination revealed mild multifactorial proliferative branchitis. Several amoebic cells were present and one fish also displayed bacteria among gill filaments (potentially associated with Rainbow Trout Fry Syndrome [RTFS] observed on site).

Flavobacterium psychrophilum was identified on plates taken from kidney material of 4 / 5 Fish. Because of the fastidious nature of this bacterium the low level of growth observed does not reflect the actual level present in the fish and in this case the treatment with antibiotics will have reduced the number of viable bacteria. *F. psychrophilum* is a primary fish pathogen and a risk to fish health.

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 site was inspected as part of a risk based surveillance schedule. The inspection conducted was a routine inspection. Before the physical inspection on site it was noted that RTFS had been confirmed on site by the company biologist and a third party vet. The fish had been treated for this disease using florfenicol and mortality rates had reportedly reduced due to this treatment. It was thought that only fish in tanks 11 and 12 were affected by the disease. Some fish on site had been vaccinated using Alphaject 22.

During the physical inspection of the site, 5 fish were removed after moribund fish were observed. All fish removed were moribund and fish 3 was also lethargic, had a loss of equilibrium, a distended abdomen and a deformed tail. Fish 1 also had a deformed tail and fish 5 had physical damage on the lower jaw. During the internal examination, it was noted that all fish had a lack of fat associated with the pyloric caeca and no food present in the gut. Fish 3 also had a swollen atrium.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1 + 2	1	11	Rainbow trout (<i>Oncorhynchus mykiss</i>)	~120g	Brow Well Fisheries
3	1	12	Rainbow trout (<i>Oncorhynchus mykiss</i>)	~120g	Brow Well Fisheries
4	1	6	Rainbow trout (<i>Oncorhynchus mykiss</i>)	~60g	Brow Well Fisheries
5	1	7	Rainbow trout (<i>Oncorhynchus mykiss</i>)	~100g	Brow Well Fisheries

Results

Bacteriology: Kidney and spleen material from fish 1 - 5 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated from fish 1,2,4 and 5.
Flavobacterium sp. (kidney)

Flavobacterium psychrophilum was identified by QPCR.

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

Tissue samples were tested for the presence of infectious pancreatic necrosis virus (IPNV), by QPCR

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	15.79	31.86	32.03	32.38	POSITIVE

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

Parasitology: Fins were collected to determine the presence of *Gyrodactylus salaris* using light microscopy and molecular techniques (PCR).

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 fish 1 – 5. The tissue samples were fixed in 10% neutral buffered formalin.

R09

Histopathological examination revealed the following:

Tissues from 5 Atlantic salmon were examined by light microscopy. The following histopathological changes were observed:

Gill: Very mild to mild multifocal interlamellar hyperplasia (F1-F5) and lamellar fusion (F5). F5 displayed occasional spaces (lacunae) on the hyperplastic plaques, some of the lacunae filled with cell debris and amoebic cells, (F5). All fish exhibited several amoebic cells free among gill filaments and lamellae. F5 also displayed cluster of filamentous and rod-shaped Gram-negative bacteria associated with debris among gill filaments. F5 exhibited inflammatory cell infiltration, mainly polymorphonuclear neutrophils, observed at the gill filaments centre. One third of proximal area of one gill filament displayed cell necrosis associated. One several aneurysmal dilation (F3).

Skin & Muscle: Within normal range.

Heart: Mild pericarditis (F2).

Gut and pyloric caeca: Some cell sloughing (F5) (potentially associated with post-mortem artefacts).

Pancreas: Within normal range. F1 displayed artefacts which hindered the reading.

Liver: Mild diffuse hepatocyte vacuolation (F1, F3).

Kidney: Renal tubes displayed hyaline droplets on the lining epithelium (F1, F2 & F5), hematopoietic tissue slightly congested.

Spleen: Slightly congested (F2, F5).

Brain: Not sampled

Eye: Not sampled.

Signed:



Fish Health Inspector

Date: 12/11/2021

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>



Image 1: Fish 1 and 2



Image 2: Fish 3



Image 3: Fish 4



Image 4: Fish 5

Case No: 2021-0329 Date of visit: 14/09/2021

Time spent on site: 1 hour Main Inspector:

Site No: FS0058 Site Name: Elphin Smolt Unit
Business No: FB0447 Business Name: Wester Ross Fisheries Ltd

Case Types: 1 REG 2 3 4 5 6

Water Temp (°C): Thermometer No: FHI 045 completed

Observations: Region: HI Water type: F CoGP MA:

Dead/weak/abnormally behaving fish present? If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? If yes, see additional information/clinical score sheet.
Gross pathology observed? If yes, see additional information/clinical score sheet.
Diagnostic samples taken?

UNI/REG only - if unable to carry out intended visit detail reason below:
The site has been fallow since 2014 and the facilities have been dismantled.

Additional Case Information:

Site remains fallow, since 2014, and the tanks have been dismantled. There are no current plans to inactivate or to resurrect the site.

Case No: Site No:

Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?

2. Changes made to details?

Site Details (include cleaner fish for all sections)

Total No facilities	<input type="text" value="0"/>	Facilities stocked	<input type="text" value="0"/>	No facilities inspected	<input type="text" value="0"/>
Species	<input type="text" value="N/A"/>				
Age group	<input type="text" value="N/A"/>				
No Fish	<input type="text" value="N/A"/>				
Mean Fish Wt	<input type="text" value="N/A"/>				
Next Fallow Date (Site)	<input type="text" value="N/A"/>	Next Input Date (Site)	<input type="text" value="N/A"/>		
Recent (last 4 wks) disease problems?	<input type="text" value="N/A"/>		Any escapes (since last visit)?	<input type="text" value="N/A"/>	
If yes, detail:	<input type="text" value=""/>				

Movement Records

1. Movement records available for inspection?

2. Date of last inspection:

3. Are records complete and correctly entered?

4. Are movement records available for dead fish and waste?

5. Are records complete and correctly entered?

6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?

If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?

2. How are mortalities disposed of?

If other detail:

3. Mortality records complete and correctly entered?

4. Recent mortality (last 4 wks):

5. Evidence of recent increased/atypical mortalities?

If yes, facility nos/no mortality per facility/no stock per facility/reason:

6. Any other peaks in mortality during period checked?

If yes, detail:

7. Have increased (unexplained) mortalities been reported to vet or FHI?

If yes, detail action:

8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

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?	
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	
3. 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?	
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 <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	
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.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site?	
If no, detail:	

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, detail (if not detailed under recent disease problems).	

Records checked between:	03/10/16 - 14/09/21
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FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	14/09/2021
SITE No	FS0058	SITE NAME	Elphin Smolt Unit
CASE No	20210329	INSPECTOR	[REDACTED]

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

On this occasion, the site was found to be fallow with all facilities removed. There are no plans to restock the site at this time, however the operator would prefer that the site remained active. Please ensure that a biosecurity measures plan and appropriate records are maintained in accordance with the authorisation granted to operate at the site and contact us if the site is to be restocked in the future or transferred to another business.

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

Signed:

[REDACTED]

Date: 08/11/2021

Fish Health Inspector

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

Case No: Date of visit:

Time spent on site: Main Inspector:

Site No: Site Name:
 Business No: Business Name:

Case Types: 1 2 3 4 5 6

Water Temp (°C): Thermometer No: FHI 045 completed

Observations: Region: HI Water type: S CoGP MA M-14

Dead/weak/abnormally behaving fish present? If yes, see additional information/clinical score sheet.
 Clinical signs of disease observed? If yes, see additional information/clinical score sheet.
 Gross pathology observed? If yes, see additional information/clinical score sheet.
 Diagnostic samples taken?

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

Following the mortalities due to gill health issues and handling for husbandry operations, there has been a return to normal mortality, with fish shoaling as normal and no moribund fish observed. The site has planned to start harvesting from the end of this week. A seal was observed close to the pens but predator mitigation was in place. Lions mane jellyfish observed on site. Records show observed cleanerfish mortality is very low. Nets are kept clean by swim-through and air drying. Although registered separately, the two Ardessie sites are operated as one for production purposes. Inspection and remote paperwork undertaken by [REDACTED] supervised by [REDACTED]. [REDACTED] 27/04/22 - evidence was supplied to resolve the issue with the FMS which now meets the requirement.

Case No: 2021-0330

Site No: FS0517

Date of Visit: 15/09/2021

Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?

Y

2. Changes made to details?

Y

Site Details (include cleaner fish for all sections)

Total No facilities	12	Facilities stocked	10	No facilities inspected	12
Species	SAL	WRS			
Age group	2020 S0	Wild			
No Fish	74,478	1,580			
Mean Fish Wt	2 Kg	120g			
Next Fallow Date (Site)	03/2022		Next Input Date (Site)	20/05/2022	
Recent (last 4 wks) disease problems?			Y	Any escapes (since last visit)?	N
If yes, detail:	Gill pathology, AGD detected. Liver pathology is likely due to plankton toxin.				

Movement Records

1. Movement records available for inspection?

Y

2. Date of last inspection:

20/10/2020

3. Are records complete and correctly entered?

Y

4. Are movement records available for dead fish and waste?

Y

5. Are records complete and correctly entered?

Y

6. Are health certificates for introductions (outwith GB) available?

N/A

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?

N

If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?

