

Case No: 2021-0391 Date of visit: 06/10/2021

Time spent on site: 8 hours Main Inspector:

Site No: FS1101 Site Name: Etive 3 (Port na Mine)
Business No: FB0456 Business Name: Dawnfresh Farming Ltd

Case Types: 1 SLA 2 3 4 5 6

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

Observations: Region: ST Water type: S CoGP MA M-36

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

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

Additional Case Information:

All of the 2019 year class fish are planned to be harvested out week beginning 18th of October.

Well boat has been hired in to harvest out the fish on site, (2019) stock, another treatment boat has been in the loch doing bath treatments. 780 tonnes have been harvested since the 13th of September - Salmosan treatments for the 2021 fish on site. 2019 fish will all be harvested.

Decision was made middle of August to harvest 2021 fish out and effort was made to acquire a well boat for that purpose.

0.3 of total life stages is trigger level for treatment - Documented. Coincides with roughly 0.1 females.

treatment boat came in on week 27 - Hydrolicer - Good results - mortality was normal

Lice numbers rose sharply after the Hydrolicer treatments, consistent with resettlement - different Hydrolicer used again - 3rd of August.

It was reported anecdotally that the first Hydrolicer that arrived in week 27 had a malfunction that lead to removed lice being leaked back into the loch, this could have contributed to the rapid increase in Sea lice counts recorded in July.

Rainfall and water temperature have both been at an unusually low and high extremes respectively. Company in the opinion that this has massively contributed to the unusual high levels of lice observed on fish.

Remote paperwork completed by [REDACTED], onsite inspection and physical record check carried out by [REDACTED].

Pens with different size fish. The smaller fish, that had not been stocked long on the site had no damage evident. Pens with larger fish tended to have some grazing damage.

Quite a number of pens with a small amount of fish remaining following intensive harvesting from the site after the mortality event a few weeks prior. These pens will be manually emptied (i.e. harvested) in the coming week, rather than by wellboat.

As the pumps on the wellboat were struggling to empty the pens completely. So a number of pens will be emptied across the site in the coming week.

Some records received and checked 30/11/22, 13/12/22 and meeting to discuss further documents and plans 13/01/23. Case to be closed following discussion and review of provided materials. [REDACTED] (24/01/23)

Case No: **2021-0391** Site No: **FS1101**
 Date of Visit: **06/10/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

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

Site Details (include cleaner fish for all sections)

Total No facilities	10	Facilities stocked	8	No facilities inspected	8
Species	RTR	RTR			
Age group	2019	2021			
No Fish	78,000	251,000			
Mean Fish Wt	3.5	500g			
Next Fallow Date (Site)	June 22		Next Input Date (Site)	July 22	
Recent (last 4 wks) disease problems?			N	Any escapes (since last visit)?	N
If yes, detail:	[REDACTED]				

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **23/11/2020**
 3. Are records complete and correctly entered? **Y**
 4. Are movement records available for dead fish and waste? **Y**
 5. Are records complete and correctly entered? **Y**
 6. Are health certificates for introductions (outwith GB) available? **N/A**

Transport Records

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

Mortality Records

1. Mortality records available for inspection? **Y**
 2. How are mortalities disposed of? **Whole fish - Dundas Chemicals**
 If other detail: **[REDACTED]**
 3. Mortality records complete and correctly entered? **Y**
 4. Recent mortality (last 4 wks): **wk39(0.70%-2585),wk38(0.41%-970),wk37(0.24%-565),wk36(0.06%-148)**
 5. Evidence of recent increased/atypical mortalities? **Y**
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
wk31 2021- 1.32% - Waterborne enviromental insult.
 6. Any other peaks in mortality during period checked? **N**
 If yes, detail: **[REDACTED]**
 7. Have increased (unexplained) mortalities been reported to vet or FHI? **N/A**
 If yes, detail action: **[REDACTED]**
 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet. **Y**

Treatments and Medicines Records

1. Recent treatments (see comment)? Y

If yes, detail: T.M.S.,
Salmosan

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)? Salmosan, TMS

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?

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: 23/11/2020-06/10/2021

Case No: Site No:

Date of visit: Inspector(s):

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
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ENHANCED SEA LICE INSPECTION CHECKLIST

a. Inspection of sea lice records

1.1 Are sea lice count records available for inspection?	Medium	Y	CoGP 1.2.1, 1.2.2, Annex 6 SSI 1,2, SSI 1,2(g)	
1.2 Do records adequately reflect the required standard specified in the SSI ¹ and the CoGP ² ? (Counts should be weekly, record the person making the count, date of the count, number of fish sampled (should be 25), pen or facility number recorded, water temperature ³ , number of parasites observed and correct stages recorded ⁴)	Low & Medium	Y		
1.3 Where weekly counts are not conducted is the reason for not conducting the count stated?	Low	Y		
1.4 Is that reason considered acceptable by the Inspector? Give detail.	Low	N/A		
1.5 Has the site experienced sea lice problems in the previous 4 years?		Y	Detail if necessary:	Unusual elevated sea lice levels seen this year. Company reports issues with treatment boats, and abnormal environmental conditions contributing to the issue. See additional info.

b. Inspection of records relating to treatment and control of sea lice

2.1 Has appropriate action been taken where: a) <i>L. salmonis</i> record levels have been above the suggested criteria for treatment? b) <i>C. elongatus</i> infestation is at a level considered to cause significant welfare problems	High	Y	CoGP Annex 6	
2.2 Is therapeutic treatment initiated ASAP where required?	High	Y	CoGP 4.3.81, 5.3.50	
	Medium	Y	CoGP 4.3.130, 5.3.84	
2.3 Where medicines have been administered there should be a record of : the name / identity of the product the date of administration the quantity (concentration and amount) administered the method of administration of the product the identification of the fish / facilities treated name of the person administering the treatment the withdrawal period	High	Y	VMD ¹² 19 SSI 1,3	
	High	Y		
	High	Y		
	High	Y		
	High	Y		
	Low	Y		
	Medium	Y		
2.4 If the medicine is administered by a veterinary surgeon: the name of the veterinary surgeon name of the product	High	Y	VMD 18	
	High	Y		

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
batch number	High	Y		On average over 50% clearance is achieved from medicinal treatments,
the date of administration	High	Y		
amount administered	High	Y		
identification of fish treated	High	Y		
withdrawal period	Medium	Y		
2.5 Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?	High	Y		
Inspect records to confirm. Significant impact - ≥50% reduction in site average <i>L.salmonis</i> numbers (all stages)				
2.6 If other methods are employed on site to control sea lice and their impact is there a record of:	Low	Y	SSI, 1,4	
the nature and date of the method employed; the identification number of all facilities subjected to the method; the name of the person employing the method				
2.7 Where medicines have been acquired is there a record of:			VMD 19	
proof of purchase of the medicine concerned	Medium	Y	VMD 17	
name of the product	High	Y		
batch number	High	Y		
the date of purchase	Medium	Y		
the quantity purchased	High	Y		
the name and address of the supplier	Medium	Y		
2.8 Where medicines have been disposed is there a record of:			VMD 19	
the date of disposal	Medium	N/A		
the quantity of product involved	Medium	N/A		
how and where it was disposed of	Medium	N/A		
2.9 Are veterinary health plans available which detail bio-security protocols, preventative measures and treatments in relation to sea lice?	Medium	Y	CoGP 4.3.129, 5.3.83	Some failed treatments due to a variety of circumstances. E.g weather, equipment issues, fish welfare. All recorded appropriately.
Consider the following points over a percentage of treatments conducted on site				
2.10 Has the recommended course of treatments been completed?	Medium	N	CoGP 4.3.134, 5.3.88	
2.11 If not, is there a recorded acceptable reason for not completing treatment?	Medium	Y	CoGP 4.3.135, 5.3.89	
2.12 Was advice taken from the Veterinary surgeon in such circumstances?	Medium	Y	CoGP 4.3.135, 5.3.89	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
2.13 Are there clear written instructions regarding medicine use, available to those responsible for treatment administration?	Medium	Y	CoGP 4.3.133, 5.3.87	
2.14 Does the site have treatment discharge consents relevant to sea lice?		Y	Detail if necessary:	
c. Inspection of records relating to farm management groups and farm management agreements or statements				
3.1 Is there a nominated farmer acting as coordinator and point of contact for this farm or area inclusive of this farm?	Low	Y	SSI 1,5,b CoGP 4.3.75, 5.3.44	
3.2 Is there a written undertaking that the farm will observe the provisions of the NTS ⁶ ?	Low	Y	CoGP 4.3.76, 5.3.45	
3.3 Has an area group been formed within the area containing the site?	Medium	Y	CoGP 4.3.77, 5.3.46	
3.4 Does the remit of the area group have appropriate veterinary involvement? Consider: -agreed basis for monitoring sea lice -coordinated monitoring and treatment -co-operation between participating farms This may require follow up investigation conducted off site to determine	Medium	Y	CoGP 4.3.77, 5.3.46 SSI 1,5, c	
3.5 Are records available of any decisions made by the FMG in relation to the prevention, control and reduction of parasites?	Low	N	SSI 1, 5, c	
3.6 Where treatments have been administered is this done in accordance with principles to maximise the effectiveness of treatments, promote the minimal use of medicines consistent with the maintenance of high standards of fish welfare and help preserve their efficacy? For example, the principles of ISLM include: Resistance monitoring – reporting suspected adverse drug event (SADE) to the VMD. The steps to determine if resistance is considered a reason for a suspected lack of efficacy (e.g. Bio-assay tests and results, seeking veterinary advice) Appropriate discharge consent in place Use of authorized medicines with veterinary instruction and advice as necessary Monitoring lice numbers Using an array of treatments where possible Treating all stocks on site at the same time Avoiding the simultaneous use of different active ingredients Avoiding consecutive treatments of the same active ingredient, and certainly not on the same cohort of lice	Medium	Y	4.3.82, 5.3.51	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
Routine removal of moribund fish and regular removal of mortalities.				
3.7 Are weekly monitoring results communicated to other farmers within the defined area?	High	Y	CoGP 4.3.78, 5.3.47	
3.8 Is this done 'as soon as reasonably possible where lice numbers exceed the suggested criteria for treatment?	High	Y	CoGP 4.3.79, 5.3.48	
3.9 Is sea lice data and other information relevant to the management of sea lice provided to the SSPO?	Low	Y	CoGP 4.3.80, 5.3.49	
3.10 Are annual review meetings held by FMA groups to evaluate site performance against set criteria?	High	N	CoGP 4.3.83, 5.3.52	
3.11 Is there a signed documented farm management agreement or farm management statement relevant to the site and CoGP Farm Management Area (or equivalent)?		Y	AFSA ¹³ 4A	Farm management statement in place.
3.12 Are up to date copies of FMS available from other APB operating within the same FMA?	Medium	Y	Detail if necessary: CoGP 4.3.88, 5.3.57	
3.13 Are significant changes to FMS notified to other companies within the FMA?	Medium	Y	CoGP 4.3.89, 5.3.58	
3.14 Is there co-operation between APB's operating within the FMA in the development and implementation of FMAg?	Medium	Y	CoGP 4.3.90, 5.3.59	
3.15 Are copies of FMS or FMAg available for inspection?	Medium	Y	AFSA 4B	
3.16 Does the FMS or FMAg take into account the relevant aspects regarding a sea lice control strategy?	Medium	Y	CoGP 4.3.91, 5.3.60	
3.17 If the FMA has been redefined, is there documented evidence to demonstrate that the risks to health within and outwith the area is not increased by the proposal?	High ¹⁰	N/A	CoGP 4.3.92, 5.3.61	
3.18 Is the CoGP Farm Management Area (or equivalent) fallowed synchronously on a single year class basis?	High	N	CoGP 4.3.100	
3.19 If answered no to 3.18, then is there a documented risk assessment which meets the requirements of CoGP point 4.3.101?	High	N	CoGP 4.3.101	
d. Inspection of records relating to training and procedures				
4.1 Is there a training programme or plan in place relevant to sea lice control for the site?	High	Y	CoGP 7.1.8	Sea lice identification training, Fish welfare, Part of induction training. Covered under fish welfare training.
4.2 Are training records available for relevant staff in relation to:			CoGP 4.1.6, 5.1.6 SSI, 1,1	
parasite identification	High	Y	CoGP 4.3.84-86,	
counting parasites (procedures for)	High	Y	5.3.53-55	
recording counts	High	Y		
biology and life cycle of parasites	Low	Y		
symptoms of parasite infection in fish	Low	Y		

