$camon $cotland, 11 April 2023

EXPOSED: "Disappointing" Breaches of Biosecurity at ASC-Certified Mowi
- FOI disclosure reveals net failures at Colonsay & North Uist caused escapes at Mowi
- Call to close salmon farms & fine repeat offenders
- Mowi's certification as 'responsible' via the ASC "must be rescinded"
- Mowi has reported over 433,000 escapees since 1999 via 30+ incidents
- Over 700,000 farmed fish officially reported as escaped in Scotland since 2012 with ca. 4 million escapees since 1998

A Freedom of Information disclosure by the Scottish Government lifts the lid on biosecurity breaches and net failures in relation to mass escapes by Mowi at their Colonsay salmon farm in Argyll & Bute and Greanem (Grey Horse Channel Outer) salmon farm in North Uist **[1]**.

Mowi's Greanem salmon farm - which reported an escape of 32,463 fish in June 2022 - was certified by the Aquaculture Stewardship Council as 'responsible' in April 2022; and Mowi's Colonsay salmon farm – which reported an escape of 15,000 to 20,000 fish in June 2022 - was certified by the Aquaculture Stewardship Council as 'responsible' in July 2022.

$camon $cotland is now calling on the ASC to cancel the certification of Mowi's Colonsay and Greanem (Grey Horse Channel Outer) salmon farms as 'responsible' and is calling on the Scottish Government to immediately close down salmon farms which repeatedly breach biosecurity and fine serial offenders such as Mowi **[2]**.

"The Scottish Government should close the net on breaches of biosecurity at salmon farms across Scotland," said Don Staniford, Director of $camon $cotland. "Closures should start at sites with an appalling track record on escapes such as Mowi's Colonsay, Greanem, Hellisay and Carradale salmon farms. Disease-ridden salmon farming is a noose around the neck of Scotland strangling the lifeblood out of wildlife tourism, wild fisheries and the aquatic environment. The growing problems of mass escapes, biosecurity breaches and mass mortalities exposes the irresponsible nature of Scottish salmon farming industry. The Aquaculture Stewardship Council should immediately withdraw their 'responsible' certification from Mowi's faulty feedlots. Shame on supermarkets for greenwashing Scottish salmon."

The Scottish Government's FOI disclosure on breaches of biosecurity at salmon farms reveals:

"Ministers and communication colleagues will wish to be aware that we have received a final notification from the fish escape incident at a Mowi fish farming site in Colonsay from June this year," reported the Scottish Government in a briefing to the Cabinet Secretary for Rural Affairs and Islands in October 2022. "The estimated number of fish escaped is between 15,000-20,000….the incident was attributed to a passive grading event which took place on 14 June when it is believed that the froyer ring connection had failed, adding strain to the already weakened net structure causing it to tear."

"This latest escape event is disappointing," reported the Scottish Government in a briefing to the Cabinet Secretary for Rural Affairs and Islands in October 2022. "The Fish Health Inspectorate has attended site to conduct an investigation and will make recommendations in order to avoid similar events in future. The Scottish Government is working to support fish farms towards the goal of 100% containment. In our response to the Salmon Interactions Working Group report last year, we committed to strengthening the escapes regulatory regime and to work towards introducing fines for fish farm escapes…..We will publish a revised Technical Standard for Scottish Finfish Aquaculture to further improve containment of farmed fish."

A Scottish Government report on the mass escape at Mowi's Colonsay salmon farm in June 2022 included:

Since the site was registered in 2015, there have been six reported escapes (or circumstances that may have gave rise to a significant risk of escape) at Colonsay (see table below):

Date Reported	Species	Number of Fish Escaped	Reported Reason for escape
20/10/2017	Atlantic salmon	0	Other
18/10/2019	Atlantic salmon	0	Predator
08/11/2019	Atlantic salmon	0	Predator
17/01/2020	Atlantic salmon	73,684	Pen Failure
29/09/2021	Atlantic salmon	0	Hole in Net
16/06/2022	Atlantic salmon	15,000-20,000	Hole in Net

"Colonsay fish farm has reported 6 escape incidents and near misses since 2019, with 73,000 fish lost in 2020 in a storm event," reported the Scottish Government in a briefing to the Minister for Environment and Land Reform and Cabinet Secretary for Rural Affairs and Islands in September 2022. "The details of the escape incident will be uploaded to Scotland's Aquaculture Website next week. We expect that there will be media activity at a future date. Past events of this scale have attracted significant media attention. Holding communication lines for the weekend are provided."