Y

2. How are mortalities disposed of?

Other (detail)

If other detail: Ensiled at Corry farm. Depending on availability for removal, ensiled waste processed by anaerobic

3. Mortality records complete and correctly entered?

Y

4. Recent mortality (last 4 wks):

Week 36 22.29% (17,000) Week 35 0.45% (339), Week 34 0.07% (55), Week

5. Evidence of recent increased/atypical mortalities?

Y

If yes, facility nos/no mortality per facility/no stock per facility/reason:

D1 (1,519), D2 (1,213), D3 (2,306), D4 (3,376), D5 (1,502), D6 (1,567), D7 (1,106), D8 (1,359), D9 (1,409), D10 (1,642) due to gill pathology

6. Any other peaks in mortality during period checked?

N

If yes, detail:

7. Have increased (unexplained) mortalities been reported to vet or FHI?

N/A

If yes, detail action:

8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

Y

Treatments and Medicines Records1. Recent treatments (see comment)? Y

If yes, detail:

H2O2,
T.M.S.

If other, detail:

2. Medicines records available for inspection? Y3. Are records complete and correctly entered? Y4. Are fish in a withdrawal period? Y

5. If yes, what treatment(s)?

T.M.S.

If other, detail:

6. Are medicines stored appropriately? Y**Biosecurity Records**1. Biosecurity records available for inspection? Y2. Has the manner and frequency of mortality removal, recording and safe disposal been considered? Y3. 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? Y4. 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? Y5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)? Y6. 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.)? Y7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site? Y8. Have the biosecurity procedures been adequately implemented on site? Y

If no, detail:

Results of Surveillance1. Has any animal health surveillance been carried out by, or on behalf of, the business? Y2. If yes, are results available for inspection? Y3. Any significant results? Y

If yes, detail (if not detailed under recent disease problems).

AGD associated mortality following peroxide

Vet diagnosed the fish with having discrete mixed gill pathology.

Records checked between:

10/2020 - 10/09/2021.

Case Number:	2021-0330	Site No:	FS0517	Insp:		
Date of Visit	15/09/2021	No of movements/supp./dest.			Score	
Live fish movements		0	1-5	6-10	>10	
Movements on (from out with GB) of susceptible species	Frequency of movements on from equivalent MS	0	5	10	14	0
	Frequency of movements on from equivalent zone or compartment including third country	0	9	18	26	0
	Number of suppliers	0	5	10	14	0
Movements off	Frequency of movements off	0	3	6	10	3
	Number of destinations	0	3	6	10	3
Exposure via water	Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species susceptible to same diseases)	Farm is protected (secure water supply through disinfection or borehole)	0				
	Farm is on-line or in a coastal zone with category I farms upstream or within 1 tidal excursion	1	2	4		2
	Farm is on-line or in a coastal zone with category III farms upstream or within 1 tidal excursion	1	3	6		
	Farm is on-line or in a coastal zone with category V farms upstream or within 1 tidal excursion	1	4	8		
Management practices		None	Secure	Unsecure		
Water contacts with processors	Any processing plant discharging into adjacent waters	0	1	2		0
On farm processing within the rules of the directive	No on farm processing	0				
	Processing own fish (re-cycling risk)	1				1
	Processing fish from MS of equivalent status	2				
	Processing fish from zone or compartment of equivalent status	4				
	Processing fish from Category III farm	8				
	Processing fish from Category V farm	10				
Disposal of fish and fish by-products	Site's own waste only processed.	0				
	Common processes with other farms	3				3
	Collection point for waste from other farms	5				
Use of unpasteurised feeds	No feeding of unpasteurised feed	0				0
	Feeding unpasteurised feed	5				
Biosecurity	Number of sites	1	2 or 3	≥ 4		
Contacts with other sites	Sites operating from single shorebase	0	1	2		1
	Sites sharing staff and equipment	0	1	2		1
Disinfection of equipment between sites, use of footbaths etc	Yes	0				
	No	1				1
CoGP/Regulator						
Practices in accordance with regulator or industry code of practice	Yes	0				0
	No	3				
Platform access to cages	Yes	0				0
	No	2				
Total Rank					15	LOW

Case No: **2021-0330**

Site No: **FS0517**

Sea Lice Inspection (Seawater Sites Only)

- 1. Has the site experienced sea lice problems in the previous 4 years?
- 2. Is the CoGP Farm Management Area (or equivalent) fallowed synchronously on a single year class basis?
- 3. Does the site have access to a range of licenced in-feed and bath sea lice medications (including deltamethrin, azamethiphos and emamectin benzoate) as well as access to suitable biological and/or mechanical control measures, and can these be deployed in a reasonable period of time?
- 4. Is there a signed documented farm management agreement or statement relevant to the site and CoGP Farm Management Area (or equivalent)?
- 5. Are sea lice count records available for inspection? (Legal SSI, CoGP Annex 6)
- 6. Do records adequately reflect the required standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6)
- 7. Are sea lice (*L. salmonis*) record levels below the suggested criteria for treatment in the CoGP during the period that records are inspected? (CoGP Annex 6)
- 8. Have average adult female sea lice (*L. salmonis*) numbers per fish been at a level of 3 or above (prior to w/b 10/6/19) or 2 or above (from w/b 10/6/19) during the period that records are inspected?
- If yes, have these been reported to the Fish Health Inspectorate? If no, FHI see comment.
- 9. Is *C. elongatus* infestation at a level which is considered to cause significant welfare problems? (CoGP 4.3.81, 5.3.50)
- 10. Have therapeutic treatments been administered or other actions taken when *L. salmonis* levels have exceeded the suggested criteria for treatment or where *C. elongatus* is considered to have welfare implications? (CoGP 4.3.82, 5.3.51)
- 11. Has any other action been taken (where applicable)?
- 12. Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?
- 13. Are treatments, where conducted, carried out in cooperation between participating farms?
- 14. Is there a harvesting strategy for the site, where fewer populations or part populations are held without treatment for sea lice?
- 15. Is there a site specific written lice management procedure with waypoints describing set actions to deal with recognised scenarios during the escalation of a sea lice infestation?
- 16. Do the sea lice levels observed on stocks reflect sea lice count data? If no please detail reasons.

Containment Inspection

- 1. Has the site experienced equipment damage due to predators in the current or previous production cycles?
- 2. Are measures in place to mitigate against the predation experienced on site? (Detail below)

Predator net enclosing the pen group

If other, detail below:

- 3. Have escape incidents or events been experienced on or in the vicinity of the site since the last FHI inspection?
- If Yes proceed with questions 4 – 9. If No skip to question 10
- 4. Have these been reported to Scottish Ministers?
- 5. Have these been reported to local DSFB forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
- 6. Have these been reported to the SSPO and local fisheries trusts forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
- 7. Were methods (if any) used to recover escapees? If yes give detail
- 8. If gill nets were deployed was this action agreed with local wild fish interests and was permission given by Scottish Ministers? (Legal, CoGP – 4.4.38, 5.4.18)
- 9. What action was taken to prevent and minimise the risk of further escapes? (Not covered in code but could be considered under satisfactory measures of the Act)
- 10. Is the site inspected as satisfactory with regards to containment? If no, please detail reason(s)

Case No: 2021-0330

Site No: FS0517

Date of Visit: 15/09/2021

Inspector: [REDACTED]

Point of Compliance

1. Is the farm under inspection located within a farm management area?

If N, no further questions require completion.

Points of Compliance for Both Farm Management Agreements and Statements

2. Has a current farm management agreement or statement (FMAg/S) been prepared?

3. Is the current FMAg/S available for inspection?

4. Does the FMAg/S identify the relevant farm management area?

5. Does the FMAg/S identify the fish farm site(s) to which it applies?

6. Does the FMAg/S identify the date of commencement of the agreement or statement?

7. Does the FMAg/S identify the date of review?

Arrangements for Fish Health Management

8. Does the FMAg/S identify the minimum health standards for the stocks to be introduced to the area or farm?

9. Does the FMAg/S identify the vaccination requirements for stocks held in the area or farm?

10. Does the FMAg/S identify the species of fish which may be stocked into the area or farm?

11. Does the FMAg/S identify the maximum stocking density of any pen on any farm in the area or the individual farm?

12. Does the FMAg/S identify the arrangements for the storage and disposal of any dead fish from any fish farm in the area or the individual farm?

Arrangements for The Management of Sea Lice

13. Does the FMAg/S identify arrangements for the sharing of data on sea lice numbers and treatments?

14. Does the FMAg/S identify the availability and the use of medicines on farms covered by the agreement of statement?

15. Does the FMAg/S identify any requirements for the sensitivity testing of available treatments for sea lice on farms in the area or individual farms?

16. Does the FMAg/S identify the circumstances under which biological controls and cleaner fish are to be used on farms in the area or individual farms?

17. Does the FMAg/S identify the arrangements for synchronous treatments on farms within the area?

Live Fish Movements

18. Does the FMAg/S identify the circumstances when live fish may be introduced or removed from the area or farm?

19. Does the FMAg/S identify the arrangements for the movement of live fish on and off sites in the area or individual farms?

Harvesting

20. Does the FMAg/S identify acceptable harvest practices on farms in the area or individual farms?

Fallowing

21. Does the FMAg/S identify the dates by which the area or individual farm will be fallow and the earliest date when a farm or area may be restocked?

22. Does the FMAg/S identify whether one or more year classes may be stocked onto sites covered by the agreement or statement?

23. Does the FMAg/S identify whether broodstock or potential broodstock are to be kept on any site covered by the agreement or statement?