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
<p>4.3 Have staff been trained in the administration of treatments?</p> <p>N.B. there is no legal requirement to maintain a record of this</p> <p>Where records exist regarding SOPs and site procedures these should be inspected to confirm suitability</p>	High	Y	CoGP 4.1.6, 5.1.6 CoGP 4.3.84, 5.3.53	
e. Inspection of site and site stock				
<p>5.1 Are medicines used, stored and disposed of safely?</p> <p>5.2 Do the sea lice levels observed on stocks reflect sea lice count data?</p> <p>Refer to section e) of guidance notes</p> <p>5.3 Does the site appear satisfactory in terms of fish welfare relating to sea lice infestation?</p>	Medium High High	Y Y Y	VMD schedule 5	
f. Inspection of farm count procedures				
<p>6.1 Are pens and fish sampled at random?</p> <p>6.2 Have the personnel conducting counts had appropriate training in lice recognition and recording?</p> <p>(Cross reference to training records – Section d)</p> <p>6.3 Can such personnel demonstrate post training competence?</p> <p>6.4 Do the sample sizes and methods of sampling match the CoGP suggested protocol (detailed iii – vii)?</p> <p>N.B. Other strategies are acceptable if considered adequate in the control and reduction of sea lice</p> <p>6.5 Is identification and recording of sea lice count information including species and stages observed to be correct?</p> <p>Minimum recording requirements within the CoGP and NTS are: for Caligus elongatus all identifiable stages and for Lepeophtheirus salmonis chalimus, mobiles and adult females (with or without egg strings)¹¹</p> <p>6.6 Is the transfer of data from field counts to records observed to be satisfactory?</p>	Low High High Medium High Medium	Y Y Y Y Y N/A	CoGP Annex 6, 4.3.84-86, 5.3.53-55 CoGP 4.3.85, 5.3.54 Annex 6 Annex 6	Did not observe due to Covid distancing requirements.
g. Inspection of treatment administration procedures				
<p>7.1 Are treatments considered to be administered in an appropriate competent manner?</p> <p>Consider appropriate use of tarpaulins; completion of medication per prescription, correct concentrations, mixing and administrations, appropriate product used</p> <p>7.2 Is accurate information provided to the attending veterinary surgeon for dosage calculation?</p>	High High	N/A N/A	CoGP 4.3.131, 5.3.85	No treatment observed.

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
7.3 Are the fish under consideration being given any other medication, or are they in a withdrawal period for any other medication?		N/A		
7.4 If so, has the prescribing veterinary surgeon been informed of this?	Medium	N/A	CoGP 4.3.132, 5.3.86	
7.5 Are clear instructions for medication, dosage and administration communicated to the staff responsible for treatment?	High	N/A	CoGP 4.3.133, 5.3.87	

Additional actions	Powers	Comments and advice given or action taken if necessary
h. FHI sea lice counts If necessary conduct a sea lice count in accordance with the protocol of the CoGP. Indicate where this procedure has been done and make a record of results within the comments box	Power granted under the Act – section 3 (2) (a)	
i. Collection of samples If necessary collect samples. Indicate if samples have been taken and detail what those samples are and the purpose of their collection	Power granted under the Act – section 3 (3) (a)	
j. Enforcement Notice. If an enforcement notice has been issued then maintain a copy / duplicate and record detail Guidance on completing the Enforcement Notice	Power granted under the Act – Section 6 (2)	

[1] Scottish Statutory Instrument – The Fish Farming Businesses (Record Keeping) (Scotland) Order 2008

[2] A Code of Good Practice for Scottish Finfish Aquaculture

[3] Water temperature to be measured at the half way point of the depth of the facility containing the fish, or as close to as possible. For SW cage sites one reading per count may be s

[4] Recording requirements:- for *C. elongatus* – all identifiable stages and for *L. salmonis* - mobiles and adult females (with or without egg strings)

[5] Area refers to management area as specified within Part 3 of the industry CoGP or as redefined appropriately

[6] For reference Annex 6 of the CoGP provides the detail of the NTS

[7] FMA = Farm Management Area

[8] FMS = Farm Management Statement

[9] FMAg = Farm Management Agreement

[10] No further action may be required when answering no to this point and yes to 3.18

[11] Legal recording requirements within the SSI stipulate – for *Caligus elongatus*: mobiles; and for *Lepeophtheirus salmonis*: non-gravid mobiles and gravid females.

[12] VMD - The Veterinary Medicines Regulations 2013 (SI 2013 No 2033)

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
[13] AFSA - Aquaculture and Fisheries (Scotland) Act 2007 (as amended)				

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0456	DATE OF VISIT	06/10/2021
SITE No	FS1101	SITE NAME	Etive 3 (Port na Mine)
CASE No	20210391	INSPECTOR	[REDACTED]

ENHANCED SEA LICE INSPECTION

An enhanced sea lice inspection to ascertain the levels of sea lice and for assessing the measures in place for the prevention, control and reduction of sea lice was conducted in accordance with the Aquaculture and Fisheries (Scotland) Act 2007.

The visit consisted of an inspection of records with regards to sea lice, the stock on site, site procedures with regards to sea lice and the provision of advice.

Records

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

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

Mortality records were inspected and found to be adequately maintained.

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

a) Inspection of sea lice records

The site meets the requirement of current Scottish industry best practice. There were no recommendations made and no further action is required.

b) Inspection of records relating to treatment and control of sea lice

Although the site meets the requirement of current Scottish industry best practice, the sea lice records demonstrated that sea lice levels on site had been significantly above the suggested criteria for treatment despite the management actions undertaken.

It is recommended that the sea lice management strategy be reviewed, taking into account veterinary advice, where necessary, to ensure that an effective strategy is being implemented that will meet the requirements of the Code of Good Practice for Scottish Finfish Aquaculture (CoGP) and follow the standards associated with A National

Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms, as described in Annex 6 of the CoGP.

c) Inspection of records relating to farm management groups and area management agreements.

The following recommendations are made for improvement.

Records of decisions made by the farm management group in relation to the prevention, control and reduction of sea lice were not available.

It is recommended that to meet the requirements of schedule 1, section 5(c) of the Fish Farming Business (Record Keeping) (Scotland) Order 2008 a record should be kept of any decision made by the area management group relating to the prevention, control and reduction of sea lice.

During inspection it was determined that annual review meetings had not been held by the farm management area group with a view to evaluating site performance against set criteria with regards to sea lice management. Quarterly meetings have since been arranged amongst the farm management area group.

It is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4 point 3.83) annual review meetings should be convened by the farm management area group to evaluate performance of the farms within the area in regards to the criteria set out in the National Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms, as described in Annex 6 of the CoGP

The farm management area is not followed synchronously on a single year class basis, however a risk assessment was not carried out to determine the risk to other businesses in the area.

It is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4, point 3.100) the farm management area should be followed synchronously on a single year class basis.

Alternatively, it is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4, point 3.101) a documented risk assessment, which considers the risks to the company's own operations and to the operations of other companies operating within the farm management area and any adjacent areas, should be undertaken, to include strategies to be followed for pathogen and parasite control in the absence of following.

d) Inspection of records relating to training and procedures

The site meets the requirement of current Scottish industry best practice. No recommendations made or further action required.

e) Inspection of site and site stock

The site meets the requirement of current Scottish industry best practice. No recommendations made or further action required.

f) Inspection of farm count procedures

R04

An inspection of site staff conducting and recording a sea lice count was carried out. This met the requirements of The Fish Farming Business (Record Keeping) (Scotland) Order 2008 and CoGP. No further recommendations or further action required.

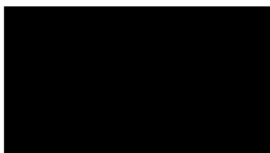
The transfer of data from field counts to records could not be observed due to Covid-19 social distancing requirements.

g) Inspection of treatment administration procedures

Procedures were not inspected as a treatment was not taking place at the time of inspection. However, discussions on procedures with the company correspondent would suggest that the site meets the requirement of current Scottish industry best practice.

Further Action

The recommendations in this report should be implemented by **01/12/2022**. Documentation should be provided as evidence that the recommendations have been implemented. Enforcement action may result if the recommendations are not implemented in the necessary time frame. Records should be sent to Marine Scotland Science's Fish Health Inspectorate (FHI) (contact details are provided below).



Signed:

Date: 25/08/2022

Fish Health Inspector

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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0456	DATE OF VISIT	06/10/2021
SITE No	FS1101	SITE NAME	Etive 3 (Port na Mine)
CASE No	20210391	INSPECTOR	[REDACTED]

Case completion report

Recommendations in relation to the above case were made for implementation by 01/12/2022. Following submission of the required documentation, evidence has now been provided to Marine Scotland to demonstrate that the recommendations have been implemented.

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

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

Signed:

[REDACTED]

Fish Health Inspector

Date: 24/01/2023

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

Case No: 2021-0392 Date of visit: 06/10/2021

Time spent on site: 8 hours Main Inspector:

Site No: FS1112 Site Name: Etive 4

Business No: FB0456 Business Name: Dawnfresh Farming Ltd

Case Types: 1 SLA 2 3 4 5 6

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

Observations: Region: ST Water type: S CoGP MA M-36

Dead/weak/abnormally behaving fish present? Y If yes, see additional information/clinical score sheet.

Clinical signs of disease observed? N If yes, see additional information/clinical score sheet.

Gross pathology observed? N If yes, see additional information/clinical score sheet.

Diagnostic samples taken? N

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

Additional Case Information:

Salmosan and AMX treatments conducted on 3rd of September - With more AMX treatments planned next week.

All 2019 fish will be harvested out in the next week.

Well boat has been hired in to harvest out the fish on site, (2019) stock, another treatment boat has been in the loch doing bath treatments. 780 tonnes have been harvested since the 13th of September - Salmosan treatments for the 2021 fish on site. 2019 fish will all be harvested.

treatment boat came in on week 27 - Hydrolicer - Good results - mortality was normal

Lice numbers rose sharply after the Hydrolicer treatments, consistent with resettlement - Different Hydrolicer used 3rd of August.

