



Animal Health & Welfare Act (Scotland) 2006

Report on Fish Welfare for Scottish Government

Part 1: General details

1. Reference number	FFMC01
2. Name and address	Scottish Sea Farms Limited, Laurel House Laurelhill Business Park Stirling Scotland, Postcode FK7 9JQ
3. Location of Fish (if different from above)	Scallastle farm site Sound of Mull Postcode PA65 6BH
4. Date of Visit	22/10/20
5. Time of visit	13:30

Part 2: Detail

6. Present at visit:

(List the names and roles of attendees at the visit)

Remote on line inspection: site empty at the time of inspection.

[Redacted] Scottish sea Farm.
[Redacted] Scottish Sea Farm.
[Redacted] Marine Scotland
[Redacted] : APHA [Redacted]

7. Reason for Visit:

(state specific reason for visit i.e. routine visit, complaint etc. If a complaint include by whom)

Complaint by email sent by [Redacted]
As reported:
[Redacted]

Please keep this report confidential and do not share my name or my organisation's name with the farm, company or anyone else. We will also not be able to tell you who filmed and sent in this footage as they do not wish to be connected to this report and so asked us to make this contact on their behalf

8. Background

(include nature of site (sea/freshwater), species, number, production aim, production cycle, source, history of unit, any recent changes, transport used, veterinary and other advisers).

Sea water site: production of Atlantic salmon. Licence number CAR/L/1010606/C1/V7,

Max licensed biomass on site (tonnes): 2000

Recorded in June 2020: 1259 tonnes.

Production cycle started in Feb 2019, with 425.655 Atlantic Salmon, 35.077 Ballan Wrasse introduced on wk 19 and 36.309 Lumpfish from wk 52. Site gradually depopulated since early summer 2020, and fully depopulated by October 2020. Biomass on site checked for all the production cycle: no issue detected.

APHA received a welfare complaint for the site and Spelvie site at the same time: General good health was noticed at Scallastle with no major issues identified apart from detected issues with lice that were under veterinary treatment.

Analysis of picture sent:

- Sea lice infestation: by the picture provided it's not possible to make any valuation on the extent of this infestation across the farm. APHA will consider actions taken on the group (monitoring/action/outcome).
- Damaged fish: this looks like the consequences of an attack from predator(s), likely a seal. This has been investigated with analysis of predator policy and records.

9. Findings

(include disease situation and duration, mortalities and other significant records, feeding patterns, advice sought, diagnosis, treatment, vaccinations, culling, expectations etc).

Sea lice presence has been detected and monitored along the production cycle by the farm. PVS has referred that the site had a challenge in spring /summer 2020 as a result of the elevated harmful algal bloom seen in the region. The harmful algae embedded into the gills of fish causing damage which, if not fatal, will prevent treatment action (included the one approved for sea lice), reducing oxygen level available. Action plan can only be to reduce the stocking density, and the site has been always stocking under approved capacity, splitting the pens timely and harvesting often (62 times for the 16 cages in total). This early harvesting has occurred also to mitigate a second health challenge detected: CMS suspected on clinical sign on week 35 2020, confirmed following Laboratory investigation and Histopathology. Cardiomyopathy syndrome is a severe disease affecting the heart of infected fish and characterized by prolonged periods of low-level mortalities (Brun et al. 2003). PVS has referred that lice treatment at this stage is going to be more damaging as stressful time for the fish. This is confirmed in scientific literature: during sea lice bath treatments, mortalities can be significantly elevated and considered due to the clinical and pathological effects of the CMS as stressful events (Kongtorp et al. 2006). Several harvestings have mitigated the lack of treatment available.

Records are solid and able to show constant monitoring of the sea lice presence, with treatment action as soon as this was possible (see below) and culling when required. According to the PVS, this was a good production cycle with a challenging situation due to the algal bloom, but at any time health and welfare were supervised. Weekly meetings with the farm management were in place. PVS refers that in his professional experience the farm was managing correctly the health and the welfare of the fish. Good average growing figures provided can confirm this: there is a constant progress noticed in the growing records (in grams): Jan to Dec 2019: 94, 131, 196, 233, 373, 562, 692, 914, 1368, 1768, 2305, 2786. Jan to Sept 2020: 3375, 3968, 4465, 4784, 5068, 5638, 6397, 6712; in September 6681: It has been explained that the average weight of fish on site is expected to decrease at the end of a cycle as pens with larger size fish are harvested first to allow the smaller sized fish to continue to grow to their potential.

Fish health monitoring sampling history available, as records of mechanical treatment/Medicine used when possible as a multisystem approach are all actions taken by the farm timely: records checked and verified in line with increased mortality data recorded by fish Health Inspector (only those above 1% were required to be reported to FHI (regular levels 0.1% - 0.2%).

Week 45 2019 – 1620 (0.44%)Week 50 2019 – 2379 (0.66%)Week 05 2020 – 1801 (0.3%)Week 06 2020 – 2327 (0.67%)Week 12 2020 – 1025 (0.3%)Week 16 2020 – 1934 (0.6%)Week 17 2020 – 1441 (0.45%)Week 25 2020 – 1006 (0.52%)Week 36 2020 - 569 (1.16%)Week 37 2020 – 437 (1.04%)Week 39 2020 – 529 (2.25%)Week 40 2020 – 194 (1.17%)Week 41 2020 – 215 (1.87%)Week 42 2020 – 55 (1.2%)

Medicine treatment (whole site): Slice Vet: 25/3/19, 10/05/19, 1/7/19- Salmosan: 7/7/19 Paramove50 29/08/19 - Slice vet 17/9/19.

Mecanical treatment- specified for pen: Thermolycer 4/10/19 pen6; 4/11/19 pen 14; 9/11/19 pen 8; 20/12/19 pen 1; Hydrolicer: 19/4/20 pen 4; SFI 11/5/20 pen 4; 20/7/20 pen1; 7/8/20 pen4; 18/8/20 pen1

Attach from predators. This issue is verified and match with timing of picture sent by the informant and records provided by the farm (increaase of seal activity around the farm recorded in October 2020). Acoustic deterrent authorised in place, (REFERENCE NUMBER: 20/01057/MFF) and net tension checked for damage and tension adjusted.

10. Action

(outline any necessary actions)

No APHA action required

Follow up with on site visit at next production cycle will be schedule.

11. Conclusions and recommendations

In general, managing fish farms has become more challenging in the past few years, with higher water temperatures and an increase in the incidences of algal blooms. This is reported into the recent scientific articles and it has occured also for other sites in Scotland this year.

The site has invested in recent time into cleaner fish and mechanical treatment to remove sea lice in balance with responsible access to medicines as part of a multi-faceted strategy.

All records provided are showing that appropriate action were taken to respond promptly to the challenges occurred during the production cycle in order to prevent deterioration of the welfare of the animals under care. The site staff detected fish Health issue, consulted the PVS, and took proportionated action required, included culling and treatment available (mechanical and medicine) when possible. Good records kept are able to satisfy the APHA investigation, also on the actions required related to safeguard from predators.

On site visit will be request for next production site as follow up.”

12. Overall Assessment:

** delete as appropriate*

Signature	
Name in BLOCK LETTERS	
Date	22/11/2020
Tel No.	

APHA office address
APHA Perth, Strathearn House, Broxden Business Park, Lamberkine Drive, Perth, PH1 1RX.

DATA PROTECTION

For information on how we handle personal data please go to www.gov.uk and search Animal and Plant Health Agency Personal Information Charter.

APHA is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Government, Welsh Government and Food Standards Agency to safeguard animal and plant health for the benefit of people, the environment and the economy.