Point of Compliance for Farm Management Agreements Only

24. Does the farm management agreement include arrangements for persons to become, or cease to be, parties to the agreement?

Management and operation

25. Is the fish farm being managed and operated in accordance with the agreement or statement?

26. What is the version no/date of issue of the FMAg/S?

Site staff advised to update the FMS with a date for review.

Site No: FS0517
Case No: 2021-0330
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	15/09/2021
SITE No	FS0517	SITE NAME	Ardessie A
CASE No	20210330	INSPECTOR	[REDACTED]

Case completion report

A recommendation in relation to the above case was made for implementation by 08/12/2021. Following submission of the required documentation, evidence has now been provided to Marine Scotland to demonstrate that the recommendation has been implemented.

This case will now be closed. This site may be subject to further audit and recommendations in the future.

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

Signed:



Date: 28/01/2022

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Medicine records were inspected and found to be adequately maintained.

Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice), section 4A regarding fish farm management agreements and statements and section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory with regards to parasites, containment and escapes.

The farm management agreement/statement was inspected and found to be inadequately maintained. Please see the attached annex detailing the points that must be addressed.

Please ensure that these points have been addressed by 08 December 2021. Records or documentation demonstrating that these points have been addressed should be sent to the Fish Health Inspectorate (contact details below). The site may be subject to further inspection or enforcement action should the appropriate action regarding the above points not be taken within the time period stipulated.

Please contact myself or the duty inspector should you require any assistance or clarification in implementing any requirement or recommendation detailed in this report.

Signed:



Date: 23/11/2021

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Annex - The Aquaculture and Fisheries (Scotland) Act 2007

Section 4A of the Aquaculture and Fisheries (Scotland) Act 2007, as amended, introduces the requirement for a person carrying out the business of fish farming within a farm management area⁽¹⁾ to;

- (a) be party to a farm management agreement, or prepare and maintain a farm management statement, in relation to the fish farm, and
- (b) ensure that the fish farm is managed and operated in accordance with the agreement or statement.

To ensure compliance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, the following points must be addressed in the farm management agreement/statement:

- **The statement or agreement must identify the date of review (farm management agreements or statements must be reviewed at least every two years).**

⁽¹⁾ Farm management area means an area specified as such in the Code of Good Practice for Scottish Finfish Aquaculture

Case No:	<input type="text" value="2021-0331"/>	Date of visit:	<input type="text" value="15/09/2021"/>			
Time spent on site:	<input type="text" value="4.5 hours"/>	Main Inspector:	<input type="text" value=""/>			
Site No:	<input type="text" value="FS0675"/>	Site Name:	<input type="text" value="Ardessie B"/>			
Business No:	<input type="text" value="FB0447"/>	Business Name:	<input type="text" value="Wester Ross Fisheries Ltd"/>			
Case Types:	1 <input type="text" value="ECI"/>	2 <input type="text" value="CNI"/>	3 <input type="text" value="SLI"/>	4 <input type="text" value="VMD"/>	5 <input type="text" value="DIA"/>	6 <input type="text" value=""/>
Water Temp (°C):	<input type="text" value="13.7"/>	Thermometer No:	<input type="text" value="T148"/>	FHI 045 completed	<input type="text" value=""/>	
Observations:	Region:	HI	Water type:	S	CoGP MA	M-14
Dead/weak/abnormally behaving fish present?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="text" value="Y"/>					

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

On the date of inspection mortality was 1,800 fish for the site, with the highest numbers of mortality occurring in the middle of the pen group. Moribund fish were near the surface and particularly in pen corners. A number of fish were also observed gasping on the surface or working their opercula. Pens were being aerated. Lions Mane jelly fish observed on site and some fish were seen to have signs of interaction with jellyfish tentacles. Upon inspection of the gills of the fish removed, evidence of mild gill damage was observed, attributed to PGD by site staff. Site began H2O2 treatment on the day of inspection based on veterinary advice. The company currently operates both Ardessie A and B as one site. Veterinary reports are for the two sites referenced as one. Site advised that when conducting veterinary site visits to distinguish between the two sites. A bung was observed missing on one of the mort bins stored at the shore base, site staff reminded to ensure all bungs remain in place for biosecurity. A seal was observed near the site but predator mitigation was in place. Observed cleanerfish mortality is low. Inspection and remote paperwork undertaken by [REDACTED] supervised by [REDACTED]. VMD samples by [REDACTED]. Sampling F1 - F3 by [REDACTED] and F4 & F5 by [REDACTED] supervised by [REDACTED]. [REDACTED] 27/01/22 - evidence supplied to resolve issue raised with FMS which now meets the requirement.

Case No: **2021-0331** Site No: **FS0675**
 Date of Visit: **15/09/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

1. Business/site details summary checked by site representative? **Y**
 2. Changes made to details? **Y**

Site Details (include cleaner fish for all sections)

Total No facilities	14	Facilities stocked	11	No facilities inspected	14
Species	SAL	Wrasse			
Age group	2020 S0	Wild			
No Fish	114,728	1,825			
Mean Fish Wt.	2.4kg	120g			
Next Fallow Date (Site)	03/2022		Next Input Date (Site)	20/5/2022	
Recent (last 4 wks) disease problems?			Y	Any escapes (since last visit)?	N
If yes, detail:	AGD currently on site, fish are healthy at the moment but experiencing a slight elevation in mortality.				

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **20/10/2020**
 3. Are records complete and correctly entered? **Y**
 4. Are movement records available for dead fish and waste? **Y**
 5. Are records complete and correctly entered? **Y**
 6. Are health certificates for introductions (outwith GB) available? **N/A**

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)? **N**
 If yes, is there a system in place for maintenance of transportation records? **[REDACTED]**

Mortality Records

1. Mortality records available for inspection? **Y**
 2. How are mortalities disposed of? **Ensiled - on site**
 If other detail: **Ensiled at Corry Farm.**
 3. Mortality records complete and correctly entered? **Y**
 4. Recent mortality (last 4 wks): **Week 36 4.18% (4798) Week 35 0.26% (299), Week 34 0.12% (138), Week**
 5. Evidence of recent increased/atypical mortalities? **Y**
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
D11 (1126), D12 (64), D13 (426), D14 (322), D15 (496), D16 (161), D17 (998), D18 (460), D19 (509), D20 (148), D21 (87) Gill health.
 6. Any other peaks in mortality during period checked? **N**
 If yes, detail: **[REDACTED]**
 7. Have increased (unexplained) mortalities been reported to vet or FHI? **N/A**
 If yes, detail action: **[REDACTED]**
 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet. **Y**

Treatments and Medicines Records

1. Recent treatments (see comment)?	<input type="checkbox"/>	Y
If yes, detail:	H2O2, T.M.S.	
If other, detail:		
2. Medicines records available for inspection?	<input type="checkbox"/>	Y
3. Are records complete and correctly entered?	<input type="checkbox"/>	Y
4. Are fish in a withdrawal period?	<input type="checkbox"/>	Y
5. If yes, what treatment(s)?	T.M.S.	
If other, detail:		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
3. 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?	<input type="checkbox"/>	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 <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>	Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>	Y
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.)?	<input type="checkbox"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
If no, detail:		

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>	Y
2. If yes, are results available for inspection?	<input type="checkbox"/>	Y
3. Any significant results?	<input type="checkbox"/>	Y
If yes, detail (if not detailed under recent disease problems).		

Records checked between:	20/10/20 - 10/09/21
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Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	F4	F5	P1						
Fish nos	1	2	3	4	5							
Pool Group												
Species	SAL	SAL	SAL	SAL	SAL							
Average weight	2.4kg	2.4kg	2.4kg	2.4kg	2.4kg							
Sex	N/A	N/A	N/A	N/A	N/A							
Water Type	SW	SW	SW	SW	SW							
Stock Details												
		Corry Farm	Corry Farm	Corry Farm	Corry Farm	Corry Farm						
Stock Origin												
Facility No	D17	D17	D17	D17	D17							

Case no: 2021-0331

Site No: FS0675

Method of killing: Percussive

Date of visit: 15/09/2021

Inspector(s):

Sheet Relevant: Y

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

Fish Number		F1	F2	F3	F4	F5					
Time sampled after death (if > 45 minutes)		1 hour	1 hour	1 hour	1 hour	1 hour					
External Signs											
Behaviour	Moribund	S	S	S	S	S					
	Lethargic	S	S	S	S	S					
	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)		4	4	4	5	4				
	Granulomas										
	Lesions										
Pyloric caeca	Petechial haem										
	Tubules mauve										
	Lack of fat										
Spleen	Enlarged										
	Granulomas										
Gut	No food present										
	Yellow pseudo-faeces	S	S	S	S	S					
	External haem										
	Internal haem										
Body wall	Haemorrhaging										
Swim bladder	Haemorrhaging										
	Fluid filled										
Kidney	Swollen										
	Grey										
	Granular										
	Liquefied										
General	Parasites present										
	Anaemia										

Additional comments:

Flaccid heart in F1, F1 - F5 observed gasping at surface.