It was reported anecdotally that the first Hydrolicer that arrived in week 27 had a malfunction that led to removed lice being leaked back into the loch, this could have contributed to the rapid increased in sea lice numbers observed in July.

Rainfall and water temperature have both been at an unusually low and high extremes respectively. Company in the opinion that this has massively contributed to the unusual high levels of lice observed on fish.

Remote paperwork completed by [REDACTED], onsite inspection and physical record check carried out by [REDACTED].

Grazing evident in most pens. High lice burden evident on fish, particularly pens with larger fish. Pens with different size fish. On multiple pens observed dead fish in the top meters of the net.

Fish get spooked and race round the pens then jump and get stuck in the gathered net at the top. Observed this racing behaviour on a few pens across all the Etive sites.

Discussed that these nets should be fastened differently to prevent this kind of thing from happening in future.

Variation between reported mortality number and submitted mortality number - wk37 - Lots of harvesting going on during this period so numbers were updated post inspection. Mortality counts have been updated.

Some records received and checked 30/11/22, 13/12/22 and meeting to discuss further documents and plans 13/01/23. Case to be closed following discussion and review of provided materials. [REDACTED] (24/01/23)

Case No: **2021-0392** Site No: **FS1112**
 Date of Visit: **06/10/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

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

Site Details (include cleaner fish for all sections)

Total No facilities	10	Facilities stocked	8	No facilities inspected	8
Species	RTR	RTR	RTR		
Age group	2019	2020	2021		
No Fish	35,000	94,000	91,000		
Mean Fish Wt	3.4	1.6	1.6		
Next Fallow Date (Site)	Feb 2023		Next Input Date (Site)	March 2023	
Recent (last 4 wks) disease problems?			Any escapes (since last visit)?	Y	
If yes, detail:	Gill issues.				

Movement Records

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

Transport Records

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

Mortality Records

- 1. Mortality records available for inspection?
- 2. How are mortalities disposed of?
- If other detail:
- 3. Mortality records complete and correctly entered?
- 4. Recent mortality (last 4 wks):
- 5. Evidence of recent increased/atypical mortalities?
- If yes, facility nos/no mortality per facility/no stock per facility/reason:
- 6. Any other peaks in mortality during period checked?
- If yes, detail:
- 7. Have increased (unexplained) mortalities been reported to vet or FHI?
- If yes, detail action:
- 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

Treatments and Medicines Records

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

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
If no, detail:	

Results of Surveillance

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

Records checked between:	15/06/2021-06/10/2021
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Case No: 2021-0392 Site No: FS1112

Date of visit: 06/10/2021 Inspector(s):

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
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ENHANCED SEA LICE INSPECTION CHECKLIST

a. Inspection of sea lice records

1.1 Are sea lice count records available for inspection?	Medium	Y	CoGP 1.2.1, 1.2.2, Annex 6	
1.2 Do records adequately reflect the required standard specified in the SSI ¹ and the CoGP ² ? (Counts should be weekly, record the person making the count, date of the count, number of fish sampled (should be 25), pen or facility number recorded, water temperature ³ , number of parasites observed and correct stages recorded ⁴)	Low & Medium	Y	SSI 1,2,	
1.3 Where weekly counts are not conducted is the reason for not conducting the count stated?	Low	Y	SSI 1,2(g)	
1.4 Is that reason considered acceptable by the Inspector? Give detail.	Low	N/A		
1.5 Has the site experienced sea lice problems in the previous 4 years?		Y	Detail if necessary:	2019 and late 2021 - see additional info.

b. Inspection of records relating to treatment and control of sea lice

2.1 Has appropriate action been taken where: a) <i>L. salmonis</i> record levels have been above the suggested criteria for treatment?	High	Y	CoGP Annex 6	Treatments conducted and harvest plan enacted.,
b) <i>C. elongatus</i> infestation is at a level considered to cause significant welfare problems	High	N/A	CoGP 4.3.81, 5.3.50	
2.2 Is therapeutic treatment initiated ASAP where required?	Medium	Y	CoGP 4.3.130, 5.3.84	treatment trigger level of 0.3 total lice per fish.
2.3 Where medicines have been administered there should be a record of : the name / identity of the product	High	Y	VMD ¹² 19 SSI 1,3	
the date of administration	High	Y		
the quantity (concentration and amount) administered	High	Y		
the method of administration of the product	High	Y		
the identification of the fish / facilities treated	High	Y		
name of the person administering the treatment	Low	Y		
the withdrawal period	Medium	Y		
2.4 If the medicine is administered by a veterinary surgeon: the name of the veterinary surgeon	High	Y	VMD 18	
name of the product	High	Y		
batch number	High	Y		

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
the date of administration	High	Y		
amount administered	High	Y		
identification of fish treated	High	Y		
withdrawal period	Medium	Y		
2.5 Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?	High	Y		
Inspect records to confirm. Significant impact - ≥50% reduction in site average <i>L.salmonis</i> numbers (all stages)				
2.6 If other methods are employed on site to control sea lice and their impact is there a record of:	Low	Y	SSI, 1,4	
the nature and date of the method employed; the identification number of all facilities subjected to the method; the name of the person employing the method				
2.7 Where medicines have been acquired is there a record of:			VMD 19	
proof of purchase of the medicine concerned	Medium	Y	VMD 17	
name of the product	High	y		
batch number	High	y		
the date of purchase	Medium	y		
the quantity purchased	High	y		
the name and address of the supplier	Medium	y		
2.8 Where medicines have been disposed is there a record of:			VMD 19	
the date of disposal	Medium	N/A		All medicine is used on site, so no disposal takes place.
the quantity of product involved	Medium	N/A		
how and where it was disposed of	Medium	N/A		
2.9 Are veterinary health plans available which detail bio-security protocols, preventative measures and treatments in relation to sea lice?	Medium	Y	CoGP 4.3.129, 5.3.83	
Consider the following points over a percentage of treatments conducted on site				
2.10 Has the recommended course of treatments been completed?	Medium	Y	CoGP 4.3.134, 5.3.88	
2.11 If not, is there a recorded acceptable reason for not completing treatment?	Medium	Y	CoGP 4.3.135, 5.3.89	
2.12 Was advice taken from the Veterinary surgeon in such circumstances?	Medium	Y	CoGP 4.3.135, 5.3.89	
2.13 Are there clear written instructions regarding medicine use, available to those responsible for treatment administration?	Medium	Y	CoGP 4.3.133, 5.3.87	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
2.14 Does the site have treatment discharge consents relevant to sea lice?		Y	Detail if necessary:	
c. Inspection of records relating to farm management groups and farm management agreements or statements				
3.1 Is there a nominated farmer acting as coordinator and point of contact for this farm or area inclusive of this farm?	Low	Y	SSI 1,5,b CoGP 4.3.75, 5.3.44	
3.2 Is there a written undertaking that the farm will observe the provisions of the NTS ⁶ ?	Low	Y	CoGP 4.3.76, 5.3.45	
3.3 Has an area group been formed within the area containing the site?	Medium	Y	CoGP 4.3.77, 5.3.46	
3.4 Does the remit of the area group have appropriate veterinary involvement? Consider: -agreed basis for monitoring sea lice -coordinated monitoring and treatment -co-operation between participating farms This may require follow up investigation conducted off site to determine	Medium	Y	CoGP 4.3.77, 5.3.46 SSI 1,5, c	
3.5 Are records available of any decisions made by the FMG in relation to the prevention, control and reduction of parasites?	Low	N	SSI 1, 5, c	
3.6 Where treatments have been administered is this done in accordance with principles to maximise the effectiveness of treatments, promote the minimal use of medicines consistent with the maintenance of high standards of fish welfare and help preserve their efficacy? For example, the principles of ISLM include: Resistance monitoring – reporting suspected adverse drug event (SADE) to the VMD. The steps to determine if resistance is considered a reason for a suspected lack of efficacy (e.g. Bio-assay tests and results, seeking veterinary advice) Appropriate discharge consent in place Use of authorized medicines with veterinary instruction and advice as necessary Monitoring lice numbers Using an array of treatments where possible Treating all stocks on site at the same time Avoiding the simultaneous use of different active ingredients Avoiding consecutive treatments of the same active ingredient, and certainly not on the same cohort of lice Routine removal of moribund fish and regular removal of mortalities.	Medium	Y	4.3.82, 5.3.51	
3.7 Are weekly monitoring results communicated to other farmers within the defined area?	High	Y	CoGP 4.3.78, 5.3.47	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
3.8 Is this done 'as soon as reasonably possible where lice numbers exceed the suggested criteria for treatment?	High	Y	CoGP 4.3.79, 5.3.48	
3.9 Is sea lice data and other information relevant to the management of sea lice provided to the SSPO?	Low	Y	CoGP 4.3.80, 5.3.49	
3.10 Are annual review meetings held by FMA groups to evaluate site performance against set criteria?	High	Y	CoGP 4.3.83, 5.3.52	
3.11 Is there a signed documented farm management agreement or farm management statement relevant to the site and CoGP Farm Management Area (or equivalent)?		Y	AFSA ¹³ 4A	FMS in place.
3.12 Are up to date copies of FMS available from other APB operating within the same FMA?	Medium	y	Detail if necessary: CoGP 4.3.88, 5.3.57	
3.13 Are significant changes to FMS notified to other companies within the FMA?	Medium	y	CoGP 4.3.89, 5.3.58	
3.14 Is there co-operation between APB's operating within the FMA in the development and implementation of FMAg?	Medium	y	CoGP 4.3.90, 5.3.59	
3.15 Are copies of FMS or FMAg available for inspection?	Medium	y	AFSA 4B	
3.16 Does the FMS or FMAg take into account the relevant aspects regarding a sea lice control strategy?	Medium	y	CoGP 4.3.91, 5.3.60	
3.17 If the FMA has been redefined , is there documented evidence to demonstrate that the risks to health within and outwith the area is not increased by the proposal?	High ¹⁰	N/A	CoGP 4.3.92, 5.3.61	
3.18 Is the CoGP Farm Management Area (or equivalent) followed synchronously on a single year class basis?	High	N	CoGP 4.3.100	
3.19 If answered no to 3.18, then is there a documented risk assessment which meets the requirements of CoGP point 4.3.101?	High	N	CoGP 4.3.101	
d. Inspection of records relating to training and procedures				
4.1 Is there a training programme or plan in place relevant to sea lice control for the site?	High	Y	CoGP 7.1.8	
4.2 Are training records available for relevant staff in relation to:			CoGP 4.1.6, 5.1.6 SSI, 1,1	
parasite identification	High	Y	CoGP 4.3.84-86,	
counting parasites (procedures for)	High	Y	5.3.53-55	
recording counts	High	Y		
biology and life cycle of parasites	Low	Y		
symptoms of parasite infection in fish	Low	Y		
4.3 Have staff been trained in the administration of treatments?	High	Y	CoGP 4.1.6, 5.1.6 CoGP 4.3.84, 5.3.53	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
N.B. there is no legal requirement to maintain a record of this Where records exist regarding SOPs and site procedures these should be inspected to confirm suitability				
e. Inspection of site and site stock				
5.1 Are medicines used, stored and disposed of safely?	Medium	Y	VMD schedule 5	
5.2 Do the sea lice levels observed on stocks reflect sea lice count data?	High	Y		
Refer to section e) of guidance notes				
5.3 Does the site appear satisfactory in terms of fish welfare relating to sea lice infestation?	High	Y		
f. Inspection of farm count procedures				
6.1 Are pens and fish sampled at random?	Low	y	CoGP Annex 6, 4.3.84-86, 5.3.53-55	
6.2 Have the personnel conducting counts had appropriate training in lice recognition and recording? (Cross reference to training records – Section d)	High	y		
6.3 Can such personnel demonstrate post training competence?	High	y	CoGP 4.3.85, 5.3.54	
6.4 Do the sample sizes and methods of sampling match the CoGP suggested protocol (detailed iii – vii)? N.B. Other strategies are acceptable if considered adequate in the control and reduction of sea lice	Medium	y	Annex 6	
6.5 Is identification and recording of sea lice count information including species and stages observed to be correct? Minimum recording requirements within the CoGP and NTS are: for Caligus elongatus all identifiable stages and for Lepeophtheirus salmonis chalimus, mobiles and adult females (with or without egg strings) ¹¹	High	y	Annex 6	
6.6 Is the transfer of data from field counts to records observed to be satisfactory?	Medium	N/A		Did not observed due to Covid distancing requirements.
g. Inspection of treatment administration procedures				
7.1 Are treatments considered to be administered in an appropriate competent manner? Consider appropriate use of tarpaulins; completion of medication per prescription, correct concentrations, mixing and administrations, appropriate product used	High	N/A		no treatment observed.
7.2 Is accurate information provided to the attending veterinary surgeon for dosage calculation?	High	N/A	CoGP 4.3.131, 5.3.85	
7.3 Are the fish under consideration being given any other medication, or are they in a withdrawal period for any other medication?		N/A		

