

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: ST 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:

Additional Case Information:

Site inspected following report from company of increased mortality.

Gill pox confirmed on site by PCR, samples taken by company biologists. Previous weeks mortality prior to mortality event were 0.1% - 0.2%. Vets due on site for pre-transfer inspection later this week. Transfer date pushed back 1 week, fish due to be sent to sites in Unst.

Tanks that were least affected during mortality event held smaller fish (~50g), these fish had been affected by PD earlier in the year.

No apparent environmental issues picked up during mortality event.

No morts or signs of clinical disease observed during inspection of fish on site, feed response of fish was good.

Case No: **2018-0410** Site No: **FS0339**
 Date of Visit: **28/08/2018** Inspector(s): **JET**

Registration/Authorisation Details

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

Site Details

Total No facilities	17	Facilities stocked	12	No facilities inspected	12
Species	SAL				
Age group	2018 S0				
No Fish	1,230,000				
Mean Fish Wt	70g				
Next Fallow Date (Site)	N/A	Next Input Date (Site)	October 2018		

Recent (last 4 wks) disease problems? **Y** Any escapes (since last visit)? **N**
 If yes, detail: **Gill pox virus - increased mortality**

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **31/05/2018**
 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)?
 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? **Whole fish - Secanim, Widnes**
 If other detail:
 3. Mortality records complete and correctly entered? **Y**
 4. Recent mortality (last 4 wks): **117461 across site (8.7%)**
 5. Evidence of recent increased/atypical mortalities? **Y**
 If yes, facility nos/no mortality per facility/no stock per facility/reason:

w/b 13/08 Section B tank 3 - 67,335 (4.41% of site) mortalities, attributed to gill pox, all other tanks on site between 100 - 1000 mortalities during the week. w/b 20/08 Section B tank 3 mortalities dropped to 610/week, Section B as a whole had 1465 mortalities for the week. w/b 20/08 Section A mortality of 43,781 (3.1% of site) . Similar mortality across tanks 2 - 4 (1000-3000/day). Mortality has dropped since 25/08 to 0-200/day across the whole site.

6. Any other peaks in mortality during period checked? **N**
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI? **Y**
 If yes, detail action: **Reported to FHI.**
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet. **Y**

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	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"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
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"/>
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"/>
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"/>
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"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
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).	Gill pox virus confirmed by PCR	

Records checked between:

██████████
Cooke Aquaculture (Freshwater) Ltd
Crowness Road
Hatston Kirkwall
Orkney
KW15 1RG
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0235	DATE OF VISIT	28/08/2018
SITE No	FS0339	SITE NAME	Furnace (FW)
INSPECTOR	Joe Triscott	CASE No	20180410

The above site was inspected following a report from the company of a mortality event.

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.

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:

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.

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

Signed: ██████████

Fish Health Inspector

Date: 30/08/2018

R10

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

R10

Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
Tel - 0131 244 3498 Fax - 01224 295620 Email - ms.fishhealth@gov.scot
Website - www.gov.scot/Topics/marine/science

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:

SAV had been confirmed in the stock.

Mortalities began to increase around the start of August, mortality reporting criteria reached week 33 (716 1.32%) week 34 (4396 8.23%), week 35 (17800 36.32%), week 36 (5283 16.78%) Numbers are continuing to decrease.

SAV had caused some increased mortality through June (peak of 0.73% recorded week 23) but numbers had reduced.

Peroxide treatments being administered to treat the AGD

The company keeps handling to a minimum with no grading once input. Lice numbers are consistently low with good results reported from cleaner fish use. Swim throughs are used to ensure clean nets which is very effective.

Case No: **2018-0411** Site No: **FS0517**
 Date of Visit: **30/08/2018** Inspector(s): **DJT**

Registration/Authorisation Details

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

Site Details

Total No facilities	12	Facilities stocked	6	No facilities inspected	12
Species	SAL	WRS			
Age group	2017 S0	mix wild			
No Fish	37,508	1,338			
Mean Fish Wt	1.3	N/A			
Next Fallow Date (Site)	March 2019		Next Input Date (Site)	April 2019	

Recent (last 4 wks) disease problems? **Y** Any escapes (since last visit)? **N**
 If yes, detail: **AGD**

Movement Records

- 1. Movement records available for inspection? **Y**
- 2. Date of last inspection: **10/05/2016**
- 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)? **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? **Biogas - Barkip**
- If other detail: **Usually ensiled but due to volume sent to Barkip.**
- 3. Mortality records complete and correctly entered? **Y**
- 4. Recent mortality (last 4 wks): **27350 (46.7%), August for whole site. 6 WRS August**
- 5. Evidence of recent increased/atypical mortalities? **Y**
- If yes, facility nos/no mortality per facility/no stock per facility/reason:
as above
- 6. Any other peaks in mortality during period checked? **n**
- If yes, detail:
- 7. Have increased (unexplained) mortalities been reported to vet or FHI? **y**
- If yes, detail action: **FVG site inspection and FHI site inspection**
- 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet. **y**

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	peroxide	
If other, detail:	TMS	
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)?	Peroxide TMS	
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).	SAV, AGD	

Records checked between:

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							
	Species	SAL	SAL	SAL	SAL	SAL	SAL						
	Average weight	1.4000	1.4000	1.4000	1.4000	1.4000							
	Sex												
	Water Type	SW	SW	SW	SW	SW	SW						
Stock Details	Stock Origin	Loch Merkland	Loch Merkland	Loch Merkland	Loch Merkland	Loch Merkland							
	Facility No	Q21	Q21	Q21	Q8	Q8							

Case no: 2018-0411

Site No: FS0517

Method of killing: Percussive

Date of visit: 30/08/2018

Inspector(s): DJI

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						
	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			W						
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	W	W	W	W	W				
Liver	Petechial haem	W	M	W	W	W				
	Gross haem									
	Tissue breakdown									
	Enlarged									
	Colour number(s)									
	Granulomas									
	Lesions									
Pyloric caeca	Petechial haem									
	Tubules mauve									
	Lack of fat									
Spleen	Enlarged		M		M					
	Granulomas									
Gut	No food present									
	Yellow pseudo-faeces		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:

Hearts all appeared slightly swollen, AGD type lesions observed on gills. Fish 3 was moribund all other were lethargic. Fish were in recovery from PD.

Case Number:	2018-0411	Site No:	FS0517	Insp:	DJT	
Date of Visit	30/08/2018	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				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				
	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 shore base	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					14	LOW

Case No: **2018-0411**

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) followed 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 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. Does the stock on site appear satisfactory in relation to sea lice level and 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 nets AC Top nets MML tensioned nets

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: 2018-0411

Site No: FS0517

Date of Visit: 30/08/2018

Inspector: DJT

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 No: FS0517
Case No: 2018-0411
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



████████████████████
Wester Ross Fisheries Ltd
Ardmair
Ullapool
Ross-shire
IV26 2TN
████████████████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	30/08/2018
SITE No	FS0517	SITE NAME	Ardessie A
INSPECTOR	David Tomlinson	CASE No	20180411

Section 1: Summary

The site was inspected, following a report from the company of recent increased mortalities being attributed to amoebic gill disease (AGD). On inspection of the site a number of lethargic and moribund fish were observed, five were removed for further examination and subsequent diagnostic sampling.

Histopathology examination revealed marked complex gill issues with proliferative gill hyperplasia, evidences of amoebic cells (agent of amoebic gill disease) and presence of epitheliocystis. Some vascular damage also noted (potentially treatment effects or water borne insult) and mild hepatic necrosis and cardiomyopathy. F2 also showed features resembling an early stage of pancreas disease (PD) and the samples tested positive by QPCR for salmonid alphavirus, the causative agent of PD.

Due to gill health issues reported on site, samples were screened by QPCR for *Neoparamoeba perurans*, *Paranucleospora theridion* and salmon gill poxvirus. The results of these tests were positive.

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

During the inspection a number of lethargic Atlantic salmon were observed along with a low number of moribund fish. The site was stocked with 37,508 2017 S0 Atlantic salmon at an average weight of 1.3 kg and 1,338 wild sourced wrasse.

SAV had been confirmed in the stock in June 2018 with a peak mortality rate of 0.73% being attributed to this. Mortalities above the reporting criteria began during week 33 with 1.32% recorded, this rapidly increased to a peak of 36.32% (17,800) in week 36. Through August a total mortality rate of 46.7% (27,350) had been recorded. Site inspection and sampling by the Fish Vet Group diagnosed AGD likely linked to an environmental insult such as a plankton bloom.

Four lethargic and one moribund Atlantic salmon were removed for further examination and subsequent diagnostic sampling. Externally F3 had some haemorrhaging on the flank and all fish had AGD type lesions on the gills.

Internally all fish had some petechial haemorrhaging, F2 and F3 had splenomegaly, F2 3 and 4 had yellow pseudo faeces present.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1-3	1	Q21	Atlantic salmon	2017 S0@1.3kg	Loch Merkland
4-5	1	Q8	Atlantic salmon	2017 S0@1.3kg	Loch Merkland

Results

Bacteriology: Kidney and gill material from F1-5 were inoculated onto appropriate media for the isolation of bacteria.

No significant bacteria were isolated.

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

Salmonid alphavirus

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
1	16.78	37.20	36.29	37.17	POSITIVE

R09

Salmon gill poxvirus

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	22.59	29.71	29.83	29.93	POSITIVE
F2	22.75	28.52	28.67	28.69	POSITIVE
F3	21.92	26.26	26.13	26.24	POSITIVE
F4	21.75	26.91	26.95	26.86	POSITIVE
F5	21.60	26.73	26.81	26.83	POSITIVE

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

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	22.59	29.66	29.95	30.07	POSITIVE
F2	22.75	28.61	28.64	28.52	POSITIVE
F3	21.92	28.31	28.27	28.36	POSITIVE
F4	21.75	26.03	26.15	26.14	POSITIVE
F5	21.60	27.54	27.43	27.55	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	22.59	32.81	32.96	33.03	POSITIVE
F2	22.75	34.58	34.27	34.42	POSITIVE
F3	21.92	33.35	33.16	33.80	POSITIVE
F4	21.75	32.13	32.01	31.94	POSITIVE
F5	21.60	33.22	33.34	33.45	POSITIVE

Histology: Tissue samples of gill, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from F1-5. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Mild to marked multifocal to diffuse interlamellar hyperplasia with spaces (lacunae) occasionally filled with cell debris and lamellar fusion, multifocal adherence of secondary lamellae (synechia), lamellar necrosis with karyorrhectic nuclei, epithelial spongiosis and chloride cells displacement and hyperplasia and prominent goblet cells (F1-F5), in F5 also noted lamellar haemorrhage and congestion. Several basophilic epithelial inclusions (likely epitheliocystis) (F1, F3, F4), several amoebic cells resembling *Neoparamoeba perurans* were noted in all individuals. Several scattered aneurysmal dilation/telangiectasia and lamellar thrombosis.

Heart: Few small foci of basophilic nuclei at the spongy layer of ventricle and occasional fibre degeneration (F2) and focal cardiomyofibre degeneration and replacement with connective tissue at the spongy layer of ventricle (F5).

Gut and pyloric caeca: Within normal range.

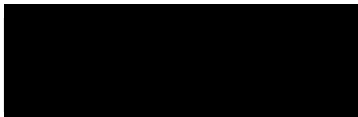
Pancreas: Small pockets of acinar necrosis (F2).

Liver: Mild multifocal hepatic necrosis (F3, F4, F5), focal sinusoidal congestion (F2).

Kidney: Within normal range.

Spleen: Some adhesions at the splenic serosa (likely associated with vaccine administration) (F3), parenchyma with mild depletion of white pulp and evidences of erythrophagocytosis (F4).

Signed:



Fish Health Inspector

Date: 28/09/2018

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

██████████
Wester Ross Fisheries Ltd
Ardmair
Ullapool
Ross-shire
IV26 2TN
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	30/08/2018
SITE No	FS0517	SITE NAME	Ardessie A
INSPECTOR	David Tomlinson	CASE No	20180411

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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.

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.

R25

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

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

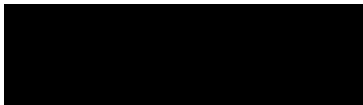
Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, 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, fish farm management agreements and statements and containment and escapes.