Case Number:		2021-0331	Site No:		FS0675	Insp:	
Date of Visit		15/09/2021	No of movements/supp./dest.				Score
Live fish movements			0	1-5	6-10	>10	
Movements on (from out with GB) of susceptible species	Frequency of movements on from equivalent MS	0	5	10	14		0
	Frequency of movements on from equivalent zone or compartment including third country	0	9	18	26		0
	Number of suppliers	0	5	10	14		0
Movements off	Frequency of movements off	0	3	6	10		3
	Number of destinations	0	3	6	10		3
Exposure via water		Site contacts		0	1-5	6-10	
Water contacts with other farms (holding species susceptible to same diseases)	Farm is protected (secure water supply through disinfection or borehole)	0					
	Farm is on-line or in a coastal zone with category I farms upstream or within 1 tidal excursion	1	2	4			2
	Farm is on-line or in a coastal zone with category III farms upstream or within 1 tidal excursion	1	3	6			
	Farm is on-line or in a coastal zone with category V farms upstream or within 1 tidal excursion	1	4	8			
Management practices				None	Secure	Unsecure	
Water contacts with processors	Any processing plant discharging into adjacent waters	0	1	2			0
On farm processing within the rules of the directive	No on farm processing	0					
	Processing own fish (re-cycling risk)	1					1
	Processing fish from MS of equivalent status	2					
	Processing fish from zone or compartment of equivalent status	4					
	Processing fish from Category III farm	8					
	Processing fish from Category V farm	10					
Disposal of fish and fish by-products	Site's own waste only processed.	0					
	Common processes with other farms	3					3
	Collection point for waste from other farms	5					
Use of unpasteurised feeds	No feeding of unpasteurised feed	0					0
	Feeding unpasteurised feed	5					
Biosecurity		Number of sites		1	2 or 3	≥ 4	
Contacts with other sites	Sites operating from single shorebase	0	1	2			1
	Sites sharing staff and equipment	0	1	2			1
Disinfection of equipment between sites, use of footbaths etc	Yes	0					
	No	1					1
CoGP/Regulator							
Practices in accordance with regulator or industry code of practice	Yes	0					0
	No	3					
Platform access to cages	Yes	0					0
	No	2					
Total Rank							15
							LOW

Case No: **2021-0331**

Site No: **FS0675**

Sea Lice Inspection (Seawater Sites Only)

- 1. Has the site experienced sea lice problems in the previous 4 years?
- 2. Is the CoGP Farm Management Area (or equivalent) fallowed synchronously on a single year class basis?
- 3. Does the site have access to a range of licenced in-feed and bath sea lice medications (including deltamethrin, azamethiphos and emamectin benzoate) as well as access to suitable biological and/or mechanical control measures, and can these be deployed in a reasonable period of time?
- 4. Is there a signed documented farm management agreement or statement relevant to the site and CoGP Farm Management Area (or equivalent)?
- 5. Are sea lice count records available for inspection? (Legal SSI, CoGP Annex 6)
- 6. Do records adequately reflect the required standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6)
- 7. Are sea lice (*L. salmonis*) record levels below the suggested criteria for treatment in the CoGP during the period that records are inspected? (CoGP Annex 6)
- 8. Have average adult female sea lice (*L. salmonis*) numbers per fish been at a level of 3 or above (prior to w/b 10/6/19) or 2 or above (from w/b 10/6/19) during the period that records are inspected?
- If yes, have these been reported to the Fish Health Inspectorate? If no, FHI see comment.
- 9. Is *C. elongatus* infestation at a level which is considered to cause significant welfare problems? (CoGP 4.3.81, 5.3.50)
- 10. Have therapeutic treatments been administered or other actions taken when *L. salmonis* levels have exceeded the suggested criteria for treatment or where *C. elongatus* is considered to have welfare implications? (CoGP 4.3.82, 5.3.51)
- 11. Has any other action been taken (where applicable)?
- 12. Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?
- 13. Are treatments, where conducted, carried out in cooperation between participating farms?
- 14. Is there a harvesting strategy for the site, where fewer populations or part populations are held without treatment for sea lice?
- 15. Is there a site specific written lice management procedure with waypoints describing set actions to deal with recognised scenarios during the escalation of a sea lice infestation?
- 16. Do the sea lice levels observed on stocks reflect sea lice count data? If no please detail reasons.

Containment Inspection

- 1. Has the site experienced equipment damage due to predators in the current or previous production cycles?
- 2. Are measures in place to mitigate against the predation experienced on site? (Detail below)

Cages are enclosed by a predator net

If other, detail below:

- 3. Have escape incidents or events been experienced on or in the vicinity of the site since the last FHI inspection?
- If Yes proceed with questions 4 – 9. If No skip to question 10
- 4. Have these been reported to Scottish Ministers?
- 5. Have these been reported to local DSFB forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
- 6. Have these been reported to the SSPO and local fisheries trusts forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
- 7. Were methods (if any) used to recover escapees? If yes give detail
- 8. If gill nets were deployed was this action agreed with local wild fish interests and was permission given by Scottish Ministers? (Legal, CoGP – 4.4.38, 5.4.18)
- 9. What action was taken to prevent and minimise the risk of further escapes? (Not covered in code but could be considered under satisfactory measures of the Act)
- 10. Is the site inspected as satisfactory with regards to containment? If no, please detail reason(s)

Case No: 2021-0331

Site No: FS0675

Date of Visit: 15/09/2021

Inspector: [REDACTED]

Point of Compliance

1. Is the farm under inspection located within a farm management area?

If N, no further questions require completion.

Points of Compliance for Both Farm Management Agreements and Statements

2. Has a current farm management agreement or statement (FMAg/S) been prepared?

3. Is the current FMAg/S available for inspection?

4. Does the FMAg/S identify the relevant farm management area?

5. Does the FMAg/S identify the fish farm site(s) to which it applies?

6. Does the FMAg/S identify the date of commencement of the agreement or statement?

7. Does the FMAg/S identify the date of review?

Arrangements for Fish Health Management

8. Does the FMAg/S identify the minimum health standards for the stocks to be introduced to the area or farm?

9. Does the FMAg/S identify the vaccination requirements for stocks held in the area or farm?

10. Does the FMAg/S identify the species of fish which may be stocked into the area or farm?

11. Does the FMAg/S identify the maximum stocking density of any pen on any farm in the area or the individual farm?

12. Does the FMAg/S identify the arrangements for the storage and disposal of any dead fish from any fish farm in the area or the individual farm?

Arrangements for The Management of Sea Lice

13. Does the FMAg/S identify arrangements for the sharing of data on sea lice numbers and treatments?

14. Does the FMAg/S identify the availability and the use of medicines on farms covered by the agreement of statement?

15. Does the FMAg/S identify any requirements for the sensitivity testing of available treatments for sea lice on farms in the area or individual farms?

16. Does the FMAg/S identify the circumstances under which biological controls and cleaner fish are to be used on farms in the area or individual farms?

17. Does the FMAg/S identify the arrangements for synchronous treatments on farms within the area?

Live Fish Movements

18. Does the FMAg/S identify the circumstances when live fish may be introduced or removed from the area or farm?

19. Does the FMAg/S identify the arrangements for the movement of live fish on and off sites in the area or individual farms?

Harvesting

20. Does the FMAg/S identify acceptable harvest practices on farms in the area or individual farms?

Fallowing

21. Does the FMAg/S identify the dates by which the area or individual farm will be fallow and the earliest date when a farm or area may be restocked?

22. Does the FMAg/S identify whether one or more year classes may be stocked onto sites covered by the agreement or statement?

23. Does the FMAg/S identify whether broodstock or potential broodstock are to be kept on any site covered by the agreement or statement?

Point of Compliance for Farm Management Agreements Only

24. Does the farm management agreement include arrangements for persons to become, or cease to be, parties to the agreement?

Management and operation

25. Is the fish farm being managed and operated in accordance with the agreement or statement?

26. What is the version no/date of issue of the FMAg/S?

Site staff advised to update the FMS with a date for review.

Site No: FS0675
Case No: 2021-0331
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	15/09/2021
SITE No	FS0675	SITE NAME	Ardessie B
CASE No	20210331	INSPECTOR	[REDACTED]

Section 1: Summary

The site was visited as part of the Scottish Government's routine risk based health surveillance. During the physical inspection, five fish were removed for diagnostic sampling.

Histopathology examination revealed multifactorial proliferative gill pathology, which included the presence of several amoebic cells suggestive of amoebic gill disease, confirmed by QPCR and some epitheliocystis. Mild multifocal hepatic necrosis noted in one fish.

Due to gill health issues observed on site, samples were screened for salmon gill poxvirus (SPGV) & *Paranucleospora theridion* (syn. *Desmozoon lepeophtherii*) by QPCR and tested positive for both pathogens.

Vibrio sp. was identified on plates taken from gill material of 5/5 fish. A second bacterium was isolated on plates taken from gill material of 5/5 fish and kidney material of 1/5 fish but was not fully identified and did not match the characteristics of a known fish pathogen. The level and purity of growth would not suggest that either would be implicated as primary pathogen in fish morbidity and are likely to be of environmental origin.

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 above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009. During the inspection, it was observed that mortality had increased and was thought to be due to a gill health issue, as it was known that *Neoparamoeba perurans* (AGD) was present on the site.

Clinical signs of disease included morbidity and lethargy present in all 5 fish sampled, with fish demonstrating increased ventilation of the gills. Internally, all fish had pseudo-faeces present in the gut and Fish 1 had a flaccid ventricle.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
F1 – F5	P1	D17	Atlantic salmon	2020 S0 Grower 2.4 Kg	Corry Farm

Results

Bacteriology: Kidney and gill material from Fish 1 – 5 were inoculated onto appropriate media for the isolation of bacteria.

