FHI 059, Version 11		Issued by: FHI		Date of issue: 12/09/2017
Case No: 2018-0410				Date of visit: 28/08/2018
Time spent on site: 2	hours		Main Inspector	r: JET
Site No:FS0339Business No:FB0235	Site Name: Business Name:	Furnace (FW) Cooke Aquacult	ture (Freshwate	er) Ltd
Case Types: 1 REP	23	4	5	6
Water Temp (°C): 16	Thermometer No:	Site		FHI 045 completed
Observations:	Region: ST	Water type	: F	CoGP MA:
Dead/weak/abnormally behaving Clinical signs of disease observe Gross pathology observed? Diagnostic samples taken?		N If yes, see	additional inform	mation/clinical score sheet. mation/clinical score sheet. mation/clinical score sheet.
UNI/REG only - if unable to carry	out intended visit deta	il 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.

FHI 059, Version 11			Issu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0410]	Site No:	FS0339)			
Date of Visit:		28/08/2018			Inspector(s):	JET		
Registration/Autho 1. Business/site deta 2. Changes made to Site Details	ails summary		ite representa	itive?			Y N	
Total No facilities Species Age group No Fish Mean Fish Wt Next Fallow Date (S	SAL 2018 S0 1,230,000 70g ite)	17	Facilities sto	cked Next Input Da	12	No facilitie	os inspected	12
Recent (last 4 wks)	disease probl	ems?		Y	Any escapes	s (since last	visit)?	N
If yes, detail:	Gill pox virus	s - increased r	nortality					
Movement Records 1. Movement record 2. Date of last inspect 3. Are records comp 4. Are movement records comp 6. Are health certifice Transport Records 1. Are any movement If yes, is there a system Mortality Records 1. Mortality records	s available fo ction: olete and corro cords availab olete and corro ates for introc ates for introc	ectly entered? le for dead fis ectly entered? ductions (outw t by (or on bel for maintenand	h and waste? ith GB) availa nalf) of the bu	uble? siness (not us			31/05/2018	Y Y Y N/A
 Mortality records a How are mortalitie 		•			Whole fish -	Secanim, W	/idnes	f
If other detail:								
3. Mortality records of	•	correctly ente						Y
 Recent mortality (Evidence of recent 	· · · · ·	typical mortal		ss site (8.7%)				Y
If yes, facility nos/no		••		/reason:				<u> </u>
w/b 13/08 Section B mortalities during the mortalities for the we 3000/day). Mortality	tank 3 - 67,3 e week. w/b 2 eek. w/b 20/0 has dropped	35 (4.41% of s 20/08 Section 1 8 Section A m since 25/08 to	site) mortalitie B tank 3 mort ortality of 43, o 0-200/day a	es, attributed to alities dropped 781 (3.1% of s	d to 610/week site) . Similar r	, Section B a	as a whole ha	d 1465 4 (1000-
 Any other peaks in If yes, detail: 	n mortality du	ring period ch	ecked?					N
7. Have increased (unexplained)	mortalities be	en reported to	vet or FHI?				Y
If yes, detail action:		Reported to		DT				
8. Have 'mortality ev	ents' been re	ported to FHI	? If no, add M	RI case and e	enter on morta	ality events s	sheet.	Y

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	Y
If yes, detail: T.M.S.	
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)? T.M.S.	
If other, detail:	
6. Are medicines stored appropriately?	Y
Biosecurity Records	
1. Biosecurity records available for inspection?	
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher	
health status, certification if required)?	
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of	
aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site?	
If no, detail:	
Results of Surveillance	
1. Has any animal health surveillance been carried out by, or on behalf of, the business?	Y
2. If yes, are results available for inspection?	Y
3. Any significant results?	Y
If yes, detail (if not detailed under recent disease problems). Gill pox virus confirmed by PCR	
Records checked between: 31/05/2018 - 28/08/2018	

Case No:	2018-0410]		Date of visit:	28/08/2018			
Site No:	FS0339]		Inspector:	JET]		
Results Summary	Freq.	1		Da	te of Notifica	tion		
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type	Date	Insp	2 nd Insp					
REP	30/08/2018	JFT	z msp AJW					
	00,00,2010	021	7.011					

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NoFB0235SITE NoFS0339INSPECTORJoe Triscott

 DATE OF VISIT
 28/08/2018

 SITE NAME
 Furnace (FW)

 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.

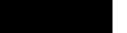
Mortality records were inspected and found to be adequately maintained.

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

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

FHI 059, Version 11	ls	sued by: FHI		Date of it	ssue: 12/09/2017
Case No: 2018-0411				Date of visit:	30/08/2018
Time spent on site: 4	h		Main Inspecto	or: D.	JT
Site No: FS0517 Business No: FB0447	Site Name: Business Name:	Ardessie A Wester Ross Fi	sheries Ltd		
Case Types: 1 ECI	2 CNI 3 SLI	4 REP	5 DIA	6	
Water Temp (°C): 12.5	Thermometer No:	T173		FHI 045 comple	ted
Observations:	Region: HI	Water type	: S	CoGP MA:	M-14
Dead/weak/abnormally behaving Clinical signs of disease observe Gross pathology observed? Diagnostic samples taken?	•	Y If yes, see	additional infor	mation/clinical sco mation/clinical sco mation/clinical sco	ore sheet.
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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0411]	Site No:	FS0517	7			
Date of Visit:		30/08/2018			Inspector(s):	DJT]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		ite representa	ative?			Y N	
Site Details								
Total No facilities		12	Facilities sto	cked	6	No facilitie	s inspected	12
Species	SAL	WRS		Ī				
Age group	2017 S0	mix wild						
No Fish	37,508	1,338						
Mean Fish Wt	1.3	N/A						
Next Fallow Date (S	ite)	March 2019		Next Input Da	ate (Site)	April 2019		
				noxt input be		7.0111 2010		
Recent (last 4 wks)	disease prob	lems?		Y	Any escapes	s (since last v	/isit)?	N
If yes, detail:	AGD					(,	
Maria di Davida								
Movement Record								
1. Movement record		or inspection?						Y
2. Date of last inspe							10/05/2016	
3. Are records comp		•						у
4. Are movement re				•				у
5. Are records comp								у
6. Are health certific	ates for intro	ductions (outw	ith GB) availa	able?				n/a
Transport Records	5							
1. Are any movemen If yes, is there a sys								y y
Mortality Records			·					
1. Mortality records	available for	inspection?						Y
2. How are mortalitie		•			Biogas - Bar	kip		
	· · · · · · · · · · · · · · · · · · ·	iled but due to	volume sent	to Barkin	Dioguo Dui	in p		
3. Mortality records				to Banapi				Y
4. Recent mortality (•	, i i i i i i i i i i i i i i i i i i i		%), August for	whole site. 6	WRS Augus	t	
5. Evidence of recer	nt increased/a	atypical mortal		<i>//</i>				Y
If yes, facility nos/no				/reason:				•
as above			· · ·					
6. Any other peaks i	n mortality du	uring period ch	ecked?					n
If yes, detail:								
7. Have increased (unexplained)	mortalities bee	en reported to	o vet or FHI?				У
If yes, detail action:		FVG site insp	pection and F	HI site inspect	tion			
8. Have 'mortality ev	vents' been re	eported to FHI	? If no, add M	RT case and e	enter on morta	ality events s	heet.	У

Treatments and Medicines Records		
1. Recent treatments (last 4 wks)?		Y
If yes, detail: peroxide		
If other, detail: TMS		
2. Medicines records available for inspection?		У
3. Are records complete and correctly entered?		Y
4. Are fish in a withdrawal period?		У
5. If yes, what treatment(s)? Peroxide Th	MS	
If other, detail:		
6. Are medicines stored appropriately?		У
Biosecurity Records		
1. Biosecurity records available for inspection?	[У
2. Has the manner and frequency of mortality removal, recording and safe dis		У
3. Has the manner and period in which the APB will notify Scottish Ministers o	or veterinary professional of any	
increased (unexplained) mortality at the site been included?	Ĺ	У
4. Has the action that will be taken in the event that the presence or suspicion		У
is detected been included and how and when that will be notified to Scottish I		
5. Has the health status of aquaculture animals being stocked on the farm site health status, certification if required)?	e been covered (equal or higher	У
6. Have the husbandry and biosecurity measures implemented between each		У
transmission of disease been covered (movement of staff, visitors, equipment		
7. Is documentation available regarding the measures in place to maintain the	e physical containment of	У
aquaculture animals held on site?	_	
8. Have the biosecurity procedures been adequately implemented on site? If no, detail:		У
Results of Surveillance	_	
1. Has any animal health surveillance been carried out by, or on behalf of, the	business?	У
2. If yes, are results available for inspection?		Y
3. Any significant results?		Y
If yes, detail (if not detailed under recent disease problems).	AV, AGD	
Records checked between: 10/5/2016 to 30/	/8/18	

FHI 059, Version 11				Issued by: FHI		
Case no:	2018-0411	Site No:	FS0517	Date of visit/ Sampling:	30/08/2018	30/0
Priority samples:	VI	BA	PA	MG	HI	
Time sampling starts/ends:	13:00:00	14:15:00	Inspector:	DJT	VMD No.	0
Environmental conditions:	1 Indoors	2	3	4	5	
Summary samples	HIST Y	BA Y	MG Y VI	ΥΡΑ	Total Sa	mples

Add Fish/Pools - click

<u> </u>	Deel/Fish No			F 0						
_	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	2 Loch Merkland	Loch Merkland	D Loch Merkland	S Loch Merkland	2 Loch Merkland				
Ś	racility NO	Q21	QZ1	QZ1	Q8	Q8				

08/2018	08/2018 Additional Sample Information:										
6		Total Te	ests ass	igned	3						
						-					

FHI 059, Versio	on 11		Issued by: FHI						Date of issue: 12/09/2				
Case no:	2018-0411		Site No: FS0517			7	M	ethod o	f killing:	Percus	sive]	
Date of visit:	30/08/20)18	Inspector(s):					5	Sheet Ro	elevant:	Y)	
S for strong preser	nce: M for medium presence: W f	for weak pres	ence										
Fish Number		1 1		2 3	4	5			1			1	
	er death (if > 45 minutes)												
External Signs	, · ·												
Behaviour	Moribund			S									
	Lethargic	S	S	S	s	S							
	Hanging vertical				_								
	Spiralling	_			_								
	Flashing Loss of equilibrium				-								
Body	Dark												
Body	Distended abdomen												
	Anorexic												
	Scale Oedema												
Opercula	Shortened											1	
-	Flared]	
Haemorrhaging	Throat												
	Ventrum												
	Base of fins												
-	Elsewhere			w								-	
Eyes	Exophthalmic												
	Enophthalmic (sunken)												
	Cataract Haemorrhagic				-		-						
Gills	Pale												
0113	Zoned												
	Necrotic												
Lesions	Flank												
	Elsewhere												
Vent	Inflamed												
	Trailing faeces												
Lice Load	Estimate numbers												
Internal Signs													
Ascites	Clear				_								
O a starra	Bloody	_			_								
Oedema	In tissues Pale/anaemic				-								
Heart	Granulomas	_											
	Deformed	w	w	w	w	w							
Liver	Petechial haem	w	m	w	w	w							
2.00.	Gross haem												
	Tissue breakdown												
	Enlarged											1	
	Colour number(s)												
	Granulomas												
	Lesions												
Pyloric caeca	Petechial haem												
	Tubules mauve											-	
Culoar	Lack of fat		m		m								
Spleen	Enlarged Granulomas		m		m							-	
Gut	No food present											1	
Gui	Yellow pseudo-faeces		S	S	s								
	External haem		-	-	ľ.							1	
	Internal haem												
Body wall	Haemorrhaging											1	
Swim bladder	Haemorrhaging											1	
	Fluid filled											1	
Kidney	Swollen]	
	Grey												
	Granular												
	Liquefied												
General	Parasites present												
	Anaemia												

Case no:	2018-0411

L

Date of visit:

30/08/2018

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

	nce: M for medium presence: W for	N	1		1		1	1
Fish Number								
	er death (if > 45 minutes)							
External Signs								
Behaviour	Moribund	_				 		
	Lethargic							
	Hanging vertical	_				 		
	Spiralling							
	Flashing							
	Loss of equilibrium							
Body	Dark							
	Distended abdomen							
	Anorexic							
	Scale Oedema							
Opercula	Shortened							
	Flared							
Haemorrhaging	Throat							
	Ventrum							
	Base of fins							
	Elsewhere							
Eyes	Exophthalmic							
	Enophthalmic (sunken)							
	Cataract							
	Haemorrhagic							
Gills	Pale							
	Zoned							
	Necrotic	-						
Legione	Flank	-						
Lesions								
Maart	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							
041	Yellow pseudo-faeces							
	External haem							
	Internal haem							
Deduurall								
Body wall Swim bladder	Haemorrhaging Haemorrhaging							
Swilli bladder	Inaemornaumo							
	Fluid filled			· · · · ·				
Kidney	Fluid filled Swollen							
Kidney	Fluid filled Swollen Grey							
Kidney	Fluid filled Swollen Grey Granular							
Kidney	Fluid filled Swollen Grey Granular Liquefied							
Kidney General	Fluid filled Swollen Grey Granular							

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.

		leoded by: 111			Bato		. 12/00/2011
Case Number:	2018-0411		Site No:	FS0517		Insp:	DJT
Date of Visit	30/08/2018		No of m	ovements/s	supp./dest.		Score
Live fish movements			0	1-5	6-10	>10	
Movements on (from out		novements on from equivalent MS	0	5	10	14	0
with GB) of susceptible species		novements on from equivalent zone or including third country	0	9	18	26	0
	Number of sup		0	5		14	0
Movements off	Frequency of n		0	3	6	10	
	Number of des		0	3	6	10	3
Exposure via water		Site contacts	0	1-5	6-10		
Water contacts with other		ed (secure water supply through					
farms (holding species susceptible to same	disinfection or	•	0				0
diseases)	farms upstrean	or in a coastal zone with category I n or within 1 tidal excursion	1	2	4		1
	farms upstrean	or in a coastal zone with category III n or within 1 tidal excursion	1	3	6		
		or in a coastal zone with category V n 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 pro	cessing	0				
	Processing ow	n fish (re-cycling risk)	1				1
	Processing fish	from MS of equivalent status	2				
	Processing fish equivalent state	n from zone or compartment of Js	4				
	Processing fish	from Category III farm	8				
	Processing fish	from Category V farm	10				
Disposal of fish and fish by-	Site's own was	te only processed.	0	ĺ			
products	Common proce	esses with other farms	3				3
	Collection poin	t for waste from other farms	5				
Use of unpasteurised feeds	No feeding of u	inpasteurised feed	0				0
	Feeding unpas	teurised 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 s	taff and equipment	0	1	2		1
Disinfection of equipment	Yes		0				
between sites, use of footbaths etc.	No		1				1
CoGP/Regulator							
Practices in accordance with regulator or industry	Yes		0				0
code of practice	No		3				
Platform access to cages	Yes		0				0
	No		2				
					Total Rank		14 LOW

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0411	Site No:	FS0517
Sea Lice Inspection (Seawater Sites Only 1. Has the site experienced sea lice problem		n
2. Is the CoGP Farm Management Area (or	equivalent) fallowed synchronously on a single y	ear class basis? y
azamethiphos and emamectin benzoate) as can these be deployed in a reasonable period	cenced in-feed and bath sea lice medications (ind s well as access to suitable biological and/or med od of time? gement agreement or statement relevant to the si	hanical control measures, and
5. Are sea lice count records available for in	spection? (Legal SSI, CoGP Annex 6)	v
	standard specified in the SSI and the CoGP? (L	egal SSI, CoGP Annex 6) y
7. Are sea lice (<i>L. salmonis</i>) record levels be records are inspected? (CoGP Annex 6)	elow the suggested criteria for treatment in the Co	oGP during the period that Y
8. Have average adult female sea lice (<i>L. sa</i> records are inspected?	Imonis) numbers per fish been at a level of 3 or a	above during the period that
If yes, have these been reported to the Fish	Health Inspectorate? If no, FHI see comment.	n/a
9. Is C. elongatus infestation at a level which	n is considered to cause significant welfare proble	ems? (CoGP 4.3.81, 5.3.50) n
	nistered or other actions taken when <i>L. salmonis</i> a elongatus is considered to have welfare implication	
11. Has any other action been taken (where	applicable)?	n/a
12. Have therapeutic treatments or the actio	ns taken had a significant impact upon the lice le	vels recorded? n/a
	d out in cooperation between participating farms? , where fewer populations or part populations are	· · · · · · · · · · · · · · · · · · ·
	ement procedure with waypoints describing set a infestation?	actions to deal with recognised y
16. Does the stock on site appear satisfacto reasons.	ry in relation to sea lice level and sea lice count d	lata? If no please detail y
Containment Inspection		
	age due to predators in the current or previous pr	
	the predation experienced on site? (Detail below	y y
Predator nets AE Top nets MML	tensioned nets	
If other, detail below:		
3. Have escape incidents or events been ex	perienced on or in the vicinity of the site since the	e last FHI inspection?
If Yes proceed with questions $4 - 9$. If No sk		
4. Have these been reported to Scottish Min		
5. Have these been reported to local DSFB t	orthwith (where they exist)? (CoGP – 4.4.37, 5.4	.17)
6. Have these been reported to the SSPO and	nd local fisheries trusts forthwith (where they exis	t)? (CoGP – 4.4.37, 5.4.17)
7. Were methods (if any) used to recover es	capees? If yes give detail	
8. If gill nets were deployed was this action a Ministers? (Legal, CoGP – 4.4.38, 5.4.18)	agreed with local wild fish interests and was perm	ission given by Scottish
9. What action was taken to prevent and mir	nimise the risk of further escapes? (Not covered in	n code but could
be considered under satisfactory measu	ures of the Act)	
10. Is the site inspected as satisfactory with	regards to containment? If no, please detail rease	on(s) y

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0411 Site	No: FS0517	
Date of Visit: 30/08/2018	Inspector: DJT	
Deint of Compliance		
Point of Compliance		
 Is the farm under inspection located within If N, no further questions require completion 	Ŭ	у
Points of Compliance for Both Farm Man	agement Agreements and Statements	
 Has a current farm management agreemed. Is the current FMAg/S available for inspect Does the FMAg/S identify the relevant farm Does the FMAg/S identify the fish farm sit Does the FMAg/S identify the date of common common common state of reviewed. 	ction? m management area? te(s) to which it applies? mencement of the agreement or stateme	У У У
Arrangements for Fish Health Manageme	nt	
8. Does the FMAg/S identify the minimum he farm?	ealth standards for the stocks to be introd	luced to the area or y
9. Does the FMAg/S identify the vaccination 10. Does the FMAg/S identify the species of 11. Does the FMAg/S identify the maximum individual farm?	fish which may be stocked into the area	or farm? y
12. Does the FMAg/S identify the arrangement fish farm in the area or the individual farm?	ents for the storage and disposal of any d	ead fish from any y
Arrangements for The Management of Se	a Lice	
13. Does the FMAg/S identify arrangements	for the sharing of data on sea lice number	ers and treatments? y
14. Does the FMAg/S identify the availability of statement?	and the use of medicines on farms cove	
15. Does the FMAg/S identify any requirement lice on farms in the area or individual farms?	· -	
16. Does the FMAg/S identify the circumstar used on farms in the area or individual farms		cleaner fish are to be y
17. Does the FMAg/S identify the arrangement		within the area? y
Live Fish Movements		
18. Does the FMAg/S identify the circumstar area or farm?	nces when live fish may be introduced or	
19. Does the FMAg/S identify the arrangeme or individual farms?	ents for the movement of live fish on and	off sites in the area y

Harvesting

20. Does the FMAg/S identify acceptable harvest practices on farms in the area or individual farms?	у
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?	У
22. Does the FMAg/S identify whether one or more year classes may be stocked onto sites covered by the agreement or statement?	У
23. Does the FMAg/S identify whether broodstock or potential broodstock are to be kept on any site covered by the agreement or statement?	У
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?	n/a
Management and operation	
25. Is the fish farm being managed and operated in accordance with the agreement or statement?	У
26. What is the version no/date of issue of the FMAg/S? Issue 4	

Site No: FS0517

Case No: 2018-0411

Nature of non-compliance:

Action taken (FHI):

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

Case No:	2018-0411	l		Date of visit:	30/08/2018			
Site No:	FS0517			Inspector:	DJT			
Results Summary Freq. Date of Notification								
,		Database	Insp		Insp	Writing	Insp	2 nd Insp
AGD PCR	5/5	05/09/2018	DJT	05/09/2018	DJT	28/09/2018	DJT	AJW
IHN PCR	0/1	05/09/2018	DJT	05/09/2018	DJT	28/09/2018	DJT	AJW
IPN PCR	0/1	05/09/2018	DJT	05/09/2018	DJT	28/09/2018	DJT	AJW
ISA PCR	0/1	05/09/2018	DJT	05/09/2018	DJT	28/09/2018	DJT	AJW
Paranucleospora theridion PCR	5/5	05/09/2018	DJT	05/09/2018	DJT	28/09/2018	DJT	AJW
SAV	1/1	05/09/2018	D.IT	05/09/2018	D.IT	28/09/2018	D.IT	AJW
VHS	0/1	05/09/2018		05/09/2018		28/09/2018		AJW
Salmon Gill Poxvirus	5/5	05/09/2018		05/09/2018		28/09/2018		AJW
PMVP	0/1	07/09/2018		10/09/2018		28/09/2018		AJW
AMGD	5/5	10/09/2018		10/09/2018		28/09/2018		AJW
CGDH	5/5	10/09/2018		10/09/2018		28/09/2018		AJW
EPIT	3/5	10/09/2018		10/09/2018		28/09/2018		AJW
HPAT	2/5	10/09/2018		10/09/2018		28/09/2018		AJW
GPAT	5/5	10/09/2018		10/09/2018		28/09/2018		AJW
LPAT	5/5 4/5	10/09/2018		10/09/2018		28/09/2018		AJW
PPAT	4/5 1/5	10/09/2018		10/09/2018		28/09/2018		AJW
SALH	1/5	10/09/2018		10/09/2018		28/09/2018		AJW
SALN	1/5	10/09/2018	DJT	10/09/2018	DJT	28/09/2018	DJT	AJVV
Report Summary]				
Case Type	Date	Insp	2 nd Insp					
ECI,CNI,SLI,REP	17/09/2018		ALW					
DIA	28/09/2018	DJT	AJW					

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NoFB0447SITE NoFS0517INSPECTORDavid Tomlinson

DATE OF VISIT30/08/2018SITE NAMEArdessie ACASE NO20180411

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

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

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

<u>Results</u>

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		Reported Result (PCR)		
1	16.78	37.20	36.29	37.17	POSITIVE

Salmon gill poxvirus

Fish Number	Endogenous control Cp value		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).

