

Scottish Salmon Watch, 30 August 2021

[Scottish Salmon's 'Ticking Time-Bomb': ISA reported at Scottish Sea Farms on Mull](#)



- Fish Health Inspection report & photos reveal deformities, welfare abuse, viruses, pathogens, bacteria & infectious diseases at RSPCA Assured Loch Spelve salmon farm
- Letter to Scottish Ministers calls for immediate quarantine & extended ISA surveillance
- Loch Spelve salmon farm & other Scottish Sea Farms' sites hit by ISA in 1998-9 costing £100 million & 200 jobs

A damning inspection report [published by the Scottish Government](#) reveals welfare abuse, infectious diseases and viruses (including Infectious Salmon Anaemia, Salmon Gill Pox, Piscine Reovirus and Amoebic Gill Disease) at an RSPCA Assured salmon farm operated by Scottish Sea Farms in Loch Spelve on the Isle of Mull. This is believed to be the first time ISA has been publicly reported in Scotland since an [outbreak at Norwegian-owned Scottish Sea Farms and Grieg Seafood in Shetland in 2009](#). In 1998-9, an ISA outbreak in mainland Scotland ([traced back to Scottish Sea Farms – formerly known as Hydro Seafoods GSP – in Loch Nevis and then spreading to Loch Creran, the Sound of Mull, Loch Linnhe, Kerrera, Lismore, Shuna and Loch Spelve](#)) cost £100 and led to the loss of 200 jobs.

Photos slipped out earlier this month by Fish Health Inspectorate reveal deformities, lesions and mortalities during an inspection on 14 May 2021 triggered by a welfare complaint [filed by Scottish Salmon Watch following secret filming inside the cages on 7 May 2021](#).



Image 4: Fish 1 – 5 before sampling

Additional comments:

Lesions: F2 lesion on tail, F3 lesion on opercular valve, F4 lesion on opercular valve. Head of F2 and F5 were slightly deformed, opercular valve of F3 was shortened, snout of F5 and F2 were shortened. F3 lost an eye but this was post mortem. Deposit (appears to be fat) on the spleen of F5 (see photos)

Here's photos of farmed salmon at the RSPCA Assured salmon farm in Loch Spelve operated by Scottish Sea Farms (published by the Scottish Government's Fish Health Inspectorate via [Case # 2021-0132](#) in August 2021):





Image 10: petechial haemorrhaging of the liver (fish 1 from cage 3)



Image 11: spots (possibly fat) on the spleen (fish 5, from cage 12)

Read more via [Damning Disease Report for RSPCA Assured Scottish Sea Farms in Loch Spelve](#)

Don Staniford, [Director of Scottish Salmon Watch](#), said:

“The Fish Health Inspectorate’s damning report blows claims by Scottish Sea Farms that seals are to blame for welfare problems in Loch Spelve out of the water. The fact that Infectious Salmon Anaemia is rearing its ugly head yet again on a Norwegian-owned salmon farm in Scotland is alarming but all too predictable. The ISA virus is a ticking time-bomb with the risk of spreading the deadly disease all too real. RSPCA Assured Scottish Sea Farms in Loch Spelve could be ground zero in another ISA disease outbreak. Remember that Scottish Sea Farms was the company caught spreading ISA around Scotland in both 1998-9 and 2009.”

“The Scottish Government should immediately quarantine Scottish Sea Farms and test all salmon farms in Scotland for Infectious Salmon Anaemia. Importing ova from Norway – and even Iceland and Ireland – is like playing a risky game of ecological roulette with deadly diseases, viruses and pathogens. Scottish Ministers must urgently close the borders to infectious diseases and viruses imported via ova and stop the spread of ISA dead in its tracks before it causes irreparable economic and environmental damage.”



Read a letter to Scottish Ministers dated 30 August 2021 [online here](#)

“Consumers are urged to avoid virus-laden Scottish salmon like the proverbial plague,” concluded Staniford. “Please boycott Scottish salmon – especially RSPCA Assured ‘responsibly sourced’ salmon from M&S. Scottish salmon is ridden with nasty viruses such as Piscine Reovirus, Salmon Gill Poxvirus and even Infectious Salmon Anaemia Virus. What hidden extras are lurking in your Scottish salmon? Farmed salmon belongs in the sick bucket not your shopping basket!”