Vibrio sp. was identified on plates taken from gill material of 5/5 fish. A second bacterium which was not fully identified but did not match the characteristics of a known fish pathogen was observed on plates taken from gill material of 5/5 fish and kidney material of 1/5 fish. The level and purity of growth would not suggest that either would be implicated as the primary pathogen in fish morbidity and are likely to be of environmental origin.

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

Salmon gill poxvirus (SGPV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.77	25.84	25.88	25.96	POSITIVE
F2	21.77	27.23	27.22	27.29	POSITIVE
F3	22.61	27.87	27.94	27.85	POSITIVE
F4	21.52	24.48	24.34	24.37	POSITIVE
F5	22.03	28.64	28.61	28.66	POSITIVE

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

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

Neoparamoeba perurans (AGD)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.77	27.90	28.11	28.21	POSITIVE
F2	21.77	26.89	27.05	26.99	POSITIVE
F3	22.61	28.70	28.67	28.70	POSITIVE
F4	21.52	28.23	28.22	28.36	POSITIVE
F5	22.03	27.52	27.61	27.66	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.77	31.53	31.64	31.63	POSITIVE
F2	21.77	34.25	34.15	34.62	POSITIVE
F3	22.61	37.05	36.64	36.44	POSITIVE
F4	21.52	35.01	34.83	35.15	POSITIVE
F5	22.03	29.46	29.39	29.47	POSITIVE

Histology: Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hindgut, liver, spleen and kidney were taken from Fish 1 – 5 and the pseudobranch from Fish 3. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Mild to moderate multifocal interlamellar hyperplasia with occasional spaces (lacunae), some filled with cell debris and amoebic cells, lamellar fusion, (F1-F5), displacement of chloride cells and some prominent goblet cells. F5 displayed some haemorrhage on the hyperplastic plaque. Few amoebic cells resembling *Neoparamoeba perurans* (F1-F5) and few numbers of basophilic epithelial inclusions (likely epitheliocystis) (F2) were noted. F2 also displayed a focal area of inflammatory cell infiltration at the centre of one gill filament and the vessels exhibited several free polymorphonuclear neutrophil cells. Some free blood among gill filament and lamellar congestion noted (likely associated with killing method) and several aneurysmal dilation, mainly noted in F5. Some fish displayed some autolysis artefacts.

Pseudobranch: Within normal range (only F3).

Skin & Muscle: Within normal range.

Heart: Within normal range. F5 - no atrium in section.

Gut and pyloric caeca: Some cell sloughing (F5) (potentially associated with post-mortem artefacts).

Pancreas: Minor focal area of inflammatory cell infiltration surrounding pancreatic acinar tissue (potentially associated with vaccine administration) (F1).

Liver: Mild multifocal hepatic necrosis (F1) and vacuolated macrophages (F1-F5). Mild diffuse hepatocyte vacuolation and some sinusoidal hepatic congestion noted in F5.

Kidney and Spleen: Within normal range.

Brain and Eye: Not sampled.

Signed:



Fish Health Inspector

Date: 24/11/2021

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

R09

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	15/09/2021
SITE No	FS0675	SITE NAME	Ardessie B
CASE No	20210331	INSPECTOR	[REDACTED]

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. Samples were taken for diagnostic purposes. A separate report will be issued detailing the results of these tests.

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 third 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.

Mortality records were inspected and found to be adequately maintained.

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

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

Inspection under the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (England and Scotland) Regulations 2015

Medicine records were inspected and found to be adequately maintained.

R25

Samples were taken to be analysed for veterinary residues.

Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice), section 4A regarding fish farm management agreements and statements and section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory with regards to parasites, containment and escapes.

The farm management agreement/statement was inspected and found to be inadequately maintained. Please see the attached annex detailing the points that must be addressed.

Please ensure that these points have been addressed by 08 December 21. Records or documentation demonstrating that these points have been addressed should be sent to the Fish Health Inspectorate (contact details below). The site may be subject to further inspection or enforcement action should the appropriate action regarding the above points not be taken within the time period stipulated.

Please contact myself or the duty inspector should you require any assistance or clarification in implementing any requirement or recommendation detailed in this report.

Signed:



Date: 23/11/2021

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Annex - The Aquaculture and Fisheries (Scotland) Act 2007

Section 4A of the Aquaculture and Fisheries (Scotland) Act 2007, as amended, introduces the requirement for a person carrying out the business of fish farming within a farm management area⁽¹⁾ to;

- (a) be party to a farm management agreement, or prepare and maintain a farm management statement, in relation to the fish farm, and
- (b) ensure that the fish farm is managed and operated in accordance with the agreement or statement.

To ensure compliance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, the following points must be addressed in the farm management agreement/statement:

- **The statement or agreement must identify the date of review (farm management agreements or statements must be reviewed at least every two years).**

⁽¹⁾ Farm management area means an area specified as such in the Code of Good Practice for Scottish Finfish Aquaculture

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	15/09/2021
SITE No	FS0675	SITE NAME	Ardessie B
CASE No	20210331	INSPECTOR	[REDACTED]

Case completion report

A recommendation in relation to the above case was made for implementation by 08/12/2021. Following submission of the required documentation, evidence has now been provided to Marine Scotland to demonstrate that the recommendation has been implemented.

This case will now be closed. This site may be subject to further audit and recommendations in the future.

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

Signed:



Date: 28/01/2022

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2021-0332 Date of visit: 13/09/2021

Time spent on site: 1 hour Main Inspector: [Redacted]

Site No: FS1316 Site Name: Lentrán Aquaponics
Business No: FB0569 Business Name: Lentrán Aquaponics

Case Types: 1 REG 2 [] 3 [] 4 [] 5 [] 6 []

Water Temp (°C): [] Thermometer No: [] FHI 045 completed []

Observations: Region: HI Water type: F CoGP MA: []

Dead/weak/abnormally behaving fish present? [] If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? [] If yes, see additional information/clinical score sheet.
Gross pathology observed? [] If yes, see additional information/clinical score sheet.
Diagnostic samples taken? []

UNI/REG only - if unable to carry out intended visit detail reason below:

The site has not been in operation for some time - no records maintained since site dismantled as no fish stocks held.

Additional Case Information:

The site in Inverness has been dismantled and is to be deregistered along with the business. The new site at Lentrán is still under construction and has no fish or plants being grown. The owner intends to grow micro-greens and may or may not stock with Tilapia. Owner will contact the FHI when/if in operation.

Case No: Site No:

Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?

2. Changes made to details?

Site Details (include cleaner fish for all sections)

Total No facilities	<input type="text" value="0"/>	Facilities stocked	<input type="text" value="0"/>	No facilities inspected	<input type="text" value="0"/>
Species	<input type="text" value="N/A"/>				
Age group	<input type="text" value="N/A"/>				
No Fish	<input type="text" value="N/A"/>				
Mean Fish Wt	<input type="text" value="N/A"/>				
Next Fallow Date (Site)	<input type="text" value="N/A"/>	Next Input Date (Site)	<input type="text" value="N/A"/>		
Recent (last 4 wks) disease problems?	<input type="text" value="N/A"/>		Any escapes (since last visit)?	<input type="text" value="N/A"/>	
If yes, detail:	<input type="text" value=""/>				

Movement Records

1. Movement records available for inspection?

2. Date of last inspection:

3. Are records complete and correctly entered?

4. Are movement records available for dead fish and waste?

5. Are records complete and correctly entered?

6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?

If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?

2. How are mortalities disposed of?

If other detail:

3. Mortality records complete and correctly entered?

4. Recent mortality (last 4 wks):

5. Evidence of recent increased/atypical mortalities?

If yes, facility nos/no mortality per facility/no stock per facility/reason:

6. Any other peaks in mortality during period checked?

If yes, detail:

7. Have increased (unexplained) mortalities been reported to vet or FHI?

If yes, detail action:

8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

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?

2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?

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?

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?

5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?

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.)?

7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?

8. Have the biosecurity procedures been adequately implemented on site?

If no, detail:

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, detail (if not detailed under recent disease problems).

Records checked between:



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0569	DATE OF VISIT	13/09/2021
SITE No	FS1316	SITE NAME	Lentran Aquaponics
CASE No	20210332	INSPECTOR	[REDACTED]

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

On this occasion, the site was found to be fallow with all facilities removed. There are no plans to restock the site at this time therefore the status of the site and the business will be changed to deregistered and the authorisation to operate as an aquaculture production business will be revoked.

Please contact us to renew the authorisation to operate as an aquaculture production business if the new site is to be stocked in the future.

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

Signed:

[REDACTED]

Fish Health Inspector

Date: 08/11/2021

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

Case No:	2021-0333	Date of visit:	14/09/2021			
Time spent on site:	6 hours	Main Inspector:				
Site No:	FS0056	Site Name:	Ardmair			
Business No:	FB0447	Business Name:	Wester Ross Fisheries Ltd			
Case Types:	1 ECI	2 CNI	3 SLI	4 VMD	5 DIA	6
Water Temp (°C):	13.4	Thermometer No:	T148	FHI 045 completed		
Observations:	Region:	HI	Water type:	S	CoGP MA	M-11
Dead/weak/abnormally behaving fish present?	<input type="checkbox"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="checkbox"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="checkbox"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="checkbox"/>					

UNI/REG only - if unable to carry out intended visit detail reason below:

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Additional Case Information:

Inspection and remote paperwork by [REDACTED], overseen by [REDACTED] sampled F1 & F2, [REDACTED] Sampled F3 - F5 under [REDACTED] supervision.