The Scottish Government wrote to Mowi in September 2022: "We can appreciate that there have been operational issues which have made the calculation of the number of escaped fish problematic. However, the provision and publication of a very broad range for the number of

escaped fish may present further issues in relation to the record keeping and husbandry operations of an aquaculture site and aquaculture production business (APB). We think the final notification should reflect any discrepancy in fish numbers following consideration of the official records of movements and mortalities required to be maintained by the authorisation conditions placed on Mowi Scotland Ltd to operate as an APB."

Mowi "presented information regarding the discrepancies in fish numbers across the pens at the Colonsay site" reported the Scottish Government in September 2022. "These discrepancies have been due to fish health issues and problems in recording mortalities across the site…..Mowi Scotland Ltd will calculate the discrepancies across the cages which received fish from the pen suffering the breach in containment, minus the average discrepancy per pen due to mortalities at the site."

"I do not propose to record the number of escaped fish until we receive a more accurate figure," reported the Scottish Government in September 2022. "The margins of error on fish transferred to the site for ongrowing and in recording mortalities that have been removed are causing Mowi Scotland Ltd difficulties in their calculations. However, I have proposed that the number of escaped fish should be the discrepancy from the official census records of live movements, harvests and mortalities. I think recording and publishing such a large range in figures would result in criticism of the record keeping and husbandry operations, which rely on the stock census, at aquaculture sites."

"It has been very difficult to establish an exact number in relation to this incident, the site experienced two high mortality events precipitated by PD in the first instance and then AGD affecting weak fish, number control of dead fish was not easy as weather affected removal of fresh fish," reported Mowi in September 2022. "C5 was split out over four cages , these four cages all suffered a count loss but were also mixed during harvest uplift with cages with a positive number completion but taking all this into consideration and the average loss from each cage we believe the realistic loss total from this incident to be 15-20k."

Mowi claimed in December 2022: "There are new nets on order with upgraded construction and materials….Scale AQ manufacturer of Aqualine system pens have completed a inspection and repair and maintenance for Colonsay cages….HDPE knotted netting will be used as a upgrade to standard conventional Seal Pro style netting."

"I'm not sure that Mowi Scotland Ltd have fully understood what was required," stated the Scottish Government in an email in January 2023. "They have conducted work to repair, service, replace or refurbish the equipment, however, the documented reviews were also to consider whether the procedures and equipment in place were adequate or if they required improvement. The decisions on whether to change procedures and equipment or not being documented by the reviews. The new equipment designs being trialled are fine but the documented reviews should have established the considerations for making the changes. Do they have evidence of these discussions and decisions to satisfy the requirement for documented review? Perhaps these are just recorded in communications between themselves and manufacturers/service companies? Or they haven't really conducted a documented review and have only asked suppliers to improve the equipment spec?"

"MOWI are trialling some new gear out at Colonsay following the escape that occurred last year," stated the Scottish Government in an email in January 2023.

"Site staff attributed the damage to a seal in the first instance, however, following investigation the incident was attributed to a passive grading event which took place on 14th June 2022 when it is believed that the froyer ring connection had failed, adding strain to the already weakened net structure causing it to tear," stated the Scottish Government in an undated report on the mass escape at Mowi's Colonsay salmon farm in June 2022. "Divers repaired the 1m hole in the net of cage 5 on the same day the seal was observed in the cage. The fish were moved into four other cages on the site and the net removed for repairs. All the froyer ring connection points (16 per cage) across the site are currently being replaced. The winch dyneema lifting ropes and the tension bar bolts are also being replaced across the site……Following the breach in containment on 16/06/2022, recommendations have been made for improvement in relation to the selection and installation of pens and moorings, taking into consideration the environmental conditions that are experienced at the site, factoring in adequate safety margins to prevent any future failures in the weighting system. Recommendations for improvement were also made with regard to the standard operating procedure and inspection plan for pen and mooring components. The standard operating procedure for raising and lowering the weighting system should also be improved to ensure that these procedures are carefully planned and supervised to minimise any risk of escape. The site specific predator risk assessment should also be reviewed and improved to ensure that the equipment and farm design are sufficient in protecting the fish from predators."

