

Case No: 2019-0388 Date of visit: 08/08/2019

Time spent on site: 6 hrs Main Inspector:

Site No: FS1093 Site Name: Teisti Geo

Business No: FB0125 Business Name: Scottish Sea Farms Ltd

Case Types: 1 SLA 2 3 4 5 6

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

Observations: Region: SH Water type: S CoGP MA S-11

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

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

Additional Case Information:

Thermolicer treatment ongoing during inspection, had been due to complete site the previous day, but treatment delayed due to issue with a compressor onboard the Voe Viking. Thermolicer was reported to be giving good clearances. Sea lice count observed and satisfactory, also conducted eye and skin scores which is standard SSF practice to monitor for any issues with the Thermolicer.

No bath treatments have been conducted this cycle for sea lice, two SLICE treatments have been conducted, one for caligus. Caligus numbers weren't high but treatment conducted due to increase in fish jumping and damaging themselves on top net support. Second SLICE treatment conducted prior to hydrogen peroxide treatment for AGD. Only other sea lice treatments conducted have been 4 Thermolicer treatments.

AGD not reported to be causing any issues this cycle.

Site was fitted with sea lice skirts from two weeks pre input until a couple of weeks ago. Skirts were reported to be effective, no aeration used on site as this can subsequently cause issues during an algal bloom. SSF are reportedly trialling skirts at different depths up to 15m on another site in Shetland.

SSF will have a new Thermolicer boat with all machinery integrated below deck and will be capable of processing higher tonnages per hour than the Voe Viking, which is currently ~70 tonnes per hour..

SSF have also used the Eva Elizabeth, which was reported to be one of the first Thermolicer developed. The system was reported to be very effective. However, unlike the Voe Viking it doesn't filter lice that are removed prior to water being discharge, it utilises electricity to kill the sea lice prior to discharge. Sea water removed during the dewatering step is also filtered on Voe Viking to remove any sea lice that have been dislodged and all filtered water is returned on site.

Have reported CMS on site, 3 cages affected, 2 have been harvested and third will be fallow by Monday 12th August.

Sites to be stocked by SSF in 3a for next cycle will be Teisti Geo, Holms Geo and Lippie Geo. All will be stocked with 2020 S1 from Barcaldine.

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

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

Site Details

Total No facilities	<input type="text" value="9"/>	Facilities stocked	<input type="text" value="7"/>	No facilities inspected	<input type="text" value="9"/>
Species	<input type="text" value="SAL LUM"/>				
Age group	<input type="text" value="2018 S1"/>	<input type="text" value="2018"/>			
No Fish	<input type="text" value="307,617"/>	<input type="text" value="~36,000"/>			
Mean Fish Wt	<input type="text" value="4.08 kg"/>	<input type="text" value="400g"/>			
Next Fallow Date (Site)	<input type="text" value="Oct 2019"/>		Next Input Date (Site)	<input type="text" value="Feb/March 2020"/>	

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

Movement Records

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

Transport Records

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

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:

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

Treatments and Medicines Records

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

Biosecurity Records

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

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>
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:

Case No: 2019-0388 Site No: FS1093

Date of visit: 08/08/2019 Inspector(s):

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
-------------------------	------------	---------------	-------------	--

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	Only time counts not conducted if treatments are ongoing and counts will be conducted following week
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:	

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	This has been complicated by the on-going CMS challenge on site, and plan to minimise handling of stock to minimise mortalities. Plan to harvest site to reduce biomass.
2.2 Is therapeutic treatment initiated ASAP where required?	High	N/A	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	
	High	Y	SSI 1,3	
	High	Y		
	High	Y		
	High	Y		
	Low	Y		
	Medium	Y		
2.4 If the medicine is administered by a veterinary surgeon:			VMD 18	

Point for consideration	Risk level	Satisfactory?	Requirement	Comments and advice given or action taken if necessary
the name of the veterinary surgeon	High	N/A		
name of the product	High	N/A		
batch number	High	N/A		
the date of administration	High	N/A		
amount administered	High	N/A		
identification of fish treated	High	N/A		
withdrawal period	Medium	N/A		
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	Thermolicer used for treatments, Lump sucker stocked on site.
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	
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	N/A	CoGP 4.3.135, 5.3.89	
2.12 Was advice taken from the Veterinary surgeon in such circumstances?	Medium	N/A	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	Fish Health and Welfare manager. Fish Health group formed for Shetland which includes SSF, GSS and CAS. Regular fish health meetings for Shetland
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	Y	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	Discussed whilst reviewing FMAg.
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	FMAg in place between SSF and GSS. Already FMAg in place FMAg for current cycle, due for review prior to restocking at beginning 2020.
3.12 Are up to date copies of FMS available from other APB operating within the same FMA?	Medium	N/A	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	N/A	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	N/A	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	Y	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/A	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	NAFC training course covers sea lice
4.2 Are training records available for relevant staff in relation to:			CoGP 4.1.6, 5.1.6	
parasite identification	High	Y	SSI, 1,1	
counting parasites (procedures for)	High	Y	CoGP 4.3.84-86,	
recording counts	High	Y	5.3.53-55	
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 <i>Caligus elongatus</i> all identifiable stages and for <i>Lepeophtheirus salmonis</i> 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 Y	CoGP Annex 6, 4.3.84-86, 5.3.53-55 CoGP 4.3.85, 5.3.54 Annex 6 Annex 6	10 fish sampled from every cage each week. Exceeds CoGP suggested protocol.
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 Y		Treatments not observed, but no bath treatments conducted this cycle. Company vet has access to fish talk for up to date information.

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?		Y		T.M.S. for lice counts and gill scores.
7.4 If so, has the prescribing veterinary surgeon been informed of this?	Medium	Y	CoGP 4.3.132, 5.3.86	All info recorded on Fishtalk
7.5 Are clear instructions for medication, dosage and administration communicated to the staff responsible for treatment?	High	Y	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)				

██████████
Scottish Sea Farms Ltd
Laurel House
Laurelhill Business Park
Polmaise Road Stirling
FK7 9JQ
████████████████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0125	DATE OF VISIT	08/08/2019
SITE No	FS1093	SITE NAME	Teisti Geo
INSPECTOR	██████████	CASE No	20190388

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, site procedures with regards to sea lice and the provision of advice.

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

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

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

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

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

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.

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 site manager would suggest that the site meets the requirement of current Scottish industry best practice.

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



Signed:

Date: 11/02/21

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at www.gov.scot/Topics/marine/Fish-Shellfish/FHI/charter