Mortalities removed by dead sock and ensiled at Ardmair shorebase before disposal by biogas or incineration. Ardmair is currently divided into two pen groups, A and B. At the time of inspection the site was experiencing approximately 600 mortalities per day. Pharmaq Analytiq diagnosed complex gill disease in week 35 with AGD present. Upon inspection fish behaviour was lethargic with numbers of moribund fish observed near the surface and around the corners of pens. Recent mortality has occurred at both pen groups, with group B more affected. Mortality per pen on group B on the day of inspection was approximately 70 per pen with population N23 (currently in pen 5) the worst effected. The smaller grade fish were significantly more affected than the large grade. The fish on pen group A were displaying similar clinical signs of disease, although was not as wide spread. H2O2 treatments 23 & 24, 30 & 31 August and 01 September. Samples taken for diagnostics were pooled, two fish from population S6 (currently in pen 6 on pen group A) and 3 fish from population N23 (currently pen 5 on pen group B). Wrasse are stocked on site and are working well, with no signs of elevated numbers of sea lice. On inspection of the site's FMS the date of review was not present, FHI have advised that this is to be updated. Evidence of updated FMS was supplied on 27/01/22 and met the requirement - [REDACTED] 27/01/22

Case No: **2021-0333** Site No: **FS0056**
 Date of Visit: **14/09/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

- 1. Business/site details summary checked by site representative? Y
- 2. Changes made to details? Y

Site Details (include cleaner fish for all sections)

Total No facilities	30	Facilities stocked	25	No facilities inspected	30
Species	SAL	Wrasse			
	2020 S0	Wild caught			
Age group					
No Fish	216,312	3,480			
Mean Fish Wt	1.6kg	120g			
Next Fallow Date (Site)	07/2022		Next Input Date (Site)	08/2022	
Recent (last 4 wks) disease problems?			Y	Any escapes (since last visit)?	N
If yes, detail:	Complex gill pathology with AGD present, the site sustained some elevated mortality following peroxide				

Movement Records

- 1. Movement records available for inspection? Y
- 2. Date of last inspection: **11/09/2019**
- 3. Are records complete and correctly entered? Y
- 4. Are movement records available for dead fish and waste? Y
- 5. Are records complete and correctly entered? Y
- 6. Are health certificates for introductions (outwith GB) available? N/A

Transport Records

- 1. Are any movements carried out by (or on behalf) of the business (not using a STB)? N
- If yes, is there a system in place for maintenance of transportation records?

Mortality Records

- 1. Mortality records available for inspection? Y
- 2. How are mortalities disposed of? **Ensiled - on site**
- If other detail: **[REDACTED]**
- 3. Mortality records complete and correctly entered? Y
- 4. Recent mortality (last 4 wks): **Wk 33 - 0.03%, Wk 34 - 0.58%, Wk 35 - 2.58%, Wk 36 - 1.05%**
- 5. Evidence of recent increased/atypical mortalities? Y
- If yes, facility nos/no mortality per facility/no stock per facility/reason: **Pen group B affected, cages 23,24,25 had highest mortality.**
- 6. Any other peaks in mortality during period checked? N
- If yes, detail: **[REDACTED]**
- 7. Have increased (unexplained) mortalities been reported to vet or FHI? Y
- If yes, detail action: **Gill pathology with some liver pathology due to possible bloom/micro jellies**
- 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet. Y

Treatments and Medicines Records

1. Recent treatments (see comment)? Y

If yes, detail:

H2O2,				
T.M.S.				

If other, detail:

2. Medicines records available for inspection? Y

3. Are records complete and correctly entered? Y

4. Are fish in a withdrawal period? Y

5. If yes, what treatment(s)? T.M.S.

If other, detail:

6. Are medicines stored appropriately? Y

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 health status, certification if required)? Y

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.)? Y

7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site? Y

8. Have the biosecurity procedures been adequately implemented on site? Y

If no, detail:

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business? Y

2. If yes, are results available for inspection? Y

3. Any significant results? Y

If yes, detail (if not detailed under recent disease problems). Complex gill disease identified, AGD present.

Significant, mixed becoming complex, acute and chronic gill pathology.

Records checked between: October 2019 - 10.09.21

Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	F4	F5	P1	P2						
Fish nos	1	2	3	4	5	1-2	3-5						
Pool Group	P1	P1	P2	P2	P2								
Species	SAL	SAL	SAL	SAL	SAL	SAL	SAL						
Average weight	1.6kg	1.6kg	1.6kg	1.6kg	1.6kg	1.6kg	1.6kg						
Sex	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
Water Type	SW	SW	SW	SW	SW	SW	SW						
Stock Details													
		Corry Farm	Corry Farm	Corry Farm	Corry Farm	Corry Farm	Corry Farm	Corry Farm					
Stock Origin													
Facility No	6	6	5	5	5	6	5						

Case no: 2021-0333

Site No: FS0056

Method of killing: Percussive

Date of visit: 14/09/2021

Inspector(s):

Sheet Relevant: Y

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

Fish Number		1	2	3	4	5						
Time sampled after death (if > 45 minutes)		60 min	60 min	60 min	70 min	75 min						
External Signs												
Behaviour	Moribund	M	M	S	S	S						
	Lethargic	M	M	S	S	S						
	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	W										
	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)	3	4	4	4	4						
	Granulomas											
	Lesions											
Pyloric caeca	Petechial haem											
	Tubules mauve	W										
	Lack of fat											
Spleen	Enlarged											
	Granulomas											
Gut	No food present											
	Yellow pseudo-faeces			S	S	S	S					
	External haem											
	Internal haem	W	W									
Body wall	Haemorrhaging											
Swim bladder	Haemorrhaging											
	Fluid filled											
Kidney	Swollen											
	Grey											
	Granular											
	Liquefied											
General	Parasites present											
	Anaemia											

Additional comments:

F3 & F5 - spleen was lighter in colour

Case Number:	2021-0333	Site No:	FS0056	Insp:		
Date of Visit	14/09/2021	No of movements/supp./dest.			Score	
Live fish movements		0	1-5	6-10	>10	
Movements on (from out with GB) of susceptible species	Frequency of movements on from equivalent MS	0	5	10	14	0
	Frequency of movements on from equivalent zone or compartment including third country	0	9	18	26	0
	Number of suppliers	0	5	10	14	0
Movements off	Frequency of movements off	0	3	6	10	3
	Number of destinations	0	3	6	10	3
Exposure via water	Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species susceptible to same diseases)	Farm is protected (secure water supply through disinfection or borehole)	0				
	Farm is on-line or in a coastal zone with category I farms upstream or within 1 tidal excursion	1	2	4		1
	Farm is on-line or in a coastal zone with category III farms upstream or within 1 tidal excursion	1	3	6		
	Farm is on-line or in a coastal zone with category V farms upstream or within 1 tidal excursion	1	4	8		
Management practices		None	Secure	Unsecure		
Water contacts with processors	Any processing plant discharging into adjacent waters	0	1	2		0
On farm processing within the rules of the directive	No on farm processing	0				
	Processing own fish (re-cycling risk)	1				1
	Processing fish from MS of equivalent status	2				
	Processing fish from zone or compartment of equivalent status	4				
	Processing fish from Category III farm	8				
	Processing fish from Category V farm	10				
Disposal of fish and fish by-products	Site's own waste only processed.	0				0
	Common processes with other farms	3				
	Collection point for waste from other farms	5				
Use of unpasteurised feeds	No feeding of unpasteurised feed	0				0
	Feeding unpasteurised feed	5				
Biosecurity	Number of sites	1	2 or 3	≥ 4		
Contacts with other sites	Sites operating from single shorebase	0	1	2		0
	Sites sharing staff and equipment	0	1	2		0
Disinfection of equipment between sites, use of footbaths etc	Yes	0				0
	No	1				
CoGP/Regulator						
Practices in accordance with regulator or industry code of practice	Yes	0				0
	No	3				
Platform access to cages	Yes	0				0
	No	2				
Total Rank					8	LOW

Case No: **2021-0333**

Site No: **FS0056**

Sea Lice Inspection (Seawater Sites Only)

- 1. Has the site experienced sea lice problems in the previous 4 years?
- 2. Is the CoGP Farm Management Area (or equivalent) fallowed synchronously on a single year class basis?
- 3. Does the site have access to a range of licenced in-feed and bath sea lice medications (including deltamethrin, azamethiphos and emamectin benzoate) as well as access to suitable biological and/or mechanical control measures, and can these be deployed in a reasonable period of time?
- 4. Is there a signed documented farm management agreement or statement relevant to the site and CoGP Farm Management Area (or equivalent)?
- 5. Are sea lice count records available for inspection? (Legal SSI, CoGP Annex 6)
- 6. Do records adequately reflect the required standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6)
- 7. Are sea lice (*L. salmonis*) record levels below the suggested criteria for treatment in the CoGP during the period that records are inspected? (CoGP Annex 6)
- 8. Have average adult female sea lice (*L. salmonis*) numbers per fish been at a level of 3 or above (prior to w/b 10/6/19) or 2 or above (from w/b 10/6/19) during the period that records are inspected?
- If yes, have these been reported to the Fish Health Inspectorate? If no, FHI see comment.
- 9. Is *C. elongatus* infestation at a level which is considered to cause significant welfare problems? (CoGP 4.3.81, 5.3.50)
- 10. Have therapeutic treatments been administered or other actions taken when *L. salmonis* levels have exceeded the suggested criteria for treatment or where *C. elongatus* is considered to have welfare implications? (CoGP 4.3.82, 5.3.51)
- 11. Has any other action been taken (where applicable)?
- 12. Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?
- 13. Are treatments, where conducted, carried out in cooperation between participating farms?
- 14. Is there a harvesting strategy for the site, where fewer populations or part populations are held without treatment for sea lice?
- 15. Is there a site specific written lice management procedure with waypoints describing set actions to deal with recognised scenarios during the escalation of a sea lice infestation?
- 16. Do the sea lice levels observed on stocks reflect sea lice count data? If no please detail reasons.