A 'Fish Health Inspectorate Visit Report' dated 3 June 2021 – [published online by the Scottish Government on 3 August 2021](#) – details a positive test for Infectious Salmon Anaemia Virus (as well as other viruses, diseases, pathogens and bacteria). Here's an excerpt from the Scottish Government's Fish Health Inspectorate's report ([Case # 2021-0132](#)) dated 3 June 2021 for the RSPCA Assured salmon farm operated by Scottish Sea Farms at Dalnaha in Loch Spelve:



Scottish Government
Riaghaltas na h-Alba
gov.scot

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NO	FB0125	DATE OF VISIT	14/05/2021
SITE NO	FS0253	SITE NAME	Loch Spelve (B)
CASE NO	20210132	INSPECTOR	██████████

Section 1: Summary

The site was visited following a welfare complaint. During the physical inspection five fish were removed for diagnostic sampling.

Histopathology examination revealed mixed pathology. Integument displayed ulcerative bacterial dermatitis and the gill displayed complex gill pathology, although the reading of the gill, gut and pyloric caeca of some fish was compromised by autolysis artefacts. Liver of F1 displayed mild zonal haemorrhagic hepatocellular necrosis and glomerular necrosis, potentially linked to *Moritella* infection.

Due to gill health issues observed on site samples were screened for *Neoparamoeba perurans*, salmon gill poxvirus (SPGV) & *Paranucleospora theridion* (syn. *Desmozoon lepeophtherii*) by QPCR and tested positive for all three pathogens.

Samples were screened for infectious salmon anaemia virus (ISAV) by QPCR as part of surveillance program for control of listed diseases. The samples tested positive for infectious salmon anaemia virus (ISAV) by QPCR and the sequence data confirmed to be ISAV HPR0, the non-pathogenic form of the virus. Additionally, an ISAV immunochemistry (IHC) assay that target against the pathogenic form of the virus (ISA-deleted nucleoprotein) was performed and confirmed to be negative for the pathogenic form.

Vibrio sp. *Photobacterium* sp. and *Moritella viscosa* were identified, these can be pathogenic however the level and purity would not suggest they are implicated in current morbidity.

ISAV

Pool Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
P1	15.18	35.23	37.01	36.63	POSITIVE

Salmon gill poxvirus

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	17.92	28.36	28.34	28.48	POSITIVE
F2	18.84	32.94	33.58	32.90	POSITIVE
F3	18.79	26.77	26.73	26.82	POSITIVE
F4	19.05	31.32	31.34	31.24	POSITIVE
F5	18.64	27.83	28.07	27.66	POSITIVE

Neoparamoeba perurans (AGD)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	17.92	34.51	34.77	34.10	POSITIVE
F2	18.84	35.37	35.07	34.68	POSITIVE
F3	18.79	33.01	33.50	32.52	POSITIVE
F4	19.05	33.02	32.50	32.26	POSITIVE
F5	18.64	30.60	30.68	30.53	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	17.92	24.58	24.75	24.64	POSITIVE
F2	18.84	22.86	22.87	22.85	POSITIVE
F3	18.79	22.15	22.15	22.22	POSITIVE
F4	19.05	23.33	23.37	23.37	POSITIVE
F5	18.64	21.46	21.70	21.49	POSITIVE

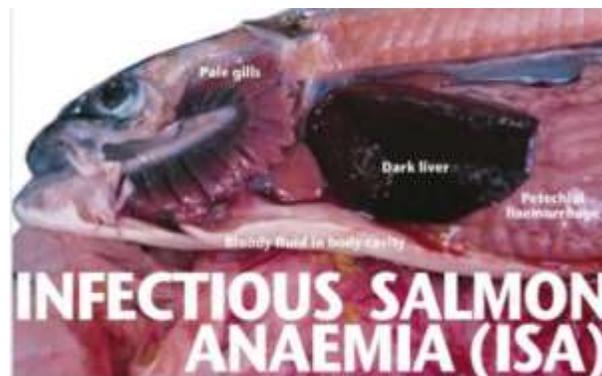
Additional information published along with ([Case # 2021-0132](#)) detailed Piscine Reovirus:

Complex gill issues diagnosed by FVG on 10/03/2021. FVG called onto site following mortality event. AGD diagnosed by FVG via swabs.

AGD scores improving since mid-April

Fish on site positive for salmonid gill pox, branchiomonas cysticola, piscine reovirus and AGD. Histo results from 13/05/2021, from Pharmaq Analytiq Ltd. Also tested for CMS, HSMI, IPNV but not detected.

