

Case No:	<input type="text" value="2020-0010"/>	Date of visit:	<input type="text" value="21/01/2020"/>			
Time spent on site:	<input type="text" value="6 hours"/>	Main Inspector:	<input type="text" value=""/>			
Site No:	<input type="text" value="FS0575"/>	Site Name:	<input type="text" value="Ormsary Smolt Unit"/>			
Business No:	<input type="text" value="FB0061"/>	Business Name:	<input type="text" value="Landcatch Natural Selection Ltd"/>			
Case Types:	1 <input type="text" value="MOV"/>	2 <input type="text" value="VMD"/>	3 <input type="text" value="DIA"/>	4 <input type="text" value=""/>	5 <input type="text" value=""/>	6 <input type="text" value=""/>
Water Temp (°C):	<input type="text" value="3.2"/>	Thermometer No:	<input type="text" value="T146"/>	FHI 045 completed	<input type="text" value=""/>	
Observations:	Region:	ST	Water type:	F	CoGP MA	
Dead/weak/abnormally behaving fish present?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="text" value="Y"/>					

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

Additional Case Information:

Export of 315@58g smolts to Wageningen University in Holland, IntraGB.2020.0001584. Transported by Solway Transport. From tank E1. Vaccinated 20/11/19 and post treated with formalin. Morts in tank low and attributed to fungus.

2020 S1 going to sea starting wk10 to wk17 - going SSC - Lamlash, Loch Duart to Sound of Harris

FVG in for lesions observed mainly in tank X9, suspected bacterial growth, likely Flavobacterium - treatments; florocol, cress and formalin. Morts across the site since vaccination in September about 2.2% in 2020 S1s.

Florocol treatment 16th Jan 2020 - all 2020 S1 tanks treated and currently under treatment finishing on Sunday. Feed mixed on site.

wk3 peak morts in tank X9 -146 for the day all with lesions; 13/1/20, tank X10 338 morts due to lesions

Feed mixing licence from 2014 - is an annual licence sent out? Contacted VMD licences are not sent out annually. 2014 one is current. Site contact informed [REDACTED] 3/2/20

Case No: **2020-0010** Site No: **FS0575**
 Date of Visit: **21/01/2020** Inspector(s): **[REDACTED]**

Registration/Authorisation Details

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

Site Details

Total No facilities	108	Facilities stocked	58	No facilities inspected	58
Species	sal				
Age group	2020 S1	2020 S0			
No Fish	1,153,225	1,095,012			
Mean Fish Wt	70g	0.2g			
Next Fallow Date (Site)	None		Next Input Date (Site)	This week from Ormsary Hatchery	

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

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **21/07/2019**
 3. Are records complete and correctly entered? **Y**
 4. Are movement records available for dead fish and waste? **N/A**
 5. Are records complete and correctly entered? **N/A**
 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? **Incinerated - on site**
 If other detail: **[REDACTED]**
 3. Mortality records complete and correctly entered? **Y**
 4. Recent mortality (last 4 wks): **2020 S1 morts; 0.33%/site/wk2, 0.38% wk 1, wk52, 0.2%, wk51 0.23%- attributed to fungus and lesions**
 5. Evidence of recent increased/atypical mortalities? **Y**
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
2020 S1 peaked at 17%/TnkX9 /week - site peak 0.23%; Lesions
 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? **Y**
 If yes, detail action: **Visit from FVG - prescribed florfenicol**
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet. **N/A**

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

Biosecurity Records

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

Results of Surveillance

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

Records checked between: 21/7/19- 21/1/19

Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	F4	F5	P1							
Fish nos	1	2	3	4	5	1-5	6-11	12-17	18-23	24-29	30-36	37-42	
Pool Group	P1	P1	P1	P1	P1								
Species	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL
Average weight	50g	50g	50g	50g	50g	50g	50g	50g	50g	50g	50g	50g	50g
Sex													
Water Type	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW
Stock Origin	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	SSC via Ormsary Hatchery	SSC via Ormsary Hatchery	SSC via Ormsary Hatchery	SSC via Ormsary Hatchery
Facility No	X9	X9	X9	X9	X9	X9	A4	A6	E6	E13	E20	E28	