Containment Inspection

- 1. Has the site experienced equipment damage due to predators in the current or previous production cycles?
- 2. Are measures in place to mitigate against the predation experienced on site? (Detail below)
- secondary predator box nets
- If other, detail below:
- Predator exclusion nets
- 3. Have escape incidents or events been experienced on or in the vicinity of the site since the last FHI inspection?
- If Yes proceed with questions 4 – 9. If No skip to question 10
- 4. Have these been reported to Scottish Ministers?
- 5. Have these been reported to local DSFB forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
- 6. Have these been reported to the SSPO and local fisheries trusts forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
- 7. Were methods (if any) used to recover escapees? If yes give detail
- 8. If gill nets were deployed was this action agreed with local wild fish interests and was permission given by Scottish Ministers? (Legal, CoGP – 4.4.38, 5.4.18)
- 9. What action was taken to prevent and minimise the risk of further escapes? (Not covered in code but could be considered under satisfactory measures of the Act)
- 10. Is the site inspected as satisfactory with regards to containment? If no, please detail reason(s)

Case No: 2021-0333

Site No: FS0056

Date of Visit: 14/09/2021

Inspector: [REDACTED]

Point of Compliance

1. Is the farm under inspection located within a farm management area?

If N, no further questions require completion.

Points of Compliance for Both Farm Management Agreements and Statements

2. Has a current farm management agreement or statement (FMAg/S) been prepared?

3. Is the current FMAg/S available for inspection?

4. Does the FMAg/S identify the relevant farm management area?

5. Does the FMAg/S identify the fish farm site(s) to which it applies?

6. Does the FMAg/S identify the date of commencement of the agreement or statement?

7. Does the FMAg/S identify the date of review?

Arrangements for Fish Health Management

8. Does the FMAg/S identify the minimum health standards for the stocks to be introduced to the area or farm?

9. Does the FMAg/S identify the vaccination requirements for stocks held in the area or farm?

10. Does the FMAg/S identify the species of fish which may be stocked into the area or farm?

11. Does the FMAg/S identify the maximum stocking density of any pen on any farm in the area or the individual farm?

12. Does the FMAg/S identify the arrangements for the storage and disposal of any dead fish from any fish farm in the area or the individual farm?

Arrangements for The Management of Sea Lice

13. Does the FMAg/S identify arrangements for the sharing of data on sea lice numbers and treatments?

14. Does the FMAg/S identify the availability and the use of medicines on farms covered by the agreement of statement?

15. Does the FMAg/S identify any requirements for the sensitivity testing of available treatments for sea lice on farms in the area or individual farms?

16. Does the FMAg/S identify the circumstances under which biological controls and cleaner fish are to be used on farms in the area or individual farms?

17. Does the FMAg/S identify the arrangements for synchronous treatments on farms within the area?

Live Fish Movements

18. Does the FMAg/S identify the circumstances when live fish may be introduced or removed from the area or farm?

19. Does the FMAg/S identify the arrangements for the movement of live fish on and off sites in the area or individual farms?

Harvesting

20. Does the FMAg/S identify acceptable harvest practices on farms in the area or individual farms?

Fallowing

21. Does the FMAg/S identify the dates by which the area or individual farm will be fallow and the earliest date when a farm or area may be restocked?

22. Does the FMAg/S identify whether one or more year classes may be stocked onto sites covered by the agreement or statement?

23. Does the FMAg/S identify whether broodstock or potential broodstock are to be kept on any site covered by the agreement or statement?

Point of Compliance for Farm Management Agreements Only

24. Does the farm management agreement include arrangements for persons to become, or cease to be, parties to the agreement?

Management and operation

25. Is the fish farm being managed and operated in accordance with the agreement or statement?

26. What is the version no/date of issue of the FMAg/S?

Site staff advised to update the FMS with a date for review.

Site No: FS0056
Case No: 2021-0333
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	14/09/2021
SITE No	FS0056	SITE NAME	Ardmair
CASE No	20210333	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. Samples were taken for diagnostic purposes. A separate report will be issued detailing the results of these tests.

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 third 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.

Mortality records were inspected and found to be adequately maintained.

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

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

Inspection under the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (England and Scotland) Regulations 2015

Medicine records were inspected and found to be adequately maintained.

R25

Samples were taken to be analysed for veterinary residues.

Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice), section 4A regarding fish farm management agreements and statements and section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory with regards to parasites, containment and escapes.

The farm management agreement/statement was inspected and found to be inadequately maintained. Please see the attached annex detailing the points that must be addressed.

Please ensure that these points have been addressed by 08 December 2021. Records or documentation demonstrating that these points have been addressed should be sent to the Fish Health Inspectorate (contact details below). The site may be subject to further inspection or enforcement action should the appropriate action regarding the above points not be taken within the time period stipulated.

Please contact myself or the duty inspector should you require any assistance or clarification in implementing any requirement or recommendation detailed in this report.

Signed:



Date: 08/11/2021

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Annex - The Aquaculture and Fisheries (Scotland) Act 2007

Section 4A of the Aquaculture and Fisheries (Scotland) Act 2007, as amended, introduces the requirement for a person carrying out the business of fish farming within a farm management area⁽¹⁾ to;

- (a) be party to a farm management agreement, or prepare and maintain a farm management statement, in relation to the fish farm, and
- (b) ensure that the fish farm is managed and operated in accordance with the agreement or statement.

To ensure compliance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, the following points must be addressed in the farm management agreement/statement:

- **The statement or agreement must identify the date of review (farm management agreements or statements must be reviewed at least every two years).**

⁽¹⁾ Farm management area means an area specified as such in the Code of Good Practice for Scottish Finfish Aquaculture

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	14/09/2021
SITE No	FS0056	SITE NAME	Ardmair
CASE No	20210333	INSPECTOR	[REDACTED]

Section 1: Summary

The site was visited as part of the Scottish Government's routine risk based health surveillance. During the physical inspection, five fish were removed for diagnostic sampling.

Histopathology examination revealed mild multifactorial proliferative gill pathology, which included the presence of several amoebic cells suggestive of amoebic gill disease, confirmed by QPCR and epitheliocystis. Some fish also displayed evidence of some gill vascular disturbance. Mild multifocal hepatic necrosis, minor peritonitis and minor cardiac inflammation.

Due to the histopathological examination being suggestive of epitheliocystis, samples were screened for *Candidatus Branchiomonas cysticola*, *Candidatus Syngnamydia salmonis* and *Candidatus Piscichlamydia salmonis* by QPCR and tested positive for *Candidatus Branchiomonas cysticola* and *Candidatus Syngnamydia salmonis*.

Due to gill health issues observed on site, samples were screened for salmon gill poxvirus (SPGV) and *Paranucleospora theridion* (syn. *Desmozoon lepeophtherii*) by QPCR and tested positive for both pathogens.

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 above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009. During the inspection, it was observed that a recent increase in mortality due to complex gill disease had been reported to the competent authority following veterinary involvement.

Clinical signs of disease included morbidity and lethargy present in all 5 fish sampled. Fish 1 had zonation in the gills. Internally, the tubules of the pyloric caeca and the hindgut of Fish 1 were inflamed. Fish 2 had an inflamed hindgut. Fish 3 – 5 had pseudo-faeces present in the gut.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
F1 & F2	P1	6	Atlantic salmon	2020 S0 Grower 1.6 Kg	Corry Farm
F3 – F5	P2	5	Atlantic salmon	2020 S0 Grower 1.6 Kg	Corry Farm

Results

Bacteriology: Kidney and gill material from Fish 1 – 5 were inoculated onto appropriate media for the isolation of bacteria.

The predominant bacterium observed on plates taken from kidney material of fish 1-3 was not fully identified, however, it did not match the characteristics of a known fish pathogen and is likely to be of environmental origin.

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

Candidatus Branchiomonas cysticola

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.19	22.28	22.26	22.24	POSITIVE
F2	20.57	24.13	23.97	24.14	POSITIVE
F3	22.19	21.06	21.08	21.06	POSITIVE
F4	21.38	19.69	19.91	19.89	POSITIVE
F5	20.59	20.55	20.45	20.47	POSITIVE

Candidatus Synonymydia salmonis

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	-	-	-	-	NEGATIVE
F2	20.57	34.99	35.07	35.19	POSITIVE
F3	22.19	29.68	29.69	29.72	POSITIVE
F4	21.38	26.59	26.51	26.48	POSITIVE
F5	20.59	28.18	27.98	27.94	POSITIVE

The samples tested negative for *Candidatus* Piscichlamydia salmonis.