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: 17/09/2018

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:	2018-0412	Date of visit:	30/08/2018			
Time spent on site:	4h	Main Inspector:	DJT			
Site No:	FS0675	Site Name:	Ardessie B			
Business No:	FB0447	Business Name:	Wester Ross Fisheries Ltd			
Case Types:	1 ECI	2 CNI	3 SLI	4 REP	5 DIA	6
Water Temp (°C):	12.5	Thermometer No:	T173	FHI 045 completed		
Observations:	Region:	HI	Water type:	S	CoGP MA:	M-14
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:

Additional Case Information:

SAV had been confirmed in the stock

Mortalities began to increase week 33 (1240 1.36%) week 34 (4282 4.76%) week 35 (26247 30.64%) week 36 (5950 10.1%). It is considered that there had been an environmental insult (plankton bloom) that has caused the onset of the AGD

Peroxide treatments being administered to treat the AGD

Handling is kept to a minimum throughout the cycle with no grading following input. Swim throughs are use to keep nets clean.

Lice numbers low throughout the cycle with the site contacts impressed with the cleaner fish as a method of lice control. No chemical treatments have been administered for sea lice.

Case No: **2018-0412** Site No: **FS0675**
 Date of Visit: **30/08/2018** Inspector(s): **DJT**

Registration/Authorisation Details

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

Site Details

Total No facilities	14	Facilities stocked	10	No facilities inspected	10
Species	SAL	WRS			
Age group	2017 s0	Mix wild			
No Fish	67,793	1,656			
Mean Fish Wt	1.4	N/A			
Next Fallow Date (Site)	March 2019		Next Input Date (Site)	April 2019	

Recent (last 4 wks) disease problems? Y Any escapes (since last visit)? N
 If yes, detail: **AGD**

Movement Records

- 1. Movement records available for inspection? Y
- 2. Date of last inspection: **10/05/2016**
- 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)? 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? **Biogas - Barkip**
- If other detail: **waste is normally ensiled but due to volume of morts these are sent to Barkip**
- 3. Mortality records complete and correctly entered? Y
- 4. Recent mortality (last 4 wks): **SAL 37,377 (39.2%) gill issues AGD caused by plankton, WRS 6/month August.**
- 5. Evidence of recent increased/atypical mortalities? y
- If yes, facility nos/no mortality per facility/no stock per facility/reason:
as above all pens affected
- 6. Any other peaks in mortality during period checked? N
- If yes, detail:
- 7. Have increased (unexplained) mortalities been reported to vet or FHI? Y
- If yes, detail action: **FVG site inspection and samples taken. Peroxide being administered**
- 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet. Y

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	Hydrogen peroxide TMS	
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)?	TMS Peroxide	
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).	SAV, AGD	

Records checked between:

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							
Species	SAL	SAL	SAL	SAL	SAL	SAL						
Average weight	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000						
Sex	N/A	N/A	N/A	N/A	N/A	N/A						
Water Type	SW	SW	SW	SW	SW	SW						
Stock Details		Ardessie A	Ardessie A	Ardessie A	Ardessie A	Ardessie A	Ardessie A					
	Stock Origin											
Facility No	Q11	Q11	Q17	Q17	Q17							

Case no: 2018-0412

Site No: FS0675

Method of killing: Percussive

Date of visit: 30/08/2018

Inspector(s): DJI

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												
	Lethargic			S	S	S							
	Hanging vertical												
	Spiralling												
	Flashing												
	Loss of equilibrium												
Body	Dark			m	m	m							
	Distended abdomen												
	Anorexic	w	w	w	w	w							
	Scale Oedema												
Opercula	Shortened												
	Flared												
Haemorrhaging	Throat												
	Ventrum												
	Base of fins												
	Elsewhere												
Eyes	Exophthalmic												
	Enophthalmic (sunken)												
	Cataract												
	Haemorrhagic												
Gills	Pale				m	m							
	Zoned			w	w	w							
	Necrotic												
Lesions	Flank												
	Elsewhere												
Vent	Inflamed												
	Trailing faeces												
Lice Load	Estimate numbers												
Internal Signs													
Ascites	Clear												
	Bloody												
Oedema	In tissues												
Heart	Pale/anaemic					S							
	Granulomas												
	Deformed	w				w							
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									
Spleen	Enlarged			S	S	S							
	Granulomas												
Gut	No food present												
	Yellow pseudo-faeces			S	S	S							
	External haem												
	Internal haem												
Body wall	Haemorrhaging												
Swim bladder	Haemorrhaging												
	Fluid filled												
Kidney	Swollen												
	Grey												
	Granular					S							
	Liquefied												
General	Parasites present												
	Anaemia												

Additional comments:

Gills appeared to have AGD. F 1 and 2 were caught using feed and were from a cage that had recently been treated with peroxide. F3-5 were lethargic and were able to be netted from the pen relatively easily. Fish were in recovery from PD.

Case Number:	2018-0412	Site No:	FS0675	Insp:	DJT	
Date of Visit	30/08/2018	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	0
	Number of destinations	0	3	6	10	0
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 shore base	0	1	2		1
	Sites sharing staff and equipment	0	1	2		
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					8	LOW

Case No: **2018-0412**

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) followed 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 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. Does the stock on site appear satisfactory in relation to sea lice level and 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)

ADD	Predator nets	Top nets	MML	tensioned nets
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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: 2018-0412

Site No: FS0675

Date of Visit: 30/08/2018

Inspector: DJT

Point of Compliance1. 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 Statements2. 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 No: FS0675
Case No: 2018-0412
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



Case No: **2018-0412** Date of visit: **30/08/2018**
 Site No: **FS0675** Inspector: **DJT**

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
AGD PCR	4/5	05/09/2018	DJT	05/09/2018	DJT	08/10/2018	DJT	AJW
IHN PCR	0/1	05/09/2018	DJT	05/09/2018	DJT	08/10/2018	DJT	AJW
IPN PCR	0/1	05/09/2018	DJT	05/09/2018	DJT	08/10/2018	DJT	AJW
ISA PCR	0/1	05/09/2018	DJT	05/09/2018	DJT	08/10/2018	DJT	AJW
Paranucleospora theridion PCR	5/5	05/09/2018	DJT	05/09/2018	DJT	08/10/2018	DJT	AJW
SAV	1/1	05/09/2018	DJT	05/09/2018	DJT	08/10/2018	DJT	AJW
VHS	0/1	05/09/2018	DJT	05/09/2018	DJT	08/10/2018	DJT	AJW
Salmon Gill Poxvirus	5/5	05/09/2018	DJT	05/09/2018	DJT	08/10/2018	DJT	AJW
ADHE	1/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
AMGD	5/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
CGDH	5/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
GPAT	5/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
HPAT	2/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
KPAT	1/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
LPAT	4/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
PPAT	2/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
SPAT	2/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
SALH	1/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW

Report Summary			
Case Type	Date	Insp	2 nd Insp
ECI CNI SLI REP	17/09/2018	DJT	ALW
DIA	28/09/2018	DJT	AJW

Wester Ross Fisheries Ltd
Ardmair
Ullapool
Ross-shire
IV26 2TN

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	30/08/2018
SITE No	FS0675	SITE NAME	Ardessie B
INSPECTOR	David Tomlinson	CASE No	20180412

Section 1: Summary

The site was inspected, following a report from the company of recent increased mortalities being attributed to amoebic gill disease (AGD). On inspection of the site a number of lethargic and moribund fish were observed, five were removed for further examination and subsequent diagnostic sampling.

Histopathology examination revealed marked complex gill issues with proliferative gill hyperplasia, evidences of amoebic cells (agent of amoebic gill disease). Some vascular damage also noted (potentially treatment effects or water borne insult) and mild hepatic necrosis and peritonitis. F5 also showed features resembling pancreas disease (PD) and the samples tested positive by QPCR for salmonid alphavirus, the causative agent of PD..

Due to gill health issues reported on site, samples were screened by QPCR for *Neoparamoeba perurans*, *Paranucleospora theridion* and salmon gill poxvirus. Samples tested positive for all three 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

During the inspection a number of lethargic Atlantic salmon were observed along with a low number of moribund fish. The site was stocked with 67,793 S0 Atlantic salmon at an average weight of 4 kg and 1,656 wild sourced wrasse. The site was stocked with fish R09

from Ardessie A which had tested positive for SAV earlier in the cycle. Mortalities above the reporting criteria began during week 33 with 1.36% recorded, this rapidly increased to a peak of 30.64% (26,247) in week 35. Throughout August 39.2% (37,377) had been recorded. Site inspection and sampling by the Fish Vet Group diagnosed AGD likely linked to an environmental insult such as a plankton bloom.

Three lethargic and two additional fish were removed for further examination and subsequent diagnostic sampling. Externally F3-5 had darkened bodies with slightly zoned gills, F4 and F5 also had pale gills. All fish appeared to be anorexic.

Internally the hearts of F1 and F5 were slightly swollen with the heart of F5 also being pale in appearance. There was a lack of fat on the pyloric caeca of F1-3. F3-5 had splenomegaly with yellow pseudo faeces present. The kidney of F5 was slightly granular.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1&2	1	Q11	Atlantic salmon	2017 S1@1.4kg	Ardessie A
3-5	1	Q17	Atlantic salmon	2017 S1@1.4kg	Ardessie A

Results

Bacteriology: Kidney and gill material from F1-5 were inoculated onto appropriate media for the isolation of bacteria.

No significant bacteria were isolated.

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

Salmonid alphavirus

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	16.75	36.06	35.29	35.01	POSITIVE

Salmon gill poxvirus

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	20.96	32.85	33.31	32.81	POSITIVE
F2	21.96	40	38.51	40	POSITIVE

R09

F3	20.49	27.66	27.46	27.46	POSITIVE
F4	21.59	26.85	26.59	26.81	POSITIVE
F5	20.85	34.98	35.10	35.88	POSITIVE

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), infectious pancreatic necrosis virus (IPNV), infectious salmon anaemia virus (ISAV) 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).

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	20.96	28.83	28.95	28.63	POSITIVE
F2	21.96	33.52	34.27	33.88	POSITIVE
F3	20.49	27.39	26.88	27.18	POSITIVE
F4	21.59	29.29	29.29	29.02	POSITIVE
F5	20.85	31.74	31.44	31.65	POSITIVE

Neoparamoeba perurans (AGD)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	20.96	32.36	32.73	32.73	POSITIVE
F2	-	-	-	-	Negative
F3	20.49	25.38	25.63	25.50	POSITIVE
F4	21.59	27.07	26.85	26.66	POSITIVE
F5	20.85	28.21	28.28	28.12	POSITIVE

Histology: Tissue samples of gill, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from F1-5. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Mild to moderate multifocal interlamellar hyperplasia with spaces (lacunae) occasionally filled with cell debris, lamellar fusion and epithelial thickness, multifocal adherence of secondary lamellae (synechia), lamellar necrosis with karyorrhectic nuclei, epithelial spongiosis and chloride cells displacement (F1-F5). Several amoebic cells resembling *Neoparamoeba perurans* were noted in all individuals. Several scattered aneurysmal dilation/telangiectasia and lamellar thrombosis.

Heart: Few small foci of basophilic nuclei at the spongy layer of ventricle and occasional fibre degeneration (F1) and one small thrombi at the ventricle was noted in F5.

Gut and pyloric caeca: Fibrous adhesions with eosinophilic cells in granulation tissue (F1).

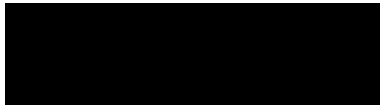
Pancreas: Absence of pancreatic acinar tissue (F2), presence of some apoptotic cells in the pancreatic acinar tissue (F5) and some fibrous adhesions in the peripancreatic tissue (likely associated with vaccine administration) (F5).

Liver: Mild multifocal hepatic necrosis (F3, F4) and haemorrhage (F3), some vein cuffing (F2) and capillary congestion (F1, F2).

Kidney: Head kidney with foci of empty spaces and few leucocyte cells circulating (F5).

Spleen: Some adhesions at the splenic serosa (likely associated with vaccine administration) (F3), and parenchyma with mild focal to multifocal depletion of white pulp and evidences of erythrophagocytosis (F3, F4).

Signed:



Fish Health Inspector

Date: 8/10/2018

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

██████████
Wester Ross Fisheries Ltd
Ardmair
Ullapool
Ross-shire
IV26 2TN
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	30/08/2018
SITE No	FS0675	SITE NAME	Ardessie B
INSPECTOR	David Tomlinson	CASE No	20180412

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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.

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.