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
7.4 If so, has the prescribing veterinary surgeon been informed of this?	Medium	N/A	CoGP 4.3.132, 5.3.86	
7.5 Are clear instructions for medication, dosage and administration communicated to the staff responsible for treatment?	High	N/A	CoGP 4.3.133, 5.3.87	

Additional actions	Powers	Comments and advice given or action taken if necessary
h. FHI sea lice counts If necessary conduct a sea lice count in accordance with the protocol of the CoGP. Indicate where this procedure has been done and make a record of results within the comments box	Power granted under the Act – section 3 (2) (a)	
i. Collection of samples If necessary collect samples. Indicate if samples have been taken and detail what those samples are and the purpose of their collection	Power granted under the Act – section 3 (3) (a)	
j. Enforcement Notice. If an enforcement notice has been issued then maintain a copy / duplicate and record detail Guidance on completing the Enforcement Notice	Power granted under the Act – Section 6 (2)	

[1] Scottish Statutory Instrument – The Fish Farming Businesses (Record Keeping) (Scotland) Order 2008

[2] A Code of Good Practice for Scottish Finfish Aquaculture

[3] Water temperature to be measured at the half way point of the depth of the facility containing the fish, or as close to as possible. For SW cage sites one reading per count may be

[4] Recording requirements:- for *C. elongatus* – all identifiable stages and for *L. salmonis* - mobiles and adult females (with or without egg strings)

[5] Area refers to management area as specified within Part 3 of the industry CoGP or as redefined appropriately

[6] For reference Annex 6 of the CoGP provides the detail of the NTS

[7] FMA = Farm Management Area

[8] FMS = Farm Management Statement

[9] FMAg = Farm Management Agreement

[10] No further action may be required when answering no to this point and yes to 3.18

[11] Legal recording requirements within the SSI stipulate – for *Caligus elongatus*: mobiles; and for *Lepeophtheirus salmonis*: non-gravid mobiles and gravid females.

[12] VMD - The Veterinary Medicines Regulations 2013 (SI 2013 No 2033)

[13] AFSA - Aquaculture and Fisheries (Scotland) Act 2007 (as amended)

Case No: 2021-0392

Date of visit: 06/10/2021

Site No: FS1112

Inspector: [Redacted]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
SLA	25/08/2022		
case completion	24/01/2023		

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0456	DATE OF VISIT	06/10/2021
SITE No	FS1112	SITE NAME	Etive 4
CASE No	20210392	INSPECTOR	[REDACTED]

Case completion report

Recommendations in relation to the above case were made for implementation by 01/12/2022. Following submission of the required documentation, evidence has now been provided to Marine Scotland to demonstrate that the recommendations have been implemented.

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

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

Signed:

[REDACTED]

Date: 24/01/2023

Fish Health Inspector

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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0456	DATE OF VISIT	06/10/2021
SITE No	FS1112	SITE NAME	Etive 4
CASE No	20210392	INSPECTOR	[REDACTED]

ENHANCED SEA LICE INSPECTION

An enhanced sea lice inspection to ascertain the levels of sea lice and for assessing the measures in place for the prevention, control and reduction of sea lice was conducted in accordance with the Aquaculture and Fisheries (Scotland) Act 2007.

The visit consisted of an inspection of records with regards to sea lice, the stock on site, site procedures with regards to sea lice and the provision of advice.

Records

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

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

Mortality records were inspected and found to be adequately maintained.

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

a) Inspection of sea lice records

The site meets the requirement of current Scottish industry best practice. There were no recommendations made and no further action is required.

b) Inspection of records relating to treatment and control of sea lice

Although the site meets the requirement of current Scottish industry best practice, the sea lice records demonstrated that sea lice levels on site had been significantly above the suggested criteria for treatment despite the management actions undertaken.

It is recommended that the sea lice management strategy be reviewed, taking into account veterinary advice, where necessary, to ensure that an effective strategy is being implemented that will meet the requirements of the Code of Good Practice for Scottish Finfish Aquaculture (CoGP) and follow the standards associated with A National Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms, as described in Annex 6 of the CoGP.

c) Inspection of records relating to farm management groups and area management agreements.

The following recommendations are made for improvement.

Records of decisions made by the farm management group in relation to the prevention, control and reduction of sea lice were not available.

It is recommended that to meet the requirements of schedule 1, section 5(c) of the Fish Farming Business (Record Keeping) (Scotland) Order 2008 a record should be kept of any decision made by the area management group relating to the prevention, control and reduction of sea lice.

During inspection it was determined that annual review meetings had not been held by the farm management area group with a view to evaluating site performance against set criteria with regards to sea lice management. Quarterly meetings have since been arranged amongst the farm management area group.

It is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4 point 3.83) annual review meetings should be convened by the farm management area group to evaluate performance of the farms within the area in regards to the criteria set out in the National Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms, as described in Annex 6 of the CoGP

The farm management area is not fallowed synchronously on a single year class basis, however a risk assessment was not carried out to determine the risk to other businesses in the area.

It is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4, point 3.100) the farm management area should be fallowed synchronously on a single year class basis.

Alternatively, it is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4, point 3.101) a documented risk assessment, which considers the risks to the company's own operations and to the operations of other companies operating within the farm management area and any adjacent areas, should be undertaken, to include strategies to be followed for pathogen and parasite control in the absence of fallowing.

d) Inspection of records relating to training and procedures

The site meets the requirement of current Scottish industry best practice. No recommendations made or further action required.

e) Inspection of site and site stock

The site meets the requirement of current Scottish industry best practice. No recommendations made or further action required.

R25

f) Inspection of farm count procedures

An inspection of site staff conducting and recording a sea lice count was carried out. This met the requirements of The Fish Farming Business (Record Keeping) (Scotland) Order 2008 and CoGP. No further recommendations or further action required.

The transfer of data from field counts to records could not be observed due to Covid-19 social distancing requirements.

g) Inspection of treatment administration procedures

Procedures were not inspected as a treatment was not taking place at the time of inspection. However, discussions on procedures with the company correspondent would suggest that the site meets the requirement of current Scottish industry best practice.

Further Action

The recommendations in this report should be implemented by **01/12/2022**. Documentation should be provided as evidence that the recommendations have been implemented. Enforcement action may result if the recommendations are not implemented in the necessary time frame. Records should be sent to Marine Scotland Science's Fish Health Inspectorate (FHI) (contact details are provided below).

Signed:



Date: 25/08/2022

Fish Health Inspector

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

Case No: Date of visit:

Time spent on site: Main Inspector:

Site No: Site Name:

Business No: Business Name:

Case Types: 1 2 3 4 5 6

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

Observations: Region: ST Water type: S CoGP MA M-36

Dead/weak/abnormally behaving fish present? If yes, see additional information/clinical score sheet.

Clinical signs of disease observed? If yes, see additional information/clinical score sheet.

Gross pathology observed? If yes, see additional information/clinical score sheet.

Diagnostic samples taken?

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

Additional Case Information:

Plan to early fallow etive 6, as it is closest to sea entrance. Smaller fish on site currently being treated with AMX. Will try to keep etive 6 fish if possible and treat where possible. Under constant review.

0.3 of total life stages is trigger level - Documented. Coincides with roughly 0.1 females.

treatment boat came in on week 27 - Hydrolicer - Good results - mortality was normal

Lice numbers rose sharply after the Hydrolicer treatment, consistent with resettlement - Different Hydrolicer used 3rd of August.

It was reported anecdotally that the first Hydrolicer that arrived in week 27 had a malfunction that led to removed lice being leaked back into the loch, this could have contributed to the rapid increase in sea lice numbers observed in July.

Rainfall and water temperature have both been at an unusually low and high extremes respectively. Company in the opinion that this has massively contributed to the unusual high levels of lice observed on fish.

Remote paperwork completed by [REDACTED] onsite inspection and physical record check carried out by [REDACTED]

Worst affected pens by grazing 1, 3 and 6. Grazing evident but no open wounds caused by grazing. Lice numbers very high. Pens with different size fish.

Observed lice count and staff appeared knowledgeable. Two people counting, one person scribing. Started 2h Azasure bath treatment during visit.

Treated 1 pen yesterday, treating 3 pens today. Normally Treat 2 pens per day, one treatment was delayed yesterday. Treating whole site would take approximately a week

week 38 mortality submission does not match records. (slight difference) - Lots of harvesting at time of report, figures updated after inspection and mortality records updated.