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

Salmon gill poxvirus (SGPV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	20.98	36.49	36.61	36.70	POSITIVE
F2	20.88	28.93	28.71	28.72	POSITIVE
F3	22.37	30.63	30.53	30.55	POSITIVE
F4	21.82	25.31	25.32	25.37	POSITIVE
F5	20.94	31.83	31.71	31.84	POSITIVE

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

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

Neoparamoeba perurans (AGD)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	-	-	-	-	NEGATIVE
F2	20.88	33.56	33.12	33.62	POSITIVE
F3	22.37	29.94	30.05	29.84	POSITIVE
F4	21.82	26.98	27.22	27.08	POSITIVE
F5	20.94	28.59	28.57	28.63	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	20.98	37.10	37.18	37.64	POSITIVE
F2	20.88	31.17	31.00	31.03	POSITIVE
F3	22.37	27.46	27.56	27.64	POSITIVE
F4	21.82	29.65	29.65	29.70	POSITIVE
F5	20.94	29.08	29.06	29.15	POSITIVE

Histology: Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from Fish 1 – 5 and brain from Fish 2. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Mild multifocal interlamellar hyperplasia and lamellar fusion (F1-F5). Occasional spaces (lacunae), some filled with cell debris and amoebic cells, lamellar fusion, (F2-F5), displacement of chloride cells and some prominent goblet cells. Some lamellar thickness and vascular disturbance (F3-F5), F2 also displayed a pustule-like structure within the hyperplastic plaque. A few amoebic

cells resembling *Neoparamoeba perurans* (F3-F5) and high numbers of basophilic epithelial inclusions (likely epitheliocystis) (F1-F5). Some free blood among the gill filament and lamellar congestion noted (likely associated with percussive stunning method) and several aneurysmal dilations were observed. Fish 3 to 5 displayed autolysis artefacts which hindered the reading.

Skin & Muscle: Small focal area with inflammation and fibrosis of endomysium of skeletal red muscle fibres (F2, F5).

Heart: Mild multifocal inflammatory cell infiltration noted in the two chambers (F2). Some pericarditis (F2). No atrium in Section: F3, F4 & F5.

Gut and pyloric caeca: Small focal area of haemorrhage noted in adipose tissue (F4). Minor focal area of inflammatory cell infiltration of abdominal adipose tissue (potentially associated with vaccine administration). Some cell sloughing (F5) (potentially associated with post-mortem artefacts).

Pancreas: Within normal range.

Liver: Minor to mild multifocal hepatic necrosis (F3-F4), F4 also displayed some haemorrhage. Small focal area of inflammatory cell infiltration. Mild diffuse hepatocyte vacuolation (F1) and some sinusoidal hepatic congestion noted in F3.

Kidney: A small distinct area with granulomatous inflammation (F4).

Spleen: Small focal areas of absence of haematopoietic tissue (F1 & F2).

Brain: Within normal range (only F2).

Eye: Not sampled.

Signed:



Fish Health Inspector

Date: 24/11/2021

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	14/09/2021
SITE No	FS0056	SITE NAME	Ardmair
CASE No	20210333	INSPECTOR	[REDACTED]

Case completion report

A recommendation in relation to the above case was made for implementation by 08/12/2021. Following submission of the required documentation, evidence has now been provided to Marine Scotland to demonstrate that the recommendation has been implemented.

This case will now be closed. This site may be subject to further audit and recommendations in the future.

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

Signed:



Date: 28/01/2022

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2021-0343 Date of visit: 21/09/2021

Time spent on site: 1 hour Main Inspector: [Redacted]

Site No: SS0913 Site Name: Ard Mhor
Business No: SB0533 Business Name: Traigh Mhor Oysters

Case Types: 1 ECI 2 3 4 5 6

Water Temp (°C): N/A Thermometer No: FHI 045 completed

Observations: Region: WI Water type: S CoGP MA

Dead/weak/abnormally behaving fish present? N If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? N If yes, see additional information/clinical score sheet.
Gross pathology observed? N If yes, see additional information/clinical score sheet.
Diagnostic samples taken? N

UNI/REG only - if unable to carry out intended visit detail reason below:
[Redacted]

Additional Case Information:

OED input from Morecombe Bay via Garbh Lingeigh. Input from Morecombe to Garbh in July 2020 and moved to Ard in May 2021.

Inspection [REDACTED]; paperwork [REDACTED]

No depuration done all site are class A all year round

Input planned; 400,000 at 2g from Morecombe Bay in Sept 2021 CGI

Stock graded every 3 months. Any increase and unusual mortalities will be recorded then. Grading has not taken place in the last 18 months due to covid restrictions.

Predator mortality has increased as access was not possible during COVID lockdown period to clear stocks of crabs. Stock has been grown on trays on long lines at other sites and was unable to be graded for 18 month period due to COVID and weather. Crabs have therefore grown in the trays and predated on the oysters. The trays are being brought ashore from the offshore sites and transferred to trestle bags and on to Ard Mhor. These stocks are graded about three weeks after being put onto Ard Mhor. This allows the oysters to "harden" and results in less damage at grading. Estimated 15% losses over period occurring at the offshore sites.

Case No: **2021-0343** Site No: **SS0913**
 Date of Visit: **21/09/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

1. Business/site details summary checked by site representative? **Y**
 2. Changes made to details? **Y**

Site Details (include cleaner fish for all sections)

Total No facilities	477	Facilities stocked	400	No facilities inspected	477
Species	CGI OED				
Age group	2015-2017 2020				
No Fish	429,000 80,000				
Mean Fish Wt	10-53g 7g				
Next Fallow Date (Site)	not known	Next Input Date (Site)	Sept 2021 - Morecombe bay		
Recent (last 4 wks) disease problems?		N	Any escapes (since last visit)?		N
If yes, detail:	[REDACTED]				

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **29/10/2019**
 3. Are records complete and correctly entered? **Y**
 4. Are movement records available for dead fish and waste? **N/A**
 5. Are records complete and correctly entered? **N/A**
 6. Are health certificates for introductions (outwith GB) available? **N/A**

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)? **[REDACTED]**
 If yes, is there a system in place for maintenance of transportation records? **[REDACTED]**

Mortality Records

1. Mortality records available for inspection? **N/A**
 2. How are mortalities disposed of? **Other (detail)**
 If other detail: **empty shells used on driveway away from site**
 3. Mortality records complete and correctly entered? **N/A**
 4. Recent mortality (last 4 wks): **see additional info.**
 5. Evidence of recent increased/atypical mortalities? **N**
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
[REDACTED]
 6. Any other peaks in mortality during period checked? **Y**
 If yes, detail: **across sites - crab predation, 15% losses occurs at long line sites but shells are graded at Ard Mhor**
 7. Have increased (unexplained) mortalities been reported to vet or FHI? **N/A**
 If yes, detail action: **[REDACTED]**
 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet. **N/A**

Treatments and Medicines Records

1. Recent treatments (see comment)?	<input type="checkbox"/>
If yes, detail:	<input type="text"/>
If other, detail:	<input type="text"/>
2. Medicines records available for inspection?	<input type="checkbox"/>
3. Are records complete and correctly entered?	<input type="checkbox"/>
4. Are fish in a withdrawal period?	<input type="checkbox"/>
5. If yes, what treatment(s)?	<input type="text"/>
If other, detail:	<input type="text"/>
6. Are medicines stored appropriately?	<input type="checkbox"/>

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained) mortality</i> at the site been included?	<input type="checkbox"/>	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 <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>	Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>	Y
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.)?	<input type="checkbox"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
If no, detail:	<input type="text"/>	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>	N
2. If yes, are results available for inspection?	<input type="checkbox"/>	
3. Any significant results?	<input type="checkbox"/>	
If yes, detail (if not detailed under recent disease problems).	<input type="text"/>	

Records checked between:	29/10/19- 21/9/21
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Case Number:	2021-0343	Site No:	SS0913		
Date of Visit	21/09/2021	Inspector:			
Number of Susceptible species on site					
If no susceptible species present = LOW risk					
If susceptible species present, score for each pathogen					
		No	Yes		
	Susceptible to Bonamia ostrea (OED)	0	25		25
	Susceptible to Marteilia refringens (OED, MED)	0	3		3
	Susceptible to OshV (CGI)	0	3		3
Sites within a tidal excursion					
		1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2	10	10
Live shellfish movements					
		0	1-2	>3	
Movements 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	
	Number of suppliers	0	5	10	0
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1	2	0
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3	6	
	Number of destinations	0	3	6	0
Management practices					
		None	Secure (effluent treatment)	Unsecure (no effluent treatment)	
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1	2	0
	Depuration of stock from other businesses sites within MSS management area	0	2	6	
	Depuration of stock from sites outwith MSS management area	0	4	8	
Biosecurity					
	Number of sites	1	2 or 3	≥ 4	
Contacts with other sites	Sites operating from single shorebase	0	1	2	2
	Sites sharing staff and equipment	0	1	5	5
		Yes No			
	Disinfection of equipment between sites, use of footbaths etc	0	2		0
				Total Risk	48 HIGH

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0533	DATE OF VISIT	21/09/2021
SITE No	SS0913	SITE NAME	Ard Mhor
CASE No	20210343	INSPECTOR	[REDACTED]

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 high. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted annually. 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 Scotland.

No animal health surveillance had been carried out on behalf of the business and/or Marine Scotland since the last Marine Scotland 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: 19/11/2021

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>