Fish Number	Endogenous control Cp value		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

Neoparamoeba perurans (AGD)

Paranucleospora theridion

Fish Number	Endogenous control Cp value		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 (synechiae), lamellar necrosis with karryiorhectic 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.

<u>Heart</u>: 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.

<u>Spleen</u>: 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

marine scotland science



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.

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

FHI 059, Version 11	Issu	ied by: FHI		Date of is	ssue: 12/09/2017
Case No: 2018-0412				Date of visit:	30/08/2018
Time spent on site: 4	1	3	Main Inspector	r: D.	JT
Site No: FS0675 Business No: FB0447	Site Name: Business Name:	Ardessie B Wester Ross Fi	sheries Ltd		
Case Types: 1 ECI	2 CNI 3 SLI	4 REP	5 DIA	6	
Water Temp (°C): 12.5	Thermometer No:	T173		FHI 045 complet	ted
Observations:	Region: HI	Water type	: S	CoGP MA:	M-14
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	y If yes, see	additional inform	nation/clinical sco nation/clinical sco nation/clinical sco	ore sheet.
UNI/REG only - if unable to carry	out intended visit detail rea	ason below:			

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.

FHI 059, Version 11			lssu	ued by: FHI			Date of issu	ie: 12/09/2017
Case No:	2018-0412		Site No:	FS0675	<u>.</u>			
Date of Visit:		30/08/201	8		Inspector(s):	DJT		
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		site representa	ative?			y n]
Site Details								
Total No facilities		14	Facilities sto	ocked	10	No facilitie	s 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 (S	ite)	March 2019	9	Next Input Da	ate (Site)	April 2019		
Recent (last 4 wks)	disease prol	blems?		Y	Any escapes	s (since last	visit)?	N
If yes, detail:	AGD							
Movement Records	s							
1. Movement record	ls available f	or inspection	?					Y
2. Date of last inspe							10/05/2016	
3. Are records comp		•						у
4. Are movement re				?				у
5. Are records comp				ahla)				y N/A
6. Are health certific		ductions (out	With GB) availa	able?				
Transport Records	;							
1. Are any movemen								Y
If yes, is there a sys	tem in place	for maintena	nce of transpo	rtation records'	?			Y
Mortality Records								
1. Mortality records		•						Y
2. How are mortalitie					Biogas - Bark	•		
If other detail:				olume of morts t	these are sent	t to Barkip		
3. Mortality records	complete an	d correctly en		(00.00() aill ior		the sheet of the second		T I
4. Recent mortality ((last 4 wks):		August.	′ (39.2%) gill iss	sues AGD cau	sed by plan		month
5. Evidence of recer		· ·						у
If yes, facility nos/no		er facility/no st	tock per facility	//reason:				
as above all pens af								
6. Any other peaks i	n mortality d	luring period c	checked?					N
If yes, detail: 7. Have increased (upovolaineď) mortalities h	con reported to	a vot or EHI2				I Y
If yes, detail action:	inexplained)			samples taken.	Peroxide beir	na administe	red	
8. Have 'mortality ev	vents' been r							Y

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	Y
If yes, detail: Hydrogen peroxide TMS	
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)? TMS Peroxide	
If other, detail:	
6. Are medicines stored appropriately?	Y
Biosecurity Records	
1. Biosecurity records available for inspection?	У
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	У
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?	У
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease	У
is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	V
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher	Y
health status, certification if required)?	
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise	У
transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	V
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	У
8. Have the biosecurity procedures been adequately implemented on site?	V
If no, detail:	1
Results of Surveillance	
1. Has any animal health surveillance been carried out by, or on behalf of, the business?	Y
2. If yes, are results available for inspection?	Y
3. Any significant results?	Y
If yes, detail (if not detailed under recent disease problems). SAV, AGD	
Records checked between: 10/5/2016 to 30/8/18	

FHI 059, Version 11				Issued by: FHI		
Case no:	2018-0412	Site No:	FS0675	Date of visit/ Sampling:	30/08/2018 3	80/(
Priority samples:	VI	BA	PA	MG		
Time sampling starts/ends:	10:30:00	11:30:00	Inspector:	DJT	VMD No.	0
Environmental conditions:	1 Indoors	s 2	3	4	5	
Summary samples	HIST Y	BA Y	MG Y VI	ΥΡΑ	Total Sample	S

Add Fish/Pools - click

Pool/Fish No Fish nos	4		F3	F4	F5	P1						
	1	2	3		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						
Nater Type	SW	SW	SW	SW	SW	SW						
Stock Origin Facility No	D Ardessie A	D Ardessie A	D L Ardessie A	Z Ardessie A	D Ardessie A	Ardessie A						
	verage weight iex Vater Type	verage weight 1.4000 lex N/A Vater Type SW	Verage weight 1.4000 1.4000 iex N/A N/A Vater Type SW SW Vater Type V SW	Verage weight 1.4000 1.4000 1.4000 iex N/A N/A N/A Vater Type SW SW SW Vater Type SW SW SW Vater Type SW SW SW	Verage weight 1.4000 1.4000 1.4000 1.4000 iex N/A N/A N/A N/A N/A Vater Type SW SW SW SW Vater Type SW SW SW SW Vater Type SW SW SW SW	Verage weight 1.4000	Verage weight 1.4000	Average weight 1.4000 1.4000 1.4000 1.4000 1.4000 1.4000 iex N/A N/A N/A N/A N/A N/A N/A Vater Type SW SW SW SW SW SW Vater Type SW SW SW SW SW SW	Average weight 1.4000 <th< th=""><th>Average weight 1.4000 <th< th=""><th>Average weight 1.4000 <th< th=""><th>Average weight 1.4000 <th< th=""></th<></th></th<></th></th<></th></th<>	Average weight 1.4000 <th< th=""><th>Average weight 1.4000 <th< th=""><th>Average weight 1.4000 <th< th=""></th<></th></th<></th></th<>	Average weight 1.4000 <th< th=""><th>Average weight 1.4000 <th< th=""></th<></th></th<>	Average weight 1.4000 <th< th=""></th<>

08/2018	08/2018 Additional Sample Information:													
6		Total Te	ests ass	igned	3									
						-								

FHI 059, Versio		Issued by: FHI						Date of issue: 12/09/201				
Case no:	2018-0412		Site N	0:	FS067	'5	Me	Method of killing: Percussive			sive	
Date of visit:	30/08/20)18	Inspec	tor(s):	DJT			5	Sheet Ro	elevant:	Y	
S for strong preser	nce: M for medium presence: W f	for weak pre-	sonco									
Fish Number		101 Weak pres		3	4	5			1		-	
	er death (if > 45 minutes)											
External Signs	· ·											1
Behaviour	Moribund											
	Lethargic			S	S	S						
	Hanging vertical											
	Spiralling											
	Flashing											
Body	Loss of equilibrium Dark	_		m	m	m						
Body	Distended abdomen	-										
	Anorexic	w	w	w	w	w						
	Scale Oedema											
Opercula	Shortened											1
	Flared											1
Haemorrhaging	Throat]
	Ventrum											
	Base of fins											Į
	Elsewhere											ł
Eyes	Exophthalmic	_										
	Enophthalmic (sunken)											
		_			_							
Gills	Haemorrhagic	_			m	m						
GIIIS	Pale Zoned	-		w	w	w						
Lesions	Necrotic	_		~~		**						
	Flank	-										
Lesions	Elsewhere											
Vent	Inflamed	-										
	Trailing faeces											1
Lice Load	Estimate numbers											1
Internal Signs												
Ascites	Clear											
	Bloody	_	_		_							
Oedema	In tissues				-							
Heart	Pale/anaemic	_	_		_	S						
	Granulomas Deformed	w			-	w						
Liver	Petechial haem	vv				vv						
	Gross haem	-										
	Tissue breakdown	_										
	Enlarged											1
	Colour number(s)											1
	Granulomas											1
	Lesions											
Pyloric caeca	Petechial haem											
	Tubules mauve											l
	Lack of fat	m	m	m								1
Spleen	Enlarged			s	S	S						ł
0	Granulomas											1
Gut	No food present Yellow pseudo-faeces			s	s	S						
	External haem			3	3	3						
	Internal haem											1
Body wall	Haemorrhaging											1
Swim bladder	Haemorrhaging											1
	Fluid filled											1
Kidney	Swollen											1
	Grey											1
	Granular					S						1
	Liquefied]
General	Parasites present											
	Anaemia											

Case no:	2018-0412

Г

Date of visit:

30/08/2018

 ${\bf S}$ for strong presence: ${\bf M}$ for medium presence: ${\bf W}$ for w

	ce: M for medium presence: W for v	٨		-	 -	 -	
Fish Number							
	er death (if > 45 minutes)						
External Signs							
Behaviour	Moribund						
	Lethargic						
	Hanging vertical						
	Spiralling						
	Flashing						
	Loss of equilibrium						
Body	Dark						
	Distended abdomen						
	Anorexic						
	Scale Oedema						
Opercula	Shortened						
	Flared						
Haemorrhaging	Throat						
	Ventrum						
	Base of fins						
	Elsewhere						
Eyes	Exophthalmic						
	Enophthalmic (sunken)						
	Cataract						
	Haemorrhagic						
Gills	Pale						
	Zoned						
	Necrotic						
Lesions	Flank						
	Elsewhere						
Vent	Inflamed						
	Trailing faeces						
Lice Load	Estimate numbers						
Internal Signs							
Ascites	Clear						
	Bloody						
Oedema	In tissues						
Heart	Pale/anaemic						
	Granulomas						
	Deformed						
Liver	Petechial haem						
	Gross haem						
	Tissue breakdown						
	Enlarged						
	Colour number(s)						
	Granulomas						
	Lesions						
Pyloric caeca	Petechial haem						
	Tubules mauve						
	Lack of fat						
Spleen	Enlarged						
	Granulomas						
Gut	No food present						
	Yellow pseudo-faeces						
	External haem						
	Internal haem						
Body wall	Haemorrhaging						
Swim bladder	Haemorrhaging						
	Fluid filled						
Kidney	Swollen						
	Grey						
	Granular						
	Liquefied						
General	Parasites present						
	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.

FHI 059, Version 11		Issued by: FHI			Date	JI 13300	: 12/09/201
Case Number:	2018-0412		Site No:	FS0675		Insp:	DJT
Date of Visit	30/08/2018		No of mo	ovements/s	supp./dest.		Score
Live fish movements			0	1-5	6-10	>10	
Movements on (from out	Frequency of m	novements on from equivalent MS	0	5	10	14	(
with GB) of susceptible species		novements on from equivalent zone or including third country	0	9	18	26	
	Number of sup		0	5	10	14	0
Movements off	Frequency of n	novements off	0	3	6	10	
	Number of des		0	3	6	10	C
Exposure via water		Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species	Farm is protect disinfection or l	ed (secure water supply through	0				
susceptible to same diseases)	Farm is on-line	or in a coastal zone with category I or within 1 tidal excursion	1	2	4		2
		or in a coastal zone with category III n or within 1 tidal excursion	1	3	6		
		or in a coastal zone with category V n 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		C
On farm processing within the rules of the directive	No on farm pro		0				
	Processing own	n fish (re-cycling risk)	1				1
		from MS of equivalent status	2				
	equivalent state		4				
		from Category III farm	8				
	Processing fish	from Category V farm	10				
Disposal of fish and fish by- products			0				
products	Common proce	esses with other farms	3				3
	Collection poin	t for waste from other farms	5				
Use of unpasteurised feeds	No feeding of u	inpasteurised feed	0				(
	Feeding unpas	teurised feed	5				
Biosecurity		Number of sites	1	2 or 3	≥ 4		
Contacts with other sites		from single shore base	0	1	2		1
	Sites sharing s	taff and equipment	0	1	2		
Disinfection of equipment	Yes		0				
between sites, use of footbaths etc	No		1				1
CoGP/Regulator							
Practices in accordance	Yes		0				0
with regulator or industry code of practice	No		3				
Platform access to cages	Yes		0				C
	No		2				
					Total Rank		8 LOW
					Nalik		

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0412	Site No:	FS0675
Sea Lice Inspection (Seawater Sites Only 1. Has the site experienced sea lice problem	-	n
2. Is the CoGP Farm Management Area (or	equivalent) fallowed synchronously on a single ye	ear class basis? y
azamethiphos and emamectin benzoate) as can these be deployed in a reasonable period	cenced in-feed and bath sea lice medications (inc s well as access to suitable biological and/or mech od of time? gement agreement or statement relevant to the si	hanical control measures, and
5. Are sea lice count records available for in	spection? (Legal SSI, CoGP Annex 6)	v
	d standard specified in the SSI and the CoGP? (Lo	egal SSI, CoGP Annex 6) y
7. Are sea lice (<i>L. salmonis</i>) record levels b records are inspected? (CoGP Annex 6)	elow the suggested criteria for treatment in the Co	oGP during the period that Y
8. Have average adult female sea lice (<i>L. sa</i> records are inspected?	almonis) numbers per fish been at a level of 3 or a	above during the period that
If yes, have these been reported to the Fish	Health Inspectorate? If no, FHI see comment.	n/a
9. Is <i>C. elongatus</i> infestation at a level whic	h is considered to cause significant welfare proble	ems? (CoGP 4.3.81, 5.3.50) n
	nistered or other actions taken when <i>L. salmonis l elongatus</i> is considered to have welfare implicati	
11. Has any other action been taken (where	applicable)?	n/a
12. Have therapeutic treatments or the actic	ns taken had a significant impact upon the lice lev	vels recorded? n/a
14. Is there a harvesting strategy for the site sea lice?	d out in cooperation between participating farms? e, where fewer populations or part populations are gement procedure with waypoints describing set a	held without treatment for Y
scenarios during the escalation of a sea lice	infestation?	
16. Does the stock on site appear satisfactor reasons.	ry in relation to sea lice level and sea lice count d	ata? If no please detail Y
	age due to predators in the current or previous pro	
ADD Predator nets	Top nets MML	tensioned nets
If other, detail below:		
If Yes proceed with questions 4 – 9. If No sk 4. Have these been reported to Scottish Mir 5. Have these been reported to local DSFB 6. Have these been reported to the SSPO a 7. Were methods (if any) used to recover es	forthwith (where they exist)? (CoGP – 4.4.37, 5.4 nd local fisheries trusts forthwith (where they exist scapees? If yes give detail	.17) t)? (CoGP – 4.4.37, 5.4.17)
 Ministers? (Legal, CoGP – 4.4.38, 5.4.18) 9. What action was taken to prevent and minister be considered under satisfactory meas 	agreed with local wild fish interests and was perminimise the risk of further escapes? (Not covered in ures of the Act)	n code but could

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0412 Sit	te No: FS0675	
Date of Visit: 30/08/2018	Inspector: DJT	
Point of Compliance		
1. Is the farm under inspection located with If N, no further questions require completion	•	У
Points of Compliance for Both Farm Ma	nagement Agreements and Statement	s
 Has a current farm management agreen Is the current FMAg/S available for inspect. Does the FMAg/S identify the relevant farms Does the FMAg/S identify the fish farms Does the FMAg/S identify the date of control of the FMAg/S identify the date of revenues 	ection? arm management area? site(s) to which it applies? mmencement of the agreement or statem	У У У
Arrangements for Fish Health Managem	ent	
8. Does the FMAg/S identify the minimum farm?	health standards for the stocks to be intro	oduced to the area or y
9. Does the FMAg/S identify the vaccinatio 10. Does the FMAg/S identify the species of 11. Does the FMAg/S identify the maximum individual farm?	of fish which may be stocked into the area	a or farm?
12. Does the FMAg/S identify the arrangen fish farm in the area or the individual farm		dead fish from any y
Arrangements for The Management of S	Sea Lice	
13. Does the FMAg/S identify arrangement	ts for the sharing of data on sea lice num	bers and treatments? y
14. Does the FMAg/S identify the availability	ty and the use of medicines on farms cov	ered by the agreement y
of statement? 15. Does the FMAg/S identify any requirem lice on farms in the area or individual farms		e treatments for sea
16. Does the FMAg/S identify the circumsta used on farms in the area or individual farm	ances under which biological controls and	d cleaner fish are to be y
17. Does the FMAg/S identify the arrangen		ns within the area? y
Live Fish Movements		
18. Does the FMAg/S identify the circumsta area or farm?	ances when live fish may be introduced o	
19. Does the FMAg/S identify the arrangen or individual farms?	nents for the movement of live fish on and	d off sites in the area y

Harvesting

20. Does the FMAg/S identify acceptable harvest practices on farms in the area or individual farms?	у
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?	у
22. Does the FMAg/S identify whether one or more year classes may be stocked onto sites covered by the agreement or statement?	у
23. Does the FMAg/S identify whether broodstock or potential broodstock are to be kept on any site covered by the agreement or statement?	У
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?	у
Management and operation	
25. Is the fish farm being managed and operated in accordance with the agreement or statement?	У
26. What is the version no/date of issue of the FMAg/S? Issue no.4	

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	I		
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	5/5	05/09/2018	DJT	05/09/2018	DJT		DJT	AJW
theridion PCR						08/10/2018		
SAV	1/1	05/09/2018	DJT	05/09/2018	DJT	08/10/2018		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		08/10/2018	DJT	AJW
SALH	1/5	10/09/2018	DJT	10/09/2018	DJT	08/10/2018	DJT	AJW
	-	<u>.</u>		<u> </u>		•		
Report Summary								
Case Type	Date	Insp	2 nd Insp	1				
ECI CNI SLI REP	17/09/2018		ALW	1				
DIA	28/09/2018		AJW	1				
				1				
				1				
	1							
	1							
	1							
			ľ					
	1							
	1							

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOFB0447SITE NOFS0675INSPECTORDavid Tomlinson

DATE OF VISIT30/08/2018SITE NAMEArdessie BCASE NO20180412

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

<u>Results</u>

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:

<u>Gill</u>: Mild to moderate multifocal interlamellar hyperplasia with spaces (lacunae) occasionally filled with cell debris, lamellar fusion and epithelial thickness, multifocal adherence of secondary lamellae (synechiae), lamellar necrosis with karryiorhectic 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.