R25

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

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

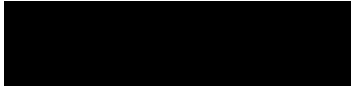
Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, 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, fish farm management agreements and statements and containment and escapes.

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: 17/09/2018

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: 2018-0421 Date of visit: 31/08/2018

Time spent on site: 1 hours Main Inspector: ASM

Site No: FS1240 Site Name: Highland
Business No: FB0544 Business Name: Scotland

Case Types: 1 DIA 2 3 4 5 6

Water Temp (°C): N/A Thermometer No: T172 FHI 045 completed

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

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

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

Additional Case Information:

Email received from Environmental Health informing us that about 2,000-3,000 dead fish (most likely pollock) were observed dead near the harbour at Scarfsferry, near Thurso (north east Scotland). The email also said that the water in the which the fish were observed dead tasted and smelt very bitter, but there were no signs of contamination. Email received on August 23rd 2018.

The local creel fishermen reported poor catches in the area two weeks prior to the event.

The local MS compliance officers went to find evidence of the fish the day after notification. No fish were observed along the coastline.

A local resident offered the compliance officers a tub containing a sample (about 20) of the dead fish and some photos on the incident. These samples and photos were submitted to the FHI.

The fish had been stored in the freezer for about 5 days and were in transit for two days in a box with some ice packs before reaching the lab.

When reporting the results to the correspondent, he informed me that large amounts of dead seaweed were observed in the harbour at the time the fish were observed dead.

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	F6	F7	F8	F9	F10	F11	F12
Fish nos	1	2	3	4	5	6	7	8	9	10	11	12
Pool Group	P1	P1	P1	P1	P1	P2	P2	P2	P2	P2	P3	P3
Species												
Average weight	40g	40g	40g	40g	40g	40g	40g	40g	40g	40g	40g	40g
Sex												
Water Type	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
Stock Origin	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)
Facility No												

08/2018 Additional Sample Information:
 Brain and visera were liquified on inspection. Barely able to make out individual organs

24 Total Tests assigned 3

F13	F14	F15	F16	F17	F18	F19	F20	P1	P2	P3	P4				
13	14	15	16	17	18	19	20	1-5	6-10	11-15	16-20				
P3	P3	P3	P4	P4	P4	P4	P4								
40g	40g	40g	40g	40g	40g	40g	40g	40g	40g	40g	40g				
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW				
Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)	Wild fish (Scarfskerry)				

Case no: **2018-0421** Site No: **FS1240** Method of killing:

Date of visit: **31/08/2018** Inspector(s): **ASM** Sheet Relevant: **Y**

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

Fish Number		1	2	3	4	5	6	7	8	9	10
Time sampled after death (if > 45 minutes)											
External Signs											
Behaviour	Moribund										
	Lethargic										
	Hanging vertical										
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark										
	Distended abdomen										
	Anorexic										
	Scale Oedema										
Opercula	Shortened										
	Flared										
Haemorrhaging	Throat										
	Ventrum										
	Base of fins										
	Elsewhere										
Eyes	Exophthalmic										
	Enophthalmic (sunken)										
	Cataract			S							
	Haemorrhagic										
Gills	Pale	S	S	S	S	S	S	S	S	S	S
	Zoned										
	Necrotic										
Lesions	Flank					S					
	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										
Spleen	Enlarged										
	Granulomas										
Gut	No food present										
	Yellow pseudo-faeces										
	External haem										
	Internal haem										
Body wall	Haemorrhaging										
Swim bladder	Haemorrhaging										
	Fluid filled										
Kidney	Swollen										
	Grey										
	Granular										
	Liquefied	S	S	S	S	S	S	S	S	S	S
General	Parasites present										
	Anaemia										

Case no: 2018-0421

Date of visit: 31/08/2018

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

Fish Number		11	12	13	14	15	16	17	18	19	20
Time sampled after death (if > 45 minutes)											
External Signs											
Behaviour	Moribund										
	Lethargic										
	Hanging vertical										
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark										
	Distended abdomen										
	Anorexic										
	Scale Oedema										
Opercula	Shortened										
	Flared										
Haemorrhaging	Throat										
	Ventrum										
	Base of fins										
	Elsewhere										
Eyes	Exophthalmic										
	Enophthalmic (sunken)										
	Cataract										
	Haemorrhagic										
Gills	Pale	S	S	S	S	S	S	S	S	S	S
	Zoned										
	Necrotic										
Lesions	Flank							S			
	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										
Spleen	Enlarged										
	Granulomas										
Gut	No food present										
	Yellow pseudo-faeces										
	External haem										
	Internal haem										
Body wall	Haemorrhaging										
Swim bladder	Haemorrhaging										
	Fluid filled										
Kidney	Swollen										
	Grey										
	Granular										
	Liquefied	S	S	S	S	S	S	S	S	S	S
General	Parasites present										
	Anaemia										

Additional comments:

All internal organs liquified.

Site No: FS1240
Case No: 2018-0421
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



██████████
The Haven
Scarfskerry
Thurso
Highland
KW14 8XN.

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

DATE OF VISIT 31/08/2018
LOCATION Scarfskerry
INSPECTOR Andy Mayes
CASE No 20180421

Section 1: Summary

Marine Scotland's fish health inspectorate received information that a fish kill had been observed at the harbour at Scarfskerry, near Thurso. A member of the public took a sample of the gadoids and they were forwarded to the fish health inspectorate via Marine Scotland – Compliance.

The fish were tested for segments of nucleic acid indicative of the presence of nodavirus, viral haemorrhagic septicaemia virus and infectious pancreatic necrosis virus. The results of these tests were negative.

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

On August 24th 2018 the duty inspector received an email notifying the fish health inspectorate that a member of the public had observed a fish kill of approximately 2,000-3,000 small fish (about 5 inches) at the harbour at Scarfskerry, near Thurso. The correspondent also detailed that the water tasted and smelled bitter and a large volume of dead seaweed was observed in the area.

A member of the public took a sample of about 20 dead fish and stored them in the freezer. These fish (thought to be gadoids) were given to Marine Scotland – Compliance. They were then sent to the Marine Laboratory by post with some ice packs, but (due to an error with the delivery service) got held up en route and arrived a day late.

R09

Photos taken of the fish shortly after the fish kill was observed showed some fish with gaping mouths. When the fish were taken for necropsy they were in the early stages of decomposition. Most of the internal organs were partially liquefied. Fish 6 and 18 had lesions on their flank, possibly from predation post mortem. The gills of all fish were very pale. Due to the level of decomposition and storage method, the fish were only tested using molecular genetic techniques.

Samples

Samples were collected from 20 fish according to the table below:

Fish number	Pool number	Species	Stage	Origin
1-5	1	Saithe (<i>Pollachius virens</i>)	Juvenile	Scarfskerry harbour
6-10	2	Saithe (<i>Pollachius virens</i>)	Juvenile	Scarfskerry harbour
11-15	3	Saithe (<i>Pollachius virens</i>)	Juvenile	Scarfskerry harbour
16-20	4	Saithe (<i>Pollachius virens</i>)	Juvenile	Scarfskerry harbour

Results

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

Infectious haematopoietic necrosis virus (IHNV)
Infectious pancreatic necrosis virus (IPNV)
Nodavirus

All samples screened negative.

Signed:



Fish Health Inspector

Date: 10/09/18

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



Picture 1: fish at Scarfskerry Harbour



Picture 2: fish at Scarfskerry Harbour



Picture 3: fish at Scarfskerry Harbour



Picture 4: fish at Scarfskerry Harbour



Picture 5: fish on the harbour quay at Scarfskery



Picture 6: fish on the harbour quay at Scarfskery



Picture 7: fish on the harbour quay at Scarfskery



Picture 8: fish at Marine Laboratory

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:

- 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:

Persistent problem with tube worm fouling

Case Number:	2018-0422	Site No:	SS0555
Date of Visit	15/08/2018	Inspector:	ASM
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
	Susceptible to Marteilia refringens (OED, MED)	0	3
	Susceptible to OshV (CGI)	0	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
			0
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
			10
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
			6
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
	Depuration of stock from other businesses sites within MSS management area	0	2
	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
	Sites sharing staff and equipment	0	1
			5
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			0
Total Risk			
8			

Case No: Site No:

Date of case: Inspector(s):

Business/site contacts correct? (if no, update site summary sheet)

Site Details

Total No facilities:	<input type="text" value="7"/>			No facilities stocked:	<input type="text" value="7"/>		
Species	<input type="text" value="MED"/>	<input type="text" value="MED"/>	<input type="text" value="MED"/>				
Age group	<input type="text" value="2016"/>	<input type="text" value="2017"/>	<input type="text" value="2018"/>				
No shellfish	<input type="text" value="3 longlines"/>	<input type="text" value="2 longlines"/>	<input type="text" value="2 longlines"/>				
Mean fish Wt	<input type="text" value="20g"/>	<input type="text" value="10g"/>	<input type="text" value="1g"/>				
Next fallow date (site)	<input type="text" value="No plans"/>			Next input date (site)	<input type="text" value="Aug-18"/>		

Date of last inspection: (ECI or PSI):

Any recent increased or atypical mortalities? (last 4 weeks):

If yes, detail:
e.g. site average, max per facility

Any increased mortalities? (since last inspection)

If yes, detail:

How are mortalities disposed of?

If other detail:

Are there any diseases on your site?

If yes, detail:

Have you experienced predation on site?

If yes, detail:

Has the site experienced increased or abnormal fouling?

If yes, detail:

Have you observed any invasive species on your site?

If yes, detail:

Do you have an up to date BMP, and are there any issues?

If yes, detail:

What quantity of spat fall have you had in the last 12 months? (mussel sites only):

Loch Laxford Shellfish Ltd.
Foindle
By Lairg
Sutherland
IV27 4SU

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0309	DATE OF CASE	15/08/2018
SITE No	SS0555	SITE NAME	Allt Briste
INSPECTOR	Andy Mayes	CASE NO	20180422

Routine surveillance frequency assessment under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was contacted in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

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

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

Signed:



Date: 30/08/18

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: 2018-0423 Date of visit: 15/08/2018

Time spent on site: 15 mins Main Inspector: ASM

Site No: SS0497 Site Name: Croggan Bay

Business No: SB0320 Business Name: Croggan Oysters

Case Types: 1 PSI 2 3 4 5 6

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

Observations: Region: ST Water type: S 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:

Additional Case Information:

As oysters are not tested for toxins the oysters cannot be sold to be consumed by the public, so the oysters are sold to other growers. The oysters are also consumed by the site owner.
Almost no predation at all.

The few dead oysters on the site are used to relay paths and to feed to the owners chickens. Only empty shells observed.

Case Number:	2018-0423	Site No:	SS0497
Date of Visit	15/08/2018	Inspector:	ASM
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
	Susceptible to Marteilia refringens (OED, MED)	0	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
			0
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
			10
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
			6
			3
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
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
			2
			6
			8
			0
			0
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
			5
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			2
			0
Total Risk			
			12

Case No:

Site No:

Date of case:

Inspector(s):

Business/site contacts correct? (if no, update site summary sheet)

Site Details

Total No facilities:	<input type="text" value="6"/>		No facilities stocked:	<input type="text" value="5"/>	
Species	<input type="text" value="CGI"/>	<input type="text" value="CGI"/>			
Age group	<input type="text" value="7 years"/>	<input type="text" value="3 years"/>			
No shellfish	<input type="text" value="8,000"/>	<input type="text" value="20,000"/>			
Mean fish Wt	<input type="text" value="90g"/>	<input type="text" value="50g"/>			
Next fallow date (site)	<input type="text" value="No plans"/>		Next input date (site)	<input type="text" value="No plans"/>	

Date of last inspection: (ECI or PSI):

Any recent increased or atypical mortalities? (last 4 weeks):

If yes, detail:
e.g. site average, max per facility

Any increased mortalities? (since last inspection)

If yes, detail:

How are mortalities disposed of?

If other detail:

Are there any diseases on your site?

If yes, detail:

Have you experienced predation on site?

If yes, detail:

Has the site experienced increased or abnormal fouling?

If yes, detail:

Have you observed any invasive species on your site?

If yes, detail:

Do you have an up to date BMP, and are there any issues?