"Salmon farmers are far too quick to point the finger at seals even when basic net failures are to blame for mass escapes," concluded Staniford. "These latest escape incidents at Mowi's Colonsay and Greanem salmon farms – both greenwashed by the ASC - blow out of the water claims that offshore farming is environmentally responsible. Official data obtained from the Scottish Government* reveals that 713,331 farmed fish escaped since 2012 at an average of 64,848 fish per year – leaving the goal of 100% containment dead in the water along with millions of disease-ridden Scottish farmed salmon. Since 1998, around 4 million farmed fish have escaped from Scottish salmon's incontinent operations – any more leaks and Mowi will ditch Gordon Ramsay's Next Level Chef to sponsor incontinence pads."

* Data obtained via Freedom of Information from the Scottish Government in February 2023

Annual Escapes Data (based on estimated and final notification reports published on Scotland's Aquaculture Website)

Year	Fish Escapes
2012	40, 957
2013	40, 754
2014	184,618
2015	18, 096
2016	11,496
2017	31,161
2018	53, 301
2019	70, 307
2020	206, 522
2021	19, 738
2022 (to date)	36, 381

Contact:

Don Staniford: 07771 541826 (salmonfarmingkills@gmail.com)

Notes to Editors:

[1] Download the Scottish Government's FOI disclosure on 28 February 2023 in full online here

[2] Letter to the Scottish Government dated 10 April 2023 – read online here

Letter to the Aquaculture Stewardship Council dated 10 April 2023 – read online here

Read more via:

Farm salmon escape event: levels of farm/wild hybridisation
Science Advances: "Introgression from farmed escapees affects the full life cycle of wild Atlantic salmon"
There's No Escaping Norwegian Genetic Pollution For 'Scottish' Salmon!
Herald: "Fish farmers 'should face penalties and even criminal charges for mass escapes'"
'At least 3,000' salmon from Carradale escape made it to rivers, report says
Fish Health Inspectorate report from Hellisay fish farm: EIR release
Mowi plans tougher, 200m pens after third escape from exposed site
BBC One Show on Mowi's Great Escape
Escaped Argyll fish farm salmon found in three rivers in England
Escaped salmon from Argyll farm appearing in west coast rivers
Anglers told to kill escaped farmed salmon caught in rivers
Zero Escapees Recovered by Mowi Out of 48,834 - That's Officially 0%!
Far from Fine: Mowi Recaptures Less Than 1% of Escapees in Scotland!
Fines, Lost Licences & Prison Sentences for Repeat Escape Offenders!
Beware of Deformed Mowi Salmon!
Nearly 50,000 salmon escaped from storm-damaged fish farm
Mass escape from Colonsay fish farm after Storm Brendan
Escape calls high energy salmon sites into question
74,000 salmon escape Mowi Scotland farm after storm
Ecological 'disaster' as 74,000 fish escape farm
Second big escape in a year at Mowi high-energy site
Salmon Eggsclusive: Scotland's 'King of Fish' is Now Viking Not Scottish!
Invasion of the Viking salmon
Fish farms are 'wiping out Scotland's wild salmon'
Escaped farmed salmon impacts
'Norwegian' genes found in wild salmon populations in Wester Ross
Scottish Salmon's Great Escape
Call to jail fish-farm bosses who allow escapes

Media Backgrounder: There's No Escaping Biosecurity Breaches at Salmon Farms!

Information disclosed by the Scottish Government via FOI-2023-00340514 on 28 February 2023 included a briefing to the Cabinet Secretary for Rural Affairs and Islands (Mairi Gougeon) in October 2022 following a mass escape of 15,000 to 20,000 farmed salmon at Mowi's Colonsay salmon farm in June 2022 (just weeks before the site was certified as 'responsible' by the ASC):

PS/Cabinet Secretary for Rural Affairs and Islands,

Further to recent emails, Ministers and communication colleagues will wish to be aware that we have received a final notification from the fish escape incident at a Mowi fish farming site in Colonsay from June this year. The estimated number of fish escaped is between **15,000-20,000**. You may find it useful to see the background information relating to this incident and the subsequent follow-up action.

Background to incident (as reported)

The FHI was conducting a routine surveillance inspection at MOWI Scotland Ltds, Colonsay site (FS1296) on 16 June when a seal was observed by the inspector. Divers were called out to the site the same day and discovered a vertical tear in the base of the net. Following investigation the incident was attributed to a passive grading event which took place on 14 June when it is believed that the froyer ring connection had failed, adding strain to the already weakened net structure

causing it to tear. The hole was repaired by divers at the time of discovery. An Initial Notification of the circumstances which led to an increased risk of escape, was received by the Inspectorate on 16 June.