Some records received and checked 30/11/22, 13/12/22 and meeting to discuss further documents and plans 13/01/23. Case to be closed following discussion and review of provided materials. [REDACTED] (24/01/23)

Case No: **2021-0393** Site No: **FS1288**
 Date of Visit: **06/10/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

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

Site Details (include cleaner fish for all sections)

Total No facilities	10	Facilities stocked	8	No facilities inspected	8
Species	RTR	RTR	RTR		
Age group	2019	2020	2021		
No Fish	40,000	270,000	79,000		
Mean Fish Wt	2.4	1.3	280g		
Next Fallow Date (Site)	end oct 2021		Next Input Date (Site)	Dec-21	
Recent (last 4 wks) disease problems?			Y	Any escapes (since last visit)?	Y
If yes, detail:	Gill health issues				

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **23/09/2021**
 3. Are records complete and correctly entered? **Y**
 4. Are movement records available for dead fish and waste? **Y**
 5. Are records complete and correctly entered? **Y**
 6. Are health certificates for introductions (outwith GB) available? **Y**

Transport Records

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

Mortality Records

1. Mortality records available for inspection? **Y**
 2. How are mortalities disposed of? **Whole fish - Dundas Chemicals**
 If other detail: **[REDACTED]**
 3. Mortality records complete and correctly entered? **Y**
 4. Recent mortality (last 4 wks): **wk39 2.15%-9350)wk38(2.41%-11123)wk37(1.39%-5607) wk36(0.95% -**
 5. Evidence of recent increased/atypical mortalities? **Y**
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
Week 33 (2.37%) & 32 (1.15%)- Post treatment mortality, and gill health issues (enviromental insult)
 6. Any other peaks in mortality during period checked? **N**
 If yes, detail: **[REDACTED]**
 7. Have increased (unexplained) mortalities been reported to vet or FHI? **N/A**
 If yes, detail action: **[REDACTED]**
 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet. **Y**

Treatments and Medicines Records

1. Recent treatments (see comment)? Y
 If yes, detail: AMX TMS Salmosan
 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)? AMX Salmosan TMS
 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?
 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: 23/09/2021-06/10/2021

Case No: 2021-0393 Site No: FS1288

Date of visit: 06/10/2021 Inspector(s):

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
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ENHANCED SEA LICE INSPECTION CHECKLIST

a. Inspection of sea lice records

1.1 Are sea lice count records available for inspection?	Medium	Y	CoGP 1.2.1, 1.2.2, Annex 6	
1.2 Do records adequately reflect the required standard specified in the SSI ¹ and the CoGP ² ? (Counts should be weekly, record the person making the count, date of the count, number of fish sampled (should be 25), pen or facility number recorded, water temperature ³ , number of parasites observed and correct stages recorded ⁴)	Low & Medium	Y	SSI 1,2,	
1.3 Where weekly counts are not conducted is the reason for not conducting the count stated?	Low	Y	SSI 1,2(g)	
1.4 Is that reason considered acceptable by the Inspector? Give detail.	Low	Y		
1.5 Has the site experienced sea lice problems in the previous 4 years?		Y	Detail if necessary:	2019 and 2021 - see additional info.

b. Inspection of records relating to treatment and control of sea lice

2.1 Has appropriate action been taken where: a) <i>L. salmonis</i> record levels have been above the suggested criteria for treatment?	High	Y	CoGP Annex 6	
b) <i>C. elongatus</i> infestation is at a level considered to cause significant welfare problems	High	N/A	CoGP 4.3.81, 5.3.50	
2.2 Is therapeutic treatment initiated ASAP where required?	Medium	Y	CoGP 4.3.130, 5.3.84	Trigger level of 0.3 total lice per fish
2.3 Where medicines have been administered there should be a record of : the name / identity of the product the date of administration the quantity (concentration and amount) administered the method of administration of the product the identification of the fish / facilities treated name of the person administering the treatment the withdrawal period	High High High High High Low Medium	y y y y y y y	VMD ¹² 19 SSI 1,3	
2.4 If the medicine is administered by a veterinary surgeon: the name of the veterinary surgeon	High	y	VMD 18	
name of the product	High	y		
batch number	High	y		

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
the date of administration	High	y		
amount administered	High	y		
identification of fish treated	High	y		
withdrawal period	Medium	y		
2.5 Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?	High	Y		
Inspect records to confirm. Significant impact - ≥50% reduction in site average <i>L.salmonis</i> numbers (all stages)				
2.6 If other methods are employed on site to control sea lice and their impact is there a record of:	Low	Y	SSI, 1,4	
the nature and date of the method employed; the identification number of all facilities subjected to the method; the name of the person employing the method				
2.7 Where medicines have been acquired is there a record of:			VMD 19	
proof of purchase of the medicine concerned	Medium	Y	VMD 17	
name of the product	High	Y		
batch number	High	Y		
the date of purchase	Medium	Y		
the quantity purchased	High	Y		
the name and address of the supplier	Medium	Y		
2.8 Where medicines have been disposed is there a record of:			VMD 19	
the date of disposal	Medium	N/A		All medicine is used on site, so no disposal takes place.
the quantity of product involved	Medium	N/A		
how and where it was disposed of	Medium	N/A		
2.9 Are veterinary health plans available which detail bio-security protocols, preventative measures and treatments in relation to sea lice?	Medium	Y	CoGP 4.3.129, 5.3.83	
Consider the following points over a percentage of treatments conducted on site				
2.10 Has the recommended course of treatments been completed?	Medium	N	CoGP 4.3.134, 5.3.88	Some failed treatments recorded, attributed to variety of reasons, e.g weather, equipment issues, fish welfare. All recorded appropriately.
2.11 If not, is there a recorded acceptable reason for not completing treatment?	Medium	Y	CoGP 4.3.135, 5.3.89	
2.12 Was advice taken from the Veterinary surgeon in such circumstances?	Medium	Y	CoGP 4.3.135, 5.3.89	
2.13 Are there clear written instructions regarding medicine use, available to those responsible for treatment administration?	Medium	Y	CoGP 4.3.133, 5.3.87	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
2.14 Does the site have treatment discharge consents relevant to sea lice?		Y	Detail if necessary:	
c. Inspection of records relating to farm management groups and farm management agreements or statements				
3.1 Is there a nominated farmer acting as coordinator and point of contact for this farm or area inclusive of this farm?	Low	y	SSI 1,5,b CoGP 4.3.75, 5.3.44	
3.2 Is there a written undertaking that the farm will observe the provisions of the NTS ⁶ ?	Low	y	CoGP 4.3.76, 5.3.45	
3.3 Has an area group been formed within the area containing the site?	Medium	y	CoGP 4.3.77, 5.3.46	
3.4 Does the remit of the area group have appropriate veterinary involvement? Consider: -agreed basis for monitoring sea lice -coordinated monitoring and treatment -co-operation between participating farms This may require follow up investigation conducted off site to determine	Medium	y	CoGP 4.3.77, 5.3.46 SSI 1,5, c	
3.5 Are records available of any decisions made by the FMG in relation to the prevention, control and reduction of parasites?	Low	N	SSI 1, 5, c	
3.6 Where treatments have been administered is this done in accordance with principles to maximise the effectiveness of treatments, promote the minimal use of medicines consistent with the maintenance of high standards of fish welfare and help preserve their efficacy? For example, the principles of ISLM include: Resistance monitoring – reporting suspected adverse drug event (SADE) to the VMD. The steps to determine if resistance is considered a reason for a suspected lack of efficacy (e.g. Bio-assay tests and results, seeking veterinary advice) Appropriate discharge consent in place Use of authorized medicines with veterinary instruction and advice as necessary Monitoring lice numbers Using an array of treatments where possible Treating all stocks on site at the same time Avoiding the simultaneous use of different active ingredients Avoiding consecutive treatments of the same active ingredient, and certainly not on the same cohort of lice Routine removal of moribund fish and regular removal of mortalities.	Medium	Y	4.3.82, 5.3.51	
3.7 Are weekly monitoring results communicated to other farmers within the defined area?	High	y	CoGP 4.3.78, 5.3.47	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
3.8 Is this done 'as soon as reasonably possible where lice numbers exceed the suggested criteria for treatment?	High	y	CoGP 4.3.79, 5.3.48	
3.9 Is sea lice data and other information relevant to the management of sea lice provided to the SSPO?	Low	y	CoGP 4.3.80, 5.3.49	
3.10 Are annual review meetings held by FMA groups to evaluate site performance against set criteria?	High	N	CoGP 4.3.83, 5.3.52	
3.11 Is there a signed documented farm management agreement or farm management statement relevant to the site and CoGP Farm Management Area (or equivalent)?		y	AFSA ¹³ 4A	FMS in place
3.12 Are up to date copies of FMS available from other APB operating within the same FMA?	Medium	y	Detail if necessary: CoGP 4.3.88, 5.3.57	
3.13 Are significant changes to FMS notified to other companies within the FMA?	Medium	y	CoGP 4.3.89, 5.3.58	
3.14 Is there co-operation between APB's operating within the FMA in the development and implementation of FMAg?	Medium	y	CoGP 4.3.90, 5.3.59	
3.15 Are copies of FMS or FMAg available for inspection?	Medium	y	AFSA 4B	
3.16 Does the FMS or FMAg take into account the relevant aspects regarding a sea lice control strategy?	Medium	y	CoGP 4.3.91, 5.3.60	
3.17 If the FMA has been redefined , is there documented evidence to demonstrate that the risks to health within and outwith the area is not increased by the proposal?	High ¹⁰	N/A	CoGP 4.3.92, 5.3.61	
3.18 Is the CoGP Farm Management Area (or equivalent) followed synchronously on a single year class basis?	High	n	CoGP 4.3.100	
3.19 If answered no to 3.18, then is there a documented risk assessment which meets the requirements of CoGP point 4.3.101?	High	N	CoGP 4.3.101	
d. Inspection of records relating to training and procedures				
4.1 Is there a training programme or plan in place relevant to sea lice control for the site?	High	Y	CoGP 7.1.8	
4.2 Are training records available for relevant staff in relation to:			CoGP 4.1.6, 5.1.6 SSI, 1,1	
parasite identification	High	Y	CoGP 4.3.84-86,	
counting parasites (procedures for)	High	Y	5.3.53-55	
recording counts	High	Y		
biology and life cycle of parasites	Low	Y		
symptoms of parasite infection in fish	Low	Y		
4.3 Have staff been trained in the administration of treatments?	High	Y	CoGP 4.1.6, 5.1.6 CoGP 4.3.84, 5.3.53	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
N.B. there is no legal requirement to maintain a record of this Where records exist regarding SOPs and site procedures these should be inspected to confirm suitability				
e. Inspection of site and site stock				
5.1 Are medicines used, stored and disposed of safely?	Medium	y	VMD schedule 5	
5.2 Do the sea lice levels observed on stocks reflect sea lice count data?	High	y		
Refer to section e) of guidance notes				
5.3 Does the site appear satisfactory in terms of fish welfare relating to sea lice infestation?	High	y		
f. Inspection of farm count procedures				
6.1 Are pens and fish sampled at random?	Low	y	CoGP Annex 6, 4.3.84-86, 5.3.53-55	
6.2 Have the personnel conducting counts had appropriate training in lice recognition and recording? (Cross reference to training records – Section d)	High	y		
6.3 Can such personnel demonstrate post training competence?	High	y	CoGP 4.3.85, 5.3.54	
6.4 Do the sample sizes and methods of sampling match the CoGP suggested protocol (detailed iii – vii)? N.B. Other strategies are acceptable if considered adequate in the control and reduction of sea lice	Medium	y	Annex 6	
6.5 Is identification and recording of sea lice count information including species and stages observed to be correct? Minimum recording requirements within the CoGP and NTS are: for Caligus elongatus all identifiable stages and for Lepeophtheirus salmonis chalimus, mobiles and adult females (with or without egg strings) ¹¹	High	y	Annex 6	
6.6 Is the transfer of data from field counts to records observed to be satisfactory?	Medium	N/A		
g. Inspection of treatment administration procedures				
7.1 Are treatments considered to be administered in an appropriate competent manner? Consider appropriate use of tarpaulins; completion of medication per prescription, correct concentrations, mixing and administrations, appropriate product used	High	N/A		
7.2 Is accurate information provided to the attending veterinary surgeon for dosage calculation?	High	N/A	CoGP 4.3.131, 5.3.85	No treatment observed.
7.3 Are the fish under consideration being given any other medication, or are they in a withdrawal period for any other medication?		N/A		

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
7.4 If so, has the prescribing veterinary surgeon been informed of this?	Medium	N/A	CoGP 4.3.132, 5.3.86	
7.5 Are clear instructions for medication, dosage and administration communicated to the staff responsible for treatment?	High	N/A	CoGP 4.3.133, 5.3.87	