If yes, detail:

What quantity of spat fall have you had in the last 12 months? (mussel sites only):

██████████
Croggan Oysters
New House
Croggan, Craignure
Isle of Mull, Argyll
PA63 6AH
████████████████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0320	DATE OF CASE	15/08/2018
SITE No	SS0497	SITE NAME	Croggan Bay
INSPECTOR	Andy Mayes	CASE No	20180423

Routine surveillance frequency assessment under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was contacted in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

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

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

Signed: ██████████

Fish Health Inspector

Date: 30/08/18

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: ST Water type: S 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:

Additional Case Information:

Problems with toxin sampling so trying to sell the site. A potential buyers has been identified. Reminded to contact us to change details if the site is sold.

Site not dived by the owner is about 3 years

Considering seeding mussels onto the seabed for dredging or for hand diving if the site is not sold

Case Number:	2018-0424	Site No:	ss0513
Date of Visit	15/08/2018	Inspector:	ASM

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	
Susceptible to Marteilia refringens (OED, MED)	0	3	
Susceptible to OshV (CGI)	0	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	0

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	

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	

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	0
	Depuration of stock from sites outwith MSS management area	0	4	8	0

Biosecurity

		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	5	0
			Yes		No
	Disinfection of equipment between sites, use of footbaths etc		0	2	0

Total Risk	0
-------------------	----------

Case No:

Site No:

Date of case:

Inspector(s):

Business/site contacts correct? (if no, update site summary sheet)

Site Details

Total No facilities:	<input type="text" value="1"/>	No facilities stocked:	<input type="text" value="1"/>
Species	<input type="text" value="PMA"/>		
Age group	<input type="text" value="Mixed"/>		
No shellfish	<input type="text" value="~8 tonnes"/>		
Mean fish Wt	<input type="text" value="Mixed"/>		
Next fallow date (site)	<input type="text" value="No plans"/>	Next input date (site)	<input type="text" value="No plans"/>

Date of last inspection: (ECI or PSI):

Any recent increased or atypical mortalities? (last 4 weeks):

If yes, detail:
e.g. site average, max per facility

Any increased mortalities? (since last inspection)

If yes, detail:

How are mortalities disposed of?

If other detail:

Are there any diseases on your site?

If yes, detail:

Have you experienced predation on site?

If yes, detail:

Has the site experienced increased or abnormal fouling?

If yes, detail:

Have you observed any invasive species on your site?

If yes, detail:

Do you have an up to date BMP, and are there any issues?

If yes, detail:

What quantity of spat fall have you had in the last 12 months? (mussel sites only):

██████████
Scallop Kings 1997 Ltd
Mealdarroch Cottage
Pier Road
Tarbert Argyll
PA29 6UG
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0182	DATE OF CASE	15/08/2018
SITE No	SS0513	SITE NAME	Loch Crinan
INSPECTOR	Andy Mayes	CASE No	20180424

Routine surveillance frequency assessment under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was contacted in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

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

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

Signed: ██████████

Fish Health Inspector

Date: 30/08/18

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: WI Water type: S CoGP MA: W-1

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:

Accompanied APHA staff on visit to site following report of potential welfare issues by member of the public.

Site is stocked with lumpsuckers and they had worked well at keeping lice numbers low until July. Sudden increase in lice numbers in mid July. Numbers of adult female leps rose above reporting level in week 29. Numbers peaked in week 34. Site was due treatment with hydrolicer that week, but was delayed due to weather. Numbers dropped significantly following week after treatment, but have started to rise again following quick resettlement of juvenile lice (4.65 average AFL from count at start of week).

Site has had strategic treatments with Slice in first year and Slice is currently being fed to stock in 6 cages (started on 4/9/18). Using the hydrolicer on the other 4 cages as these are going to be harvested (cages 1, 3, 5 and 11).

Hydrolicer has been used on site in May (strategic treatment), June, July (when numbers rose significantly), twice in August (weeks 32 and 35).

Inspected a number of cages on the site. Worst affected cage appeared to have ~100 fish with observable lice damage (white heads and a few with more significant damage). Numbers with lice damage were lower in other cages. Hydrolicer treatment being conducted on cage 5. Observed fish exiting the hydrolicer over dewaterer and no fish seen with observable lice damage. Also observed the crowded stock pre hydrolicer. A few fish seen with lice damage, but vast majority of the fish did not appear to have lice damage.

Most recent lice counts for weeks 34 and 35 had not yet been submitted to FHI, collected during visit. Mortality levels for week 35 were above mortality event reporting level and were reported during visit (within 7 days of end of reporting period so no further action).

Some of the stock will moved to Outer Eport next month for further on-growing before harvest.

Site specific lice management procedure in place and company taking action to reduce the lice numbers on the site with other options available such as bath treatments if required. Staff are removing fish with lice damage and culling humanely.

Fish removed from cages 3 and 10 during inspection and diagnostic samples taken from five of these fish.

Case No: **2018-0429** Site No: **FS1091**
 Date of Visit: **05/09/2018** Inspector(s): **ALW**

Registration/Authorisation Details

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

Site Details

Total No facilities	12	Facilities stocked	10	No facilities inspected	12
Species	SAL	LUM			
Age group	2017 S1	Adult			
No Fish	270,847	9,522			
Mean Fish Wt	3.1Kg	40g			
Next Fallow Date (Site)	End October 2018		Next Input Date (Site)	March/April 2019	

Recent (last 4 wks) disease problems? **Y** Any escapes (since last visit)? **N**
 If yes, detail: **Gill health - AGD/PGD**

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **07/08/2018**
 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)?
 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: **Landfill at Whiteshore Cockles**
 3. Mortality records complete and correctly entered? **Y**
 4. Recent mortality (last 4 wks): **wk 32 - 1,305 (0.42%), wk 33 - 1,397 (0.45%), wk 34 - 1,323 (0.43%), wk 35 - 7,516 (2.56%), wk 36 to date - 4,000 (1.46%) - total for period = 15,541 (4.96%)**
 5. Evidence of recent increased/atypical mortalities? **Y**
 If yes, facility nos/no mortality per facility/no stock per facility/reason: **wk 35 - Treatments with hydrolicer across site. Cage 4 - 1,469 (5.13%), Cage 6 - 1,264 (4.27%), cage 10 - 1,036 (3.56%)**
 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, add MRT case and enter on mortality events sheet. **Y**

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	T.M.S., Slice	
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., Slice	
If other, detail:		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
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"/>
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"/>
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"/>
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"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
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).	AGD Positive	

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Records checked between:

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								
Species	SAL	SAL	SAL	SAL	SAL	SAL							
Average weight	3.1kg	3.1kg	3.1kg	3.1kg	3.1kg	3.1kg							
Sex	N/A	N/A	N/A	N/A	N/A	N/A							
Water Type	SW	SW	SW	SW	SW	SW							
Stock Details	Stock Origin	Amhuinnsuidhe (Langass)	Amhuinnsuidhe (Langass)	Amhuinnsuidhe (Langass)	Amhuinnsuidhe (Langass)	Barvas Hatchery (Carron)	Amhuinnsuidhe/Barvas						
	Facility No	3	3	3	3	10	3 & 10						

Case no: 2018-0429

Site No: FS1091

Method of killing: Anaesthetic

Date of visit: 05/09/2018

Inspector(s): ALW

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									
	Lethargic	M	M	M	M	M				
	Hanging vertical									
	Spiralling									
	Flashing									
	Loss of equilibrium									
Body	Dark									
	Distended abdomen									
	Anorexic									
	Scale Oedema									
Opercula	Shortened	S								
	Flared									
Haemorrhaging	Throat									
	Ventrum	M	M			M				
	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	high	high	high	high	high				
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									
Spleen	Enlarged									
	Granulomas									
Gut	No food present									
	Yellow pseudo-faeces	M	M	M	M	M				
	External haem									
	Internal haem									
Body wall	Haemorrhaging									
Swim bladder	Haemorrhaging									
	Fluid filled									
Kidney	Swollen									
	Grey									
	Granular									
	Liquefied									
General	Parasites present									
	Anaemia									

Additional comments:

All fish had lice damage to the head area. Lice observed on all fish, mixture of Leps and Caligus.
F1 had physical damage to left opercula and gill filaments were damaged.
F1-5 gill damage - a few white patches, small amount of haemorrhaging and some damaged tips of filaments

Case No: **2018-0429**

Site No: **FS1091**

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) followed 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 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. Does the stock on site appear satisfactory in relation to sea lice level and 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)
- 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)

Site No: FS1091

Case No: 2018-0429

Nature of non-compliance:

Action taken (FHI):

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



[REDACTED]
The Scottish Salmon Company
1 Smithy Lane
Lochgilphead
Argyll
PA31 8TA
[REDACTED]

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0169	DATE OF VISIT	05/09/2018
SITE No	FS1091	SITE NAME	Vacasay
INSPECTOR	Andrea Warwick	CASE No	20180429

Section 1: Summary

The above site was inspected, following a report of a potential welfare issue by a member of the public. A number of lethargic fish with high lice loads and physical damage to the head area due to lice were observed across the site. Five fish were removed for further examination and subsequent diagnostic sampling.

Histopathology examination revealed complex gill pathology with mild to moderate proliferative gill hyperplasia and presence of epitheliocystis. There was evidence of amoebic cells (agent of amoebic gill disease, AGD) and samples tested positive by QPCR for *Neoparamoeba perurans*, the causative agent of AGD. Some vascular damage also noted, potentially due to treatment effects or water borne insult.

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

A sample tested positive for infectious pancreatic necrosis virus by QPCR, but there was no associated pathology.

Vibrio spp. were also isolated from the kidneys and gills. The level and purity of growth would not suggest that these bacteria were implicated in current fish morbidity.

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

R09

Section 2: Case Detail

Observations

The above site was inspected, following a report of a potential welfare issue by a member of the public. The site was stocked with 270,847 2007 S1 Atlantic salmon at 3.1kg average weight and 9,522 adult lumpsuckers.

Mortality levels had been low over the preceding few weeks, but had risen in week 35 to 2.56% (7,516). The increase had been attributed to a treatment with a hydrolicer during week 35. Gill health issues had been noted on site and samples had tested positive for AGD.

A number of lethargic fish with high lice loads and physical damage on the head area due to lice were observed across the site. Five fish were removed for further examination and subsequent diagnostic sampling.

Fish 1, 2 and 5 had some haemorrhaging along the ventrum. Fish 1 to 5 had gill damage consisting of small amount of petechial haemorrhaging, white patches and damage to the gill tips. Fish 1 had a shortened opercula and the gill filaments were more severely damaged. All five fish had yellow pseudo-faeces internally.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1-4	P1	3	Atlantic salmon	2017 S1	Amhuinnsuidhe
5	P1	10	Atlantic salmon	2017 S1	Barvas Hatchery

Results

Bacteriology: Kidney and gill material from fish 1 to 5 was inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated

Vibrio spp. (kidney of fish 2, 3 and 5 and gills of fish 1 to 5)

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

Infectious pancreatic necrosis virus (IPNV)

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	15.35	38.04	37.07	38.56	POSITIVE

Salmon gill poxvirus

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	23.55	27.76	27.74	27.67	POSITIVE
F2	23.39	28.00	28.15	28.29	POSITIVE
F3	23.10	26.19	26.03	26.09	POSITIVE
F4	22.95	29.57	29.70	29.57	POSITIVE
F5	23.30	28.83	29.21	28.98	POSITIVE

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), 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	23.55	34.65	34.99	34.83	POSITIVE
F2	23.39	34.98	34.52	35.06	POSITIVE
F3	23.10	31.31	31.32	31.43	POSITIVE
F4	22.95	32.86	32.98	32.76	POSITIVE
F5	23.30	33.19	33.44	33.53	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	23.55	36.13	35.71	35.52	POSITIVE
F2	23.39	37.38	38.15	38.23	POSITIVE
F3	23.10	34.03	34.20	34.44	POSITIVE
F4	22.95	32.60	32.94	32.79	POSITIVE
F5	23.30	36.49	36.92	36.82	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 to 5. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Lamellar epithelial thickness and scatter lamellae with thrombi (F1, F3, F4, F5). One filament with focal interlamellar hyperplasia and fusion noted in F1. Mild to moderate multifocal interlamellar hyperplasia with spaces (lacunae) occasionally filled with cell debris (F2, F3, F4), epithelial spongiosis, chloride cell hypertrophy and displacement (F2) and prominent goblet cells noted in all fish. Occasional amoebic cells resembling *Neoparamoeba perurans* were noted in F2

and few basophilic epithelial inclusions (likely epitheliocystis) noted in F3, F4 & F5. Several scattered aneurysmal dilation/telangiectasia noted in F3, F4 & F5.