Infectious Salmon Anaemia can be deadly and is a [‘notifiable disease’ which can lead to compulsory slaughter of infected farmed salmon, strict movement controls on suspect farms and surveillance of nearby farms.](#)



Scientific research reports that ISAV HPR0 – the variant [reported at by the Fish Health Inspectorate at Scottish Sea Farms in Loch Spelve in May 2021](#) – can cause the spread of ISA disease. A scientific paper – [“First field evidence of the evolution from a non-virulent HPR0 to a virulent HPR-deleted infectious salmon anaemia virus”](#) - published in the Journal of General Virology in April 2017 (the experiments were carried out in Aberdeen at Marine Scotland Science) reported:

“The putatively non-virulent subtype of infectious salmon anaemia virus (ISAV), ISAV-HPR0, is proposed to act as a progenitor and reservoir for all virulent ISAVs and thus represent a potential risk factor for the emergence of infectious salmon anaemia (ISA) disease. Here, we provide the first evidence of genetic and functional evolution from an ISAV-HPR0 variant (FO/07/12) to a low-virulent ISAV virus (FO/121/14) in a Faroese Atlantic salmon marine farm...This documents that ISAV-HPR0 represents a reservoir and risk factor for the emergence of ISA disease.”

A scientific paper [published in Frontiers of Veterinary Science in December 2018](#) reported:

“There are two main variants of ISAV, one variant is highly virulent and associated with ISA outbreaks, termed HPR-deleted ISAV (HPR-del ISAV). The other variant (termed HPR0 ISAV) is assumed to be non-virulent. HPR0 ISAV was proposed in 2002 to be an ancestral form of HPR-del ISAV. A direct link between HPR0 ISAV and HPR-del ISAV remains to be demonstrated, but a strong indication of the evolution from HPR0 ISAV to HPR-del ISAV was recently reported from a Faroese Atlantic salmon marine farm. The transmission mechanisms behind primary ISA outbreaks depend on the introduction of either high virulent strains from unknown reservoirs or non-pathogenic strains of the ISA virus (HPR0 ISAV) that facilitate an evolution toward higher virulence. Therefore, an increased susceptibility of a salmon production site may introduce risk of a primary ISA outbreak.”

Read more via:

[Media Backgrounder: Scottish Salmon’s Recurring ISA Nightmare](#)

[Media Backgrounder: Norway’s Infectious Salmon Aquacalypse – Going Global Since 1984!](#)

The Fish Health Inspectorate's report ([Case # 2021-0132](#)) details how all the farmed salmon in the RSPCA Assured Loch Spelve salmon farm suffered from a raft of welfare problems and originated from Barcaldine Smolt Unit on the shore of Loch Creran (a [hatchery owned by Scottish Sea Farms which imported potentially ISA-infected ova from AquaGen in Norway](#)).

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 Sa

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	F4	F5	P1				
Fish nos	1	2	3	4	5	1-5				
Pool Group	P1	P1	P1	P1	P1					
Species	SAL	SAL	SAL	SAL	SAL	SAL				
Average weight	1,5000	1,5000	1,5000	1,5000	1,5000	1,5000				
Sex	N/A	N/A	N/A	N/A	N/A	N/A				
Water Type	SW	SW	SW	SW	SW	SW				
Stock Details		Barcaldine smolt unit								
	Stock Origin									
Facility No	3	5	7	7	12					

Case no: Site No: Method of killing:

Date of visit: Inspector(s): Sheet Relevant:

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)		2 hours	2 hours	2 hours	2 hours	1 hour
External Signs						
Behaviour	Moribund		M	M	S	M
	Lethargic		M	M	S	M
	Hanging vertical					
	Spiralling					
	Flashing					
	Loss of equilibrium				S	
Body	Dark					
	Distended abdomen				W	
	Anorexic					
	Scale Oedema					
Opercula	Shortened				W	
	Flared					
Haemorrhaging	Throat					
	Ventrum					
	Base of fins					
	Elsewhere					
Eyes	Exophthalmic					
	Enophthalmic (sunken)					
	Cataract					
	Haemorrhagic					
Gills	Pale		S	M	M	S
	Zoned					
	Necrotic		S			
Lesions	Flank		M			M
	Elsewhere			M	M	M
Vent	Inflamed					
	Trailing faeces					
Lice Load	Estimate numbers				2	

The 'Fish Health Inspectorate Visit Report' dated 3 June 2021 – [published online by the Scottish Government on 3 August 2021](#) – also detailed:

Observations

The site was visited following a complaint. Whilst the complainant was on site they filmed some moribund fish and fish with lesions that appeared to be winter ulcers. The complaint was that a breach of the Animal Welfare Act 2006 had occurred.