Additional actions	Powers	Comments and advice given or action taken if necessary
h. FHI sea lice counts If necessary conduct a sea lice count in accordance with the protocol of the CoGP. Indicate where this procedure has been done and make a record of results within the comments box	Power granted under the Act – section 3 (2) (a)	
i. Collection of samples If necessary collect samples. Indicate if samples have been taken and detail what those samples are and the purpose of their collection	Power granted under the Act – section 3 (3) (a)	
j. Enforcement Notice. If an enforcement notice has been issued then maintain a copy / duplicate and record detail Guidance on completing the Enforcement Notice	Power granted under the Act – Section 6 (2)	

[1] Scottish Statutory Instrument – The Fish Farming Businesses (Record Keeping) (Scotland) Order 2008

[2] A Code of Good Practice for Scottish Finfish Aquaculture

[3] Water temperature to be measured at the half way point of the depth of the facility containing the fish, or as close to as possible. For SW cage sites one reading per count may be

[4] Recording requirements:- for *C. elongatus* – all identifiable stages and for *L. salmonis* - mobiles and adult females (with or without egg strings)

[5] Area refers to management area as specified within Part 3 of the industry CoGP or as redefined appropriately

[6] For reference Annex 6 of the CoGP provides the detail of the NTS

[7] FMA = Farm Management Area

[8] FMS = Farm Management Statement

[9] FMAg = Farm Management Agreement

[10] No further action may be required when answering no to this point and yes to 3.18

[11] Legal recording requirements within the SSI stipulate – for *Caligus elongatus*: mobiles; and for *Lepeophtheirus salmonis*: non-gravid mobiles and gravid females.

[12] VMD - The Veterinary Medicines Regulations 2013 (SI 2013 No 2033)

[13] AFSA - Aquaculture and Fisheries (Scotland) Act 2007 (as amended)

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0456	DATE OF VISIT	06/10/2021
SITE No	FS1288	SITE NAME	Etive 6
CASE No	20210393	INSPECTOR	[REDACTED]

Case completion report

Recommendations in relation to the above case were made for implementation by 01/12/2022. Following submission of the required documentation, evidence has now been provided to Marine Scotland to demonstrate that the recommendations have been implemented.

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

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

Signed:



Fish Health Inspector

Date: 24/01/2023

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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0456	DATE OF VISIT	06/10/2021
SITE No	FS1288	SITE NAME	Etive 6
CASE No	20210393	INSPECTOR	[REDACTED]

ENHANCED SEA LICE INSPECTION

An enhanced sea lice inspection to ascertain the levels of sea lice and for assessing the measures in place for the prevention, control and reduction of sea lice was conducted in accordance with the Aquaculture and Fisheries (Scotland) Act 2007.

The visit consisted of an inspection of records with regards to sea lice, the stock on site, site procedures with regards to sea lice and the provision of advice.

Records

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

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

Mortality records were inspected and found to be adequately maintained.

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

a) Inspection of sea lice records

The site meets the requirement of current Scottish industry best practice. There were no recommendations made and no further action is required.

b) Inspection of records relating to treatment and control of sea lice

Although the site meets the requirement of current Scottish industry best practice, the sea lice records demonstrated that sea lice levels on site had been significantly above the suggested criteria for treatment despite the management actions undertaken.

It is recommended that the sea lice management strategy be reviewed, taking into account veterinary advice, where necessary, to ensure that an effective strategy is being implemented that will meet the requirements of the Code of Good Practice for Scottish Finfish Aquaculture (CoGP) and follow the standards associated with A National Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms, as described in Annex 6 of the CoGP.

c) Inspection of records relating to farm management groups and area management agreements.

The following recommendations are made for improvement.

Records of decisions made by the farm management group in relation to the prevention, control and reduction of sea lice were not available.

It is recommended that to meet the requirements of schedule 1, section 5(c) of the Fish Farming Business (Record Keeping) (Scotland) Order 2008 a record should be kept of any decision made by the area management group relating to the prevention, control and reduction of sea lice.

During inspection it was determined that annual review meetings had not been held by the farm management area group with a view to evaluating site performance against set criteria with regards to sea lice management. Quarterly meetings have since been arranged amongst the farm management area group.

It is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4 point 3.83) annual review meetings should be convened by the farm management area group to evaluate performance of the farms within the area in regards to the criteria set out in the National Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms, as described in Annex 6 of the CoGP

The farm management area is not fallowed synchronously on a single year class basis, however a risk assessment was not carried out to determine the risk to other businesses in the area.

It is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4, point 3.100) the farm management area should be fallowed synchronously on a single year class basis.

Alternatively, it is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4, point 3.101) a documented risk assessment, which considers the risks to the company's own operations and to the operations of other companies operating within the farm management area and any adjacent areas, should be undertaken, to include strategies to be followed for pathogen and parasite control in the absence of fallowing.

d) Inspection of records relating to training and procedures

The site meets the requirement of current Scottish industry best practice. No recommendations made or further action required.

e) Inspection of site and site stock

The site meets the requirement of current Scottish industry best practice. No recommendations made or further action required.

R25

f) Inspection of farm count procedures

An inspection of site staff conducting and recording a sea lice count was carried out. This met the requirements of The Fish Farming Business (Record Keeping) (Scotland) Order 2008 and CoGP. No further recommendations or further action required.

The transfer of data from field counts to records could not be observed due to Covid-19 social distancing requirements.

g) Inspection of treatment administration procedures

Procedures were not inspected as a treatment was not taking place at the time of inspection. However, discussions on procedures with the company correspondent would suggest that the site meets the requirement of current Scottish industry best practice.

Further Action

The recommendations in this report should be implemented by **01/12/2022**. Documentation should be provided as evidence that the recommendations have been implemented. Enforcement action may result if the recommendations are not implemented in the necessary time frame. Records should be sent to Marine Scotland Science's Fish Health Inspectorate (FHI) (contact details are provided below).

Signed:



Fish Health Inspector

Date: 25/08/2022

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

Case No: 2021-0394 Date of visit: 06/10/2021

Time spent on site: 8 hours Main Inspector:

Site No: FS1067 Site Name: Inverawe (East) Etive 2
Business No: FB0456 Business Name: Dawnfresh Farming Ltd

Case Types: 1 SLA 2 3 4 5 6

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

Observations: Region: ST Water type: S CoGP MA M-36

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

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

Additional Case Information:

Etive 2 to be fallowed - change from October to December, for longer fallow. Stocked again in march.

Etive 2 is normally stocked with new fish entering the site and is then split down to the other sites once fish have got bigger.

all of the 2019 year class fish are planned to be harvested out week beginning 18th of October.

Well boat has been hired in to harvest out the fish on site, (2019) stock, another treatment boat has been in the loch doing bath treatments. 780 tonnes have been harvested since the 13th of September - Salmosan treatments for the 2021 fish on site. 2019 fish will all be harvested.

Decision was made middle of august to harvest 2021 fish out and effort was made to acquire a well boat for that purpose.

0.3 of total life stages is trigger level - Documented. Coincides with roughly 0.1 females.

treatment boat came in on week 27 - Hydrolicer - Good results - mortality was normal

Lice numbers rose sharply after the Hydrolicer treatment, consistent with resettlement - a different Hydrolicer was used 3rd august.

It was reported anecdotally that the first Hydrolicer that arrived in week 27 had a malfunction that led to removed lice being leaked back into the loch, this could have contributed to the rapid increase in sea lice numbers observed in July.

Rainfall and water temperature have both been at an unusually low and high extremes respectively. Company in the opinion that this has massively contributed to the unusual high levels of lice observed on fish.

Remote paperwork completed by [REDACTED], onsite inspection and physical record check carried out by [REDACTED]

Mostly small fish, visibility poor due to inclement weather and descending darkness and fish deeper in the water.

The smaller fish, that had not been stocked long on the site had no damage evident when seen. One pen with light grazing damage observed on some fish.

Discrepancy between mortality report in week 31 and site records. Large amount of harvesting and delayed mortality removal caused numbers to be updated post inspection. Correct figures have been collected and mortality records updated.

Some records received and checked 30/11/22, 13/12/22 and meeting to discuss further documents and plans 13/01/23. Case to be closed following discussion and review of provided materials. [REDACTED] (24/01/23)

Case No: **2021-0394** Site No: **FS1067**
 Date of Visit: **06/10/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

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

Site Details (include cleaner fish for all sections)

Total No facilities	6	Facilities stocked	5	No facilities inspected	5
Species	RTR	RTR			
Age group	2020	2021			
No Fish	73,000	151,000			
Mean Fish Wt	292g	558g			
Next Fallow Date (Site)	December		Next Input Date (Site)	March 2022	
Recent (last 4 wks) disease problems?			Y	Any escapes (since last visit)?	N
If yes, detail:	Gill health issues.				

Movement Records

- 1. Movement records available for inspection? Y
- 2. Date of last inspection: **15/06/2021**
- 3. Are records complete and correctly entered? Y
- 4. Are movement records available for dead fish and waste? Y
- 5. Are records complete and correctly entered? Y
- 6. Are health certificates for introductions (outwith GB) available? Y

Transport Records

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

Mortality Records

- 1. Mortality records available for inspection? Y
- 2. How are mortalities disposed of? **Whole fish - Dundas Chemicals**
- If other detail: **[REDACTED]**
- 3. Mortality records complete and correctly entered? Y
- 4. Recent mortality (last 4 wks): **wk39(2.60%-5986)wk38(0.15%-409)wk37(0.62%-1707)wk36(0.09%-244)**
- 5. Evidence of recent increased/atypical mortalities? Y
- If yes, facility nos/no mortality per facility/no stock per facility/reason: **[REDACTED]**
- Backlog of mortality from gill health challenge, Divers off with covid, so delay in mortality retrieval.**
- 6. Any other peaks in mortality during period checked? Y
- If yes, detail: **Week 31 - 3.2% - 9188 Post treatment and Enviromental insult.**
- 7. Have increased (unexplained) mortalities been reported to vet or FHI? N/A
- If yes, detail action: **[REDACTED]**
- 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet. Y

Treatments and Medicines Records

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

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
If no, detail:	

Results of Surveillance

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

Records checked between:	15/06/2021-06/10/2021
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Case No: 2021-0394 Site No: FS1067

Date of visit: 06/10/2021 Inspector(s):

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
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ENHANCED SEA LICE INSPECTION CHECKLIST

a. Inspection of sea lice records

1.1 Are sea lice count records available for inspection?	Medium	Y	CoGP 1.2.1, 1.2.2, Annex 6 SSI 1,2, SSI 1,2(g)	
1.2 Do records adequately reflect the required standard specified in the SSI ¹ and the CoGP ² ? (Counts should be weekly, record the person making the count, date of the count, number of fish sampled (should be 25), pen or facility number recorded, water temperature ³ , number of parasites observed and correct stages recorded ⁴)	Low & Medium	Y		
1.3 Where weekly counts are not conducted is the reason for not conducting the count stated?	Low	Y		
1.4 Is that reason considered acceptable by the Inspector? Give detail.	Low	Y		
1.5 Has the site experienced sea lice problems in the previous 4 years?		Y	Detail if necessary:	2019 & 2021 (autumn) - see additional info.