Summary

The incident was reported to have been a result of a froyer ring connection failure. Divers repaired the 1m hole in the net and the fish were moved into four other cages on the site and the net removed for repairs. All the froyer ring connection points (16 per cage) across the site are currently being replaced. Follow-up action includes a change to the procedure post net drop to immediately ensure that all net ties are in place and the net is sitting properly.

Holding lines:

- The Scottish Government is working to support fish farms towards the goal of 100% containment. In our response to the Salmon Interactions Working Group report last year, we committed to strengthening the escapes regulatory regime and to work towards introducing fines for fish farm escapes, with the ultimate goal of ring-fencing fees for wild salmonid conservation and research.
- In 2021 Scottish Government published a Code of Practice for containment to manage the interactions with marine mammals.
- We will publish a revised Technical Standard for Scottish Finfish Aquaculture to further improve containment of farmed fish.
- This latest escape event is disappointing. The Fish Health Inspectorate has attended site to conduct an investigation and will make recommendations in order to avoid similar events in future.

The mass escape of 15,000 to 20,000 farmed salmon in June 2022 was reported by the Scottish Government but has still not been reported by the media. An escape of 73,684 from Mowi's Colonsay salmon farm was reported by the media in January 2020 with Mowi admitting a "structural failure" and a review of the net pen's manufacturing process.

Faulty net pen enables mass salmon escape at storm-hit Mowi Scotland farm

By Jason Holland
January 22, 2020

SHARE

Roughly 73,600 salmon weighing an average of 1.9 kilograms were lost from a single net pen during a recent storm, Mowi Scotland has confirmed.

A post-storm inspection revealed structural failure of the pen, causing a tear in the netting. Mowi said the other net pens at the site have been confirmed as secure.

The loss of fish has been reported to the regulator.

"We are very disappointed that this structural failure has occurred," Mowi's regional farm manager David MacGillivray said. "Despite storm Brendan severely battering many parts of Scotland's coast last week and Colonsay being a remote and particularly exposed location, we expect our modern infrastructure to withstand these challenges."

Mowi said the farm's net pens exceed both the Scottish and Norwegian technical standards for net pen design. The company and equipment supplier are now reviewing the net pen's manufacturing process.

According to Mowi ASA's latest trading update, its Scottish operations harvested 14,000 metric tons (MT) of gutted weight equivalent (GWE) salmon in the fourth-quarter of 2019, up from 12,000 MT in the final three months of 2018.

Mowi struggled to report an accurate figure for the number of escaped salmon from their ASC-certified Colonsay farm in June 2022 due to "operational issues". The Scottish Government reported in an email dated 28 September 2022:

> I had a meeting today with Mowi Scotland Ltd regarding the final escape notification. They presented information regarding the discrepancies in fish numbers across the pens at the Colonsay site. These discrepancies have been due to fish health issues and problems in recording mortalities across the site.
>
> My suggested resolution to use the official census figures, to establish the number of fish lost due to the containment breach, would have been an oversimplification and would have resulted in a significant over estimation of number of escaped fish. An additional complication is also encountered as the pen which suffered the breach in containment was subsequently split over a number of cages which would also have had discrepancies occurring due to the issues in recording mortalities.
>
> Mowi Scotland Ltd will calculate the discrepancies across the cages which received fish from the pen suffering the breach in containment, minus the average discrepancy per pen due to mortalities at the site. This new estimation of number of fish which may have breached containment will be submitted as an update to the final notification.

Another email from the Scottish Government dated 20 September 2022 included:

> Please see the attached updated final notification and email correspondence below regarding the reported escape incident at Mowi Scotland Ltd's farm site Colonsay
>
> (FS1296). I do not propose to record the number of escaped fish until we receive a more accurate figure.
>
> The margins of error on fish transferred to the site for ongrowing and in recording mortalities that have been removed are causing Mowi Scotland Ltd difficulties in their calculations. However, I have proposed that the number of escaped fish should be the discrepancy from the official census records of live movements, harvests and mortalities.
>
> I think recording and publishing such a large range in figures would result in criticism of the record keeping and husbandry operations, which rely on the stock census, at aquaculture sites. I will update you with any further information received.

An email from the Scottish Government to Mowi dated 20 September 2022 referred to "operational issues which have made the calculation of the number of escaped fish problematic":

> Thank you for providing the updated final notification. We can appreciate that there have been operational issues which have made the calculation of the number of escaped fish problematic. However, the provision and publication of a very broad range for the number of escaped fish may present further issues in relation to the record keeping and husbandry operations of an aquaculture site and aquaculture production business (APB).
>
> We think the final notification should reflect any discrepancy in fish numbers following consideration of the official records of movements and mortalities required to be maintained by the authorisation conditions placed on Mowi Scotland Ltd to operate as an APB.