During the physical inspection, members of staff from APHA, Argyll and Bute Council and the Royal Society of the Prevention of Cruelty to Animals (RSPCA) were present. Whilst the physical inspection took place it was clear that there were moribund fish on site. Some fish had lesions and others had deformities. During the physical inspection, 31 moribund fish were removed from the site using a hand net. From these fish, 5 were selected for internal examination and sampling.

Clinical signs of disease included morbidity and lethargy present in all 5 fish sampled. Fish 3 also had a loss of equilibrium, a distended abdomen and a shortened opercula. All fish had pale gills and the gills of fish 1 were also necrotic. All fish had lesions, some on the flank, opercular valve and tail. Fish three also had 2 sea lice present.

Internally, petechial haemorrhaging of the liver and haemorrhaging in the body wall was exhibited in fish 1. There was a lack of fat associated with the pyloric caeca in fish 2-5 and no food was present in the gut of any fish. Pseudo-faeces were present in the gut of fish 2 and 3. The kidney in all fish appeared grey and the kidney of fish 1-3 were also granular.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1	1	3	Atlantic salmon (<i>Salmo salar</i>)	Grower 2020 S1 ~1.8kg	Barcaldine Smolt Unit
2	1	5	Atlantic salmon (<i>Salmo salar</i>)	Grower 2020 S1 ~1.2kg	Barcaldine Smolt Unit
3 and 4	1	7	Atlantic salmon (<i>Salmo salar</i>)	Grower 2020 S1 ~1.5kg	Barcaldine Smolt Unit
5	1	12	Atlantic salmon (<i>Salmo salar</i>)	Grower 2020 S1 ~1.5kg	Barcaldine Smolt Unit

Maggie Brotherston of [Friends of Loch Creran](#) said:

“I am deeply disturbed that the RSPCA restored the Assured status for Loch Spelve. Scottish Sea Farms claimed that welfare abuse was caused by rogue seals when infectious diseases and viruses are cited by the Scottish Government. No wonder Scottish Sea Farms [warned us off filming when we visited Loch Spelve again in July.](#)”



Andrew Holder of [Dip In The Blue](#) said:

“The Fish Health Inspectorate report completely vindicates the welfare complaint made about Scottish Sea Farms back in May. Clearly there were some very unhealthy farmed salmon in Loch Spelve with infectious diseases and viruses causing significant welfare abuse. It is a travesty that the RSPCA decided to reinstate the Assured label so soon after withdrawing it.”



[Note that [Scottish Sea Farms](#) is owned by [SalMar](#) and the [Lerøy Seafood Group ASA](#) of Norway via the company [Norskott Havbruk](#) – it is a [member of the SSPO](#)].

In May 2021, Scottish Salmon Watch [secretly filmed inside the RSPCA Assured salmon farm in Loch Spelve operated by Scottish Sea Farms](#) and filed a welfare complaint.



 **Don Staniford**
@TheGAAIA

Secret Filming Exposes RSPCA 'Abused' Scottish Salmon - Welfare Complaint Filed Against M&S Supplier Scottish Sea Farms tinyurl.com/2vnnbrxv @rspcaassured @scotseafarms @marksandspencer @LeroySeafood @APHAgovuk @marinescotland @SSPCA_Mike @SSPCA_Kirsteen @Folketrygdffond



9:26 AM · May 13, 2021



Filming by Friends of Loch Creran and Dip in the Blue later in May 2021 [revealed mass mortalities being lifted out of cages in Loch Spelve by workers at Scottish Sea Farms.](#)



 **Don Staniford**
@TheGAAIA

Video footage of RSPCA Assured mortalities - dead & diseased 'Lochmuir' salmon supplied to M&S - from Norskott Havbruk (Scottish Sea Farms) in Loch Spelve youtube.com/watch?v=L6g1_U...
[@rspcaassured](#) [@scotseafarms](#) [@marksandspencer](#)
[@LeroySeafood](#) [@SSPOsays](#) [@APHAgovuk](#)
[@marinescotland](#)



7:45 AM · May 17, 2021



The RSPCA [suspended the Loch Spelve salmon farm](#) but after less than a week [reinstated RSPCA Assured accreditation](#).