01/2020 Additional Sample Information:
 MG DNA Prep for Flavobacterium. PCR test to be added into LIMS

6 Total Tests assigned 5

43-48	49-54	55-60	61-66												
SAL	SAL	SAL	SAL												
50g	50g	50g	50g												
FW	FW	FW	FW												
SSC via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	Loch Duart via Ormsary Hatchery	SSC via Ormsary Hatchery												
X11	X10	X7	X5												

Case no: 2020-0010

Site No: FS0575

Method of killing: Anaesthetic

Date of visit: 21/01/2020

Inspector(s):

Sheet Relevant: Y

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

Fish Number		1	2	3	4	5				
Time sampled after death (if > 45 minutes)										
External Signs										
Behaviour	Moribund	S	S	S	S	S				
	Lethargic									
	Hanging vertical									
	Spiralling									
	Flashing									
	Loss of equilibrium									
Body	Dark									
	Distended abdomen									
	Anorexic									
	Scale Oedema									
Opercula	Shortened									
	Flared									
Haemorrhaging	Throat									
	Ventrum									
	Base of fins									
	Elsewhere									
Eyes	Exophthalmic									
	Enophthalmic (sunken)									
	Cataract									
	Haemorrhagic									
Gills	Pale									
	Zoned									
	Necrotic									
Lesions	Flank									
	Elsewhere	S	S	S	S	S				
Vent	Inflamed									
	Trailing faeces									
Lice Load	Estimate numbers									
Internal Signs										
Ascites	Clear									
	Bloody									
Oedema	In tissues									
Heart	Pale/anaemic									
	Granulomas									
	Deformed									
Liver	Petechial haem									
	Gross haem									
	Tissue breakdown									
	Enlarged									
	Colour number(s)									
	Granulomas									
	Lesions									
Pyloric caeca	Petechial haem									
	Tubules mauve									
	Lack of fat									
Spleen	Enlarged									
	Granulomas									
Gut	No food present	S	S		S					
	Yellow pseudo-faeces									
	External haem									
	Internal haem									
Body wall	Haemorrhaging									
Swim bladder	Haemorrhaging									
	Fluid filled									
Kidney	Swollen									
	Grey									
	Granular									
	Liquefied									
General	Parasites present									
	Anaemia									

Additional comments:

Lesion on dorsal surface

Site No: FS0575
Case No: 2020-0010
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



Landcatch Natural Selection Ltd
Ormsary Fish Farm
Lochgilphead
Argyll
PA31 8PE

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0061	DATE OF VISIT	21/01/2020
SITE No	FS0575	SITE NAME	Ormsary Smolt Unit
INSPECTOR		CASE No	20200010

Section 1: Summary

During a routine inspection at Ormsary Smolt Unit records showed increased mortalities in tanks X9 and X3. Five fish were removed for diagnostic examination.

Histopathology examination revealed moderate to marked, focal, necrotizing myositis and mild focal muscular haemorrhage likely associated with oomycetes and bacteria.

Pseudomonas sp., and *Lactococcus piscium*, were isolated on plates taken from the fish. The level and purity of growth would suggest they may be a threat to fish health if the population is compromised. *Flavobacterium* sp. was isolated but was not identified as *F. psychrophilum*. *Flavobacterium psychrophilum* was detected by QPCR testing.

Sample tested positive by QPCR for infectious pancreatic necrosis virus (IPNV). However histopathology results were not consistent with IPN disease. The fish had been vaccinated against IPN.

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

Section 2: Case Detail

Observations

Ormsary Smolt Unit was visited to carry out a routine inspection. During the visit site staff informed me of increased mortality levels in tanks X9 and X3. This was being attributed to lesions and a *Flavobacterium* sp. infection. The fish were undergoing a florfenicol treatment. On inspection of tanks X9 and X3 approximately 30 moribund fish were observed with lesions on the dorsal surface in each tank. Five fish were removed for diagnostic sampling.