<u>Heart</u>: 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.

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

<u>Pancreas</u>: 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).

<u>Liver</u>: 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).

<u>Spleen</u>: 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:

Date: 8/10/2018

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

marine scotland science



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.

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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

FHI 059, Version 11		Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0421			Date of visit: 31/08/2018
Time spent on site:	1 hours	Main Ins	spector: ASM
Site No: FS1240 Business No: FB0544	Site Name: Business Name:	Highland 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 Clinical signs of disease observe Gross pathology observed? Diagnostic samples taken?	• •	N/A If yes, see additional	I information/clinical score sheet. I information/clinical score sheet. I information/clinical score sheet.
UNI/REG only - if unable to carr	y out intended visit deta	ail 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.

FHI 059, Version 11				Issued by: FHI	
Case no:	2018-0421	Site No:	FS1240	Date of visit/ Sampling:	31/08/2018 31/0
Priority samples:	VI	BA	PA	MG	н
Time sampling starts/ends:	11:00:00	12:00:00	Inspector:	ASM	VMD No.
Environmental conditions	: 1 Indoors	2	3	4	5
Summary samples	HIST	BA	MG Y 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		5	6	7	8	9	10	11	12
	Pool Group	P1	– P1	P1		P1	P2	P2	P2	P2	P2	P3	P3
	Species												
	Average weight	40g											
	Sex												
	Water Type	SW											
Stock Details		Wild fish (Scarfskerry)											

08/2018			-	rmation: liquified		ection. B	arely ab	ole to ma	ike out i	ndividua	l organs	3		
24 F13 13			ests ass F16 16	signed F17 17	3 F18 18	F19 19	F20 20	P1 1-5	P2 6-10	P3 11-15	P4 16-20			
P3		P3	P4	P4	P4	P4	20 P4	1-5	0-10	11-15	10-20			
40g SW	40g SW	40g SW	40g SW	40g SW	40g SW	40g SW	40g SW	40g SW	40g SW	40g SW	40g SW			
Wild fish (Scarfskerry)	Wild fish Scarfskerry)		Wild fish (Scarfskerry)				Wild fish (Scarfskerry)		Wild fish (Scarfskerry)		Wild fish Scarfskerry)			

FHI 059, Versic	on 11		lss	ued by: FHI			Date of issue: 12/0				ue: 12/09
Case no:	2018-0421		Site No	D:	FS124	0	M	ethod o	f killing:		
Date of visit:	31/08/201	8	Inspector(s): ASM				Sheet Relevant: Y				
S for strong preser	nce: M for medium presence: W fo	or weak pres	ence								
Fish Number		1		3	4	5	6	7	8	9	10
	er death (if > 45 minutes)										
External Signs											
Behaviour	Moribund				-						
	Lethargic Hanging vertical										
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark										
	Distended abdomen										
	Anorexic										
	Scale Oedema										
Opercula	Shortened										
Haomorrhesine	Flared Throat										
Haemorrhaging	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	_			-		S				
Lesions	Flank Elsewhere						3				
Vent	Inflamed				-						
Vent	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										
Dularic cost	Lesions Detechicl beem										
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										
Kidnor	Fluid filled										
Kidney	Swollen										
	Grey Granular										
	Liquefied	S	S	s	S	S	s	S	S	S	S
General	Parasites present										
	Anaemia										

Date of visit:

Issued by: FHI

Case no:	2018-0421

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31/08/2018

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

	nce: M for medium presence: W f		11 1	12 1:	হা ব	4 15	16	17	18	19	20
Fish Number	vr dooth (if , AF minutes)			14	3 14	+ 15	10		18	19	20
	er death (if > 45 minutes)										
External Signs							L		<u> </u>		
Behaviour	Moribund										
	Lethargic						<u> </u>				
	Hanging vertical										
	Spiralling						L				L
	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						—				
Dularia an-	Lesions Retechiel hear										+
Pyloric caeca	Petechial haem				-		—				
	Tubules mauve										
Color	Lack of fat				-		-				
Spleen	Enlarged										
a /	Granulomas						L				
Gut	No food present										
	Yellow pseudo-faeces										
	External haem				آلكم						
	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										
							-		4	-	

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

Case No:	2018-0421			Date of visit:	31/08/2018			
Site No:	FS1240			Inspector:	ASM			
	F	1		Det	te of Notificat	·		
Results Summary	Freq.	Database	Insp			Writing	Insp	2 nd Insp
NODA PCR	0/4	05/09/2018		05/09/2018	-	10/09/2018		KAS
NODA QPCR	0/4	05/09/2018		05/09/2018		10/09/2018	ASM	KAS
VHS PCR	0/4	05/09/2018	ASM	05/09/2018	ASM	10/09/2018	ASM	KAS
IPN PCR	0/4	05/09/2018	ASM	05/09/2018	ASM	10/09/2018	ASM	KAS
Report Summary	1			1				
Case Type	Date	Insp	2 nd Insp					
DIA	10/09/2018		Z Insp KAS					
	10/03/2010							
	1							

marine scotland science



The Haven Scarfskerry Thurso Highland KW14 8XN.

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

DATE OF VISIT31/08/2018LOCATIONScarfskerryINSPECTORAndy MayesCASE NO20180421

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

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

FHI 059, Version 11		Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0422			Date of visit: 15/08/2018
Time spent on site:	10 mins	Main Insp	ASM
Site No: SS0555 Business No: SB0309	Site Name: Business Name:	Allt Briste Loch Laxford Shellfish Ltd.	
Case Types: 1 PSI	23	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: HI	Water type: S	CoGP MA:
Dead/weak/abnormally behavir Clinical signs of disease observ Gross pathology observed? Diagnostic samples taken?	• •	If yes, see additional i	information/clinical score sheet. information/clinical score sheet. information/clinical score sheet.
UNI/REG only - if unable to car	ry out intended visit detai	il reason below:	

Additional Case Information:

Persistent problem with tube worm fouling

-HI 059, Version 11	Issued by: FHI			Date	of issue: 12/09/
Case Number:	2018-0422 Site No:	SS055	5		
Date of Visit	15/08/2018 Inspector:	ASM]	
Number of Susceptik	ble species on site				
	ies present = <u>LOW</u> risk				
f susceptible species	present, score for each pathogen		No	Yes	
	Susceptible to Bonamia ostrea (OED)		0	25	
	Susceptible to Marteilia refringens (OED, MED)		0	3	3
	Susceptible to OsHV (CGI)		0	3	
Sites within a tidal e	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2	10	0
Live shellfish moven	nents	0	1-2	>3	
Movements on	Frequency of movements on from equivalent MS	0	5	10	0
	Frequency of movements on from equivalent rice				
	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	0	3	6	
	Areas Number of destinations	0	3 3	6 6	
practices	Areas	0			
-	Areas Number of destinations Depuration of stock from own sites within MSS	0 None	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	
	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 None 0	3 Secure (effluent treatment) 1	6 Unsecure (no effluent treatment) 2	0
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area	0 None 0	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	0
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 None 0	3 Secure (effluent treatment) 1	6 Unsecure (no effluent treatment) 2	
oractices Water contacts with depuration facilities	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area	0 None 0 0	3 Secure (effluent treatment) 1 2 4	6 Unsecure (no effluent treatment) 2 6 8	0
Water contacts with depuration facilities Biosecurity	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0	3 Secure (effluent treatment) 1 2	6 Unsecure (no effluent treatment) 2 6 8 8 ≥ 4	0
vater contacts with depuration facilities	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3	6 Unsecure (no effluent treatment) 2 6 8	0
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0 0 0 1	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	0
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 1	3 Secure (effluent treatment) 1 2 4 2 or 3 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	0
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 1 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	0
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	0 0 5

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0422	Site No: SS0555	
Date of case: 15/08/2018	Inspector(s):	ASM
Business/site contacts correct? (if no, upd	ate site summary sheet)	Y
Site Details		
Total No facilities:		ities stocked: 7
SpeciesMEDAge group20162017	MED	
No shellfish 3 longlines 2 longlines	2 longlines	
Mean fish Wt 20g 10g	1g	
Next fallow date (site) No plans	Next input date (site)	Aug-18
Date of last inspection: (ECI or PSI):	05/10/2016	
Any recent increased or atypical mortalities	s? (last 4 weeks):	N
If yes, detail:		
e.g. site		
average, max		
per facility		
Any increased mortalities? (since last insp	ection)	Y
If yes, detail: Many crabs on dropp	ers in 2017. Approx 30% of stock lost. Cr	abs removed by hand
How are mortalities disposed of?		Other (detail)
If other detail: Empty shells disposed on	sea bed	
Are there any diseases on your site?		N
If yes, detail:		
		X.
Have you experienced predation on site? If yes, detail: Eider ducks, not causing s	ignificant losses. Crabs	Ŷ.
	~	
Has the site experienced increased or abn	ormal fouling?	N
If yes, detail:		
Have you observed any invasive species of	on your site?	Y
If yes, detail:		
Do you have an up to date BMP, and are t	here any issues?	V
If yes, detail: No issues		
	the lest 10 menthed (mused sites and)	
What quantity of spat fall have you had in Good, late putting out droppers, hoping for		

Case No:	2018-0422	Date of visit: 15/08/2018						
Site No:	SS0555	Inspector: ASM						
Results Summary	Freq.	Date of Notification						
	•	Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type PSI	Date	Insp	2 nd Insp					
PSI	30/08/2018	ASM	AJW					

marine scotland science



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

FHI 059, Version 11	I	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0423			Date of visit: 15/08/2018
Time spent on site:	15 mins	Main Insp	Dector: ASM
Site No: SS0497 Business No: SB0320	Site Name: Business Name:	Croggan Bay Croggan Oysters	
Case Types: 1 PSI	23	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: ST	Water type: S	CoGP MA:
Dead/weak/abnormally behavin Clinical signs of disease observ Gross pathology observed? Diagnostic samples taken?		If yes, see additional	information/clinical score sheet. information/clinical score sheet. information/clinical score sheet.
UNI/REG only - if unable to car	ry 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.

HI 059, Version 11	Issued by: FHI			Date	of issue: 12/
Case Number:	2018-0423 Site No:	SS049)7]	
Date of Visit	15/08/2018 Inspector:	ASM]	
Number of Susceptil	ble species on site			-	
-	ies present = <u>LOW</u> risk				
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 e	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2	10	0
_ive shellfish mover	nents	0	1-2	>3	
Novements on	Frequency of movements on from equivalent MS		5		
	Frequency of movements on from equivalent neo				
	compartment including third country	0	10	20	
	Number of suppliers	0	5	10	
Novements off					
	Frequency of movements off <u>within</u> MSS Management Areas	0	1	2	
	Frequency of movements off <u>outwith</u> MSS Management		2	C	6
	Areas Number of destinations	0	3	6 6	6
		Ŭ	0		Ū
Management practices		None	Secure (effluent treatment)	Unsecure (no effluent	
			treatment)	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	-	2	<u> </u>	0
	area	0	4	8	0
Biosecurity	Number of sites	1	2 or 3	≥4	
Contacts with other	Sites operating from single shorebase		1	2	0
sites	Sites sharing staff and equipment	0	1	5	0
			Yes	No	
	Disinfection of equipment between sites, use of footbath	is etc	0	2	0

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0423	Site No: SS0497	
Date of case: 15/08/2018	Inspector(s):	ASM
Business/site contacts correct? (if no, upda	ate site summary sheet)	Y
Site Details		
Total No facilities: 6	No facilit	ies stocked: 5
Species CGI CGI		
Age group7 years3 yearsNo shellfish8,00020,000	├───┤ ───┤	
Mean fish Wt 90g 50g		
Next fallow date (site) No plans	Next input date (site)	No plans
Date of last inspection: (ECI or PSI):	03/08/2015	
Any recent increased or atypical mortalities	2 (last 4 weeks):	N
If yes, detail:		
e.g. site		
average, max		
per facility		
Any increased mortalities? (since last inspe	ection)	N
If yes, detail:		
How are mortalities disposed of?		Other (detail)
If other detail: Used to feed chickens or re	eplay paths	
Are there any diseases on your site?		N
If yes, detail:		
Have you experienced predation on site?		N
If yes, detail:		
Has the site experienced increased or abn	ormal fouling?	N
If yes, detail:	sima roanig.	
Have you observed any invasive species o	n vour sito?	N
If yes, detail:		
Do you have an up to date BMP, and are the lf yes, detail: No issues		Y
What quantity of spat fall have you had in t	he last 12 months? (mused sites only)	
N/A		

Case No:	2018-0423	Date of visit: 15/08/2018						
Site No:	SS0497		Inspector: ASM					
Results Summary	Freq.		Date of Notification					
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type	Date	Insp	2 nd Insp					
PSI	30/08/2018	ASM	AJW					





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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0320SITE NOSS0497INSPECTORAndy Mayes

DATE OF CASE15/08/2018SITE NAMECroggan BayCASE NO20180423

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

FHI 059, Version 11	I	ssued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0424			Date of visit: 15/08/2018
Time spent on site:	10 mins	Main Insp	Dector: ASM
Site No: ss0513 Business No: SB0182	Site Name: Business Name:	Loch Crinan Scallop Kings 1997 Ltd	
Case Types: 1 PSI	23	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: ST	Water type: S	CoGP MA:
Dead/weak/abnormally behavin Clinical signs of disease observ Gross pathology observed? Diagnostic samples taken?	· ·	If yes, see additional	information/clinical score sheet. information/clinical score sheet. information/clinical score sheet.
UNI/REG only - if unable to car	ry 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

HI 059, Version 11	Issued by: FHI			Date	e of issue: 12/
Case Number:	2018-0424 Site No:	ss0513	3		
Date of Visit	15/08/2018 Inspector:	ASM]	
Number of Susceptil	ble species on site				
	ies present = <u>LOW</u> risk				
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	
lites within a tidal e	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal				
	excursion	0	2	10	0
ive shellfish moven	nents	0	1-2	>3	
Novements on	Frequency of movements on from equivalent MS	0	5	10	0
	Frequency of movements on from equivalent zone or				
	compartment including third country	0	10	20	
	Number of suppliers	0	5	10	
Novements off					
	Frequency of movements off within MSS Management	0		0	0
	Areas	0	1	2	0
	Frequency of movements off <u>outwith</u> MSS Management	0			
	Areas Number of destinations	0	3	6	
	Number of destinations	0	3	6 6	
lanagement			3 Secure (effluent	6	
-			3 Secure (effluent	6 Unsecure	
Water contacts with	Number of destinations	0	3 Secure (effluent	6 Unsecure (no effluent	
Management practices Water contacts with depuration facilities	Number of destinations Depuration of stock from own sites within MSS	0	3 Secure (effluent	6 Unsecure (no effluent	0
Water contacts with	Number of destinations Depuration of stock from own sites within MSS management area	0 None	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	0
Water contacts with	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 None	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	0
Water contacts with	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area	0 None 0	3 Secure (effluent treatment) 1	6 Unsecure (no effluent treatment) 2	
Water contacts with	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 None 0	3 Secure (effluent treatment) 1	6 Unsecure (no effluent treatment) 2	
vater contacts with depuration facilities	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area	0 None 0 0	3 Secure (effluent treatment) 1 2 4	6 Unsecure (no effluent treatment) 2 6 8	0
Water contacts with depuration facilities	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3	6 Unsecure (no effluent treatment) 2 6 8 8 ≥ 4	0
Water contacts with depuration facilities Biosecurity Contacts with other	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Sites operating from single shorebase	0 None 0 0 0 0	3 Secure (effluent treatment) 1 2 4 4 2 or 3 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	0
Water contacts with depuration facilities	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3	6 Unsecure (no effluent treatment) 2 6 8 8 ≥ 4	0
Water contacts with depuration facilities Biosecurity Contacts with other	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Sites operating from single shorebase	0 None 0 0 0 0	3 Secure (effluent treatment) 1 2 4 4 2 or 3 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	0
Water contacts with depuration facilities Biosecurity Contacts with other	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	
Water contacts with depuration facilities Biosecurity Contacts with other	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Depuration of stock from sites outwith MSS management area Sites operating from single shorebase	0 None 0 0 0 1 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	0
Water contacts with depuration facilities Biosecurity Contacts with other	Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0424	Site No: ss0513	
Date of case: 15/08/2018	Inspector(s):	ASM
Business/site contacts correct? (if no, upda	te site summary sheet)	Y
Site Details		
Total No facilities: 1	No facili	ties stocked: 1
Species PMA		
Age group Mixed		
No shellfish ~8 tonnes		
Mean fish Wt Mixed Next fallow date (site) No plans	Next input date (site)	No plans
Date of last inspection: (ECI or PSI):	23/11/2016	
A construction of the second state of the last of the		
Any recent increased or atypical mortalities If yes, detail:	? (last 4 weeks):	N
e.g. site		
average, max		
per facility		
Any increased mortalities? (since last inspective	ction)	N
If yes, detail:		
How are mortalities disposed of?		Other (detail)
If other detail: None observed		
Are there any diseases on your site?		Ν
If yes, detail:		
Have you experienced predation on site?		N
If yes, detail:		
Has the site experienced increased or abno	ormal fouling?	N
If yes, detail:		
Have you observed any invasive species of	n your site?	N
If yes, detail:		
		N I
Do you have an up to date BMP, and are the lf yes, detail:	lere any issues?	<u>т</u>
What quantity of spat fall have you had in t	ne last 12 months? (mussel sites only):	
N/A		

Case No:	2018-0424			Date of visit:	15/08/2018			
Site No:	ss0513			Inspector:	ASM			
Results Summary	Freq.		Date of Notification					
	1109.	Database	Insp	Phone	Insp		Insp	2 nd Insp
Report Summary	Data		and .					
Case Type PSI	Date 30/08/2018	Insp ASM	2 nd Insp AJW					





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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0182SITE NOSS0513INSPECTORAndy Mayes

DATE OF CASE15/08/2018SITE NAMELoch CrinanCASE NO20180424

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

FHI 059, Version 11	I	ssued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0429			Date of visit: 05/09/2018
Time spent on site: 5.	5 hours	Main Ir	nspector: ALW
Site No: FS1091 Business No: FB0169	Site Name: Business Name:	Vacasay The Scottish Salmon Co	ompany
Case Types: 1 REP 2	2 REG 3 SLI	4 DIA 5	6
Water Temp (°C): 14	Thermometer No:	T148	FHI 045 completed
Observations:	Region: WI	Water type: S	CoGP MA: W-1
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	Y If yes, see addition	al information/clinical score sheet. al information/clinical score sheet. al information/clinical score sheet.
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 ongrowing 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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0429]	Site No:	FS1091]			
Date of Visit:		05/09/2018			Inspector(s):	ALW]
Registration/Author 1. Business/site deta 2. Changes made to Site Details	ails summary		ite representa	ative?			Y N]
Total No facilities		12	Facilities sto	cked	10	No facilitie	s inspected	12
Species	SAL 2017 S1	LUM			<u> </u>	-		
Age group No Fish	2017 31 270,847	Adult 9,522				_		
	270,847 3.1Kg	9,522 40g						
Mean Fish Wt Next Fallow Date (S		End October	2019	Next Input Da	ato (Sito)	March/Apr	1 2010	
Next Fallow Date (S	alle)		2010			March/Apr	11 2019	
Recent (last 4 wks)				Y	Any escapes	s (since last v	visit)?	N
If yes, detail:	Gill health -	AGD/PGD						
Movement Record	s							-
1. Movement record		or inspection?						Y
2. Date of last inspe							07/08/2018	
 Are records comp Are movement re 		•		,				Y Y
5. Are records comp								Y
6. Are health certific				able?				N/A
Transport Records		,	,					
1. Are any movement	nts carried ou	it by (or on be	half) of the hi	isiness (not us	ing a STB)2			
If yes, is there a sys								
Mortality Records	·							
1. Mortality records	available for i	inspection?						Y
2. How are mortalitie					Other (detail)		<u> </u>
If other detail:		/hiteshore Co	ckles			/		
3. Mortality records	complete and	d correctly ente	The second se					Y
				5 (0.42%), wk %), wk 36 to da			•	
4. Recent mortality (````		(4.96%)					
5. Evidence of recer		••		,				Y
If yes, facility nos/no wk 35 - Treatments		-			00 6 4 064 /	4 270/)	0 10 1 020	(2 560/)
wk 55 - Treatments	with hydrolice	er across site.	Caye 4 - 1,40	09 (0.15%), Ca	ige 0 - 1,204 (4.27%), Cay	e 10 - 1,030	(3.30%)
6. Any other peaks i	n mortality du	uring period ch	necked?					N
If yes, detail:								
7. Have increased (unexplained)	mortalities be	en reported to	o vet or FHI?				N/A
If yes, detail action:	anto' hoor		2 If po cold M		optor op mort	lity avanta -	hoot	
8. Have 'mortality ev	venus been re	ported to FHI	11 no, add IV	IKT case and e	enter on morta	anty events s	neet.	Ĭ