A briefing to the Cabinet Secretary for Rural Affairs and Islands (Mairi Gougeon) and the Minister for Environment and Land Reform (Mairi McAllan) dated 16 September 2022 included:

> ***Potential Escape at Colonsay fish farm***
>
> Ministers will wish to be aware that we await the final notification from a potential escape incident at another Mowi fish farming site in Colonsay from June. We expect

the final notification next week and will provide an update to Ministers. Colonsay fish farm has reported 6 escape incidents and near misses since 2019, with 73,000 fish lost in 2020 in a storm event.

Annual Escapes Data (based on estimated and final notification reports published on Scotland's Aquaculture Website)

Year	Fish Escapes
2012	40, 957
2013	40, 754
2014	184,618
2015	18, 096
2016	11,496
2017	31,161
2018	53, 301
2019	70, 307
2020	206, 522
2021	19, 738
2022 (to date)	36, 381

Communications Activity

The details of the escape incident will be uploaded to Scotland's Aquaculture Website next week. We expect that there will be media activity at a future date. Past events of this scale have attracted significant media attention. Holding communication lines for the weekend are provided.

An 'Initial Notification' of the Colonsay escape by Mowi on 16 June 2022 gave no specific numbers but detailed:

3. Please provide details of the circumstances surrounding the fish escape or potential escape (if necessary continue on a separate sheet):

Circumstances Surrounding the Escape or potential Escape Consider: Human error, predation, suspected foul play, failure or wear and tear of equipment (mooring, ropes, netting, cages or pens, boats), weather conditions (wave height, wind speed and tidal strength):	A seal was seen in pen 5 today whilst an inspection of the site was being carried out. Divers were on site and went into the pen and found a straight vertical tear approx. 1mtr at a depth of 12 mtrs at the bottom of the side wall where it meets the base.
Suspected Primary Reason for Escape or potential Escape	Hole which the froyer ring may have caused (suspected due to size)
Suspected Underlying Cause of Reason for Escape or potential Escape(if applicable)	It is thought when the last passive grade harvest happened the froyer ring has caught and ripped the net, which happened yesterday.

A 'Final Notification' of the Colonsay escape by Mowi in 29 September 2022 detailed:

2. Please provide final details of the escape or Potential escape:

Date of initial notification:	16/06/2022	Total number of fish lost (if none please specify "none") *:	It has been very difficult to establish an exact number in relation to this incident , the site experienced two high mortality events precipitated by PD in the first instance and then AGD affecting weak fish, number control of dead fish was not easy as weather affected removal of fresh fish . C5 was split out over four cages , these four cages all suffered a count loss but were also mixed during harvest uplift with cages with a positive number completion but taking all this into consideration and the average loss from each cage we believe the realistic loss total from this incident to be 15-20k.

Marine Scotland incident reference:	MSe160622SAL1	Number of fish recovered (if none please specify "none"):	None
Action taken by business to recover fish:	N/A	Have site movement records been updated:	Movement book was updated after each harvest until empty

Confirmed Primary Reason for Escape or potential Escape	Hole found on base of net.
Confirmed Underlying Cause of Reason for Escape or potential Escape (if applicable)	Strategic ropes connecting the net to the froya ring parted leaving more strain on a single connection which caused the net to part which was then aggravated further by seals..

3. Follow-up action:

What preventative measures have or will be taken to minimise the risk of a similar incident occurring on this or any of the business' other sites (continue on a separate sheet if necessary):	*We will set up our cages in the same way and carry out pre lift checks as per normal procedure but will change our procedure post net drop to immediately ensure that all net ties are in place and the net is sitting properly , we have purchased a ROV to allow us to do this if divers don't happen to be on site.*

A Scottish Government report (undated) on the Colonsay escape included:

Since the site was registered in 2015, there have been six reported escapes (or circumstances that may have gave rise to a significant risk of escape) at Colonsay (see table below):

Date Reported	Species	Number of Fish Escaped	Reported Reason for escape
20/10/2017	Atlantic salmon	0	Other
18/10/2019	Atlantic salmon	0	Predator
08/11/2019	Atlantic salmon	0	Predator
17/01/2020	Atlantic salmon	73,684	Pen Failure
29/09/2021	Atlantic salmon	0	Hole in Net
16/06/2022	Atlantic salmon	15,000-20,000	Hole in Net

Background

The inspectorate was conducting a routine surveillance inspection at MOWI Scotland Ltds, Colonsay site (FS1296) on Thursday 16th June 2022 when a seal was observed by the inspector in cage 5. Divers were called out to the site the same day and discovered a vertical tear of approximately 1m in length at a depth of 12m, where the sidewall meets the base of the net.