Skin & Muscle: Absence of epidermis (F1).

Heart: Occasional endocardial fibre thickness noted in atrium chamber (F5).

Gut and pyloric caeca: Some fibrous adhesions (F1), some sloughing noted in the hindgut of F1, F3, F4 & F5.

Pancreas: Within normal range.

Liver: Within normal range.

Kidney: Within normal range.

Spleen: Foci of cell necrosis and haemorrhage (F5).

Signed:

A black rectangular box redacting the signature of the Fish Health Inspector.

Date: 11/10/2018

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

[REDACTED]
The Scottish Salmon Company
1 Smithy Lane
Lochgilphead
Argyll
PA31 8TA
[REDACTED]

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0169	DATE OF VISIT	05/09/2018
SITE No	FS1091	SITE NAME	Vacasay
INSPECTOR	Andrea Warwick	CASE No	20180429

Inspection of site

The above site was inspected in conjunction with veterinary officers from the Animal and Plant Health Agency following a report of a potential welfare issue by a member of the public.

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were 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 site was inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice). On this occasion, the average number of adult female *Lepeophtheirus salmonis* per fish had exceeded the suggested criteria for treatment as detailed in the Code of Good Practice. The operator of the site was taking appropriate measures to reduce the numbers of sea lice in accordance with the site specific lice management procedure.

The site was found to have had average number of adult female *Lepeophtheirus salmonis* per fish of 3 or above. The count from week 34 had not been reported to the Fish Health Inspectorate as part of the required measures to demonstrate that satisfactory measures are in place for the control of sea lice. Where the average adult female sea lice per fish count reaches 3 or above this

R10

must be reported to the Fish Health Inspectorate within seven days of the date of the count. Please ensure that future counts that exceed the reporting or intervention levels are reported to the Fish Health Inspectorate.

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

A separate report will be issued by the Animal and Plant Health Agency.

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

Signed:

A black rectangular box redacting the signature of the Fish Health Inspector.

Date: 11/09/2018

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: 2018-0430 Date of visit: 04/09/2018

Time spent on site: 1 hour Main Inspector: JET

Site No: FIS0173 Site Name: Loch Glow
Business No: FIB0159 Business Name: Loch Glow Angling Club

Case Types: 1 REP 2 REG 3 4 5 6

Water Temp (°C): 15 Thermometer No: T147 FHI 045 completed

Observations: Region: FI Water type: F 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:
[Empty box]

Additional Case Information:

Fishery inspected following reports of perch mortality.

Fishery stocked with brown trout, rainbow trout and tiger trout. Perch and pike are native to the Loch
800lb of mixed trout stocked each week.

First report of perch mortality 01/09/2018, 1-2 inch in size, discoloured skin observed. Varying reports from different anglers, one angler saying up to one hundred dead perch observed, two others saying just a few. Seagulls have been observed feeding on the dying perch. No other issues with other larger sized perch or other species of fish stocked on site.

No dead or moribund fish observed during inspection.

No issues with water quality, water was clear during inspection.

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

Total No facilities	<input type="text" value="1"/>		Facilities stocked	<input type="text" value="1"/>		No facilities inspected	<input type="text" value="1"/>	
Species	<input type="text" value="RTR"/>	<input type="text" value="TRO"/>	<input type="text" value="TTR"/>	<input type="text" value="FPE"/>	<input type="text" value="PIK"/>			
Age group	<input type="text" value="Mix"/>	<input type="text" value="Mix"/>	<input type="text" value="Mix"/>	<input type="text" value="Mix"/>	<input type="text" value="Mix"/>			
No Fish	<input type="text" value="Unknown"/>	<input type="text" value="Unknown"/>	<input type="text" value="Unknown"/>	<input type="text" value="Unknown"/>	<input type="text" value="Unknown"/>			
Mean Fish Wt	<input type="text" value="Mix"/>	<input type="text" value="Mix"/>	<input type="text" value="Mix"/>	<input type="text" value="Mix"/>	<input type="text" value="Mix"/>			
Next Fallow Date (Site)	<input type="text" value="N/A"/>			Next Input Date (Site)	<input type="text" value="04/09/2018"/>			

Recent (last 4 wks) disease problems? Any escapes (since last visit)?

If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?

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:

██████████
Loch Glow Angling Club
23 Queensferry Road
Rosyth
Fife
KY11 2PX
████████████████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FIB0159	DATE OF VISIT	04/09/2018
SITE No	FIS0173	SITE NAME	Loch Glow
INSPECTOR	Joe Triscott	CASE No	20180430

The above site was inspected following reports from the fishery operator of an increased mortality of juvenile perch (*Perca fluviatilis*).

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.

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: 05/09/2018

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: 2018-0433 Date of visit: 11/09/2018

Time spent on site: 2 hours Main Inspector: AJW

Site No: SS0346 Site Name: Rubha Mor
Business No: SB0366 Business Name: The Caledonian Oyster Company

Case Types: 1 ECI 2 3 4 5 6

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

Observations: Region: ST 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:

Additional Case Information:

No current movement book, new one sent. New site manager will backdate information where possible.

"Application to Amend" form completed.

No issues on site. All stock sourced from Guernsey. Plan not to sell shells for relaying in future due to D vex on site.

No mortality record kept as none observed.

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

Total No facilities	<input type="text" value="3000"/>	Facilities stocked	<input type="text" value="2500"/>	No facilities inspected	<input type="text" value="2000"/>
Species	<input type="text" value="CGI"/>	<input type="text" value="OED"/>			
Age group	<input type="text" value="mixed"/>	<input type="text" value="mixed"/>			
No Fish	<input type="text" value="unknown"/>	<input type="text" value="unknown"/>			
Mean Fish Wt	<input type="text" value="mixed"/>	<input type="text" value="mixed"/>			
Next Fallow Date (Site)	<input type="text" value="none"/>		Next Input Date (Site)	<input type="text" value="this week"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<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)</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:	<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"/>	

<input type="text"/>

Records checked between:

Case Number:	2018-0433	Site No:	SS0346
Date of Visit	11/09/2018	Inspector:	AJW
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
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	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
			2
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
			10
	Frequency of movements on from equivalent zone or compartment including third country	0	10
			20
	Number of suppliers	0	5
			10
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
			2
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
			6
	Number of destinations	0	3
			6
Management practices			
		Secure (effluent treatment)	Unsecure (no effluent treatment)
		None	
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1
			2
	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
	Sites sharing staff and equipment	0	1
			5
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			2
			0
Total Risk			45
			HIGH

Site No: SS0346
Case No: 2018-0433
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



██████████
The Caledonian Oyster Company
54 Lorn Road
Dunbeg
by Oban
PA37 1QQ
████████████████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0366	DATE OF VISIT	11/09/2018
SITE No	SS0346	SITE NAME	Rubha Mor
INSPECTOR	Amanda Walker	CASE No	20180433

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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 not available for inspection.

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.

The following points were raised with the site representative during the inspection:

Site manager was unable to locate the current movement record book. A new movement book was sent out to the site and will be backdated where possible.

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:

A black rectangular box redacting the signature of the Fish Health Inspector.

Fish Health Inspector

Date: 27/11/2018

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: 2018-0436 Date of visit: 11/09/2018

Time spent on site: 1.5 hours Main Inspector: JET

Site No: SS0908 Site Name: Drumyeonmore Bay

Business No: SB0512 Business Name: Gigha Oysters

Case Types: 1 ECI 2 3 4 5 6

Water Temp (°C): 14 Thermometer No: T147 FHI 045 completed

Observations: Region: ST 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:

Additional Case Information:

Site operating as nursery site. Stock grown to ~40g (2 years) before being moved to East Tarbert Bay.
Small amount of crab predation on site.
Movement records for East Tarbert Bay also collected.

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

Total No facilities	<input type="text" value="80"/>	Facilities stocked	<input type="text" value="65"/>	No facilities inspected	<input type="text" value="80"/>
Species	<input type="text" value="CGI"/>	<input type="text" value="CGI"/>			
Age group	<input type="text" value="2017"/>	<input type="text" value="2018"/>			
No Fish	<input type="text" value="250,000"/>	<input type="text" value="150,000"/>			
Mean Fish Wt	<input type="text" value="25g"/>	<input type="text" value="10g"/>			
Next Fallow Date (Site)	<input type="text" value="N/A"/>		Next Input Date (Site)	<input type="text" value="Summer 2019"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<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)</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:	<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"/>	

<input type="text"/>

Records checked between:

Case Number:	2018-0436	Site No:	SS0908	
Date of Visit	11/09/2018	Inspector:	JET	
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	
	Susceptible to Marteilia refringens (OED, MED)	0	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
0				
Live shellfish movements				
		0	1-2	>3
Movements on	Frequency of movements on from equivalent MS	0	5	10
	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
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3	6
	Number of destinations	0	3	6
2				
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
	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
0				
Biosecurity				
	Number of sites	1	2 or 3	≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1	2
	Sites sharing staff and equipment	0	1	5
	Yes No			
	Disinfection of equipment between sites, use of footbaths etc	0	2	
2				
Total Risk				
12				
LOW				

[REDACTED]
Gigha Oysters
Gallochoille
Isle of Gigha
Argyll
PA41 7AD
[REDACTED]

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0512	DATE OF VISIT	11/09/2018
SITE No	SS0908	SITE NAME	Drumyeonmore Bay
INSPECTOR	Joe Triscott	CASE No	20180436

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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

Records

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

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

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


Mortality records were inspected and found to be adequately maintained.

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:

A black rectangular box redacting the signature of the Fish Health Inspector.

Date: 14/09/2018

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: 2018-0440 Date of visit: 12/09/2018

Time spent on site: 1.5 hours Main Inspector: JET

Site No: FS1100 Site Name: Quarantine Facility
Business No: FB0393 Business Name: Marine Environmental Research Laboratory

Case Types: 1 REG 2 3 4 5 6

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

Observations: Region: ST Water type: S CoGP MA: M-49

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:

Site has been fallow since last inspection, may be used again in 2019 to hold cleaner fish prior to being moved in to the General Aquarium for research work.

Business and site details updated following change in management at Marine Environmental Research Laboratory.

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

Total No facilities	<input type="text" value="2"/>	Facilities stocked	<input type="text" value="0"/>	No facilities inspected	<input type="text" value="2"/>
Species	<input type="text" value="N/A"/>				
Age group	<input type="text"/>				
No Fish	<input type="text"/>				
Mean Fish Wt	<input type="text"/>				
Next Fallow Date (Site)	<input type="text" value="Currently fallow"/>		Next Input Date (Site)	<input type="text" value="Possibly in 2019"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?

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:

██████████
Marine Environmental Research Laboratory
University of Stirling
Machrihanish Campbeltown
Argyll
PA28 6PZ
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0393	DATE OF VISIT	12/09/2018
SITE No	FS1100	SITE NAME	Quarantine Facility
INSPECTOR	Joe Triscott	CASE No	20180440

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

On this occasion, the site was found to be fallow.

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

No aquaculture animal and aquaculture animal product movements on or off site have taken place since the last inspection

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

Signed: ██████████

Date: 20/09/2018

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: 2018-0441 Date of visit: 12/09/2018

Time spent on site: 5 hours Main Inspector: JET

Site No: FS0851 Site Name: Ardgadden

Business No: FB0169 Business Name: The Scottish Salmon Company

Case Types: 1 ECI 2 CNI 3 SLI 4 VMD 5 6

Water Temp (°C): 13 Thermometer No: T147 FHI 045 completed

Observations: Region: ST Water type: S CoGP MA: M-42

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:

Additional Case Information:

Paperwork completed 12/09/18. Cage inspection and VMD sampling completed 13/09/2018.

Input of wild wrasse due to be input w/b 24/09/2018

H2O2 treatment carried out w/b 27/08/2018 to treat AGD

W/b 20/08/2018 adult female lice numbers rose above suggested criteria for treatment, hydroliser treatment during same week (73% lice clearance), further hydroliser treatment scheduled for 17/09/18.

Fish sampled for VMD appeared healthy.

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

Total No facilities	<input type="text" value="14"/>	Facilities stocked	<input type="text" value="11"/>	No facilities inspected	<input type="text" value="14"/>
Species	<input type="text" value="SAL"/>	<input type="text" value="LUM"/>			
Age group	<input type="text" value="2017 S0"/>	<input type="text" value="2018"/>			
No Fish	<input type="text" value="605,124"/>	<input type="text" value="36,422"/>			
Mean Fish Wt	<input type="text" value="2.185 kg"/>	<input type="text" value="Mix"/>			
Next Fallow Date (Site)	<input type="text" value="June 2019"/>		Next Input Date (Site)	<input type="text" value="September 2019"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<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).	Increase in CT values from PCR tests for AGD during August. H2O2 treatment administered.	