 **Don Staniford**
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"A Scots salmon farm operated by a firm that is an exclusive supplier to M&S has had its RSPCA Assured status suspended after an investigation was launched into a welfare complaint" [heraldscotland.com/news/19306178](https://www.heraldscotland.com/news/19306178).
... @marksandspencer @rspcaassured @scotseafarms @heraldscotland @LeroySeafood



RSPCA Assured status is reinstated for Scottish M&S supplier after i...
A SCOTS salmon farm operated by a firm that is an exclusive supplier to M&S has had its RSPCA Assured status reinstated after an ...
[heraldscotland.com](https://www.heraldscotland.com)

7:15 AM · May 16, 2021

The Herald

Scottish M&S supplier blames seals for salmon wounds as RSPCA Assured status is suspended

By Martin Williams | [@MWilliamsrT](#)
Senior News Reporter



Scottish M&S supplier blames seals for salmon wound as RSPCA Assured status is suspended in welfare probe

When Scottish Salmon Watch visited Loch Spelve in July 2021 along with Friends of Loch Creran and Dip in the Blue, Scottish Sea Farms [‘buzzed’ our boat prompting a complaint to Police Scotland](#).



In October 2020, Scottish Salmon Watch [won a landmark apology from Police Scotland following the blocking of video surveillance at Scottish Sea Farms in July 2019 and July 2020](#).



In July 2021, [secret filming by Scottish Salmon Watch](#) inside RSPCA Assured Mowi salmon farms around the Sounds of Shuna and Jura exposed lice-infested fish, mass mortalities and welfare abuse.



Video footage [published by Seaspiracy via Instagram](#) now has [over 1 million views](#).



Scottish Salmon Watch's [letter to Scottish Ministers sent today \(30 August 2021\)](#) asks if Mowi and other salmon farming companies are also harbouring ISA.

The real name behind Scottish Sea Farms is Norskott Havbruk – a [Norwegian company jointly owned by Leroy and SalMar](#) who supply RSPCA Assured “responsibly sourced” salmon to retailer Marks & Spencer. Norskott Havbruk [bought Scottish Sea Farms off Hydro Seafoods GSP in 2001](#) and [launched the fake ‘Lochmuir’ brand with Marks & Spencers in 2006](#). Lochmuir – which was [‘pioneered’ in Loch Spelve](#) - was [quietly dropped earlier this year following repeated criticism](#).



Earlier this month, Ecohustler [delivered a petition signed by 115,000 people](#) calling on Marks & Spencer to come clean about the damage caused by their RSPCA Assured farmed salmon.



Shamefully, the head veterinarian at Scottish Sea Farms (Ronnie Soutar) is [chair of the Scottish SPCA](#) after being [appointed in 2018](#).



Inside Scottish Salmon Feedlots

January 29 · 🌐

NOT CORRUPTION, JUST CORRUPTED | This is a salmon feedlot under the management of the Chairman of the [Scottish SPCA](#).

In June 2018 Ronnie Soutar became the first fish vet to be appointed chairperson of animal welfare charity the Scottish SPCA. He is also the senior fish vet at Scottish Sea Farms Ltd.

The footage on the left shows state of salmon inside the cages of the Loch Creran feedlot, just a day after being subjected to the treatment to remove sea lice, shown on the right.

The appalling conditions on this Scottish Sea Farms Ltd feedlot were exposed recently and featured in a substantial feature on BBC Countryfile.