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	Y
If yes, detail: T.M.S., Slice	
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)? T.M.S., Slice	
If other, detail:	
6. Are medicines stored appropriately?	Y
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?	Y
2. If yes, are results available for inspection?	Y
3. Any significant results?	Y
If yes, detail (if not detailed under recent disease problems). AGD Positive	
Records checked between: 7/8/18 - 5/9/18	

FHI 059, Version 11				Issued by: FHI	
Case no:	2018-0429	Site No:	FS1091	Date of visit/ Sampling:	05/09/2018 05/0
Priority samples:	VI	BA	PA	MG	н
Time sampling starts/ends:	12:40:00	13:30:00	Inspector:	ALW	VMD No. 0
Environmental conditions:	1 Indoors	2	3	4	5
Summary samples	HIST Y	BA Y	MG Y VI	Y PA	Total Samples

Add Fish/Pools - click

r	Pool/Fish No	F1	F2	F3	F4	F5	P1			
-					4					
	Fish nos	1	2	3	4	5	1-5			
	Pool Group	P1	P1	P1	P1	P1				
	Species	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 Facility No	ພ Amhuinnsuidhe (Langass)	ພ Amhuinnsuidhe (Langass)	ພ Amhuinnsuidhe (Langass)	ы Атhuinnsuidhe (Langass)	D Barvas Hatchery (Carron)	⇔ Amhuinnsuidhe/Barv das			

)9/2018	09/2018 Additional Sample Information:												
6		Total Te	ests ass	igned	3								
	•			-	-	•							

FHI 059, Versio	Version 11		Issued by: F			FHI		Date of issue: 12			ue: 12/0)9/20
Case no:	2018-0429		Site N	0:	FS109)1	Me	ethod o	f killing:	Anaest	hetic]
Date of visit:	05/09/20	018	Inspec	ctor(s):	ALW			S	heet Re	elevant:	Y]
S for strong preser	nce: M for medium presence: W	for weak pres	sence									
Fish Number		101 weak pres		2 3	4	5			1		1	1
	er death (if > 45 minutes)											
External Signs	, , , , , , , , , , , , , , , , , , ,											1
Behaviour	Moribund											
	Lethargic	М	Μ	Μ	М	Μ						
	Hanging vertical											
	Spiralling											
	Flashing											4
Pody	Loss of equilibrium Dark											
Body	Distended abdomen	-										4
	Anorexic											
	Scale Oedema											
Opercula	Shortened	S										1
	Flared]
Haemorrhaging	Throat											
	Ventrum	Μ	М			М						1
	Base of fins											4
-	Elsewhere											-
Eyes	Exophthalmic											4
	Enophthalmic (sunken)											
	Cataract Haemorrhagic	-										4
Gills	Pale											1
	Zoned											1
	Necrotic											
Lesions	Flank											1
	Elsewhere											
Vent	Inflamed											
	Trailing faeces			<u> </u>	l							
Lice Load	Estimate numbers	high	high	high	high	high						
la terre el Oiere e												4
Internal Signs Ascites	Clear	_		-	_							
ASCILES	Bloody											
Oedema	In tissues											
Heart	Pale/anaemic											1
	Granulomas											
	Deformed											
Liver	Petechial haem											
	Gross haem											
	Tissue breakdown											4
	Enlarged Colour number(s)											1
	Granulomas											1
	Lesions											1
Pyloric caeca	Petechial haem											1
	Tubules mauve											1
	Lack of fat											
Spleen	Enlarged											4
. .	Granulomas											-
Gut	No food present	м	м	м	м	м						4
	Yellow pseudo-faeces External haem	IVI	141		IVI	IVI						1
	Internal haem											1
Body wall	Haemorrhaging											1
Swim bladder	Haemorrhaging											1
	Fluid filled											1
Kidney	Swollen]
	Grey											
	Granular											
<u> </u>	Liquefied				_							4
General	Parasites present				_							1
	Anaemia											4

Case no:	2018-0429

Г

Date of visit:

05/09/2018

 ${\boldsymbol{\mathsf{S}}}$ for strong presence: ${\boldsymbol{\mathsf{M}}}$ for medium presence: ${\boldsymbol{\mathsf{W}}}$ for w

Fish Number						 	
	er death (if > 45 minutes)						
External Signs							
Behaviour	Moribund						
	Lethargic						
	Hanging vertical						
	Spiralling						
	Flashing						
	Loss of equilibrium						
Body	Dark						
	Distended abdomen						
	Anorexic						
	Scale Oedema						
Opercula	Shortened						
	Flared						
Haemorrhaging	Throat						
	Ventrum						
	Base of fins						
-	Elsewhere				<u>تـــــا</u>		
Eyes	Exophthalmic						
	Enophthalmic (sunken)						
	Cataract						
<u></u>	Haemorrhagic						
Gills	Pale						
	Zoned						
	Necrotic						
Lesions	Flank	L					
	Elsewhere						
Vent	Inflamed						
	Trailing faeces						
Lice Load	Estimate numbers						
-							
Internal Signs							
Ascites	Clear						
a ·	Bloody						
Oedema	In tissues						
Heart	Pale/anaemic						
	Granulomas						
1.5.00	Deformed Detection became				ļi		ļ
Liver	Petechial haem						
	Gross haem						
	Tissue breakdown						
	Enlarged						
	Colour number(s)						
	Granulomas				i		
Dutant	Lesions Detechicl beam						
Pyloric caeca	Petechial haem						
	Tubules mauve						
Crete	Lack of fat				i		
Spleen	Enlarged						
Out	Granulomas				i		
Gut	No food present						
	Yellow pseudo-faeces						
	External haem						
Desta	Internal haem						
Body wall	Haemorrhaging						
Swim bladder	Haemorrhaging				İ		
	Fluid filled						
Kidney	Swollen						
	Grey						
	Granular						
0	Liquefied						
General	Parasites present	Land I					
	Anaemia		and the second se				

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

FHI 059, Version 11	Issued by: FHI		Date of issue: 12/09/2017		
Case No: 2018-0429		Site No: FS1091			
Sea Lice Inspection (Seawater Site 1. Has the site experienced sea lice			Y		
	rea (or equivalent) fallowed synchronously or	n a single year class basis	? Y		
3. Does the site have access to a ra azamethiphos and emamectin benzo can these be deployed in a reasonal	nge of licenced in-feed and bath sea lice medi bate) as well as access to suitable biological a	ications (including deltame and/or mechanical control	ethrin, measures, and		
	le for inspection? (Legal SSI, CoGP Annex 6)		V		
	required standard specified in the SSI and the		P Appex 6)		
	levels below the suggested criteria for treatme				
	e (<i>L. salmonis</i>) numbers per fish been at a le	vel of 3 or above during th	e period that Y		
If yes, have these been reported to t	he Fish Health Inspectorate? If no, FHI see co	omment.	N		
9. Is <i>C. elongatus</i> infestation at a lev	vel which is considered to cause significant we	lfare problems? (CoGP 4.	.3.81, 5.3.50) N		
•	en administered or other actions taken when <i>L</i> here <i>C. elongatus</i> is considered to have welfa				
11. Has any other action been taken	(where applicable)?		Y		
12. Have therapeutic treatments or t	he actions taken had a significant impact upor	the lice levels recorded?	Y		
	d, carried out in cooperation between participa		Y		
sea lice?	the site, where fewer populations or part populations				
15. Is there a site specific written lice scenarios during the escalation of a	e management procedure with waypoints desc sea lice infestation?	ribing set actions to deal v	with recognised Y		
16. Does the stock on site appear sa reasons.	atisfactory in relation to sea lice level and sea	ice count data? If no pleas	se detail Y		
Containment Inspection					
	ent damage due to predators in the current or I		\$?		
2. Are measures in place to mitigate	against the predation experienced on site? (D	etail below)			
If other, detail below:					
3. Have escape incidents or events	been experienced on or in the vicinity of the s	ite since the last FHI inspe	ection? N		
If Yes proceed with questions 4 – 9.	If No skip to question 10				
4. Have these been reported to Scot	tish Ministers?				
	DSFB forthwith (where they exist)? (CoGP –				
6. Have these been reported to the s	SSPO and local fisheries trusts forthwith (wher	e they exist)? (CoGP – 4.4	4.37, 5.4.17)		
7. Were methods (if any) used to rec	over escapees? If yes give detail				
	action agreed with local wild fish interests and	d was permission given by	Scottish		
Ministers? (Legal, CoGP – 4.4.38, 5 9. What action was taken to prevent	and minimise the risk of further escapes? (No	t covered in code but coul	ld la		
be considered under satisfactory					
-	bry 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

Case No:	2018-0429			Date of visit:	05/09/2018			
Site No:	FS1091]		Inspector:	ALW	I		
Results Summary	Freq.			Da	te of Notifica	tion		
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
AGD PCR	5/5	11/09/2018	ALW	11/09/2018	ALW	11/10/2018	ALW	SAE
SAL POX PCR	5/5	11/09/2018	ALW	11/09/2018	ALW	11/10/2018	ALW	SAE
Para theridion PCR	5/5	11/09/2018	ALW	11/09/2018	ALW	11/10/2018	ALW	SAE
IPN PCR	1/1	11/09/2018	ALW	11/09/2018	ALW	11/10/2018	ALW	SAE
ISA PCR	0/1	11/09/2018	ALW	11/09/2018	ALW	11/10/2018	ALW	SAE
VHS PCR	0/1	11/09/2018	ALW	11/09/2018	ALW	11/10/2018	ALW	SAE
IHN PCR	0/1	11/09/2018	ALW	11/09/2018	ALW	11/10/2018	ALW	SAE
SAV PCR	0/1	11/09/2018	ALW	11/09/2018	ALW	11/10/2018	ALW	SAE
Adhesions	1/5	18/09/2018	ALW	18/09/2018	ALW	11/10/2018		SAE
Complex gill disease	5/5	18/09/2018		18/09/2018		11/10/2018		SAE
AGD histology	1/5	18/09/2018	ALW	18/09/2018	ALW	11/10/2018	ALW	SAE
gill pathology	5/5	18/09/2018	ALW	18/09/2018	ALW	11/10/2018		SAE
epitheliocystis	3/5	18/09/2018	ALW	18/09/2018	ALW	11/10/2018		SAE
Vibrio species	5/5	09/10/2018	ALW			11/10/2018	ALW	SAE
Report Summary								
Case Type	Date	Insp	2 nd Insp					
REP/REG/SLI	11/09/2018		SAE					
DIA	11/10/2018	ALW	SAE					
	+							

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NoFB0169SITE NoFS1091INSPECTORAndrea Warwick

 DATE OF VISIT
 05/09/2018

 SITE NAME
 Vacasay

 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.

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

<u>Results</u>

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

<u>Gill</u>: 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).

<u>Gut and pyloric caeca</u>: 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).

4	

Signed:

Fish Health Inspector

Date: 11/10/2018

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NoFB0169SITE NoFS1091INSPECTORAndrea Warwick

 DATE OF VISIT
 05/09/2018

 SITE NAME
 Vacasay

 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

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.

Date: 11/09/2018

Fish Health Inspector

Signed:

FHI 059, Version 11	lss	sued by: FHI		Date of issue: 12/09/2017			
Case No: 2018-0430				Date of visit: 04/09/2018			
Time spent on site:	hour	-	Main Inspector	r: JET			
Site No: FIS0173 Business No: FIB0159	Site Name: Business Name:	Loch Glow Loch Glow Angli	ing Club				
Case Types: 1 REP 2	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 Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?		 N If yes, see additional information/clinical score sheet. N If yes, see additional information/clinical score sheet. N If yes, see additional information/clinical score sheet. N 					
UNI/REG only - if unable to carry out intended visit detail reason below:							

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.

FHI 059, Version 11			lss	ued by: FHI		Date of iss	sue: 12/09/2017
Case No:	2018-0430		Site No:	FIS017	′3		
Date of Visit:		04/09/201	8		Inspector(s):	JET	
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		site represent	tative?		Y N	3
Site Details							
Total No facilities		1	Facilities sto	ocked	1	No facilities inspected	1
Species	RTR	TRO	TTR	FPE	PIK		
Age group	Mix	Mix	Mix	Mix	Mix		
No Fish	Unknown	Unknown	Unknown	Unknown	Unknown		
Mean Fish Wt	Mix	Mix	Mix	Mix	Mix		
Next Fallow Date (Si	ite)	N/A		Next Input D	Date (Site)	04/09/2018	
Recent (last 4 wks) of	disease prot	blems?			Y Any escapes	s (since last visit)?	N
		tality - see add	ditional comm				
Movement Records							
		i anation'					N/A
1. Movement records		or inspection:				Eiret inspe	
 Date of last inspective Are records comp 		rectly entered	10			First inspec	ction N/A
4. Are movement red				2			N/A
5. Are records comp							N/A
6. Are health certification		•		lable?			N/A
Transport Records							
	ate corried o	ut by (or on b	shalf) of the h	usinges (not l	aing a STR)2		
1. Are any movemer If yes, is there a syst							
Mortality Records							
1. Mortality records a	available for	inspection?					N/A
2. How are mortalitie	es disposed	of?					
If other detail:							
3. Mortality records of	•	•	tered?				N/A
4. Recent mortality (. ,						
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? N/A							
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. N/A							

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: N/A						

Case No:	2018-0430	Date of visit: 04/09/2018						
Site No:	FIS0173	Inspector: JET						
Results Summary	Freq.	Date of Notification						
	•	Database	Insp			Writing	Insp	2 nd Insp
Report Summary								
Case Type REP, REG	Date	Insp	2 nd Insp					
REP, REG	05/09/2018	JET	AJW					



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

FHI 059, Version 11	ls	ssued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0433			Date of visit: 11/09/2018
Time spent on site:	2 hours	Main Inspec	ctor: AJW
Site No:SS0346Business No:SB0366	Site Name: Business Name:	Rubha Mor The Caledonian Oyster Com	npany
Case Types: 1 ECI	23	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 Clinical signs of disease observe Gross pathology observed? Diagnostic samples taken?		N If yes, see additional inf	ormation/clinical score sheet. ormation/clinical score sheet. ormation/clinical score sheet.
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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	ie: 12/09/2017
Case No:	2018-0433]	Site No:	SS0346	;			
Date of Visit:		11/09/2018	3		Inspector(s):	AJW]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		ite representa	ative?			Y Y]
Site Details								
Total No facilities		3000	Facilities sto	cked	2500	No facilitie	s inspected	2000
	CGI	OED						
Age group	mixed	mixed						
No Fish	unknown	unknown						
Mean Fish Wt	mixed	mixed						
Next Fallow Date (Si	ite)	none		Next Input Da	ate (Site)	this week		
Recent (last 4 wks) o If yes, detail:	disease prob	lems?		N	Any escapes	s (since last	visit)?	Ν
•								
Movement Records								
1. Movement records		or inspection?					20/20/2047	N
2. Date of last inspec		entered	2				26/06/2017	N/A
 Are records compl Are movement records 		•						N/A N/A
5. Are records compl								N/A
6. Are health certification				able?				N
Transport Records								
1. Are any movemen If yes, is there a syst								
Mortality Records								
1. Mortality records a		•						N/A
2. How are mortalitie					Other (detail))		
		left on beach	arad 2					N/A
 Mortality records of Recent mortality (I 	•	a correctly ent	erea ?					
 5. Evidence of recen 	,	atunical morta	litios?					N/A
If yes, facility nos/no		• •		/reason:				
	moreancy per	Taointy/1.0 c.						
6. Any other peaks in	n mortality du	uring period cl	necked?					N/A
If yes, detail:								
7. Have increased (u	inexplained)	mortalities be	en reported to	vet or FHI?				N/A
If yes, detail action:				DT				
8. Have 'mortality even	ents' been re	ported to FHI	? If no, add IVI	IR1 case and e	enter on morta	ility events s	sheet.	N/A

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: only BMP available. New movement book to be sent

HI 059, Version 11	Issued by: FHI			Date	of issue: 12/0
Case Number:	2018-0433 Site No:	SS034	6		
Date of Visit	11/09/2018 Inspector:	AJW			
Number of Susceptil	ble species on site			_	
-	ies present = <u>LOW</u> risk				
f susceptible species	present, score for each pathogen		No	Yes	
	Susceptible to Bonamia ostrea (OED)		0	25	25
	Susceptible to Marteilia refringens (OED, MED)		0	3	3
	Susceptible to OsHV (CGI)		0	3	3
Sites within a tidal e	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal				
	excursion	0	2	10	2
_ive shellfish mover	nents	0	1-2	>3	
Movements on	Frequency of movements on from equivalent MS	0	5	10	10
	Frequency of movements on from equivalent no				
	compartment including third country	0	10	20	
	Number of suppliers	0	5	10	
Assessments off					
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1	2	0
	Frequency of movements off outwith MSS Management				
	Areas	0	3	6	0
	Number of destinations	0	3	6	
Management practices		None	Secure (effluent treatment)	Unsecure (no effluent treatment)	
-	Deputation of stock from own sites within MSS	None	(effluent	(no effluent	
practices	Depuration of stock from own sites within MSS		(effluent treatment)	(no effluent treatment)	2
Water contacts with	management area	None 0	(effluent	(no effluent	2
Water contacts with	management area Depuration of stock from other businesses sites within	0	(effluent treatment)	(no effluent treatment)	2
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area	0	(effluent treatment)	(no effluent treatment)	2
Water contacts with	management area Depuration of stock from other businesses sites within	0	(effluent treatment)	(no effluent treatment)	2
vater contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0	(effluent treatment)	(no effluent treatment) 2 6	2
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 0 0	(effluent treatment)	(no effluent treatment) 2 6 8	2
Water contacts with depuration facilities Biosecurity	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area	0 0 0 1	(effluent treatment) 1 2 4 2 or 3	(no effluent treatment) 2 6 8 ≥ 4	
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1	(effluent treatment) 1 2 4 2 or 3 1	(no effluent treatment) 2 6 8 ≥ 4 2	
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1	(effluent treatment) 1 2 4 2 or 3 1 1 1	(no effluent treatment) 2 6 8 ≥ 4 2 5	
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1 0 0	(effluent treatment) 1 2 4 2 or 3 1 1 1	(no effluent treatment) 2 6 8 ≥ 4 2 5	
Water contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 0 0 1 0 0	(effluent treatment) 1 2 4 2 or 3 1 1 Yes	(no effluent treatment) 2 6 8 ≥ 4 2 5 No	0

Site No: SS0346

Case No: 2018-0433

Nature of non-compliance:

Action taken (FHI):

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

Case No:	2018-0433			Date of visit:	11/09/2018			
Site No:	SS0346			Inspector:	AJW]		
Results Summary	Freq.		Date of Notification					
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type	Date	Insp	2 nd Insp					
ECI	27/11/2018	AJW	KAS					



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0366SITE NOSS0346INSPECTORAmanda Walker

 DATE OF VISIT
 11/09/2018

 SITE NAME
 Rubha Mor

 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.