Records checked between:

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													
Fish nos	1	2	3										
Pool Group													
Species	SAL	SAL	SAL										
Average weight	2.0000	2.0000	2.0000										
Sex	N/A	N/A	N/A										
Water Type	SW	SW	SW										
Stock Details		Ormsary Smolt Unit	Ormsary Smolt Unit	Ormsary Smolt Unit									
	Stock Origin												
Facility No	1	4	11										

Case Number:	2018-0441	Site No:	FS0851	Insp:	JET		
Date of Visit	12/09/2018	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		
	Number of suppliers	0	5	10	14	0	
Movements off	Frequency of movements off	0	3	6	10	10	
	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	1	
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		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	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					21	MEDIUM	

Case No: **2018-0441**

Site No: **FS0851**

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) followed 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 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. Does the stock on site appear satisfactory in relation to sea lice level and 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)

A.D.D., Seal Blinds, Tensioned Nets, Top Nets

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: 2018-0441

Site No: FS0851

Date of Visit: 12/09/2018

Inspector: JET

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?

[REDACTED]
The Scottish Salmon Company
1 Smithy Lane
Lochgilphead
Argyll
PA31 8TA
[REDACTED]

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0169	DATE OF VISIT	12/09/2018
SITE No	FS0851	SITE NAME	Ardgadden
INSPECTOR	Joe Triscott	CASE No	20180441

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second 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.

No mortality levels exceeding the reporting criteria have been recorded since the last inspection.

R25

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 2013

Medicine records were inspected and found to be adequately maintained.

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, fish farm management agreements and statements and containment and escapes.

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

Signed:



Date: 14/09/2018

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: 2018-0442 Date of visit: 11/09/2018

Time spent on site: 3 hrs Main Inspector: RJS

Site No: SS0452 Site Name: Islay

Business No: SB0289 Business Name: G. & J. Archibald

Case Types: 1 ECI 2 3 4 5 6

Water Temp (°C): 13.8 Thermometer No: T148 FHI 045 completed

Observations: Region: ST 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:

Additional Case Information:

No current issues on the site. The staff have been busy working on the agricultural farm following the damage caused by inclement weather earlier in the year. There were a few bags that were fouled and required shells to be graded on site. The site had also been affected by the sand from the dunes which were eroded by the storms earlier in the year. A few empty shells were also observed, particularly in the upper bags of the trestle stacks. The site suffers from predation, particularly from crabs, which is managed by using creels. Empty shells are used to create roads on the farm. Stock is sourced from either Walney or Guernsey with no issues in obtaining seed. Have had to take smaller seed which can suffer more mortality following stocking. Water quality is B in the summer and although there are depuration tanks at Craigens Farm they struggle to achieve the desired quality due to the water supply being peaty. May move the system to the shorebase on a borehole supply. Oysters are marketed on the island and through the LFO.

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

Total No facilities	<input type="text" value="~200"/>		Facilities stocked	<input type="text" value="All"/>		No facilities inspected	<input type="text" value="All"/>	
Species	<input type="text" value="OED"/>	<input type="text" value="CGI"/>	<input type="text" value="CGI"/>	<input type="text" value="CGI"/>				
Age group	<input type="text" value="2014"/>	<input type="text" value="2018"/>	<input type="text" value="2017"/>	<input type="text" value="2016"/>				
No Fish	<input type="text" value="~700"/>	<input type="text" value="1.7 million"/>	<input type="text" value="1 million"/>	<input type="text" value="300 K"/>				
Mean Fish Wt	<input type="text" value="~40g"/>	<input type="text" value="1g - 20g"/>	<input type="text" value="20g - 60g"/>	<input type="text" value="50g - 80g"/>				
Next Fallow Date (Site)	<input type="text" value="No Fallow"/>			Next Input Date (Site)	<input type="text" value="May - September annually"/>			

Recent (last 4 wks) disease problems? Any escapes (since last visit)?

If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<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)</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:	<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"/>	

<input type="text"/>

Records checked between:

Case Number:	2018-0442	Site No:	SS0452
Date of Visit	11/09/2018	Inspector:	RJS
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
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	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
			0
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
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
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			Total Risk
			43
			HIGH

[REDACTED]
G. & J. Archibald
Craigens
Gruinart Bridgend
Islay, Argyll
PA44 7PW
[REDACTED]

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0289	DATE OF VISIT	11/09/2018
SITE No	SS0452	SITE NAME	Islay
INSPECTOR	Ron Smith	CASE No	20180442

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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.

Mortality records were inspected and found to be adequately maintained.

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:

A black rectangular box redacting the signature of the Fish Health Inspector.

Date: 02/10/2018

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: 2018-0443 Date of visit: 12/09/2018

Time spent on site: 4 hrs Main Inspector: RJS

Site No: SS0302 Site Name: Site 1

Business No: SB0202 Business Name: Ardencaple Oysters (P.S-K)

Case Types: 1 ECI 2 3 4 5 6

Water Temp (°C): 13.7 Thermometer No: T148 FHI 045 completed

Observations: Region: ST 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:

Additional Case Information:

No issues on site. Shells are growing well but some bags are fouled with weed and squirts. The site is understaffed as recruitment is proving difficult, husbandry of the stocks is time consuming for a one man operation. Water category is B and all shells are sold through SSMG and depurated in Bellshill. Stocks have previously been sourced from Guernsey, but the smaller seed doesn't survive well. Part grown stocks are to be sourced this year from Isle of Mull Oysters. Predation from crabs and birds and have suffered from poaching in the past. Some wild native oysters observed on 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

Total No facilities	<input type="text" value="400"/>	Facilities stocked	<input type="text" value="300"/>	No facilities inspected	<input type="text" value="All"/>
Species	<input type="text" value="CGI"/>				
Age group	<input type="text" value="2014 - 2017"/>				
No Fish	<input type="text" value="~750K"/>				
Mean Fish Wt	<input type="text" value="10g - 70g"/>				
Next Fallow Date (Site)	<input type="text" value="No plans"/>	Next Input Date (Site)	<input type="text" value="Oct/Nov 2018"/>		

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?

If yes, detail:

If other, detail:

2. Medicines records available for inspection?

3. Are records complete and correctly entered?

4. Are fish in a withdrawal period?

5. If yes, what treatment(s)?

If other, detail:

6. Are medicines stored appropriately?

Biosecurity Records

1. Biosecurity records available for inspection? Y

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

3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any *increased (unexplained)* mortality at the site been included? Y

4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and *how* and *when* that will be notified to Scottish Ministers? Y

5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher 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? N

2. If yes, are results available for inspection?

3. Any significant results?

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

Records checked between:

Case Number:	2018-0443	Site No:	SS0302
Date of Visit	12/09/2018	Inspector:	RJS
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
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	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
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
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
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
			Yes
	Disinfection of equipment between sites, use of footbaths etc	0	2
Total Risk			25
			MEDIUM

██████████
Ardencaple Oysters (P.S-K)
Strathenry House
Leslie
Fife
KY6 3HY
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0202	DATE OF VISIT	12/09/2018
SITE No	SS0302	SITE NAME	Site 1
INSPECTOR	Ron Smith	CASE No	20180443

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second 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.

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:

A black rectangular box redacting the signature of the Fish Health Inspector.

Date: 09/10/2018

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: 2018-0444 Date of visit: 13/09/2018

Time spent on site: 2.5 hrs Main Inspector: RJS

Site No: SS0366 Site Name: Ardshellach
Business No: SB0528 Business Name: Seil Sound Shellfish

Case Types: 1 ECI 2 3 4 5 6

Water Temp (°C): 13.6 Thermometer No: T148 FHI 045 completed

Observations: Region: ST 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:

Additional Case Information:

No issues on site. The majority of bags are heavily fouled with weed, squirts and sponge. The shells on site are growing too large for the traditional market and has been rather neglected by site staff. Water category is B and predation occurs from crabs and birds. A few empty shells could be observed and majority of stocks need grading and re-bagging. Shells are marketed through the LFO and locally at Oban pier. A few wild native oyster shells observed on the sea bed. Discussed with site operator that husbandry is in his own interests with regard to the viability of the stocks and the economics of the business, but he accepts that there are limitations in undertaking husbandry whilst pursuing multiple enterprises within a fragile and relatively remote community.

Case No: **2018-0444** Site No: **SS0366**
 Date of Visit: **13/09/2018** Inspector(s): **RJS**

Registration/Authorisation Details

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

Site Details

Total No facilities	60	Facilities stocked	30	No facilities inspected	All
Species	CGI				
Age group	2014				
No Fish	~20K				
Mean Fish Wt	130g				
Next Fallow Date (Site)	No plans		Next Input Date (Site)	September 2018	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<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)</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:	<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"/>	

<input type="text"/>

Records checked between:

Case Number:	2018-0444	Site No:	SS0366
Date of Visit	13/09/2018	Inspector:	RJS
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
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	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
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
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
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
			Yes
	Disinfection of equipment between sites, use of footbaths etc	0	2
Total Risk			27
			MEDIUM

Seil Sound Shellfish
The Ferry House
Easdale Island
Oban, Argyll
PA34 4TB

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0528	DATE OF VISIT	13/09/2018
SITE No	SS0366	SITE NAME	Ardshellach
INSPECTOR	Ron Smith	CASE No	20180444

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second 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.

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: 02/10/2018

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: ST Water type: S 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:

Additional Case Information:

No issues on site. The majority of bags are heavily fouled with weed, squirts and sponge. Some of the shells on site are growing too large for the traditional market and has been rather neglected by site staff. Water category is B and predation occurs from crabs and birds. A few empty shells could be observed and majority of stocks need grading and re-bagging. Shells are marketed through the LFO and locally at Oban pier. A few wild native oyster shells observed on the sea bed. Discussed with site operator that husbandry is in his own interests with regard to the viability of the stocks and the economics of the business, but he accepts that there are limitations in undertaking husbandry whilst pursuing multiple enterprises within a fragile and relatively remote community.

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

Total No facilities	<input type="text" value="60"/>	Facilities stocked	<input type="text" value="60"/>	No facilities inspected	<input type="text" value="All"/>
Species	<input type="text" value="CGI"/>				
Age group	<input type="text" value="2016"/>				
No Fish	<input type="text" value="~60K"/>				
Mean Fish Wt	<input type="text" value="130g"/>				
Next Fallow Date (Site)	<input type="text" value="No plans"/>		Next Input Date (Site)	<input type="text" value="No plans"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<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)</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:	<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"/>	

<input type="text"/>

Records checked between:

Case Number:	2018-0445	Site No:	SS0851
Date of Visit	13/09/2018	Inspector:	RJS
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
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	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
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
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
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
			Yes
	Disinfection of equipment between sites, use of footbaths etc	0	2
Total Risk			22
			MEDIUM

Seil Sound Shellfish
The Ferry House
Easdale Island
Oban, Argyll
PA34 4TB

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0528	DATE OF VISIT	13/09/2018
SITE No	SS0851	SITE NAME	Sgeir Liath - Mhor
INSPECTOR	Ron Smith	CASE No	20180445

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second 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.

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: 02/10/2018

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:

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:

Site currently fallow and in a state of redevelopment which has started but on hold at present. Future of site is uncertain. Options are open for production or R&D work.

Likely change to business correspondent and potentially business name in near future (October 2018). Inspector to follow up and confirm any changes through an email of registration details to site - sent 20/09/18.

Potentially only native oyster work in near future - to produce juveniles / spat etc but still awaiting confirmation

Native brood population were culled out and moved off site 24/4/18. Frozen then moved by harvest bin by Douglasbrae Ltd. to Keith for incineration.

Site to be inactivated until future plans agreed - unsure of the timing.

Surveillance frequency form not completed as site fallow and to be inactivated.