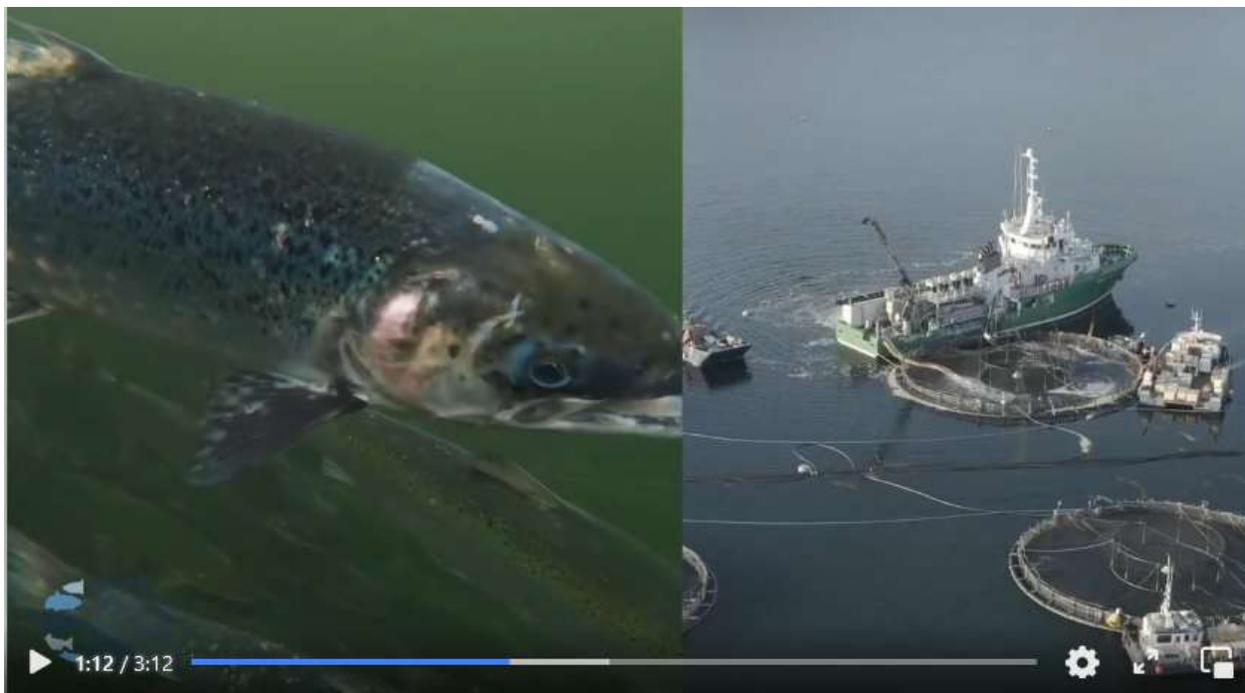
<https://www.bbc.co.uk/.../m00.../countryfile-black-mountains>

If this is what good welfare looks like on a salmon farm, as it has been claimed, what level of suffering would the fish have to endure for the Scottish SPCA to consider it cruelty?

The Scottish SPCA do some excellent work, but their reputation is badly tarnished when they condone this industry and its culture by appointing an architect of this misery.

Other organisations such as the RSPCA and the Atlantic Salmon Trust have suffered severe reputational damage owing to their willingness to take hundreds of thousands of pounds in cash donations and payments from the open cage salmon feedlot industry, while at the same time claiming to be independent of them. Buying silence.

Not corruption, but corrupted.



Not corruption, but corrupted. Salmon farming and the Scottish SPCA

Read more via:

[Damning Disease Report for RSPCA Assured Scottish Sea Farms in Loch Spelve](#)

[Fish Farmer: "RSPCA Assured lifts Loch Spelve suspension"](#)

[RSPCA Sponsored Welfare Abuse of Salmon Farms - A Guide to Getting Away with Mass Murder \(Theriodicide\)!](#)

[Video Scoop: RSPCA Assured Diseased Salmon from M&S](#)

[Herald On Sunday: "Scottish M&S supplier blames seals for salmon wounds as RSPCA Assured status is suspended"](#)

[RSPCA Suspends Spelve Salmon Farm & 'Urgently Investigates' M&S Supplier Scottish Sea Farms!](#)

[Secret Filming Exposes RSPCA 'Abused' Scottish Salmon - Welfare Complaint Filed Against M&S Supplier Scottish Sea Farms](#)

[Media Backgrounder: The Welfare Nightmare of Scottish Salmon \(Updated\)](#)

[Norway's Infectious Salmon "Horror Show" Secretly Playing Now In Scotland?](#)

[Photo Dossier of Diseased, Deformed & Abused Scottish Salmon](#)

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Don Staniford

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#COVID19 has taught us that closing borders is vital in stemming the spread of infectious diseases, viruses & pathogens tinyurl.com/yyrzsa6m Salmon farms using imported eggs should be quarantined until they can prove they're free of deadly viruses! @GreenerScotland #ISA #PRV



Fergus Ewing MSP and 8 others

11:09 AM · Aug 26, 2020 · Twitter Web App