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/FHl/charter

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0436		Date of visit: 11/09/2018
Time spent on site: 1.5 hour	rs	Main Inspector: JET
	Name: Drumyeonmo ness Name: Gigha Oysters	
Case Types: 1 ECI 2	3 4	5 6
Water Temp (°C): 14 Ther	mometer No: T147	FHI 045 completed
Observations: Regi	on: ST Water typ	be: S CoGP MA:
Dead/weak/abnormally behaving fish pr Clinical signs of disease observed? Gross pathology observed? Diagnostic samples taken?	N If yes, se	e additional information/clinical score sheet. e additional information/clinical score sheet. e additional information/clinical score sheet.
UNI/REG only - if unable to carry out int	tended visit detail reason below:	

FHI 059, Version 11 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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0436]	Site No:	SS0908	3			
Date of Visit:		11/09/2018	3		Inspector(s):	JET]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		site representa	ative?			Y Y]
Site Details								
Total No facilities	-	80	Facilities sto	cked	65	No facilitie	s inspected	80
Species	CGI	CGI						
Age group	2017	2018						
No Fish	250,000	150,000						
Mean Fish Wt	25g	10g						
Next Fallow Date (S	ite)	N/A		Next Input Da	ate (Site)	Summer 2	019	
Recent (last 4 wks) If yes, detail:	disease prob	lems?		N	Any escapes	s (since last	visit)?	N
Movement Records								<u>,</u>
1. Movement record		or inspection?						Y
 Date of last inspects Are records comp 		actly entered	2				First Inspec	Tion Y
4. Are movement re-		•		,				N/A
5. Are records comp								N/A
6. Are health certific	ates for intro	ductions (outv	with GB) availa	able?				N/A
Transport Records								
1. Are any movemer If yes, is there a syst								
	lem in place			riation records	: :			
Mortality Records								
1. Mortality records a								Y
2. How are mortalitie	· · ·				Other (detail)		
If other detail: 3. Mortality records of		al road repair						
4. Recent mortality (•	a conectly end		ells during Sep	tember - prec	lation		1
5. Evidence of recer	,	atvoical morta			stember pree			N
If yes, facility nos/no		••		/reason:				
6. Any other peaks in	n mortality du	uring period cl	hecked?					N
If yes, detail:		and a liter						N1/A
7. Have increased (ulf yes, detail action:	inexplained)	mortalities be	en reported to	o vet or FHI?				N/A
8. Have 'mortality ev	ents' been re	eported to EH	I? If no. add M	IRT case and e	enter on morte	ality events s	sheet	N/A
er nave monuncy ev								

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 o	fany
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	l disease Y
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 h health status, certification if required)?	igher Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to mi transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	nimise 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	
 Has any animal health surveillance been carried out by, or on behalf of, the business? If yes, are results available for inspection? 	N
3. Any significant results?	
If yes, detail (if not detailed under recent disease problems).	
Records checked between: First inspection	

FHI 059, Version 11	Issued by: FHI			Date	of issue: 12/0
Case Number:	2018-0436 Site No:	SS090	8		
Date of Visit	11/09/2018 Inspector:	JET			
Number of Susceptik	ble species on site			-	
-	ies present = <u>LOW</u> risk				
f 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 ex	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal				
	excursion	0	2	10	0
_ive shellfish moven	nents	0	1-2	>3	
Movements on	Frequency of movements on from equivalent MS	0	5	10	0
	Frequency of movements on from equivalent zone or				
	compartment including third country	0	10	20	
	Number of suppliers	0	5	10	0
Movements off					
	Frequency of movements off <u>within MSS Management</u>				
	Areas	0	1	2	2
	Frequency of movements off outwith MSS Management				
	· · · · · · · · · · · · · · · · · · ·	•	0		
	Areas	0	3	6	3
	· · · · · · · · · · · · · · · · · · ·	0	3 3	6 6	3
	Areas				3
Management	Areas		3	6	3
Management practices	Areas		3 Secure (effluent	6 Unsecure	3
Water contacts with	Areas Number of destinations	0	3 Secure (effluent	6 Unsecure (no effluent	3
oractices	Areas Number of destinations Depuration of stock from own sites within MSS	0	3 Secure (effluent	6 Unsecure (no effluent	3
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area	0 None	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 None	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area	0 None 0	3 Secure (effluent treatment) 1	6 Unsecure (no effluent treatment) 2	
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area	0 None 0	3 Secure (effluent treatment) 1	6 Unsecure (no effluent treatment) 2	
Water contacts with depuration facilities	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area	0 None 0 0	3 Secure (effluent treatment) 1 2 4	6 Unsecure (no effluent treatment) 2 6 8	
Water contacts with depuration facilities Biosecurity	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4	
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 0	3 Secure (effluent treatment) 1 2 4 4 2 or 3 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	
Water contacts with depuration facilities Biosecurity	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 0	3 Secure (effluent treatment) 1 2 4 4 2 or 3 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 1 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes 0	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	

Case No:	2018-0436			Date of visit:	11/09/2018			
Site No:	SS0908]		Inspector:	JET]		
Results Summary	Freq.			Da	te of Notifica	tion		
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
	1							
	1							
	1							
	-	•			•		•	
Report Summary								
Case Type	Date	Insp	2 nd Insp					
ECI	14/09/2018	JET	ASM					
L	I							



Gigha Oysters Gallochoille Isle of Gigha Argyll PA41 7AD

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NoSB0512SITE NoSS0908INSPECTORJoe Triscott

DATE OF VISIT11/09/2018SITE NAMEDrumyeonmore BayCASE NO20180436

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:

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

Issued by: FHI	Date of issue: 12/09/201
	Date of visit: 12/09/2018
S	Main Inspector: JET
Name: Quarantine F ness Name: Marine Enviro	acility onmental Research Laboratory
3 4	5 6
mometer No:	FHI 045 completed
on: ST Water ty	rpe: S CoGP MA: M-49
If yes, se	ee additional information/clinical score sheet. ee additional information/clinical score sheet. ee additional information/clinical score sheet.
ended visit detail reason below:	
	s Name: Press Name: Quarantine F Marine Envir 3 4 mometer No: On: ST Water ty esent? If yes, se If yes,

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.

FHI 059, Version 11			Issu	ed by: FHI			Date of issu	ie: 12/09/2017
Case No:	2018-0440		Site No:	FS1100)			
Date of Visit:		12/09/2018	l i		Inspector(s):	JET]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		ite representa	ative?			Y Y	3
Site Details								
Total No facilities Species Age group No Fish	N/A	2	Facilities sto	cked	0	No facilitie	s inspected	2
Mean Fish Wt Next Fallow Date (S	ite)	Currently falle	0)//	Next Input Da	ate (Site)	Possibly in	2019	
Next I allow Date (O	ile)	Currentiy laik			1	· · · ·		
Recent (last 4 wks) of lf yes, detail:	disease prob	lems?		N/A	Any escapes	(since last	visit)?	N/A
Movement Records	s							
 Movement record Date of last inspective Are records comp Are movement records comp Are records comp Are health certific Transport Records	ction: olete and corr cords availab olete and corr ates for intro	ectly entered? le for dead fisl ectly entered?	h and waste?				17/03/2016	N/A N/A N/A N/A N/A
1. Are any movement If yes, is there a syst	nts carried ou							
Mortality Records	lem in place			lation records	ŗ			
 Mortality records a How are mortalitie If other detail: 		•						N/A
3. Mortality records of	•	correctly ente	ered?					N/A
 Recent mortality (Evidence of recent 	· · · · · · · · · · · · · · · · · · ·	atvpical mortal	ities?					N/A
If yes, facility nos/no		· ·		/reason:				
6. Any other peaks in	n mortality du	iring period ch	ecked?					N/A
If yes, detail: 7. Have increased (u	unexplained)	mortalities bee	en reported to	o vet or FHI?				N/A
If yes, detail action: 8. Have 'mortality ev	ents' been re	ported to FHI	? If no, add M	IRT case and e	enter on morta	ality events s	sheet.	N/A
								-

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 <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	
 6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)? 7. Is documentation available regarding the measures in place to maintain the physical containment of 	
aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site?	
If no, detail:	
Results of Surveillance	
1. Has any animal health surveillance been carried out by, or on behalf of, the business?	
2. If yes, are results available for inspection?	
3. Any significant results?	
If yes, detail (if not detailed under recent disease problems).	
Records checked between: 17/03/2016 - 19/09/2018	

Case No:	2018-0440			Date of visit:	12/09/2018					
Site No:	FS1100]	Inspector: JET							
Results Summary	Freq.			Da	te of Notifica	tion				
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp		
								<u> </u>		
Report Summary										
Case Type	Date	Insp	2 nd Insp							
REG	20/09/2018	JET	ASM							
	<u> </u>									



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOFB0393SITE NOFS1100INSPECTORJoe Triscott

DATE OF VISIT12/09/2018SITE NAMEQuarantine FacilityCASE NO20180440

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

FHI 059, Version 11	lss	ued by: FHI		Date of it	ssue: 12/09/2017
Case No: 2018-0441				Date of visit:	12/09/2018
Time spent on site: 5 h	ours		Main Inspecto	r: JE	T
Site No:FS0851Business No:FB0169	Site Name: Business Name:	Ardgadden The Scottish Sa	almon Company	1	
Case Types: 1 ECI 2	CNI 3 SLI	4 VMD	5	6	
Water Temp (°C): 13	Thermometer No:	T147		FHI 045 comple	ted
Observations:	Region: ST	Water type	: S	CoGP MA:	M-42
Dead/weak/abnormally behaving fi Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	N If yes, see	additional inform	nation/clinical sco nation/clinical sco nation/clinical sco	ore sheet.
UNI/REG only - if unable to carry c	out intended visit detail re	ason 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.

FHI 059, Version 11			lssu	ied by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0441]	Site No:	FS0851				
Date of Visit:		12/09/201	8		Inspector(s):	JET]
Registration/Author 1. Business/site deta 2. Changes made to	ails summar		site representa	ative?			Y Y]
Site Details								
Total No facilities		14	Facilities sto	ocked	11	No facilitie	s inspected	14
Species	SAL	LUM						
Age group	2017 S0	2018						
No Fish	605,124	36,422						
Mean Fish Wt	2.185 kg	Mix						
Next Fallow Date (S	ite)	June 2019		Next Input Da	ate (Site)	Septembe	r 2019	
Pagant (last 4 w/kg)	diagona prok	alama?		Ν	Any escapes	(aince leat)	vioit) 2	N
Recent (last 4 wks) If yes, detail:					Any escapes		visit) :	IN
Movement Record	s							
1. Movement record		or inspection?)					Y
2. Date of last inspe							11/10/2016	
3. Are records comp		rectly entered	?					Y
4. Are movement re	cords availa	ble for dead fi	sh and waste?	?				Y
5. Are records comp								Y
6. Are health certific	ates for intro	oductions (out	with GB) availa	able?				N/A
Transport Records	5							
1. Are any moveme	nts carried o	ut by (or on be	ehalf) of the bu	usiness (not us	ing a STB)?			N
If yes, is there a sys								
Mortality Records								
1. Mortality records	available for	inspection?						Y
2. How are mortalitie	es disposed	of?			Whole fish -	Dundas Che	emicals	
If other detail:								
3. Mortality records	•	d correctly en						Y
4. Recent mortality	. ,		9171 across	site				
5. Evidence of recen		•••						Y
If yes, facility nos/no		-						
w/b 20/08/2018 - 60				Ill Issues. Cage	es 1 and 2 wo	rst affected (1200 - 1400	morts).
Following week mor 6. Any other peaks i		,	,					N
If yes, detail:		uning period c						
7. Have increased (unexplained	mortalities be	een reported to	o vet or FHI?				N/A
If yes, detail action:	,,							
8. Have 'mortality ev	/ents' been r	eported to FH	II? If no, add M	IRT case and e	enter on morta	ality events s	heet.	N/A

Treatments and Medicines Records
1. Recent treatments (last 4 wks)? Y
If yes, detail: H2O2, T.M.S.
If other, detail:
2. Medicines records available for inspection? Y
3. Are records complete and correctly entered? Y
4. Are fish in a withdrawal period?
5. If yes, what treatment(s)? T.M.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 Y
health status, certification if required)?
\mathbf{c} Have the bushendry and biassecurity measures implemented between each epidemiological unit to minimize
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? Y
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? Y
Increase in CT values from PCR tests for AGD
If yes, detail (if not detailed under recent disease problems). during August. H2O2 treatment administered.
Records checked between: 11/10/2016 - 14/09/2018

Fł	HI 059, Version 11							lss	ued by:	FHI			
	Case no:	2018-04	141	Site No:		FS0851			Date of		12/	09/2018	13/(
	Priority samples:	VI		BA		PA		MG	Samplin	g: HI			
l	Time sampling starts/ends: Environmental conditions:		0:00 Indoors	11:4 2	5:00	3	Inspecto	or: 4	JET	5	VMD No	р.	15
l	Summary samples	HIST		BA		MG		VI		PA		Total Sa	amples
A	dd Fish/Pools - click												
	Pool/Fish No												
	Fish nos	1	2	3									
	Pool Group												
	Species	SAL	SAL	SAL									
	Average weight	2.0000		2.0000									
	Sex	N/A		N/A									
	Water Type	SW	SW	SW									
Stock Details		Ormsary Smolt Unit	Ormsary Smolt Unit	Ormsary Smolt Unit									
Sto	Facility No	1	4	11									

)9/2018	Addition	nal Sam	ple Infor	mation:								 	
0	0 Total Tests assigned 0												
											[

FHI 059, Version 11		Issued by: FHI				or issue	
Case Number:	2018-0441		Site No:	FS0851		Insp:	JET
Date of Visit	12/09/2018		No of mo	ovements/s	upp./dest.	_	Score
Live fish movements			0	1-5	6-10	>10	
Movements on (from out		novements on from equivalent MS	0	5	10	14	
with GB) of susceptible species		novements on from equivalent zone or including third country	0	9	18	26	
	Number of sup		0	5	10	14	<u> </u>
Movements off	Frequency of m	novements off	0	3	6	10	1
	Number of dest		0	3	6	10	· ·
Exposure via water		Site contacts	0	1-5	6-10		
Water contacts with other		ed (secure water supply through					
farms (holding species susceptible to same	disinfection or b	orehole) or in a coastal zone with category I	0				<u> </u>
diseases)		or within 1 tidal excursion	1	2	4		
		or in a coastal zone with category III					
	-	or within 1 tidal excursion	1	3	6		<u> </u>
		or in a coastal zone with category V or within 1 tidal excursion	1	4	8		
Management practices			None	Secure	Unsecure		·
Water contacts with	Any processing	plant discharging into adjacent waters		Jecure	Childre		_
processors		· · · · · · · · · · · · · · · · · · ·	0	1	2		
On farm processing within	No on farm pro	cessing	0				
the rules of the directive	Processing own	n fish (re-cycling risk)	0				-
		from MS of equivalent status	1				<u> </u>
		from zone or compartment of	2				<u> </u>
	equivalent statu		4				
	Processing fish	from Category III farm	8				
	Processing fish	from Category V farm	10	•			
Disposal of fish and fish by-	Site's own wast	e only processed.	0				
products	Common proce	sses with other farms	3				
		for waste from other farms	5				<u> </u>
Use of unpasteurised feeds				[
Use of unpasteurised reeds	Feeding unpas	npasteurised feed	0				<u> </u>
Biosecurity	r eeung unpas	Number of sites	-	2 or 3	≥ 4		
Contacts with other sites	Sites operating	from single shorebase	0	1	2		
		aff and equipment	0	1	2		L
Disinfaction of aquipment	Yes			 			
Disinfection of equipment between sites, use of			0				
footbaths etc	No		1				
CoGP/Regulator			1	r			-
Practices in accordance with regulator or industry	Yes		0				
code of practice	No		3				
Platform access to access	Voc						
Platform access to cages	Yes No		0				<u> </u>
			2				
					Total		2
					Rank		MEDIUM

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
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?	Y
	quivalent) fallowed synchronously on a single	year class basis? Y
3. Does the site have access to a range of lice azamethiphos and emamectin benzoate) as a can these be deployed in a reasonable period	enced in-feed and bath sea lice medications (ir well as access to suitable biological and/or medications)	ncluding deltamethrin, chanical control measures, and
5. Are sea lice count records available for insp	pection? (Legal SSI, CoGP Annex 6)	Y
6. Do records adequately reflect the required	standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6) Y
7. Are sea lice (<i>L. salmonis</i>) record levels belor records are inspected? (CoGP Annex 6)	ow the suggested criteria for treatment in the C	CoGP during the period that N
8. Have average adult female sea lice (<i>L. saln</i> records are inspected?	nonis) numbers per fish been at a level of 3 or	above during the period that N
If yes, have these been reported to the Fish H	lealth Inspectorate? If no, FHI see comment.	N/A
9. Is C. elongatus infestation at a level which	is considered to cause significant welfare prob	lems? (CoGP 4.3.81, 5.3.50) N
	stered or other actions taken when <i>L. salmonis</i> <i>longatus</i> is considered to have welfare implica	
11. Has any other action been taken (where a	pplicable)?	Y
12. Have therapeutic treatments or the actions	s taken had a significant impact upon the lice le	evels recorded? Y
	out in cooperation between participating farms where fewer populations or part populations ar	
	ment procedure with waypoints describing set nfestation?	actions to deal with recognised Y
16. Does the stock on site appear satisfactory reasons.	r in relation to sea lice level and sea lice count	data? If no please detail Y
Containment Inspection		
1. Has the site experienced equipment damage	ge due to predators in the current or previous p	production cycles? N
	he predation experienced on site? (Detail below	w) Y
A.D.D., Seal Blinds, Tensioned Nets, Top	Nets	
If other, detail below:		
3. Have escape incidents or events been exp	erienced on or in the vicinity of the site since the	he last FHI inspection?
If Yes proceed with questions 4 – 9. If No skip	to question 10	
4. Have these been reported to Scottish Minis	ters?	
5. Have these been reported to local DSFB fo	rthwith (where they exist)? (CoGP - 4.4.37, 5.	4.17)
6. Have these been reported to the SSPO and	l local fisheries trusts forthwith (where they exi	st)? (CoGP – 4.4.37, 5.4.17)
7. Were methods (if any) used to recover esca	apees? If yes give detail	
8. If gill nets were deployed was this action an	preed with local wild fish interests and was perr	mission given by Scottish
Ministers? (Legal, CoGP – 4.4.38, 5.4.18)		
	mise the risk of further escapes? (Not covered	In code but could
be considered under satisfactory measur		son(s) Y
To its the site inspected as satisfactory with re	egards to containment? If no, please detail reas	

FHI 059, Version 11	Issued by: FHI	Date of issue: 12/09/2017
Case No: 2018-0441 Site	e No: FS0851	
Date of Visit: 12/09/2018	Inspector: JET	
Point of Compliance		
1. Is the farm under inspection located withi	Ŭ	Υ
If N, no further questions require completion		
Points of Compliance for Both Farm Man	agement Agreements and Statements	· · · · · · · · · · · · · · · · · · ·
2. Has a current farm management agreem 3. Is the current FMAg/S available for inspectively and the second	· • · · ·	d? Y
4. Does the FMAg/S identify the relevant far		Y
5. Does the FMAg/S identify the fish farm si 6. Does the FMAg/S identify the date of con		Y V
7. Does the FMAg/S identify the date of revi	e e e e e e e e e e e e e e e e e e e	Y
Arrangements for Fish Health Manageme	ent	
8. Does the FMAg/S identify the minimum h	ealth standards for the stocks to be introd	duced to the area or Y
farm?		
 Does the FMAg/S identify the vaccination Does the FMAg/S identify the species of 	•	
11. Does the FMAg/S identify the maximum	•	
individual farm? 12. Does the FMAg/S identify the arrangem	ents for the storage and disposal of any c	lead fish from any
fish farm in the area or the individual farm?		
Arrangements for The Management of Se	ea Lice	
13. Does the FMAg/S identify arrangements	for the sharing of data on sea lice numb	ers and treatments? Y
14. Does the FMAg/S identify the availability of statement?	and the use of medicines on farms cove	
15. Does the FMAg/S identify any requirement lice on farms in the area or individual farms?	· -	
16. Does the FMAg/S identify the circumsta used on farms in the area or individual farm	nces under which biological controls and	cleaner fish are to be Y
17. Does the FMAg/S identify the arrangem		s within the area? Y
Live Fish Movements		
18. Does the FMAg/S identify the circumsta area or farm?	nces when live fish may be introduced or	
19. Does the FMAg/S identify the arrangem or individual farms?	ents for the movement of live fish on and	off sites in the area Y

Harvesting

20. Does the FMAg/S identify acceptable harvest practices on farms in the area or individual farms?	Υ
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?	Y
22. Does the FMAg/S identify whether one or more year classes may be stocked onto sites covered by the agreement or statement?	Y
23. Does the FMAg/S identify whether broodstock or potential broodstock are to be kept on any site covered by the agreement or statement?	Y
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?	N/A
Management and operation	
25. Is the fish farm being managed and operated in accordance with the agreement or statement?	Y
26. What is the version no/date of issue of the FMAg/S? 26.02.2018	

Case No:	2018-0441	Date of visit: 12/09/2018						
Site No:	FS0851	Inspector: JET						
Results Summary	Freq.	Date of Notification Database Insp Phone Insp Writing Insp						
	-	Dalabase	Insp	FIIIIe	Insp	winnig	Insp	2 nd Insp
	_							
	_							
	_							
	_							
								<u> </u>
Report Summary								
Case Type	Date	Insp	2 nd Insp					
ECI,CNI,SLI,VMD	14/09/2018	JET	ASM					
	_		 					
			1					



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOFB0169SITE NOFS0851INSPECTORJoe Triscott

DATE OF VISIT12/09/2018SITE NAMEArdgaddenCASE NO20180441

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.