Site staff attributed the damage to a seal in the first instance, however, following investigation the incident was attributed to a passive grading event which took place on 14th June 2022 when it is believed that the froyer ring connection had failed, adding strain to the already weakened net structure causing it to tear. The hole was repaired by divers at the time of discovery. In addition, the repair was also covered with the grade panel sweep net (15mm mesh) as a contingency in case the net repair failed due to the increased tension before the fish could be removed. Initial notification of the circumstances which led to an increased risk of escape, was received by the inspectorate on Thursday 16th June 2022.

The final notification was submitted on 8th July 2022 stating that between 15,000 and 20,000 fish are believed to have escaped during the incident.

Summary

The circumstances that led to the significant increase in the risk of escape from MOWIs Colonsay site resulted in a loss of 15,000 – 20,000 fish. The incident was reported to have been a result of a froyer ring connection failure.

Divers repaired the 1m hole in the net of cage 5 on the same day the seal was observed in the cage. The fish were moved into four other cages on the site and the net removed for repairs. All the froyer ring connection points (16 per cage) across the site are currently being replaced. The winch dyneema lifting ropes and the tension bar bolts are also being replaced across the site.

FHI Recommendations

Following the breach in containment on 16/06/2022, recommendations have been made for improvement in relation to the selection and installation of pens and moorings, taking into consideration the environmental conditions that are experienced at the site, factoring in adequate safety margins to prevent any future failures in the weighting system. Recommendations for improvement were also made with regard to the standard operating procedure and inspection plan for pen and mooring components. The standard operating procedure for raising and lowering the weighting system should also be improved to ensure that these procedures are carefully planned and supervised to minimise any risk of escape. The site specific predator risk assessment should also be reviewed and improved to ensure that the equipment and farm design are sufficient in protecting the fish from predators.

A Fish Health Inspectorate Visit Report dated 12 October 2022 included:

marinescotland science

Scottish Government
Riaghaltas na h-Alba
gov.scot

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NO	FB0119	**DATE OF VISIT**	16/06/2022
SITE NO	FS1296	**SITE NAME**	Colonsay
CASE NO	20220201	**INSPECTOR**	(REDACTED)

Escape Investigation

Following the circumstances of the reported escape of Atlantic salmon on the 16/06/2022, the following recommendations are made for improvement at the site:

Due to the failure of weighting system connections, it is recommended that a documented review is undertaken to revise and improve the standard operating procedure and inspection plan for pen and mooring components, which is based on risk assessment, in accordance with A Code of Good Practice for Scottish Finfish Aquaculture (CoGP) Chapter 4, point 4.16.

It is recommended that a documented review is undertaken of the design, quality and standard of manufacture of nets to take account of the conditions likely to be experienced on the site, including an adequate safety margin to prevent the failure of weighting system connections to meet the requirements of CoGP Chapter 4, point 4.20.

It is recommended that a documented review is undertaken of the inspection procedures and frequencies for nets and the weighting systems as required by the CoGP Chapter 4, points 4.23 and 4.24, to ensure that weighting system connection failures are prevented.

It is recommended that a documented review should be undertaken of the procedure for raising and lowering weighting systems, the associated risk assessment and contingency plan, to ensure that procedures that could increase the risk of fish escaping from pens should be carefully planned and supervised to minimise any risk and that a documented risk assessment, a standard operating procedure and a contingency plan are in place in accordance with CoGP Chapter 4, points 4.29 and 4,30, .

It is recommended that a documented review is undertaken of the predator risk assessment as required by the CoGP Chapter 4, point 4.26, to ensure that the requirement of the CoGP Chapter 4, point 5.8 are met by the equipment and farm design protecting the fish from predators.

Please ensure that these points have been addressed by 31st December 2022. Records or documentation demonstrating that these points have been addressed should be sent to the Fish Health Inspectorate (contact details below). The site may be subject to further inspection or enforcement action should the appropriate action regarding the above points not be taken within the time period stipulated.