Case No: **2018-0448** Site No: **SS0089**

Date of Visit: **11/09/2018** Inspector(s): **NLP**

Registration/Authorisation Details

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

Site Details

Total No facilities	2 brood tanks, 8 Larval tanks, algal production facilities	Facilities stocked	0	No facilities inspected	all areas
Species	Fallow				
Age group					
No Fish					
Mean Fish Wt					
Next Fallow Date (Site)		Next Input Date (Site)	Unsure of site future at present		

Recent (last 4 wks) disease problems? **N/A** Any escapes (since last visit)? **N/A**
 If yes, detail:

Movement Records

- 1. Movement records available for inspection? **Y**
- 2. Date of last inspection: **11/10/2017**
- 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)?
- 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: **Incinerated off site by DouglasBrae Ltd.**
- 3. Mortality records complete and correctly entered? **Y**
- 4. Recent mortality (last 4 wks): **N/A site fallow since April 2018**
- 5. Evidence of recent increased/atypical mortalities? **N/A**
 If yes, facility nos/no mortality per facility/no stock per facility/reason:

- 6. Any other peaks in mortality during period checked? **Y**

If yes, detail: **Grumbling mortality in previous oyster stocks, generally single figure mortality, but from a low level stock number**

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

If yes, detail action: **samples taken and analysed by FVG - bacteriological and histological analysis but no significant results found**

- 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet. **N/A**

1. Recent treatments (last 4 wks)?	<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)</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:	<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"/>	Y
2. If yes, are results available for inspection?	<input type="checkbox"/>	Y
3. Any significant results?	<input type="checkbox"/>	N
If yes, detail (if not detailed under recent disease problems).	<input type="text"/>	

Records checked between:

FAI Aquaculture Ltd
Ardtoe Marine Research Facility
Ardtoe, Acharacle
Argyll
PH36 4LD

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0470	DATE OF VISIT	11/09/2018
SITE No	SS0089	SITE NAME	Marine Farming Unit (Hatchery)
INSPECTOR	Neil Purvis	CASE No	20180448

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

On this occasion the site was found to be fallow.

Records

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.

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.

Due to the uncertainty of the future of the site, the Marine Farming Unit (Hatchery) SS0089 will be made inactive on the Fish Health Inspectorate (FHI) database. Whilst the site is inactive, it

will not be subject to further aquatic animal disease surveillance. However, if farming operations recommence and the site is restocked with shellfish then you must inform the FHI prior to restocking. In such circumstances the site will be reactivated and fall back into the routine aquatic animal health surveillance programme.

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: 3 October 2018

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:	2018-0455	Date of visit:	12/09/2018			
Time spent on site:	4h	Main Inspector:	DJT			
Site No:	FS1027	Site Name:	Linga (Setterness)			
Business No:	FB0440	Business Name:	Grieg Seafood Shetland Ltd			
Case Types:	1 REP	2 DIA	3	4	5	6
Water Temp (°C):	13	Thermometer No:	Site	FHI 045 completed		
Observations:	Region:	SH	Water type:	S	CoGP MA:	S-4
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:

Additional Case Information:

Two cages of Landcatch with low mortalities. Girlsta stock mainly effected

Since last inspection (29/8/18) 36305 mortalities recorded (wk 35, 13512, 3.24% Wk 36, 16433 4.74%)

Mortalities started to increase 28/8/18.

Whole fish being disposed of at total waste management.

Accelerated dead haul harvests have been ongoing with an aim to fallow the site by mid October.

Case No: **2018-0455** Site No: **FS1027**
 Date of Visit: **12/09/2018** Inspector(s): **DJT**

Registration/Authorisation Details

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

Site Details

Total No facilities	10	Facilities stocked	5	No facilities inspected	5
Species	SAL	Lump			
Age group	2017 S1	N/A			
No Fish	198,000	38,000			
Mean Fish Wt	4.5kg	N/A			
Next Fallow Date (Site)	mid Oct 2018		Next Input Date (Site)	Late January	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail: **CMS Gill anaemia**

Movement Records

- 1. Movement records available for inspection?
- 2. Date of last inspection: **29/08/2018**
- 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? **Incinerated - Shetland Waste to Energy**
 If other detail: **Total waste management due to the increased mortalities**
- 3. Mortality records complete and correctly entered?
- 4. Recent mortality (last 4 wks): **36305 last two weeks see additional comments for more detail**
- 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
as above
- 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: **samples taken. Accelerated dead haul harvests instigated.**
- 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	N
If yes, detail:	<input type="text"/>	
If other, detail:	<input type="text"/>	
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"/>	N
5. If yes, what treatment(s)?	<input type="text"/>	
If other, detail:	<input type="text"/>	
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
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"/>
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"/>
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"/>
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"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
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"/>	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).	<input type="text" value="gill anaemia, CMS, possible jellyfish damage"/>	

Records checked between:

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								
Species	SAL	SAL	SAL	SAL	SAL	SAL							
Average weight	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000							
Sex	N/A	N/A	N/A	N/A	N/A	N/A							
Water Type	SW	SW	SW	SW	SW	SW							
Stock Details													
		Girlsta	Girlsta	Girlsta	Girlsta	Girlsta	Girlsta						
Stock Origin													
Facility No	3	3	4	4	4								

Case no: 2018-0455

Site No: FS1027

Method of killing: Percussive

Date of visit: 12/09/2018

Inspector(s): DJI

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												
	Lethargic	S	S	S	S	S							
	Hanging vertical												
	Spiralling												
	Flashing												
	Loss of equilibrium												
Body	Dark	W	W	W	W	W							
	Distended abdomen												
	Anorexic												
	Scale Oedema												
Opercula	Shortened			m		W							
	Flared												
Haemorrhaging	Throat					S							
	Ventrum					S							
	Base of fins												
	Elsewhere												
Eyes	Exophthalmic												
	Enophthalmic (sunken)												
	Cataract												
	Haemorrhagic												
Gills	Pale	S	S	S	S	W							
	Zoned												
	Necrotic					W							
Lesions	Flank												
	Elsewhere												
Vent	Inflamed												
	Trailing faeces												
Lice Load	Estimate numbers												
Internal Signs													
Ascites	Clear												
	Bloody	S	S		W								
Oedema	In tissues												
Heart	Pale/anaemic	S	S	S	S								
	Granulomas												
	Deformed			W									
Liver	Petechial haem			S									
	Gross haem												
	Tissue breakdown												
	Enlarged												
	Colour number(s)	1	1	1	1	six to seven							
	Granulomas												
	Lesions												
Pyloric caeca	Petechial haem												
	Tubules mauve												
	Lack of fat												
Spleen	Enlarged					S							
	Granulomas												
Gut	No food present												
	Yellow pseudo-faeces												
	External haem												
	Internal haem												
Body wall	Haemorrhaging												
Swim bladder	Haemorrhaging												
	Fluid filled												
Kidney	Swollen												
	Grey	W	W	W	W	W							
	Granular												
	Liquefied												
General	Parasites present												
	Anaemia												

Additional comments:

adhesions 3 and 4 fish 5 heart dark/swollen

Site No: FS1027
Case No: 2018-0455
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



[REDACTED]
Grieg Seafood Shetland Ltd
Gremista
Lerwick
Shetland
ZE1 OPX
[REDACTED]

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0440	DATE OF VISIT	12/09/2018
SITE No	FS1027	SITE NAME	Linga (Setterness)
INSPECTOR	David Tomlinson	CASE No	20180455

Section 1: Summary

The above site was inspected, following a report from the company of a recent increase in mortalities. A number of dark, lethargic fish were observed across the site. Five fish were removed for further examination and subsequent diagnostic sampling.

Histopathology examination revealed complex gill pathology with marked circulatory disturbances (potentially associated with a water borne insult) and mild cardiomyopathy with features consistent with cardiomyopathy syndrome (CMS), additional samples tested positive for piscine myocarditis virus the causative agent of CMS, by QPCR. Mild peritonitis was also noted.

Due to the gill health issues reported on site, samples were screened for salmon gill poxvirus, *Neoparamoeba perurans* (causative agent of amoebic gill disease) and *Paranucleospora theridion* (syn, *Desmozoon lepeophtherii*) by QPCR. Samples tested positive for all three pathogens.

Sample tested positive by QPCR for infectious pancreatic necrosis virus (IPNV). However histopathology results were not consistent with IPN disease.

A *Vibrio* sp. was also isolated. The level and purity of growth would not suggest bacteria are implicated as a primary pathogen in current fish morbidity.

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

During the inspection a number of lethargic Atlantic salmon were observed. The site was stocked with 198,000 2017 S1 Atlantic salmon at an average weight of 4.5 kg and 38,000 lumpfish. Mortality rates had started to increase during week 35 with 13,512 (3.24%) and 16,433 (4.74%) recorded the following week. Fish tissue samples had been taken with CMS and gill anaemia confirmed and damage associated with a jellyfish bloom observed.

Five lethargic fish were removed for further examination and subsequent diagnostic sampling. All fish had darkened bodies and pale gills, fish 5 had necrotic gills. Fish 3 and 5 had shortened opercula with haemorrhaging evident on the throat and ventrum of fish 5.

Internally all fish had grey kidneys, fish 1,2 and 3 had bloody ascities. The hearts of fish 1-4 were pale. The heart of fish 3 was also deformed with petechial haemorrhaging on the liver. Splenomegaly was evident in fish 5.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1 and 2	1	3	Atlantic salmon	4.5 kg, 2017 S1	Girlsta
3-5	1	4	Atlantic salmon	4.5 kg, 2017 S1	Girlsta

Results

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

The following bacteria were isolated from fish 1-5:

- *Vibrio* sp.

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

Infectious pancreatic necrosis virus (IPNV)

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	16.12	37.37	37.38	37.39	POSITIVE

Piscine myocarditis virus (CMS)

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	15.68	23.58	23.60	23.81	POSITIVE

R09

Salmon gill poxvirus

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	-	-	-	-	NEGATIVE
F2	-	-	-	-	NEGATIVE
F3	21.81	28.81	28.76	28.72	POSITIVE
F4	20.94	35.33	35	34.91	POSITIVE
F5	21.22	>40	38	39.42	POSITIVE

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), 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	20.27	35.74	35.16	35.75	POSITIVE
F3	21.81	34.56	34.01	33.74	POSITIVE
F4	20.94	33.95	34.28	33.72	POSITIVE
F5	21.22	35.7	37.01	35.82	POSITIVE

Paranucleospora theridion (syn, *Desmozoon lepeophtherii*)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	-	-	-	-	NEGATIVE
F2	20.27	35.37	34.77	35.23	POSITIVE
F3	21.81	33.76	33.98	33.86	POSITIVE
F4	20.94	31.99	32.01	31.92	POSITIVE
F5	21.22	33.59	33.33	33.67	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. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Marked presence of lamellar circulatory disturbances with several lamellae showing thrombi and aneurysmal dilation/telangiectasia noted in all fish. Irregular lamellar epithelial surface and lamellar epithelial hyperplasia also noted. Fish 5 also showed some free blood among gill filament.

Skin & Muscle: Partial absence of epidermal layer in all fish. Degeneration of individual white skeletal muscle fibres noted in fish 2.

Heart: Small foci of subendocardial leucocyte infiltration and myofibre degeneration at the spongy layer (fish 1, 2 and 3). Nest of basophilic nuclei were also noted at the junction of the spongy and compact layer (fish 1-4).

Gut and pyloric caeca: Some cell sloughing (fish 3), fibrous adhesions (likely associated with vaccine administration) note in al fish.

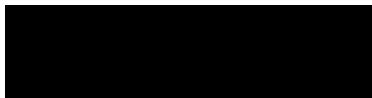
Pancreas: Within normal range.

Liver: Mild multifocal hepatocyte vacuolation and focal cell infiltration (fish 1 and 4).

Kidney: Within normal range.

Spleen: Mild depletion of white pulp (fish 2).

Signed:



Fish Health Inspector

Date: 18/10/2018

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:	2018-0456	Date of visit:	13/09/2018			
Time spent on site:	4h	Main Inspector:	DJT			
Site No:	FS0710	Site Name:	Sandwick			
Business No:	FB0095	Business Name:	Cooke Aquaculture Scotland Ltd			
Case Types:	1 REP	2 DIA	3	4	5	6
Water Temp (°C):	13.1	Thermometer No:	T173	FHI 045 completed		
Observations:	Region:	SH	Water type:	S	CoGP MA:	S-3
Dead/weak/abnormally behaving fish present?	<input type="checkbox"/> y	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="checkbox"/> y	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="checkbox"/> y	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="checkbox"/> y					

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

Additional Case Information:

Three pens stocked and inspected. Some fish were not shoaling and some were lethargic. Five were removed for sampling.