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.

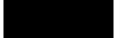
Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

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

FHI 059, Version 11	Iss	ued by: FHI		Date of issue: 12/09/2017
Case No: 2018-0442				Date of visit: 11/09/2018
Time spent on site: 3	hrs		Main Inspector	: RJS
Site No:SS0452Business No:SB0289	Site Name: Business Name:	Islay G. & J. Archiba	ld	
Case Types: 1 ECI 2	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 Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	N If yes, see	additional inform	nation/clinical score sheet. nation/clinical score sheet. nation/clinical score sheet.
UNI/REG only - if unable to carry	out intended visit detail re	ason below:		

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.

FHI 059, Version 11			Issu	ued by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0442]	Site No:	SS0452	2			
Date of Visit:		11/09/2018	3		Inspector(s):	RJS]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		site represent	ative?			Y N	-
Site Details								
Total No facilities		~200	Facilities sto	ocked	All	No facilitie	s inspected	All
Species	OED	CGI	CGI	CGI				
Age group	2014	2018	2017	2016				
No Fish	~700	1.7 million	1 million	300 K				
Mean Fish Wt	~40g	1g - 20g	20g - 60g	50g - 80g				
Next Fallow Date (S	ite)	No Fallow		Next Input D	ate (Site)	May - Sep	tember annua	ally
					7			
Recent (last 4 wks)	disease prob	lems?		1	N Any escapes	s (since last	visit)?	N/A
If yes, detail:								
Movement Records	S							
1. Movement record	s available fo	or inspection?						Y
2. Date of last inspe		·					10/10/2017	
3. Are records comp	lete and corr	ectly entered	?					Y
4. Are movement re	cords availat	ole for dead fis	sh and waste	?				N/A
5. Are records comp								N/A
6. Are health certific	ates for intro	ductions (out	vith GB) avail	lable?				Y
Transport Records	;							
1. Are any movemer	nts carried ou	ut by (or on be	half) of the b	usiness (not us	sing a STB)?			
If yes, is there a sys								
Mortality Records								
1. Mortality records	available for	inspection?						Y
2. How are mortalitie					Other (detail))		•
If other detail:	Empty shell	s are used to	create road s	surfaces on far	m			
3. Mortality records	•	d correctly ent	ered?					Y
4. Recent mortality (% of stock from	n input to harve	est		
5. Evidence of recer								N
If yes, facility nos/no	mortality pe	r facility/no sto	ock per facility	y/reason:				
C. A substitution in a select is								
 Any other peaks i If yes, detail: 	n monality di	uning period c	necked?					N
7. Have increased (Inexplained)	mortalities be	en reported t	to vet or FHI?				N/A
If yes, detail action:	anospianica)							
8. Have 'mortality ev	vents' been re	eported to FH	I? If no, add N	MRT case and	enter on morta	ality events s	sheet.	N/A
e. Have monuncy ev	0.110 0001110							

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?	Ý
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease	Y
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)?	Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise	Y
transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of	Y
aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site? If no, detail:	Y
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: 10/10/17-11/09/18	

-HI 059, Version 11	Issued by: FHI			Date	of issue: 1	2/09/20
Case Number:	2018-0442 Site No:	SS045	2			
Date of Visit	11/09/2018 Inspector:	RJS				
Number of Susceptil	ble species on site			-		
-	ies present = <u>LOW</u> risk					
	present, score for each pathogen		No	Yes		
	Susceptible to Bonamia ostrea (OED)		0	25	25	
	Susceptible to Marteilia refringens (OED, MED)		0	3	3	
	Susceptible to OsHV (CGI)		0	3	3	
Sites within a tidal e	xcursion	1	2-5	>6		
Site contacts	Number of sites holding susceptible species within a tidal			[]		
	excursion	0	2	10	0	
	•					
ive shellfish moven		0	1-2	>3		1
Novements on	Frequency of movements on from equivalent MS	0	5	10	5	
	Frequency of movements on from equivalent zone or					
	compartment including third country	0	10	20	0	
	Number of suppliers	0	5	10	5	
Movements off	Frequency of movements off within MSS Management Areas	0	1	2	0	
	Frequency of movements off <u>outwith</u> MSS Management	0	3	6	0	
	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations	0	3	6 6	0 0	
-	Areas					
Water contacts with	Areas	0	3 Secure (effluent	6 Unsecure (no effluent		
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS	0 None	3 Secure (effluent treatment)	6 Unsecure (no effluent treatment)	0	
Water contacts with	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 None 0	3 Secure (effluent treatment) 1	6 Unsecure (no effluent treatment) 2	0	
vater contacts with depuration facilities	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0 None 0 0 0	3 Secure (effluent treatment) 1 2	6 Unsecure (no effluent treatment) 2 6	0 2 0	
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 0	3 Secure (effluent treatment) 1 2 4 4 2 or 3 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	0 2 0 0	
Water contacts with depuration facilities	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 None 0 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3	6 Unsecure (no effluent treatment) 2 6 8 8	0 2 0 0	
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 0	3 Secure (effluent treatment) 1 2 4 4 2 or 3 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	0 2 0 0	
Water contacts with depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 None 0 0 0 1 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	0 2 0 0	
Water contacts with depuration facilities	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes 0	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	0 2 0 0 0	
depuration facilities Biosecurity Contacts with other	Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 None 0 0 0 1 0 0	3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes	6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5 No	0 2 0 0 0	

Case No:	2018-0442			Date of visit:	11/09/2018	l			
Site No:	SS0452]	Inspector: RJS						
Results Summary	Freq.			Dat	te of Notifica	tion			
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp	
Report Summary									
Case Type	Date	Insp	2 nd Insp						
ECI	02/10/2018	RJS	PMM						

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0289SITE NOSS0452INSPECTORRon Smith

 DATE OF VISIT
 11/09/2018

 SITE NAME
 Islay

 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.

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

lssu	ed by: FHI		Date of issue: 12/09/2017
			Date of visit: 12/09/2018
rs]	Main Inspector	: RJS
Site Name: Business Name:	Site 1 Ardencaple Oys	sters (P.S-K)	
3	4	5	6
Thermometer No:	T148		FHI 045 completed
Region: ST	Water type	: S	CoGP MA:
sh present? ?	N If yes, see	additional inforn	nation/clinical score sheet.
ut intended visit detail rea	son below:		
	rs Site Name: Business Name: 3 Thermometer No: Region: ST sh present?	Site Name: Site 1 Business Name: Ardencaple Oys 3 4 Thermometer No: T148 Region: ST Water type sh present? N If yes, see N If yes, see	rs Main Inspector Site Name: Site 1 Business Name: Ardencaple Oysters (P.S-K) 3 4 5 5 Thermometer No: T148 Region: ST Water type: S sh present? N If yes, see additional inform N If yes, see additional inform N If yes, see additional inform N If yes, see additional inform

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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0443]	Site No:	SS0302	2			
Date of Visit:		12/09/2018]		Inspector(s):	RJS]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		ite representa	ative?			Y Y]
Site Details								
Total No facilities		400	Facilities sto	cked	300	No facilitie	s inspected	All
Species Age group No Fish	CGI 2014 - 2017 ~750K							
Mean Fish Wt	10g - 70g							
Next Fallow Date (S	ite)	No plans		Next Input Da	ate (Site)	Oct/Nov 20	018	
Recent (last 4 wks) If yes, detail:	disease probl	lems?		N	Any escapes	s (since last	visit)?	N/A
Movement Records	S							
1. Movement record		r inspection?						Y
2. Date of last inspe		·					22/08/2016	
3. Are records comp		•						Y
4. Are movement re								N/A
 5. Are records comp 6. Are health certific 				able?				N/A Y
Transport Records								
1. Are any movemen If yes, is there a sys								
Mortality Records	·							
1. Mortality records	available for i	nspection?						Y
2. How are mortalitie	es disposed c	of?			Other (detail)		
		s used on road						
3. Mortality records	•	correctly ente						Ŷ
4. Recent mortality (·	tunical martal		stocks annually	у			N
5. Evidence of recer If yes, facility nos/no		••		/reason:				
	montainty per							
6. Any other peaks i	n mortality du	iring period ch	necked?					Y
				seed suffered	following trans	sfer.		
7. Have increased (u	unexplained)	mortalities be	en reported to	o vet or FHI?				N/A
If yes, detail action: 8. Have 'mortality ev	ents' hoon ro		2 If no. add M	RT case and	enter on morte	ality events a	heet	N/A
o. Have mortality ev	ents been le		: if no, add M			anty events s	neet.	IN/A

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	Y
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)?	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?	Ν
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: 22/08/2016 - 12/09/2018	

HI 059, Version 11	Issued by: FHI			Date	of issue: 12/
Case Number:	2018-0443 Site No:	SS030	2		
Date of Visit	12/09/2018 Inspector:	RJS			
lumber of Susceptil	ble species on site				
	ies present = <u>LOW</u> risk		. .		
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	0
	Susceptible to OsHV (CGI)		0	3	3
Sites within a tidal e	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2	10	10
_ive shellfish moven	nents	0	1-2	>3	
Movements on	Frequency of movements on from equivalent MS	0	5	10	5
	Frequency of movements on from equivalent zone or				
	compartment including third country	0	10	20	0
	Number of suppliers	0	5	10	5
Movements off					
lovements on	Frequency of movements off <u>within MSS Management</u> Areas	0	1	2	0
	Frequency of movements off outwith MSS Management	0	2	C	0
	Areas Number of destinations	0	3	6 6	0
		Ű	0		Ű
Management practices		None	Secure (effluent treatment)	Unsecure (no effluent treatment)	
	Desuration of start from our sites within MCC	None	(effluent	(no effluent	
practices	Depuration of stock from own sites within MSS management area	None 0	(effluent	(no effluent	0
Water contacts with	management area Depuration of stock from other businesses sites within		(effluent treatment)	(no effluent treatment)	0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area		(effluent treatment)	(no effluent treatment)	0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0	(effluent treatment)	(no effluent treatment) 2 6	0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area	0	(effluent treatment)	(no effluent treatment)	
vater contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0	(effluent treatment)	(no effluent treatment) 2 6	0
vater contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 0 0	(effluent treatment)	(no effluent treatment)	0
Water contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area	0 0 0 1	(effluent treatment) 1 2 4 2 or 3	(no effluent treatment) 2 6 8 ≥ 4	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1 0	(effluent treatment) 1 2 4 2 or 3 1 1 1 1 1 2	(no effluent treatment) 2 6 8 ≥ 4 2 5	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1 0	(effluent treatment) 1 2 4 2 or 3 1	(no effluent treatment) 2 6 8 2 4 2 2	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1 0 0	(effluent treatment) 1 2 4 2 or 3 1 1 1 1 1 2	(no effluent treatment) 2 6 8 ≥ 4 2 5	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 0 0 1 0 0	(effluent treatment) 1 2 4 2 or 3 1 1 Yes 0	(no effluent treatment) 2 6 8 ≥ 4 2 5 No	0 0 0 0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 0 0 1 0 0	(effluent treatment) 1 2 4 2 or 3 1 1 Yes	(no effluent treatment) 2 6 8 ≥ 4 2 5 No	0 0 0 0

Case No: 2018-0443 Date of visit: 12/09/2018	
Site No: SS0302 Inspector: RJS	
Results Summary Freq. Date of Notification Database Insp Phone Insp Writing Insp 2 nd Insp	
Report Summary	
Case Type Date Insp 2 nd Insp	
ECI 09/10/2018 RJS SAE	

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0202SITE NOSS0302INSPECTORRon Smith

 DATE OF VISIT
 12/09/2018

 SITE NAME
 Site 1

 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.

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: 09/10/2018

FHI 059, Version 11	ls	sued by: FHI		Date of issue: 12/09/2017
Case No: 2018-0444				Date of visit: 13/09/2018
Time spent on site: 2.	5 hrs		Main Inspector	r: RJS
Site No: SS0366 Business No: SB0528	Site Name: Business Name:	Ardshellach Seil Sound Shel	lfish	
Case Types: 1 ECI 2	23	4	5	6
Water Temp (°C): 13.6	Thermometer No:	T148		FHI 045 completed
Observations:	Region: ST	Water type:	: S	
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	N If yes, see a	additional inform	nation/clinical score sheet. nation/clinical score sheet. nation/clinical score sheet.
UNI/REG only - if unable to carry	out intended visit detail r	eason below:		

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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0444]	Site No:	SS0366				
Date of Visit:		13/09/2018	3		Inspector(s):	RJS]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		site representa	ative?			Y Y]
Site Details								
Total No facilities		60	Facilities sto	cked	30	No facilities	s inspected	All
Species	CGI 2014							
Age group No Fish	~2014 ~20K							
Mean Fish Wt	~2010 130g							
Next Fallow Date (S		No plans		Next Input Da	te (Site)	September	· 2018	
Recent (last 4 wks)	disease probl	lems?		N	Any escapes	(since last v	/isit)?	N/A
If yes, detail:	'					X	,	
Movement Records	5							
1. Movement record		or inspection?						Y
2. Date of last inspe-		·					21/08/2012	
3. Are records comp		•						Y
4. Are movement re				•				Y Y
 Are records comp Are health certification 				able?				N/A
Transport Records								
1. Are any movement If yes, is there a system								
Mortality Records								
 Mortality records a How are mortalitie 		•			Other (detail)			Y
			oad/hard stan	ding	Other (detail)			
3. Mortality records of				ang				Y
4. Recent mortality (·		predation etc	annually			
5. Evidence of recen		••						N
If yes, facility nos/no	mortality per	facility/no sto	ock per facility	/reason:				
6. Any other peaks in	n mortality di	iring period cl	necked?					N
If yes, detail:								
7. Have increased (u	unexplained)	mortalities be	en reported to	o vet or FHI?				N/A
If yes, detail action:						1.4.		N1/A
8. Have 'mortality ev	ents' been re	eported to FHI	r? If no, add M	IR I case and e	enter on morta	lity events s	neet.	N/A

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	Y
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)?	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: 21/08/12 - 13/09/18	

HI 059, Version 11	Issued by: FHI			Date	of issue: 12/0
Case Number:	2018-0444 Site No:	SS036	6		
Date of Visit	13/09/2018 Inspector:	RJS			
Number of Susceptil	-				
	ies present = <u>LOW</u> risk		. .		
f 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	0
	Susceptible to OsHV (CGI)		0	3	3
Sites within a tidal e	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2	10	10
ive shellfish moven	nents	0	1-2	>3	
Movements on	Frequency of movements on from equivalent MS	0	5	10	5
	Frequency of movements on from equivalent zone or				
	compartment including third country	0	10	20	0
	Number of suppliers	0	5	10	5
Movements off					
Novements on	Frequency of movements off <u>within MSS Management</u> Areas	0	1	2	0
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3	6	0
	Number of destinations	0	3	6	0
			Secure (effluent	Unsecure (no effluent	
-		None	•	treatment)	
Management practices Water contacts with	Depuration of stock from own sites within MSS	None		treatment)	
practices	Depuration of stock from own sites within MSS		treatment)		0
Water contacts with	management area Depuration of stock from other businesses sites within	0	treatment)	2	0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area		treatment)		0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0	treatment)	2 6	0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area	0	treatment)	2	
Water contacts with depuration facilities Biosecurity	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0 0 0 1	treatment) 1 2 4 2 or 3	2 6 8 ≥4	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1 0	treatment) 1 2 4 2 or 3 1	2 6 8 ≥4 2	0
Water contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 0 0 1	treatment) 1 2 4 2 or 3	2 6 8 ≥4	0
Water contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1 0	treatment) 1 2 4 2 or 3 1	2 6 8 ≥4 2	0
Water contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1 0	treatment) 1 2 4 2 or 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 6 8 ≥4 2 5	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1 0 0	treatment) 1 2 4 2 or 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 6 8 ≥4 2 5	0

Case No:	2018-0444	Date of visit: 13/09/2018							
Site No:	SS0366	Inspector: RJS							
Results Summary	Freq.			Da	te of Notifica	tion			
,	•	Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp	
Report Summary	1								
Case Type	Date	Insp	2 nd Insp						
ECI	02/10/2018	RJS	PMM						





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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0528SITE NOSS0366INSPECTORRon Smith

DATE OF VISIT13/09/2018SITE NAMEArdshellachCASE NO20180444

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.