In January 2023, Mowi was asked by the Scottish Government to provide more evidence on the measures taken to prevent future escapes at Colonsay:

From: (REDACTED)@gov.scot <(REDACTED)@gov.scot>
Sent: 20 January 2023 11:42
To: (REDACTED) <(REDACTED)@mowi.com>
Cc: (REDACTED) <(REDACTED)@mowi.com>; (REDACTED) <(REDACTED)@mowi.com>; (REDACTED) <(REDACTED)@mowi.com>; (REDACTED) <(REDACTED)@mowi.com>
Subject: RE: Open NC from Marine Scotland at Colonsay
Importance: High

Hi (REDACTED)

Following on from my below email, I'm not sure that you have fully understood what was required. You have conducted work to repair, service, replace or refurbish the equipment, however, the documented reviews were also to consider whether the procedures and equipment in place were adequate or if they required improvement. The decisions on whether to change procedures and equipment or not should have been documented by the reviews. The new equipment designs being trialled are fine but the documented reviews should have established the considerations for making the changes. Do you have evidence of these discussions and decisions to satisfy the requirement for documented review?

This could just be recorded in communications between yourselves and the manufacturers/service companies? Or perhaps, you haven't conducted a documented review and have only asked suppliers to improve the equipment spec?

Let me know,
(REDACTED)

(REDACTED)
Senior Fish Health Inspector
Marine Scotland - Science

Scottish Government | Marine Laboratory | 375 Victoria Road| Aberdeen | AB11 9DB

Tel: (REDACTED)
S/B: +44 (0)131 244 2500
Mobile: (REDACTED)
e: (REDACTED)@gov.scot
w: https://www.gov.scot/marine-and-fisheries/

marinescotland science

Here's the official escapes report for Colonsay published by the Scottish Government:

Fish Escape Details

Escape Id	444	
Operator at Time of Escape	Mowi Scotland Ltd	
Escape Water Type	S	
Escape Start Date	16/06/2022	
Escape Start Time	00:00	
Escape End Date	16/06/2022	
Escape Grid Reference	NR434967	
Escaped Species	Atlantic Salmon	
Stage	Grower fish (salmon only)	
Age	23 months	
Average Weight	3.1kg	
	Initial Notification	Final Notification
Date	16/06/2022	08/07/2022
Number of Fish Escaped	Not Known	15,000 - 20,000
Number of Fish Recovered		N/A
Escape Reason	Hole in Net - HOL	Hole in Net - HOL

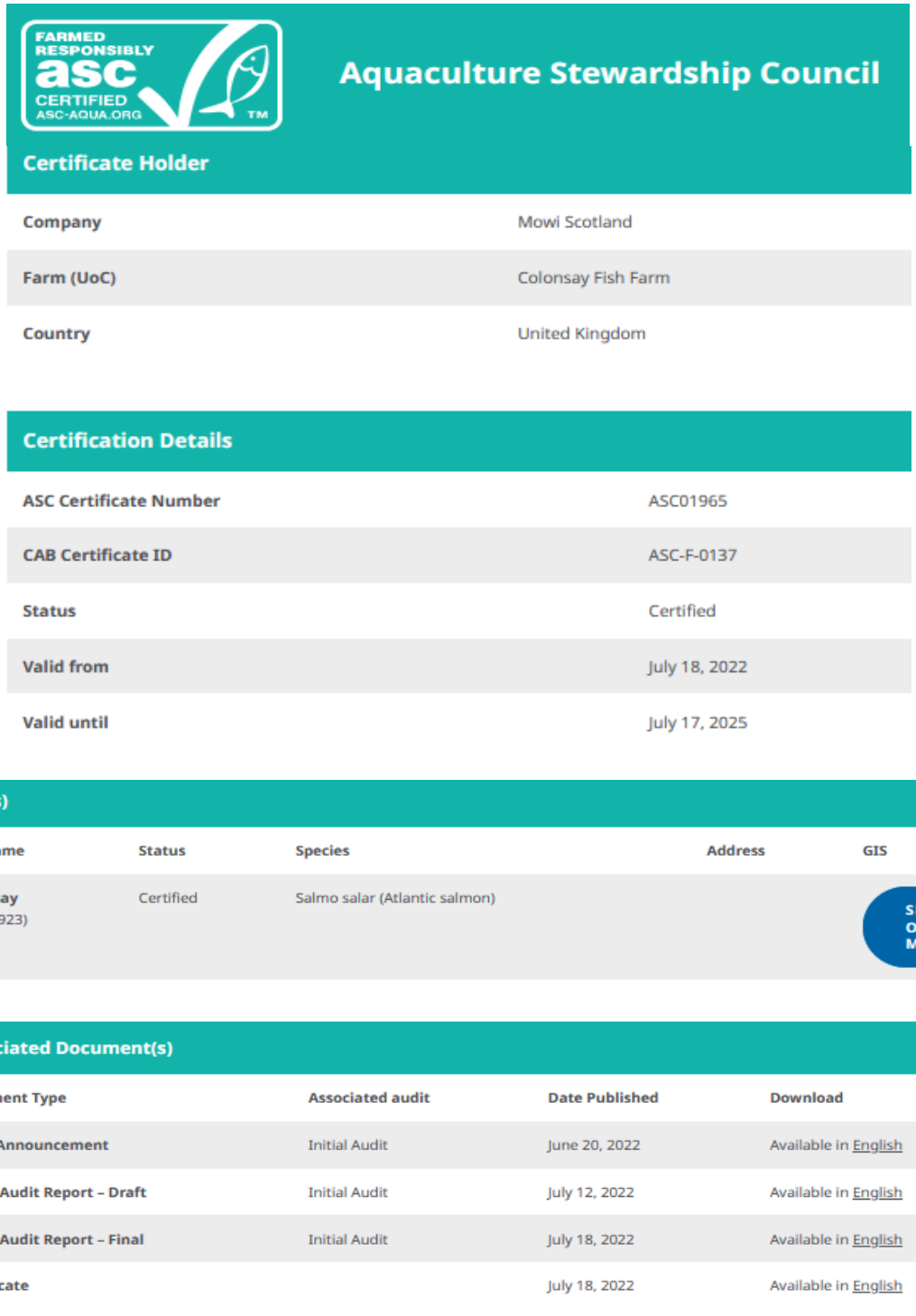
Data supplied by Marine Scotland on 12/02/2023