Mortality events that meet the reporting criteria, Wk 17 (3.51%) wk 18 2.37%, wk 20 1.22% wk 22 1.42% wk 25 1.02%, wk 28 1.01% all attributed to CMS

Movement book not inspected as this is held at the shorebase on Unst but the case sheets were completed at area managers office on mainland Shetland.

Case No: **2018-0456** Site No: **FS0710**
 Date of Visit: **13/09/2018** Inspector(s): **DJT**

Registration/Authorisation Details

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

Site Details

Total No facilities	12	Facilities stocked	3	No facilities inspected	3
Species	SAL				
Age group	2017 s1				
No Fish	59,401				
Mean Fish Wt	6.6				
Next Fallow Date (Site)	18th Sep	Next Input Date (Site)	November 2018		

Recent (last 4 wks) disease problems? Y Any escapes (since last visit)? N
 If yes, detail: **Gill anaemia, CMS**

Movement Records

- 1. Movement records available for inspection? N/A
- 2. Date of last inspection: **27/03/2018**
- 3. Are records complete and correctly entered? N/A
- 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)?
 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? **Biogas - Gask, Turriff**
- If other detail: **Total waste management**
- 3. Mortality records complete and correctly entered? Y
- 4. Recent mortality (last 4 wks): **week 37 (2078 3.38%), week 36 3976 (6.07%) wk35 838 (1.09%) week 34 478 (0.53%) Gill issues and CMS**
- 5. Evidence of recent increased/atypical mortalities? Y
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
as above
- 6. Any other peaks in mortality during period checked? Y
 If yes, detail: **see additional info**
- 7. Have increased (unexplained) mortalities been reported to vet or FHI? Y
 If yes, detail action: **Vet on site, functional feeds given**
- 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet. Y

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	TMS	
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)?	TMS	
If other, detail:		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
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"/>
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"/>
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"/>
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"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
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).	CMS, Gill issues	

Records checked between:

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							
	Species	SAL	SAL	SAL	SAL	SAL	SAL						
	Average weight	8.0000	6.0000	5.0000	1.0000	2.0000							
	Sex												
	Water Type	SW	SW	SW	SW	SW	SW						
Stock Details	Stock Origin	Flaeshins	Flaeshins	Flaeshins	Flaeshins	Flaeshins							
	Facility No	3	3	3	3	6							

Additional comments:

██████████
Cooke Aquaculture Scotland Ltd
Crowness Road
Hatston Kirkwall
Orkney
KW15 1RG
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0095	DATE OF VISIT	13/09/2018
SITE No	FS0710	SITE NAME	Sandwick
INSPECTOR	David Tomlinson	CASE No	20180456

Section 1: Summary

The above site was inspected following a report from the company of a recent increase in mortalities. On inspection of the site some fish were not shoaling and a number of lethargic and moribund fish were observed. One moribund and four lethargic fish were removed for further examination and subsequent diagnostic sampling.

Histopathology examination revealed marked endocarditis with features consistent with cardiomyopathy syndrome (CMS), additional samples tested positive for piscine myocarditis virus the causative agent of CMS by QPCR. Mild complex gill pathology with mild circulatory disturbances (potentially associated with a water borne insult) and occasional epitheliocystis were also noted. Fish 1 showed marked splenic necrosis.

Due to the gill health issues reported on site, samples were screened for, *Neoparamoeba perurans* (causative agent of amoebic gill disease) and *Paranucleospora theridion* (syn, *Desmozoon lepeophtherii*) these tested positive by QPCR.

A *Vibrio* sp. was also isolated. The level and purity of growth would not suggest bacteria are implicated as a primary pathogen in current fish morbidity.

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

During the inspection a number of lethargic Atlantic salmon were observed. The site was stocked with 59,401 S1 Atlantic salmon at an average weight of 6.6 kg. Mortality rate had started to increase in week 34 with 478 (0.53%) recorded peaking two weeks later with 3976 (6.07%)

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recorded. On the week of the inspection (week 37) numbers had dropped to 2078 (3.38%). Samples had been taken with CMS and gill pathology being confirmed as the cause of mortality.

Four lethargic and one moribund fish were removed from the pens for further examination and subsequent diagnostic sampling. Fish two had a darkened body and fish 2 and 4 had shortened opercula. Haemorrhaging was evident on the ventrum of fish 2 -5. The gills of fish 1 were pale and necrotic and fish 2,3 and 5 were also pale. There was a lesion on the flank of fish 3.

Internally the hearts of fish 1,2,3 and 5 were deformed and pale/anaemic in fish 1. There was petechial haemorrhaging and minor lesions evident on the liver of fish 2 and 5. The tubules of the pyloric caeca of fish 2 was mauve in colour and also lacked fat. Splenomegaly was evident in fish 1,2 and 5 with granulomas also present on fish 1 and 5. All fish had granular kidneys.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1-4	1	3	Atlantic salmon	6.6 kg 2017 S1	Flaeshins
5	1	6	Atlantic salmon	6.6 kg 2017 S1	Flaeshins

Results

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

The following bacteria were isolated from fish 1,3,4 and 5:

- *Vibrio* sp.

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

Piscine myocarditis virus (CMS)

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	15.60	22.66	22.58	22.72	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 hemorrhagic septicemia virus (VHSV) and salmon gill poxvirus (SGPV).

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	-	-	-	-	NEGATIVE
F3	20.67	36.61	35.82	36.01	POSITIVE
F4	20.05	35.19	34.94	35.82	POSITIVE
F5	-	-	-	-	NEGATIVE

Paranucleospora theridion (syn, *Desmozoon lepeophtherii*)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	20.71	31.02	31.08	31.01	POSITIVE
F2	20.84	35.64	35.86	35.76	POSITIVE
F3	20.67	28.01	28	28.11	POSITIVE
F4	20.05	34.33	34.49	34.3	POSITIVE
F5	-	-	-	-	NEGATIVE

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.

Histopathological examination revealed the following:

Gill: Mild multifocal to diffuse lamellar epithelial hyperplasia and fusion noted mainly at the tips of gill filaments, few aneurysmal dilation/telangiectasia and lamellar thrombi (fish 1-5) and lamellar congestion noted in fish 4. Occasional basophilic epithelial inclusions (likely epitheliocystis) noted in fish 3 and 4 and one zooplankton structure surrounded by focal lamellar hyperplasia, lamellar congestion and cell infiltration (fish 5).

Skin & Muscle: Within normal range.

Heart: Occasional small foci of subendocardial leucocyte infiltration and myofibre degeneration at the spongy layer (fish 1 and 3) and moderate to marked diffuse endocarditis and myofibre necrosis at the spongy layer of ventricle and atrium (fish 2, 4 and 5). Focal pericarditis noted in fish 1.

Gut and pyloric caeca: Abdominal adipose tissue with small foci of haemorrhage (fish 1)

Pancreas: Within normal range.

Liver: Mild multifocal to diffuse hepatocyte vacuolation (fish 1,2 and 4) and focally extended sinusoidal congestion (fish 3).

Kidney: Slightly increase number of melano-macrophage aggregates (fish 4 and 5).

Spleen: Marked splenic necrosis (fish 1) and slightly congested (fish 2 and 4).

Signed:



Fish Health Inspector

Date: 18/10/2018

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

R09

Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
Tel - 0131 244 3498 Fax - 0131 244 0944 Email - ms.fishhealth@gov.scot
Website - www.gov.scot/Topics/marine/science

Case No: 2018-0495 Date of visit: 09/10/2018

Time spent on site: 1.5 Hr Main Inspector: WJM

Site No: SS0801 Site Name: Garvan
Business No: SB0406 Business Name: Fass Fern Mussels

Case Types: 1 ECI 2 3 4 5 6

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

Observations: Region: HI 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:

Additional Case Information:

Spat collected at Garvan moved to Sron na Saobhaidh. Stocked moved in late winter. Stock moved onto Garvan comes from Camas a Chuilinn.

It has been an ongoing issue from 2010 that spat from Garvan that stays in Garvan tends to die off. Marine Scotland have investigated but no pathogens have been detected as probable cause. Believed to be an environmental issue of some kind. Stirling Uni. have a PhD project starting in the coming weeks to see what the cause is.

Spat collected at Garvan then moved to Sron na Saobhaidh doesn't die off. Approx. 15m of line in the water at Garvan collecting spat at the moment.

No increased mortality since last inspection. Health of stock and any recorded mortalities recorded in biosecurity log.

Stock looked clean and healthy.

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

Total No facilities	<input type="text" value="15"/>	Facilities stocked	<input type="text" value="7"/>	No facilities inspected	<input type="text" value="15"/>
Species	<input type="text" value="MED"/>	<input type="text" value="MED"/>			
Age group	<input type="text" value="2016"/>	<input type="text" value="2017"/>			
No Fish	<input type="text" value="60 tonnes"/>	<input type="text" value="60 tonnes"/>			
Mean Fish Wt	<input type="text" value="N/A"/>	<input type="text" value="N/A"/>			
Next Fallow Date (Site)	<input type="text" value="never fallow"/>		Next Input Date (Site)	<input type="text" value="JAN-FEB 2019"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<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)</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:	<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:

Case Number:	2018-0495	Site No:	SS0801
Date of Visit	09/10/2018	Inspector:	WJM
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
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	3
			0
			3
			0
Sites within a tidal excursion			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
			2
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
			0
	Number of suppliers	0	5
			10
			0
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
			2
			2
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
			6
			0
	Number of destinations	0	3
			6
			6
Management practices			
		Secure (effluent treatment)	Unsecure (no effluent treatment)
		None	
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
			0
	Depuration of stock from sites outwith MSS management area	0	4
			8
			0
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
			0
Total Risk			20
			MEDIUM

██████████
Fass Fern Mussels
Garvan Glen
Garvan, by Fort William
Inverness-shire
PH33 7AW
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0406	DATE OF VISIT	09/08/2018
SITE No	SS0801	SITE NAME	Garvan
INSPECTOR	Warren Murray	CASE No	20180495

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second year. The category of the site will be reassessed on a routine basis and updated as required.

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

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

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



Date: 16/10/2018

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: 2018-0511 Date of visit: 27/08/2018

Time spent on site: 45 mins Main Inspector: PMM

Site No: SS0819 Site Name: Easterdale
Business No: SB0432 Business Name: Eastvoe Shellfish

Case Types: 1 ECI 2 3 4 5 6

Water Temp (°C): 12.9 Thermometer No: T153 FHI 045 completed

Observations: Region: SH 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/A

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

Additional Case Information:

4 lines on site, 1 line ready to harvest once area opens following toxin test in early July 2018, only reported to be good growth on one half of the line. 1 line is resocked 2017 shells and the remaining two lines are 2018 spat. Not as good settlement as other sites, but still reported to be best settlement for number of years.

No issues reported at this site, some predation from eider ducks, although not reported to have been as heavy predation this year. Good spat settlement observed on lines.

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

Total No facilities	<input type="text" value="4"/>	Facilities stocked	<input type="text" value="4"/>	No facilities inspected	<input type="text" value="4"/>
Species	<input type="text" value="MED"/>	<input type="text" value="MED"/>	<input type="text" value="MED"/>		
Age group	<input type="text" value="2018 Spat"/>	<input type="text" value="2016"/>	<input type="text" value="2017"/>		
No Fish	<input type="text" value="2 lines"/>	<input type="text" value="1 lines"/>	<input type="text" value="1 line"/>		
Mean Fish Wt	<input type="text" value="mixed"/>	<input type="text" value="mixed"/>	<input type="text" value="mixed"/>		
Next Fallow Date (Site)	<input type="text" value="Never fallow"/>		Next Input Date (Site)	<input type="text" value="2018 Spat collection"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

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, add MRT case and enter on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<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)</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:	<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:

Case Number:	2018-0511	Site No:	SS0819		
Date of Visit	27/08/2018	Inspector:	PMM		
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	0	
	Susceptible to Marteilia refringens (OED, MED)	0	3	3	
	Susceptible to OshV (CGI)	0	3	0	
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	0
	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	6
	Number of destinations	0	3	6	3
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	0
	Depuration of stock from sites outwith MSS management area	0	4	8	0
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	0	2	0
Total Risk				29	
				MEDIUM	

██████████
Eastvoe Shellfish
Sained Eastvoe
Scalloway
Shetland
ZE1 0US
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0432	DATE OF VISIT	27/08/2018
SITE No	SS0819	SITE NAME	Easterdale
INSPECTOR	Paul McKay	CASE No	20180511

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second year. The category of the site will be reassessed on a routine basis and updated as required.

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

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

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

Date: 26/10/2018

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