b. Inspection of records relating to treatment and control of sea lice

2.1 Has appropriate action been taken where:				
a) <i>L. salmonis</i> record levels have been above the suggested criteria for treatment?	High	Y	CoGP Annex 6	
b) <i>C. elongatus</i> infestation is at a level considered to cause significant welfare problems	High	N/A	CoGP 4.3.81, 5.3.50	
2.2 Is therapeutic treatment initiated ASAP where required?	Medium	Y	CoGP 4.3.130, 5.3.84	
2.3 Where medicines have been administered there should be a record of :			VMD ¹² 19 SSI 1,3	
the name / identity of the product	High	Y		
the date of administration	High	Y		
the quantity (concentration and amount) administered	High	Y		
the method of administration of the product	High	Y		
the identification of the fish / facilities treated	High	Y		
name of the person administering the treatment	Low	Y		
the withdrawal period	Medium	Y		
2.4 If the medicine is administered by a veterinary surgeon:			VMD 18	
the name of the veterinary surgeon	High	Y		
name of the product	High	Y		
batch number	High	Y		

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
the date of administration	High	Y		
amount administered	High	Y		
identification of fish treated	High	Y		
withdrawal period	Medium	Y		
2.5 Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?	High	Y		
Inspect records to confirm. Significant impact - ≥50% reduction in site average <i>L.salmonis</i> numbers (all stages)				
2.6 If other methods are employed on site to control sea lice and their impact is there a record of:	Low	Y	SSI, 1,4	
the nature and date of the method employed; the identification number of all facilities subjected to the method; the name of the person employing the method				
2.7 Where medicines have been acquired is there a record of:			VMD 19	
proof of purchase of the medicine concerned	Medium	y	VMD 17	
name of the product	High	y		
batch number	High	y		
the date of purchase	Medium	y		
the quantity purchased	High	y		
the name and address of the supplier	Medium	y		
2.8 Where medicines have been disposed is there a record of:			VMD 19	
the date of disposal	Medium	N/A		all medicine is used on site, so no disposal takes place.
the quantity of product involved	Medium	N/A		
how and where it was disposed of	Medium	N/A		
2.9 Are veterinary health plans available which detail bio-security protocols, preventative measures and treatments in relation to sea lice?	Medium	Y	CoGP 4.3.129, 5.3.83	
Consider the following points over a percentage of treatments conducted on site				
2.10 Has the recommended course of treatments been completed?	Medium	Y	CoGP 4.3.134, 5.3.88	
2.11 If not, is there a recorded acceptable reason for not completing treatment?	Medium	Y	CoGP 4.3.135, 5.3.89	
2.12 Was advice taken from the Veterinary surgeon in such circumstances?	Medium	Y	CoGP 4.3.135, 5.3.89	
2.13 Are there clear written instructions regarding medicine use, available to those responsible for treatment administration?	Medium	Y	CoGP 4.3.133, 5.3.87	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
2.14 Does the site have treatment discharge consents relevant to sea lice?		Y	Detail if necessary:	
c. Inspection of records relating to farm management groups and farm management agreements or statements				
3.1 Is there a nominated farmer acting as coordinator and point of contact for this farm or area inclusive of this farm?	Low	Y	SSI 1,5,b CoGP 4.3.75, 5.3.44	
3.2 Is there a written undertaking that the farm will observe the provisions of the NTS ⁶ ?	Low	y	CoGP 4.3.76, 5.3.45	
3.3 Has an area group been formed within the area containing the site?	Medium	y	CoGP 4.3.77, 5.3.46	
3.4 Does the remit of the area group have appropriate veterinary involvement? Consider: -agreed basis for monitoring sea lice -coordinated monitoring and treatment -co-operation between participating farms This may require follow up investigation conducted off site to determine	Medium	y	CoGP 4.3.77, 5.3.46 SSI 1,5, c	
3.5 Are records available of any decisions made by the FMG in relation to the prevention, control and reduction of parasites?	Low	N	SSI 1, 5, c	
3.6 Where treatments have been administered is this done in accordance with principles to maximise the effectiveness of treatments, promote the minimal use of medicines consistent with the maintenance of high standards of fish welfare and help preserve their efficacy? For example, the principles of ISLM include: Resistance monitoring – reporting suspected adverse drug event (SADE) to the VMD. The steps to determine if resistance is considered a reason for a suspected lack of efficacy (e.g. Bio-assay tests and results, seeking veterinary advice) Appropriate discharge consent in place Use of authorized medicines with veterinary instruction and advice as necessary Monitoring lice numbers Using an array of treatments where possible Treating all stocks on site at the same time Avoiding the simultaneous use of different active ingredients Avoiding consecutive treatments of the same active ingredient, and certainly not on the same cohort of lice Routine removal of moribund fish and regular removal of mortalities.	Medium	Y	4.3.82, 5.3.51	
3.7 Are weekly monitoring results communicated to other farmers within the defined area?	High	y	CoGP 4.3.78, 5.3.47	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
3.8 Is this done 'as soon as reasonably possible where lice numbers exceed the suggested criteria for treatment?	High	y	CoGP 4.3.79, 5.3.48	
3.9 Is sea lice data and other information relevant to the management of sea lice provided to the SSPO?	Low	y	CoGP 4.3.80, 5.3.49	
3.10 Are annual review meetings held by FMA groups to evaluate site performance against set criteria?	High	Y	CoGP 4.3.83, 5.3.52	
3.11 Is there a signed documented farm management agreement or farm management statement relevant to the site and CoGP Farm Management Area (or equivalent)?		y	AFSA ¹³ 4A	Farm management Statement in place.
3.12 Are up to date copies of FMS available from other APB operating within the same FMA?	Medium	y	Detail if necessary: CoGP 4.3.88, 5.3.57	
3.13 Are significant changes to FMS notified to other companies within the FMA?	Medium	y	CoGP 4.3.89, 5.3.58	
3.14 Is there co-operation between APB's operating within the FMA in the development and implementation of FMAg?	Medium	y	CoGP 4.3.90, 5.3.59	
3.15 Are copies of FMS or FMAg available for inspection?	Medium	y	AFSA 4B	
3.16 Does the FMS or FMAg take into account the relevant aspects regarding a sea lice control strategy?	Medium	y	CoGP 4.3.91, 5.3.60	
3.17 If the FMA has been redefined , is there documented evidence to demonstrate that the risks to health within and outwith the area is not increased by the proposal?	High ¹⁰	N/A	CoGP 4.3.92, 5.3.61	
3.18 Is the CoGP Farm Management Area (or equivalent) followed synchronously on a single year class basis?	High	n	CoGP 4.3.100	
3.19 If answered no to 3.18, then is there a documented risk assessment which meets the requirements of CoGP point 4.3.101?	High	N	CoGP 4.3.101	
d. Inspection of records relating to training and procedures				
4.1 Is there a training programme or plan in place relevant to sea lice control for the site?	High	Y	CoGP 7.1.8	
4.2 Are training records available for relevant staff in relation to:			CoGP 4.1.6, 5.1.6 SSI, 1,1	
parasite identification	High	Y	CoGP 4.3.84-86,	
counting parasites (procedures for)	High	Y	5.3.53-55	
recording counts	High	Y		
biology and life cycle of parasites	Low	Y		
symptoms of parasite infection in fish	Low	Y		
4.3 Have staff been trained in the administration of treatments?	High	Y	CoGP 4.1.6, 5.1.6 CoGP 4.3.84, 5.3.53	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
N.B. there is no legal requirement to maintain a record of this Where records exist regarding SOPs and site procedures these should be inspected to confirm suitability				
e. Inspection of site and site stock				
5.1 Are medicines used, stored and disposed of safely?	Medium	y	VMD schedule 5	
5.2 Do the sea lice levels observed on stocks reflect sea lice count data?	High	y		
Refer to section e) of guidance notes				
5.3 Does the site appear satisfactory in terms of fish welfare relating to sea lice infestation?	High	y		
f. Inspection of farm count procedures				
6.1 Are pens and fish sampled at random?	Low	y	CoGP Annex 6, 4.3.84-86, 5.3.53-55	
6.2 Have the personnel conducting counts had appropriate training in lice recognition and recording? (Cross reference to training records – Section d)	High	y		
6.3 Can such personnel demonstrate post training competence?	High	y	CoGP 4.3.85, 5.3.54	
6.4 Do the sample sizes and methods of sampling match the CoGP suggested protocol (detailed iii – vii)? N.B. Other strategies are acceptable if considered adequate in the control and reduction of sea lice	Medium	y	Annex 6	
6.5 Is identification and recording of sea lice count information including species and stages observed to be correct? Minimum recording requirements within the CoGP and NTS are: for Caligus elongatus all identifiable stages and for Lepeophtheirus salmonis chalimus, mobiles and adult females (with or without egg strings) ¹¹	High	y	Annex 6	
6.6 Is the transfer of data from field counts to records observed to be satisfactory?	Medium	N/A		Did not observe due to covid distancing restrictions.
g. Inspection of treatment administration procedures				
7.1 Are treatments considered to be administered in an appropriate competent manner? Consider appropriate use of tarpaulins; completion of medication per prescription, correct concentrations, mixing and administrations, appropriate product used	High	N/A		No treatment was observed.
7.2 Is accurate information provided to the attending veterinary surgeon for dosage calculation?	High	N/A	CoGP 4.3.131, 5.3.85	
7.3 Are the fish under consideration being given any other medication, or are they in a withdrawal period for any other medication?		N/A		

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
7.4 If so, has the prescribing veterinary surgeon been informed of this?	Medium	N/A	CoGP 4.3.132, 5.3.86	
7.5 Are clear instructions for medication, dosage and administration communicated to the staff responsible for treatment?	High	N/A	CoGP 4.3.133, 5.3.87	

Additional actions	Powers	Comments and advice given or action taken if necessary
h. FHI sea lice counts If necessary conduct a sea lice count in accordance with the protocol of the CoGP. Indicate where this procedure has been done and make a record of results within the comments box	Power granted under the Act – section 3 (2) (a)	
i. Collection of samples If necessary collect samples. Indicate if samples have been taken and detail what those samples are and the purpose of their collection	Power granted under the Act – section 3 (3) (a)	
j. Enforcement Notice. If an enforcement notice has been issued then maintain a copy / duplicate and record detail Guidance on completing the Enforcement Notice	Power granted under the Act – Section 6 (2)	

[1] Scottish Statutory Instrument – The Fish Farming Businesses (Record Keeping) (Scotland) Order 2008

[2] A Code of Good Practice for Scottish Finfish Aquaculture

[3] Water temperature to be measured at the half way point of the depth of the facility containing the fish, or as close to as possible. For SW cage sites one reading per count may be

[4] Recording requirements:- for *C. elongatus* – all identifiable stages and for *L. salmonis* - mobiles and adult females (with or without egg strings)

[5] Area refers to management area as specified within Part 3 of the industry CoGP or as redefined appropriately

[6] For reference Annex 6 of the CoGP provides the detail of the NTS

[7] FMA = Farm Management Area

[8] FMS = Farm Management Statement

[9] FMAg = Farm Management Agreement

[10] No further action may be required when answering no to this point and yes to 3.18

[11] Legal recording requirements within the SSI stipulate – for *Caligus elongatus*: mobiles; and for *Lepeophtheirus salmonis*: non-gravid mobiles and gravid females.