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

Signed:

Date: 02/10/2018

Fish Health Inspector

FHI 059, Version 11	lss		Date of issue: 12/09/2017	
Case No: 2018-0445				Date of visit: 13/09/2018
Time spent on site: 2.5	5 hrs		Main Inspector	r: RJS
Site No:SS0851Business No:SB0528	Site Name: Business Name:	Sgeir Liath - Mh Seil Sound She		
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	
Dead/weak/abnormally behaving fi Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	N If yes, see	additional inform	nation/clinical score sheet. nation/clinical score sheet. nation/clinical score sheet.
UNI/REG only - if unable to carry c	out intended visit detail re	ason below:		

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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0445]	Site No:	SS0851]			
Date of Visit:		13/09/2018	3		Inspector(s):	RJS]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		ite representa	ative?			Y Y]
Site Details								
Total No facilities	-	60	Facilities sto	ocked	60	No facilitie	s inspected	All
Species	CGI							
Age group No Fish	2016 ~60K							
Mean Fish Wt	130g							
Next Fallow Date (S	-	No plans		Next Input Da	ate (Site)	No plans		
Recent (last 4 wks) o	disease probl	ems?		N	Any escapes	(since last	visit)?	N/A
If yes, detail:								
Movement Records								
 Movement record Date of last inspectively 		r inspection?					21/08/2018	Ý
3. Are records comp		ectly entered?	?				21/00/2010	Y
4. Are movement re	cords availab	le for dead fis	h and waste?	•				Y
5. Are records comp								Y
6. Are health certific		auctions (outw	vith GB) avalla	adie ?				N/A
Transport Records								
1. Are any movemer If yes, is there a syst		• •		•	- /			
Mortality Records	lenn in place i	or maintenan		nation records	<i>!</i>			
wortainty Records								
1. Mortality records a		•						Y
2. How are mortalitie	-				Other (detail)			
If other detail: 3. Mortality records of			bad/hard stan	ding				
4. Recent mortality (predation etc	annually			<u> </u>
5. Evidence of recen		atypical mortal						N
If yes, facility nos/no	mortality per	facility/no sto	ock per facility	/reason:				
6. Any other peaks in	o mortality du	ring pariod of	aakad?					N
If yes, detail:		ning period cr	ieureu :					
7. Have increased (u	inexplained)	mortalities be	en reported to	o vet or FHI?				N/A
If yes, detail action:			0.10				1 (
8. Have 'mortality ev	ents been re	ported to FHI	? If no, add M	IKI case and e	enter on morta	uity events s	sneet.	N/A

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	Y
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)?	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: 21/08/12 - 13/09/18	

HI 059, Version 11	Issued by: FHI			Date	of issue: 12/0
Case Number:	2018-0445 Site No:	SS085	51		
Date of Visit	13/09/2018 Inspector:	RJS]	
Number of Susceptil	ble species on site				
	ies present = <u>LOW</u> risk				
f 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	0
	Susceptible to OsHV (CGI)		0	3	3
Sites within a tidal e	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2	10	10
_ive shellfish moven	nents	0	1-2	>3	
Movements on	Frequency of movements on from equivalent MS	0	5		0
	Frequency of movements on from equivalent no				
	compartment including third country	0	10	20	0
	Number of suppliers	0	5	10	5
			-	, J , 1	
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	0
		0	3	6	0
	Number of destinations	0	3	0	0
Management practices	Number of destinations	None	Secure (effluent	Unsecure (no effluent treatment)	
Water contacts with			Secure (effluent	Unsecure (no effluent	
practices	Depuration of stock from own sites within MSS management area		Secure (effluent	Unsecure (no effluent	0
Water contacts with	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	None 0	Secure (effluent treatment) 1	Unsecure (no effluent treatment)	0
Water contacts with	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area	None	Secure (effluent treatment)	Unsecure (no effluent treatment)	
Water contacts with	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	None 0	Secure (effluent treatment) 1	Unsecure (no effluent treatment)	0
vater contacts with depuration facilities	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	None 0	Secure (effluent treatment) 1 2	Unsecure (no effluent treatment) 2 6	0
vater contacts with depuration facilities	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	None 0 0 0	Secure (effluent treatment) 1 2 4	Unsecure (no effluent treatment)	0
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area	None 0 0 0 1	Secure (effluent treatment) 1 2 4 2 or 3	Unsecure (no effluent treatment) 2 6 8 ≥ 4	0
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	None 0 0 0 1 0	Secure (effluent treatment) 1 2 4 2 or 3 1 1	Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	0
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	None 0 0 0 1 0	Secure (effluent treatment) 1 2 4 2 or 3 1	Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	0
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	None 0 0 0 1 0 0	Secure (effluent treatment) 1 2 4 2 or 3 1 1	Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	0

Case No:	2018-0445	Date of visit: 13/09/2018								
Site No:	SS0851]	Inspector: RJS							
Results Summary	Freq.			Da	te of Notifica	tion				
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp		
Report Summary										
Case Type	Date	Insp	2 nd Insp							
ECI	02/10/2018	RJS	PMM							
	ļ									
	<u> </u>									





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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0528SITE NOSS0851INSPECTORRon Smith

DATE OF VISIT13/09/2018SITE NAMESgeir Liath - MhorCASE NO20180445

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.

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

FHI 059, Version 11		Date of issue: 12/0)9/2017		
Case No: 2018-0448			C	Date of visit: 11/09/201	8
Time spent on site:	hour	Ma	ain Inspector:	NLP	ב
Site No:SS0089Business No:SB0470	Site Name: Business Name:	Marine Farming Un FAI Aquaculture Lto			\exists
Case Types: 1 ECI	23	4 5		6	
Water Temp (°C): N/A	Thermometer No:] F	FHI 045 completed	N/A
Observations:	Region: HI	Water type:	S	CoGP MA:	
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	N If yes, see add	litional informa	ation/clinical score sheet. ation/clinical score sheet. ation/clinical score sheet.	
UNI/REG only - if unable to carry	out intended visit deta	il reason below:			

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.

FHI 059, Version 11			Issu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0448]	Site No:	SS0089]			
Date of Visit:		11/09/2018			Inspector(s):	NLP		
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		te representa	tive?			Y Y	
Site Details						_		
Total No facilities		2 brood tanks, 8 Larval tanks, algal production facilities	Facilities sto	cked	0	No facilities	s inspected	all areas
Species	Fallow							
Age group								
No Fish								
Mean Fish Wt					(0:14)			
Next Fallow Date (S	ite)			Next Input Da	ate (Site)	Unsure of s	site future at	present
Recent (last 4 wks) If yes, detail:	disease prob	lems?		N/A	Any escapes	(since last v	visit)?	N/A
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?								Y Y Y Y N/A
Transport Records								
1. Are any movemen		• •	,	``	e ,			
If yes, is there a syst	tem in place	for maintenand	ce of transpor	tation records'	?			
Mortality Records								V
 Mortality records a How are mortalitie 		•			Other (detail)			ř
If other detail:		off site by Dou	alasBrae Ltd.					
3. Mortality records of			•					Y
4. Recent mortality (last 4 wks):		N/A site fallo	w since April 2	2018			
5. Evidence of recer		••						N/A
If yes, facility nos/no	mortality per	r facility/no sto	ck per facility/	reason:				
6. Any other peaks in	n mortality di	ring period ch	ecked?					Y
If yes, detail:	-	nortality in prev		tocks, general	ly single figure	e mortality, b	ut from a low	level stock
7. Have increased (mortalities bee	en reported to	vet or FHI?				Y
If yes, detail action:		samples take significant re	en and analys sults found	ed by FVG - ba	-			
8. Have 'mortality ev	ents' been re	eported to FHI?	? If no, add M	RI case and e	enter on morta	lity events s	neet.	N/A

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, record	ding and safe disposal been considered?	Y
3. Has the manner and period in which the APB will notify Sc	ottish 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 prese	ance or suspicion of the presence of a listed disease	Y
is detected been included and how and when that will be not	•	
5. Has the health status of aquaculture animals being stocked	d on the farm site been covered (equal or higher	Y
health status, certification if required)?		
6. Have the hughendry and hissessurity measures implement	ad batwaan aaab anidamialaajaal unit ta minimiaa	V
Have the husbandry and biosecurity measures implemente transmission of disease been covered (movement of staff, vis		· ·
7. Is documentation available regarding the measures in plac		Y
aquaculture animals held on site?		
8. Have the biosecurity procedures been adequately implement	ented on site?	Y
If no, detail:		
Results of Surveillance		
1. Has any animal health surveillance been carried out by, or	on behalf of, the business?	Y
2. If yes, are results available for inspection?		Y
3. Any significant results?		N
If yes, detail (if not detailed under recent disease problems).		
Descende als estad historia en	11 October 2017 and Contember 2010	

Records checked between:

11 October 2017 and September 2018

Case No:	2018-0448			Date of visit:	11/09/2018			
Site No:	SS0089	1		Inspector:	NLP]		
Results Summary	Freq.			Da	te of Notifica	tion		
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
		-		1				
Report Summary	Dete	l	and .					
Case Type ECI	Date 03/10/2018	Insp NI P	2 nd Insp PMM					
	03/10/2010							

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0470SITE NOSS0089INSPECTORNeil Purvis

DATE OF VISIT SITE NAME CASE NO 11/09/2018 Marine Farming Unit (Hatchery) 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

R14

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

FHI 059, Version 11	lss	ued by: FHI		Date of is	sue: 12/09/2017
Case No: 2018-0455				Date of visit: 1	2/09/2018
Time spent on site: 4h	1		Main Inspector	: DJ	T
Site No: FS1027 Business No: FB0440	Site Name: Business Name:	Linga (Setterne Grieg Seafood	/		
Case Types: 1 REP 2	DIA 3	4	5	6	
Water Temp (°C): 13	Thermometer No:	Site		FHI 045 complet	ed
Observations:	Region: SH	Water type	e: S	CoGP MA:	S-4
Dead/weak/abnormally behaving the clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?		Y If yes, see	additional inform	nation/clinical sco nation/clinical sco nation/clinical sco	re sheet.
UNI/REG only - if unable to carry	out intended visit detail re	ason 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.

FHI 059, Version 11			Issu	ied by: FHI			Date of issu	ie: 12/09/2017
Case No:	2018-0455]	Site No:	FS1027	,			
Date of Visit:		12/09/2018	1		Inspector(s):	DJT]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		ite representa	ative?			у У]
Site Details								
Total No facilities		10	Facilities stor	cked	5	No facilitie	s 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 (Si	ite)	mid Oct 2018	8	Next Input Da	ate (Site)	Late Janua	arv	
, ,	,							
Recent (last 4 wks) of	disease prob	lems?		Y	Any escapes	(since last	visit)?	Ν
, , ,	CMS Gill an							
Movement Records								
1. Movement record		or inspection?					20/22/22/2010	У
2. Date of last inspec							29/08/2018	X
3. Are records comp		•						У
4. Are movement rec								У
5. Are records comp								У
6. Are health certification	ates for intro	ductions (outw	ith GB) availa	ible?				У
Transport Records								
1. Are any movemer	nts carried ou	ut by (or on be	half) of the bu	usiness (not us	ing a STB)?			
If yes, is there a syst								
Mortality Records								
1. Mortality records a	available for i	inspection?						Y
2. How are mortalitie		•			Incinerated -	Shetland W	aste to Energ	qy
			due to the inc	creased mortali				57
3. Mortality records of								У
4. Recent mortality (•	•		wo weeks see a	additional com	ments for r	more detail	
5. Evidence of recen	nt increased/a		E.					Y
If yes, facility nos/no				/reason:				
as above								
6. Any other peaks in	n mortality du	uring period ch	lecked?					N/A
If yes, detail:								
7. Have increased (u	unexplained)							Y
If yes, detail action:				ed dead haul ha				
8. Have 'mortality ev	ents' been re	eported to FHI	? If no, add M	RT case and e	enter on morta	lity events s	sheet.	Y

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	N
If yes, detail:	
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	N
5. If yes, what treatment(s)?	
If other, detail:	
6. Are medicines stored appropriately?	Y
Biosecurity Records	
1. Biosecurity records available for inspection?	
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	
 4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers? 5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)? 	
 6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)? 7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site? 8. Have the biosecurity procedures been adequately implemented on site? If no, detail: 	
Results of Surveillance	
 1. Has any animal health surveillance been carried out by, or on behalf of, the business? 2. If yes, are results available for inspection? 3. Any significant results? 	Y Y Y
If yes, detail (if not detailed under recent disease problems). gill anaemia, CMS, possible jellyfish damag	ye
Records checked between: 29/08/2018	

F	HI 059, Version 11				Issued by: FHI		
	Case no:	2018-0455	Site No:	FS1027	Date of visit/ Sampling:	12/09/2018 12/	"(
l	Priority samples:	VI	BA	PA	MG x F	11	
l	Time sampling starts/ends:	17:30:00	18:30:00	Inspector:	DJT	VMD No.]
l	Environmental conditions:	1 Indoors	2	3	4	5	
	Summary samples	HIST Y	BA Y	MG Y VI	ΥΡΑ	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	Stock Origin Facility No	ω Girlsta	დ Girlsta	ъ Girlsta	4 Girlsta	4 Girlsta	Girlsta			
Ś	Facility NO	3	3	4	4	4				

Date of issue: 12/09/2017

)9/2018	Additior	nal Sam	ple Infor	mation:						
6		Total Te	ests ass	igned	3					

FHI 059, Versio	on 11		Issued by: FHI					Date of issue: 12/09				9/201
Case no:	2018-0455		Site N	0:	FS102	27	M	Method of killing: Percuss			sive	J
Date of visit:	12/09/20	18	Inspec	ctor(s):	DJT			5	Sheet Relevant: Y			
C (an atran a mass a												
Fish Number	nce: M for medium presence: W f	for weak pres		2 3	4	5	-		1	1		1
	er death (if > 45 minutes)	•			· · ·	r J						
External Signs												
Behaviour	Moribund											1
	Lethargic	S	S	S	S	S						
	Hanging vertical											
	Spiralling											
	Flashing			_	-							
Body	Loss of equilibrium Dark	w	w	w	w	w						
БОЦУ	Distended abdomen	•••	vv	••		vv						
	Anorexic											
	Scale Oedema											1
Opercula	Shortened			m		w						1
	Flared]
Haemorrhaging	Throat					S						1
	Ventrum					S						
	Base of fins				_							
Even a	Elsewhere											
Eyes	Exophthalmic Enophthalmic (sunken)											1
	Cataract											
	Haemorrhagic											
Gills	Pale	S	S	S	S	w						
	Zoned											
	Necrotic					W						
Lesions	Flank											
	Elsewhere											
Vent	Inflamed				_					_		
Lice Load	Trailing faeces 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 Gross haem			S	-							
	Tissue breakdown											
	Enlarged											
	Colour number(s)	1	1	1	1	six to s	seven					
	Granulomas]
	Lesions											
Pyloric caeca	Petechial haem											
	Tubules mauve											4
Spleen	Lack of fat Enlarged					S						1
opieen	Granulomas					3						1
Gut	No food present											1
	Yellow pseudo-faeces											1
	External haem											1
	Internal haem											
Body wall	Haemorrhaging											
Swim bladder	Haemorrhaging											
Kidner	Fluid filled											4
Kidney	Swollen	w	w	w	w	W/						1
	Grey Granular	vv	vv	VV	vv	w						1
	Liquefied											1
General	Parasites present											1
	Anaemia											1
												-

Case no:	2018-0455
	-

Г

Date of visit:

12/09/2018

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

Fish Number Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) External Signs Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Behaviour Moribund Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Body Distended abdomen Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Body Distended abdomen Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Body Distended abdomen Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Base of fins Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Base of fins Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Base of fins Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Eyes Exophthalinic (sunken) Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Gills Pale Image any lead for death (if > 45 minutes) Image any lead for death (if > 45 minutes) Eyes Exop	
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External haem Internal haem<	
Internal haem Image: Constraint of the second s	
Body wall Haemorrhaging	
Swim bladder Haemorrhaging	
Fluid filled	
Kidney Swollen	
Grey Grey	
Granular 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

Case No:	2018-0455			Date of visit:	12/09/2018]		
Site No:	FS1027]		Inspector:	DJT]		
Results Summary	Freq.			Da	te of Notifica	tion		
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
MG IHN	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018		
MG IPN	1/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018		
MG ISA	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018	DJT	
MG SAV	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018	DJT	
MG VHS	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018	DJT	
MG AGD	4/5	25/09/2018	DJT	25/09/2018	DJT	18/10/2018		
MG Para Ther	4/5	25/09/2018	DJT	25/09/2018	DJT	18/10/2018		
MG Sal Pox	3/5	25/09/2018	DJT	25/09/2018	DJT	18/10/2018		
Vibrio sp kidney	2/5	15/10/2018	DJT	15/10/2018	DJT	18/10/2018		
Vibrio sp gill	4/5	15/10/2018	DJT	15/10/2018		18/10/2018		
CGDH	5/5	02/10/2018	AJW	04/10/2018	AJW	18/10/2018	DJT	
MG PMVP -CMS	1/1	02/10/2018	AJW	04/10/2018	AJW	18/10/2018		
GPAT	5/5	02/10/2018	AJW	05/10/2018	AJW	18/10/2018	DJT	
HPAT	4/5	02/10/2018	AJW	06/10/2018	AJW	18/10/2018	DJT	
ADHE	5/5	02/10/2018	AJW	07/10/2018	AJW	18/10/2018	DJT	
CMPS	4/5	02/10/2018	AJW	08/10/2018	AJW	18/10/2018	DJT	
				_				
Report Summary								
Case Type	Date	Insp	2 nd Insp					
REP/DIA	18/10/2018	DJT	WJM					

marine scotland science



Grieg Seafood Shetland Ltd Gremista Lerwick Shetland ZE1 OPX

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NoFB0440SITE NoFS1027INSPECTORDavid Tomlinson

DATE OF VISIT SITE NAME CASE NO

12/09/2018 Linga (Setterness) 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

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

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

<u>Results</u>

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	POSITIVE		

R09

Salmon gill poxvirus

Fish Number	Endogenous control Cp value		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							
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		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:

<u>Gill</u>: 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.

<u>Heart</u>: 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).

<u>Gut and pyloric caeca</u>: 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.

<u>Spleen</u>: 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

FHI 059, Version 11	I	ssued by: FHI		Date of is	ssue: 12/09/2017
Case No: 2018-0456				Date of visit: 1	3/09/2018
Time spent on site: 4	h		Main Inspector	r: D.	JT
Site No: FS0710 Business No: FB0095	Site Name: Business Name:	Sandwick Cooke Aquacult	ure Scotland Lt	d	
Case Types: 1 REP	2 DIA 3	4	5	6	
Water Temp (°C): 13.1	Thermometer No:	T173		FHI 045 complet	ted
Observations:	Region: SH	Water type:	S	CoGP MA:	S-3
Dead/weak/abnormally behaving Clinical signs of disease observe Gross pathology observed? Diagnostic samples taken?	•	y If yes, see a	additional inform	nation/clinical sco nation/clinical sco nation/clinical sco	ore sheet.
UNI/REG only - if unable to carry	out intended visit detail	reason below:			

FHI 059, Version 11 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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0456		Site No:	FS0710	0			
Date of Visit:		13/09/2018]		Inspector(s):	DJT]
Registration/Author 1. Business/site det 2. Changes made to	ails summary		ite representa	ative?			у У]
Site Details								
Total No facilities		12	Facilities sto	cked	3	No facilitie	s inspected	3
Species	SAL							
Age group	2017 s1							
No Fish	59,401							
Mean Fish Wt	6.6							
Next Fallow Date (S	Site)	18th Sep		Next Input Da	ate (Site)	November	2018	
Recent (last 4 wks)	disease prob	alems?			Any escapes	: (since last	visit)?	N
If yes, detail:	Gill anaemi						vioit):	
Movement Record	s							
1. Movement record		or inspection?						N/A
2. Date of last inspe							27/03/2018	
3. Are records com		rectly entered?)					N/A
4. Are movement re		•		,				Y
5. Are records comp	plete and cor	rectly entered?)					Y
6. Are health certific	ates for intro	oductions (outw	/ith GB) availa	able?				N/A
Transport Records	5							
1. Are any moveme	nts carried o	ut bv (or on be	half) of the bu	isiness (not us	sing a STB)?			
If yes, is there a sys								
Mortality Records								
1. Mortality records		•						Y
2. How are mortaliti					Biogas - Gas	sk, Turriff		
If other detail:		management	10					
3. Mortality records	complete an	a correctly ente	-	70.2.200/)	ek 36 3976 (6	070/) wk25	020 (4 000/)	Y Nack 24
4. Recent mortality	(last 4 wks):			Gill issues an	•	0.07 <i>%</i>) WK33	030 (1.09%)	week 54
5. Evidence of recei		••						Y
If yes, facility nos/no	o mortality pe	er facility/no sto	ock per facility	/reason:				
as above	· · · · · · · · · · · · · · · · · · ·							
6. Any other peaks i If yes, detail:			IECKEO?					Y
7. Have increased (see addition		en reported to	vet or FHI2				
If yes, detail action:	unexplained)	Vet on site, f	•					
8. Have 'mortality ev	vents' been r				enter on morta	ality events s	heet.	Y