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Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1-5	P1	X9	Atlantic salmon	50g	Ormsary Hatchery for Loch Duart

Results

Bacteriology: Kidney, spleen and lesion material from five fish were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated;

- *Pseudomonas* sp. - lesion (F1-F5).
- *Lactococcus piscium* - lesion (F1-F5), spleen (F2) and kidney (F2).
- *Flavobacterium* sp - lesion (F2).

The predominant isolate observed was *Pseudomonas* sp. From the tests conducted, we do not have evidence of resistance to oxytetracycline or sulphamethoxazole/trimethoprim. There was however no sensitivity to amoxicillin and florfenicol.

A second predominant isolate was identified as *Lactococcus piscium* by sequencing. The level and purity of growth would suggest it may be a threat to fish health if the population is compromised.

Due to the suspicion of the presence of *Flavobacterium psychrophilum* tissue samples were tested for segments of nucleic acid indicative of the presence of the pathogen using real-time PCR (QPCR). This test proved positive.

Flavobacterium psychrophilum

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	22.21	34.79	35.84	35.87	Positive

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

The samples tested positive for infectious pancreatic necrosis virus (IPNV)

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	17.10	34.46	34.98	34.61	Positive

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), infectious salmon anaemia virus (ISAV), salmonid alphavirus (SAV) and viral haemorrhagic septicaemia virus (VHSV).

Parasitology: Fins were collected to determine the presence of *Gyrodactylus salaris* using light microscopy. No *G. salaris* parasites were detected in the samples examined.

Histology: Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen, kidney and brain were taken from five fish. The tissue samples were fixed in 10% neutral buffered formalin. Histopathological examination revealed the following:

Gill: Within normal range.

Skin & Muscle: Focally extended white muscle necrosis and small foci of haemorrhage and few polymorphonuclear leukocyte among red muscle fibres (F2-F5). Both skeletal muscle displayed structures resembling hyphae and F2, F3 & F5 a small mat of hyphae close to the outer layer of epidermis. Epidermal layer displayed areas of spongiosis (F2, 5). Filamentous and few rod-shaped bacteria was also noted associated with dermis and muscular layer at the lesion edge (F2-F5).

Heart: Within normal range.

Gut and pyloric caeca: Some fibrous adhesions likely associated with vaccine administration (F1-F3).

Pancreas: Within normal range.

Liver: Some diffuse hepatocyte vacuolation (F1).

Kidney: Mild renal tubule dilation (F2).

Spleen: Slightly congested (F5).

Brain: Within normal range.

A mild peritonitis likely associated with vaccine administration was also noted.

Signed:



Fish Health Inspector

Date: 24/02/2020

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

R09

Landcatch Natural Selection Ltd
Ormsary Fish Farm
Lochgilphead
Argyll
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FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

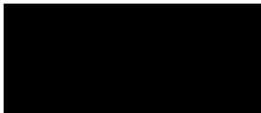
BUSINESS No	FB0061	DATE OF VISIT	21/01/2020
SITE No	FS0575	SITE NAME	Ormsary Smolt Unit
INSPECTOR		CASE No	20200010

Inspection for placing on the market in the EU

In accordance with the Trade in Animals and Related Products (Scotland) Regulations 2012 and European Community Council Directive 2006/88/EC, the above site was visited and a consignment of Atlantic salmon pre-smolts for placing on the market in Holland was inspected. A health certificate was issued which must travel with the consignment to the destination. The official authority in the importing country has been notified.

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

Signed:



Date: 30/01/2020

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

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FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0061	DATE OF VISIT	21/01/2020
SITE No	FS0575	SITE NAME	Ormsary Smolt Unit
INSPECTOR		CASE No	20200010

Inspection under the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (England and Scotland) Regulations 2015

The above site was visited in accordance with the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (England and Scotland) Regulations 2015.

Samples were taken to be analysed for veterinary residues.

In addition, samples were taken for diagnostic purposes. A separate report will be issued detailing the results of these tests.

Records

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

Medicine records were inspected and found to be adequately maintained.

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

Mortality records were inspected and found to be adequately maintained.

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

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

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Signed:



Fish Health Inspector

Date: 30/01/2020

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

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