[12] VMD - The Veterinary Medicines Regulations 2013 (SI 2013 No 2033)

[13] AFSA - Aquaculture and Fisheries (Scotland) Act 2007 (as amended)

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0456	DATE OF VISIT	06/10/2021
SITE No	FS1067	SITE NAME	Inverawe (East) Etive 2
CASE No	20210394	INSPECTOR	[REDACTED]

Case completion report

Recommendations in relation to the above case were made for implementation by 01/12/2022. Following submission of the required documentation, evidence has now been provided to Marine Scotland to demonstrate that the recommendations have been implemented.

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

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

Signed:

[REDACTED]

Date: 24/01/2023

Fish Health Inspector

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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0456	DATE OF VISIT	06/10/2021
SITE No	FS1067	SITE NAME	Inverawe (East) Etive 2
CASE No	20210394	INSPECTOR	[REDACTED]

ENHANCED SEA LICE INSPECTION

An enhanced sea lice inspection to ascertain the levels of sea lice and for assessing the measures in place for the prevention, control and reduction of sea lice was conducted in accordance with the Aquaculture and Fisheries (Scotland) Act 2007.

The visit consisted of an inspection of records with regards to sea lice, the stock on site, site procedures with regards to sea lice and the provision of advice.

Records

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

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

Mortality records were inspected and found to be adequately maintained.

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

a) Inspection of sea lice records

The site meets the requirement of current Scottish industry best practice. There were no recommendations made and no further action is required.

b) Inspection of records relating to treatment and control of sea lice

Although the site meets the requirement of current Scottish industry best practice, the sea lice records demonstrated that sea lice levels on site had been significantly above the suggested criteria for treatment despite the management actions undertaken.

It is recommended that the sea lice management strategy be reviewed, taking into account veterinary advice, where necessary, to ensure that an effective strategy is being

R25

implemented that will meet the requirements of the Code of Good Practice for Scottish Finfish Aquaculture (CoGP) and follow the standards associated with A National Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms, as described in Annex 6 of the CoGP.

c) Inspection of records relating to farm management groups and area management agreements.

The following recommendations are made for improvement.

Records of decisions made by the farm management group in relation to the prevention, control and reduction of sea lice were not available.

It is recommended that to meet the requirements of schedule 1, section 5(c) of the Fish Farming Business (Record Keeping) (Scotland) Order 2008 a record should be kept of any decision made by the area management group relating to the prevention, control and reduction of sea lice.

During inspection it was determined that annual review meetings had not been held by the farm management area group with a view to evaluating site performance against set criteria with regards to sea lice management. Quarterly meetings have since been arranged amongst the farm management area group.

It is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4 point 3.83) annual review meetings should be convened by the farm management area group to evaluate performance of the farms within the area in regards to the criteria set out in the National Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms, as described in Annex 6 of the CoGP

The farm management area is not fallowed synchronously on a single year class basis, however a risk assessment was not carried out to determine the risk to other businesses in the area.

It is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4, point 3.100) the farm management area should be fallowed synchronously on a single year class basis.

Alternatively, it is recommended that in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) (Chapter 4, point 3.101) a documented risk assessment, which considers the risks to the company's own operations and to the operations of other companies operating within the farm management area and any adjacent areas, should be undertaken, to include strategies to be followed for pathogen and parasite control in the absence of fallowing.

d) Inspection of records relating to training and procedures

The site meets the requirement of current Scottish industry best practice. No recommendations made or further action required.

e) Inspection of site and site stock

The site meets the requirement of current Scottish industry best practice. No recommendations made or further action required.

f) Inspection of farm count procedures

R25

An inspection of site staff conducting and recording a sea lice count was carried out. This met the requirements of The Fish Farming Business (Record Keeping) (Scotland) Order 2008 and CoGP. No further recommendations or further action required.

The transfer of data from field counts to records could not be observed due to Covid-19 social distancing requirements.

g) Inspection of treatment administration procedures

Procedures were not inspected as a treatment was not taking place at the time of inspection. However, discussions on procedures with the company correspondent would suggest that the site meets the requirement of current Scottish industry best practice.

Further Action

The recommendations in this report should be implemented by **01/12/2022**. Documentation should be provided as evidence that the recommendations have been implemented. Enforcement action may result if the recommendations are not implemented in the necessary time frame. Records should be sent to Marine Scotland Science's Fish Health Inspectorate (FHI) (contact details are provided below).

Signed: 
Fish Health Inspector

Date: 25/08/2022

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

Case No: 2021-0421 Date of visit: 26/10/2021

Time spent on site: 1 hour Main Inspector:

Site No: FS1339 Site Name: The Aquaponics Garden

Business No: FB0578 Business Name: The Aquaponics Garden Ltd

Case Types: 1 ECI 2 CNI 3 ALA 4 5 6

Water Temp (°C): 16 Thermometer No: T146 FHI 045 completed

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

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

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

Additional Case Information:

No longer holding rtr - koi on site since Nov 2020. Change to authorisation was not sought prior to change although FHI were aware shortly after, covid protocols delayed FHI site visit.

Water quality testing currently being taken daily, weekly when plants are online.

Slight fungus on fins of some rtr during stocking was recorded, within first few weeks it became evident that fish had not coped well with the transfer, gill parasites were evident and respiratory difficulties observed, fish were moribund. This coincided with start of Covid19 Pandemic in March 2020 - communications with FVG were digital through videos and photos. The site manager had resigned so help was sought from the source hatchery (Trossachs), and they helped to euthanize the fish.

Mortality records were not kept during this period, all fish that had perished prior to euthanasia were frozen and removed along with euthanized fish for disposal by Trossachs.

Salt treatments mostly conducted as dips - so not treating whole site and affect aquaponics.

Some treatments also conducted in quarantine tank - Costia - chloramine T in quarantine tank 4 days in July during very high temps

The multi cell raceway is split into 3 with bigger fish in one end and smaller fish at the other end - although all fish are from same stocking. Average length - 9" bigger fish - 250g , 5" smaller fish - 34g.

Fish were currently undergoing a salt treatment to the whole tanks as the plant section is currently offline, planting will recommence in Mid Nov. Partial water changes also taking place whilst plants offline. Thought that this additional stress may be causing occurrence of some carp pox, 4 fish were observed with pox like lesions but their behaviour was otherwise normal. Other fish have reportedly recovered well from this lesions following treatments in the past. Mortalities on site very low, therefore no diagnostic sampling was undertaken however owner was informed of our diagnostic service and will get in touch if she has concerns. Owner has struggled to find koi specific veterinary advice but has had a lot of help from koi supplier in Lancashire and companies that provide the treatments, no visits or diagnostic sampling has occurred but health advice received via telephone conversations with suppliers/local vet during pandemic.

With regards to ALAS regulations - in summary site is in a secure building, water is recirculated between fish tanks and most of effluent water goes through wall to plants room. Filtration (drum and bio filter), in fish tank room and any waste water is put directly into mains sewage. There is an overflow of tank for the irrigation system, which is a secure IBC located outside the building. This water is used to water ornamental plants in the garden of the college - advised against best practice. Due to change of business to NCB not required to be classified as open/closed or needing a permit as not covered by ALAS regs.

Case No: **2021-0421** Site No: **FS1339**

Date of Visit: **26/10/2021** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

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

Site Details (include cleaner fish for all sections)

Total No facilities	1	Facilities stocked	1	No facilities inspected	1
Species	CAR	CAR			
Age group	MVG	MVG			
No Fish	49	20			
Mean Fish Wt	250g	50g			
Next Fallow Date (Site)	none planned		Next Input Date (Site)	N/A	
Recent (last 4 wks) disease problems?			Any escapes (since last visit)?	N	
If yes, detail:	[REDACTED]				

Movement Records

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

Transport Records

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

Mortality Records

- 1. Mortality records available for inspection?
- 2. How are mortalities disposed of? **Other (detail)**
- If other detail: **Frozen - uplifted by waste removal when sufficient amount no uplift yet.**
- 3. Mortality records complete and correctly entered?
- 4. Recent mortality (last 4 wks): **Very low - none in last 4 weeks.**
- 5. Evidence of recent increased/atypical mortalities?
- If yes, facility nos/no mortality per facility/no stock per facility/reason: **[REDACTED]**
- 6. Any other peaks in mortality during period checked?
- If yes, detail: **RTR - euthanized April 2020 following high mortalities with gill parasitic infection**
- 7. Have increased (unexplained) mortalities been reported to vet or FHI?
- If yes, detail action: **Digital comms with FVG due to covid**
- 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

Treatments and Medicines Records

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

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>	Y
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>	Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>	Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
If no, detail:	<input type="checkbox"/>	

Results of Surveillance

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

Records checked between:	Feb 2020 - 26/10/2021
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Case No: **2021-0421**

Site No: **FS1339**

Sea Lice Inspection (Seawater Sites Only)

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

Containment Inspection

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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0578	DATE OF VISIT	26/10/2021
SITE No	FS1339	SITE NAME	The Aquaponics Garden
CASE No	20210421	INSPECTOR	██████████

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

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

Records

The 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 not kept when the site was initially stocked between March 2020 and May 2020.

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

The site is only authorised to stock rainbow trout. Koi carp were moved onto site in November 2020 without authorisation; against the conditions of the Aquaculture Production Business authorisation under The Aquatic Animal Health Regulations (Scotland) 2009. The operator was unaware that this was against their authorisation and the FHI were made aware of the movement later in November 2020 but the COVID-19 pandemic and related travel restrictions delayed the site inspection.

The site was stocked with rainbow trout in February 2020 and due to health issues, all remaining stock was culled in April 2020. Mortality records were not kept at all during this period and the incidence of high mortality was not reported to the FHI. Mortality records have been kept in a satisfactory manner since the subsequent stocking of koi carp onto site in November 2020.

Following changes to the nature of the business the site will no longer be producing rainbow trout and they have been removed from the registered site details. Furthermore, no fish will be moved off site for ongoing production or for human consumption; therefore the category of the business has been amended from Aquaculture Production Business (APB) to Non Commercial Business (NCB). Due to the historic nature of the non compliances with authorisation conditions,

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the improvements made to record keeping since and the change to the business category no further action is required.

In line with good bio-security practice it is recommended that the water in the overflow tank from the irrigation unit should not be used or distributed elsewhere for any other purpose and should be bio-securely disposed of as required in line with the procedures used for waste water discharge from the site.

Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

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

On this occasion the site was found to be satisfactory.

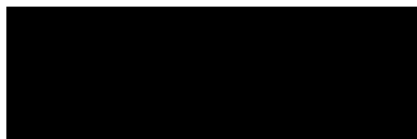
Inspection under the Alien and Locally Absent Species in Aquaculture (Scotland) Regulations 2015

The site was also inspected to determine if an application for a permit was required under the Alien and Locally Absent Species in Aquaculture (Scotland) Regulations 2015 (ALAS) to farm the non-native species koi carp (*Cyprinus carpio*). Due to changes to the operation of the business, koi carp are not being **farmed for production** therefore do not fall under the scope of the ALAS 2015 regulations.

Should any changes to the nature of the business or the operation of the site be made in future the site may require a permit under the 2015 Regulations, please contact the Fish Health Inspectorate to discuss prior to any changes to operations being implemented.

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

Signed:



Date: 18/01/2023

Senior Fish Health Inspector

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