Treatments and Med	licines Reco	ords			
1. Recent treatments	(last 4 wks)?	>			Y
If yes, detail:		TMS			
If other, detail:	-				
2. Medicines records	available for	inspection?			Y
3. Are records comple	ete and corre	ctly entered?			Y
4. Are fish in a withdra	awal period?				Y
5. If yes, what treatme	ent(s)?		TMS		
If other, detail:					
6. Are medicines stor	ed appropria	tely?			Y
Biosecurity Records	5				
1. Biosecurity records		•			
		of mortality removal, record	• ·		
		which the APB will notify Sc at the site been included?	ottish Ministers or vete	erinary professional of any	
is detected been inclu	ided and how	w and when that will be not	ified to Scottish Minist		
5. Has the health stat health status, certification		Ilture animals being stocke ed)?	d on the farm site bee	n covered (equal or higher	
		curity measures implemente ered (movement of staff, vis		emiological unit to minimise or dead fish etc.)?	
	vailable rega	arding the measures in place			
		s been adequately impleme	ented on site?		
If no, detail:	<u> </u>				
Results of Surveilla	nce				
 Has any animal here If yes, are results a 		nce been carried out by, or	on behalf of, the busir	ness?	Y
					V
3. Any significant result vos. detail (if not de		recent disease problems).	CMS (Gill issues	1
n yes, detail (il 1101 de		recent disease problems).	CIVIS, C	100000	
R	ecords check	ked between:	27/3/18 to 13/9/18		

FHI 059, Version 11				Issued by: FHI		
Case no:	2018-0456	Site No:	FS0710	Date of visit/ Sampling:	13/09/2018	13/(
Priority samples:	VI	BA	PA	MG	HI	
Time sampling starts/ends:	13:00:00	14:15:00	Inspector:	DJT	VMD No.	0
Environmental conditions:	1 Indoors	2	3	4	5	
Summary samples	HIST Y	BA Y	MG Y VI	ΥΡΑ	Total Sa	mples

Add Fish/Pools - click

	Pool/Fish No	F1	F2	F3	F4	F5	P1			
	Fish nos	1				5				
			2	-			1-5			
	Pool Group	P1	P1		P1	P1				
		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 Facility No	ω Flaeshins	د Flaeshins	ω Flaeshins	د Flaeshins	o Flaeshins				

)9/2018															
	Additional histo pots used for F1-3, F4 and F5 FMM gill swab on same plate due to expired/unusable FMM plates stored in Shetland office.														
6	6 Total Tests assigned 3														
															•

FHI 059, Version 11			Issued by: FHI				Date of issue: 12/09/20						
Case no:	2018-0456		Site N	o:	FS0710 Meth			Method of killing: Percussive			Method of killing: Percussive		
Date of visit:	13/09/20)18	Inspec	ctor(s):	DJT			Sh	eet Re	elevant:	Y		
S for strong prosor	nce: M for medium presence: W	for wook pr	weak presence										
Fish Number			esence										
	er death (if > 45 minutes)												
External Signs	(_				
Behaviour	Moribund				S								
	Lethargic	S	S	S	S	S							
	Hanging vertical												
	Spiralling	_	_				_						
	Flashing												
Body	Loss of equilibrium Dark	_	s		_		_						
Body	Distended abdomen		3										
	Anorexic												
	Scale Oedema												
Opercula	Shortened	w		w									
	Flared												
Haemorrhaging	Throat												
	Ventrum		S	w	w	w							
	Base of fins												
Evec	Elsewhere												
Eyes	Exophthalmic Enophthalmic (sunken)												
	Cataract				-								
	Haemorrhagic										_		
Gills	Pale	S	S	s		m							
	Zoned												
	Necrotic	S											
Lesions	Flank			S									
	Elsewhere												
Vent	Inflamed	_	_		_		_						
Lice Load	Trailing faeces Estimate numbers		_										
Internal Signs											_		
Ascites	Clear												
	Bloody												
Oedema	In tissues												
Heart	Pale/anaemic	w											
	Granulomas	-											
	Deformed	S	m	m	_	m	_						
Liver	Petechial haem Gross haem		S			S							
	Tissue breakdown		_										
	Enlarged												
	Colour number(s)		1 5	5 1	1 1	4							
	Granulomas												
	Lesions		W			W							
Pyloric caeca	Petechial haem												
	Tubules mauve		S		_								
Spleen	Lack of fat Enlarged	s	m s			S							
opiecii	Granulomas	m	3			5 S							
Gut	No food present					-							
	Yellow pseudo-faeces												
	External haem												
	Internal haem												
Body wall	Haemorrhaging												
Swim bladder	Haemorrhaging												
	Fluid filled												
Kidney	Swollen												
	Grey Granular	w	w	w	w	w							
	Liquefied	••			1								
General	Parasites present												
	Anaemia												

Issued by: FHI

Case no:	2018-0456
	-

Г

Date of visit:

13/09/2018

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

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

2018-0456

Case No:	2018-0456]		Date of visit:	13/09/2018					
Site No:	FS0710	Inspector: DJT								
Results Summary	Freq.	Date of Notification								
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp		
MG IHN	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018	DJT			
MG IPN	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018	DJT			
MG ISA	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018	DJT			
MG SAV	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018	DJT			
MG VHS	0/1	18/09/2018	DJT	18/09/2018	DJT	18/10/2018	DJT			
MG AGD	2/5	25/09/2018	DJT	25/09/2018	DJT	18/10/2018	DJT			
MG PARA THER	4/5	25/09/2018	DJT	25/09/2018	DJT	18/10/2018	DJT			
MG SAL POX	0/5	25/09/2018	DJT	25/09/2018	DJT	18/10/2018	DJT			
Vibrio sp Kidney	2/5	26/09/2018	DJT	27/09/2018	DJT	18/10/2018	DJT			
Vibrio sp gill	2/5	26/09/2018	DJT	27/09/2018	DJT	18/10/2018	DJT			
CGDH	5/5	02/10/2018	AJW	02/10/2018	AJW	18/10/2018	DJT			
EPIT	2/5	02/10/2018	AJW	02/10/2018	AJW	18/10/2018	DJT			
GPAT	5/5	02/10/2018	AJW	02/10/2018	AJW	18/10/2018	DJT			
HPAT	5/5	02/10/2018		02/10/2018		18/10/2018	DJT			
SPAT	3/5	02/10/2018	AJW	02/10/2018	AJW	18/10/2018	DJT			
CMPS	5/5	02/10/2018		02/10/2018		18/10/2018	DJT			
MG PMCV -CMS	1/1	02/10/2018	AJW	02/10/2018	AJW	18/10/2018	DJT			
		1								
	-	-			<u> </u>					
Report Summary				1						
Case Type	Date	Insp	2 nd Insp							
DIA/REP	18/10/2018		Z IIISP WJM							
	10/10/2010	201	VV01V1	-						
				-						
		 								
				4						

marine scotland science



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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NoFB0095SITE NoFS0710INSPECTORDavid Tomlinson

DATE OF VISIT13/09/2018SITE NAMESandwickCASE NO20180456

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%)

R09

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

<u>Results</u>

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:

<u>Gill:</u> 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.

<u>Heart</u>: 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).

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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

FHI 059, Version 11	lss	sued by: FHI		Date of issue: 12/09/2017
Case No: 2018-0495				Date of visit: 09/10/2018
Time spent on site:	1.5 Hr		Main Inspecto	or: WJM
Site No:SS0801Business No:SB0406	Site Name: Business Name:	Garvan Fass Fern Mus	sels	
Case Types: 1 ECI	23	4	5	6
Water Temp (°C): N/A	Thermometer No:			FHI 045 completed
Observations:	Region: HI	Water type	e: S	CoGP MA:
Dead/weak/abnormally behavin Clinical signs of disease observ Gross pathology observed? Diagnostic samples taken?	• •	N If yes, see	additional inform	mation/clinical score sheet. mation/clinical score sheet. mation/clinical score sheet.
UNI/REG only - if unable to carr	y out intended visit detail re	eason 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 on 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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0495]	Site No:	SS0801]			
Date of Visit:		09/10/2018			Inspector(s):	WJM]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		te representa	itive?			Y N]
Site Details								
Total No facilities	_	15	Facilities sto	cked	7	No facilitie	s inspected	15
Species	MED	MED						
Age group	2016	2017						
No Fish	60 tonnes	60 tonnes						
Mean Fish Wt	N/A	N/A						
Next Fallow Date (Si	ite)	never fallow		Next Input Da	ate (Site)	JAN-FEB	2019	
Recent (last 4 wks) o	disease prob	lems?		N	Any escapes	s (since last	visit)?	N/A
If yes, detail:								
Movement Records	5							
1. Movement record	s available fo	or inspection?						Y
2. Date of last inspec	ction:						09/06/2016	
3. Are records comp		•						Y
4. Are movement rec								N/A
5. Are records comp								N/A N/A
6. Are health certifica		Juctions (outw	ith GD) availa	idle :				N/A
Transport Records								
1. Are any movemer	nts carried ou	it by (or on bel	nalf) of the bu	siness (not usi	ing a STB)?			
If yes, is there a syst	em in place f	for maintenand	ce of transpor	tation records?	?			
Mortality Records								
1. Mortality records a	available for i	nspection?						Y
2. How are mortalitie					Other (detail))		
		s drop to seabe						
3. Mortality records of	•	-						Y
4. Recent mortality (no known me	ortalities				
5. Evidence of recen		••		/***				N
If yes, facility nos/no	monality per	Tacility/no sto	ck per lacility/	reason:				
6. Any other peaks in	n mortality du	ring period ch	ecked?					N
If yes, detail:		0111111						
7. Have increased (u	inexplained)	mortalities bee	en reported to	vet or FHI?				N/A
If yes, detail action:								
8. Have 'mortality ev	ents' been re	ported to FHI?	? If no, add M	RT case and e	enter on morta	ality events s	sheet.	N/A

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	Y
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)?	Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise	Y
transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of	ř
aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site? If no, detail:	I
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: 09/06/2016 - 09/10/2018	

HI 059, Version 11	Issued by: FHI			Date	of issue: 12/0
Case Number:	2018-0495 Site No:	SS080	01		
Date of Visit	09/10/2018 Inspector:	WJM			
Number of Susceptil	ble species on site			-	
	ies present = <u>LOW</u> risk				
f 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
ites within a tidal e	xcursion	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal				
	excursion	0	2	10	2
ive shellfish moven.	nents	0	1-2	>3	
Novements on	Frequency of movements on from equivalent MS	0	5	10	0
	Frequency of movements on from equivalent zone or				
	compartment including third country	0	10	20	0
	Number of suppliers	0	5	10	0
			-		
Novements off	Frequency of movements off within MSS Management				
	Areas	0	1	2	2
	Frequency of movements off outwith MSS Management				
	Areas	0	3	6	0
	Number of destinations	0	3	6	6
Management			Secure (effluent	Unsecure (no effluent	
Management practices		None			
Water contacts with	Depuration of stock from own sites within MSS		(effluent treatment)	(no effluent treatment)	
	management area	None 0	(effluent	(no effluent	0
Water contacts with	management area Depuration of stock from other businesses sites within	0	(effluent treatment)	(no effluent treatment)	
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area		(effluent treatment)	(no effluent treatment)	0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0	(effluent treatment)	(no effluent treatment) 2 6	0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area	0	(effluent treatment)	(no effluent treatment)	
vater contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0	(effluent treatment)	(no effluent treatment) 2 6	0
Water contacts with	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 0 0	(effluent treatment)	(no effluent treatment) 2 6 8	0
Water contacts with depuration facilities	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area	0 0 0 1	(effluent treatment) 1 2 4 2 or 3	(no effluent treatment) 2 6 8 ≥ 4	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1	(effluent treatment) 1 2 4 2 or 3 1 1 1 1 1 2	(no effluent treatment) 2 6 8 ≥ 4 2 5	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 1	(effluent treatment) 1 2 4 2 or 3 1	(no effluent treatment) 2 6 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 1 0 0	(effluent treatment) 1 2 4 2 or 3 1 1 1 1 1 2	(no effluent treatment) 2 6 8 ≥ 4 2 5	0
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 0 1 0 0	(effluent treatment) 1 2 4 2 or 3 1 1 Yes 0	(no effluent treatment) 2 6 8 ≥ 4 2 5 No	0 0 2 5
Water contacts with depuration facilities Biosecurity Contacts with other	management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 0 1 0 0	(effluent treatment) 1 2 4 2 or 3 1 1 Yes	(no effluent treatment) 2 6 8 ≥ 4 2 5 No	0 0 2 5

FHI 059, Version 11

Case No:	2018-0495			Date of visit:	09/10/2018	l		
Site No:	SS0801			Inspector:	WJM			
Results Summary	Freq.	Date of Notification						
Results Summary	rieq.	Database	Insp		Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type	Date	Insp	2 nd Insp					
ECI	16/10/2018	WJM	ALW					

marine scotland science



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 NOSB0406SITE NOSS0801INSPECTORWarren Murray

 DATE OF VISIT
 09/08/2018

 SITE NAME
 Garvan

 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: Fish Health Inspector

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Date: 16/10/2018

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

FHI 059, Version 11	Is	sued by: FHI		Date of issue: 12/09/2017
Case No: 2018-0511			Γ	Date of visit: 27/08/2018
Time spent on site: 45	5 mins	М	lain Inspector:	PMM
Site No: SS0819 Business No: SB0432	Site Name: Business Name:	Easterdale Eastvoe Shellfish		
Case Types: 1 ECI 2	2 3	4 5	5	6
Water Temp (°C): 12.9	Thermometer No:	T153] F	FHI 045 completed
Observations:	Region: SH	Water type:	S	CoGP MA:
Dead/weak/abnormally behaving	fish present?	N If yes, see add	ditional informa	ation/clinical score sheet.
Clinical signs of disease observed				ation/clinical score sheet.
Gross pathology observed?		N If yes, see add	ditional informa	ation/clinical score sheet.
Diagnostic samples taken?				
UNI/REG only - if unable to carry	out intended visit detail r	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.

FHI 059, Version 11			lssu	ed by: FHI			Date of issu	e: 12/09/2017
Case No:	2018-0511]	Site No:	SS0819				
Date of Visit:		27/08/201	8		Inspector(s):	РММ]
Registration/Autho 1. Business/site deta 2. Changes made to	ails summary		site representa	ative?			Y N]
Site Details								
Total No facilities	-	4	Facilities sto	cked	4	No facilitie	s inspected	4
Species	MED	MED	MED					
Age group	2018 Spat	2016	2017					
No Fish	2 lines	1 lines	1 line					
Mean Fish Wt	mixed	mixed	mixed					
Next Fallow Date (S	ite)	Never fallow	N	Next Input Da	ate (Site)	2018 Spat	collection	
Recent (last 4 wks)	disease prob	lems?		N	Any escapes	s (since last	visit)?	N
If yes, detail:								
Movement Records	5							
1. Movement record	s available fo	or inspection?)					Y
2. Date of last inspe							30/06/2016	
3. Are records comp	lete and corr	ectly entered	?					Y
4. Are movement ree								N/A
5. Are records comp		•						N/A
6. Are health certification	ates for intro	ductions (out	with GB) availa	able?				N/A
Transport Records								
1. Are any movemer	nts carried ou	It by (or on b	ehalf) of the bu	isiness (not us	ing a STB)?			
If yes, is there a syst	tem in place	for maintena	nce of transpo	rtation records?	?			
Mortality Records								
1. Mortality records a	available for i	inspection?						Y
2. How are mortalitie	es disposed o	of?			Other (detail))		
	Seabed - en							
3. Mortality records of	•	correctly en						Y
4. Recent mortality (,		no mortalitie	s observed,				
5. Evidence of recent If yes, facility nos/no				/reason:				N
6. Any other peaks in	n mortality du	uring period c	hecked?					N
If yes, detail:								
7. Have increased (u	unexplained)	mortalities b	een reported to	o vet or FHI?				N/A
If yes, detail action:								
8. Have 'mortality ev	ents' been re	eported to FH	II? If no, add M	IRT case and e	enter on morta	ality events s	sheet.	N/A

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 <i>how</i> and <i>when</i> 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).	

FHI 059, Version 11	Issued by: FHI			Date	of issue: 12	2/09/20
Case Number:	2018-0511 Site No:	SS081	9			
Date of Visit	27/08/2018 Inspector:	PMM				
Number of Susceptik	ble species on site			-		
-	ies present = <u>LOW</u> risk					
	present, score for each pathogen		No	Yes		
	Susceptible to Bonamia ostrea (OED)		0	25	0	
	Susceptible to Marteilia refringens (OED, MED)		0	3	3	
	Susceptible to OsHV (CGI)		0	3	0	
Sites within a tidal ex	xcursion	1	2-5	>6		
Site contacts	Number of sites holding susceptible species within a tidal	1				
	excursion	0	2	10	10	
			4.0			
Live shellfish moven		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 within MSS Management					
	Arooo					
	Areas	0	1	2	0	
	Frequency of movements off outwith MSS Management					
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3	6	6	
	Frequency of movements off outwith MSS Management					
Management	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3 3 Secure (effluent	6 6 Unsecure (no effluent	6	
Management practices	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3 3 Secure (effluent	6 6 Unsecure	6	
Water contacts with	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations	0	3 3 Secure (effluent	6 6 Unsecure (no effluent	6	
practices	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS	0	3 3 Secure (effluent	6 6 Unsecure (no effluent	6	
Water contacts with	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area	0 0 None	3 3 Secure (effluent treatment)	6 6 Unsecure (no effluent treatment)	6 3	
Water contacts with	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 0 None	3 3 Secure (effluent treatment)	6 6 Unsecure (no effluent treatment) 2	6 3	
Water contacts with	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area	0 0 None	3 3 Secure (effluent treatment)	6 6 Unsecure (no effluent treatment)	6 3	
Water contacts with	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within	0 0 None	3 3 Secure (effluent treatment)	6 6 Unsecure (no effluent treatment) 2	6 3	
Water contacts with	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0 0 None	3 3 Secure (effluent treatment) 1 2	6 6 Unsecure (no effluent treatment) 2 6	6 3 0	
Water contacts with	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management	0 0 None	3 3 Secure (effluent treatment) 1 2	6 6 Unsecure (no effluent treatment) 2 6	6 3 0	
practices Water contacts with depuration facilities Biosecurity	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area	0 0 None	3 3 Secure (effluent treatment) 1 2 4	6 6 Unsecure (no effluent treatment) 2 6 8	6 3 0	
practices Water contacts with depuration facilities Biosecurity	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites	0 0 None 0 0 0	3 3 Secure (effluent treatment) 1 2 4 2 or 3	6 6 Unsecure (no effluent treatment) 2 6 8 2	6 3 0 0	
Water contacts with depuration facilities Biosecurity Contacts with other	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 None 0 0 0 0 1	3 3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1	6 6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	6 3 0 0 0	
Water contacts with depuration facilities Biosecurity Contacts with other	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 None 0 0 0 0 1	3 3 Secure (effluent treatment) 1 2 4 2 or 3 1	6 6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2	6 3 0 0 0	
Water contacts with depuration facilities Biosecurity Contacts with other	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 0 0 0 0 0 0 1 0 0	3 3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1	60Unsecure (no effluent treatment)268≥ 425No		
Water contacts with depuration facilities Biosecurity Contacts with other	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase	0 0 0 0 0 0 0 1 0 0	3 3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes	6 6 Unsecure (no effluent treatment) 2 6 8 ≥ 4 2 5	6 3 0 0 0	
Water contacts with depuration facilities Biosecurity Contacts with other	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 0 0 0 0 0 0 1 0 0	3 3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes	60Unsecure (no effluent treatment)268≥ 425No		
Water contacts with depuration facilities Biosecurity Contacts with other	Frequency of movements off <u>outwith</u> MSS Management Areas Number of destinations Depuration of stock from own sites within MSS management area Depuration of stock from other businesses sites within MSS management area Depuration of stock from sites outwith MSS management area Number of sites Sites operating from single shorebase Sites sharing staff and equipment	0 0 0 0 0 0 0 1 0 0	3 3 Secure (effluent treatment) 1 2 4 2 or 3 1 1 1 Yes 0	60Unsecure (no effluent treatment)268≥ 425No	6 3 0 0 0 0	

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Case No:	2018-0511]		Date of visit:	27/08/2018]		
Site No:	SS0819]		Inspector:	PMM]		
Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type	Date	Insp	2 nd Insp					
ECI	26/10/2018	PMM	ALW					
			 					

marine scotland science



Eastvoe Shellfish Sained Eastvoe Scalloway Shetland ZE1 0US

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOSB0432SITE NOSS0819INSPECTORPaul McKay

DATE OF VISIT27/08/2018SITE NAMEEasterdaleCASE NO20180511

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:

R14

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