Site Details

Site ID	FS1296
Site Name	Colonsay
Address	Stob Ban House Glen Nevis Business Park PH33 6RX
Telephone Number	
Date Registered	09/04/2015
Operator	Mowi Scotland Ltd
Aquaculture Type	Fish
Water Type	Seawater
Species	Atlantic Salmon, Lumpsucker, N/A, Wrasse
Health Surveillance Frequency	Low
Production reported to Marine Scotland within last 3 years?	Yes
National Grid Reference	NR434968
Easting	143400
Northing	696800
Marine Scotland Management Area	16e - Colonsay
Local Authority	Argyll and Bute
Region	Strathclyde
View on Map	View on map

Data supplied by Marine Scotland on 12/02/2023

Notice that the Colonsay escape took place on 16 June 2022 – just four days before the ASC announced an initial audit of the Mowi salmon farm and just over a month before the ASC certified the Colonsay salmon farm as 'responsible':



Aquaculture Stewardship Council

Certificate Holder

Company	Mowi Scotland
Farm (UoC)	Colonsay Fish Farm
Country	United Kingdom

Certification Details

ASC Certificate Number	ASC01965
CAB Certificate ID	ASC-F-0137
Status	Certified
Valid from	July 18, 2022
Valid until	July 17, 2025

Site(s)

Site name	Status	Species	Address	GIS
Colonsay (S0004923)	Certified	Salmo salar (Atlantic salmon)		SHOW ON MAP

Associated Document(s)

Document Type	Associated audit	Date Published	Download
Audit Announcement	Initial Audit	June 20, 2022	Available in English
Initial Audit Report – Draft	Initial Audit	July 12, 2022	Available in English
Initial Audit Report – Final	Initial Audit	July 18, 2022	Available in English
Certificate		July 18, 2022	Available in English

The ASC 'Salmon Standard' published in September 2022 includes:

Criterion 3.4 Escapes[54]

INDICATOR	REQUIREMENT
3.4.1 Maximum number of escapees[55] in the most recent production cycle	300[56]
3.4.2 Accuracy[57] of the counting technology or counting method used for calculating stocking and harvest numbers	≥ 98%
3.4.3 Estimated unexplained loss[58] of farmed salmon is made publicly available	Yes
3.4.4 Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies	Yes

[56] A rare exception to this standard may be made for an escape event that is clearly documented as being outside the farm's control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. See auditing guidance for additional details.

[57] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.

[58] Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes. Where possible, use of the pre-smolt vaccination count as the stocking count is preferred.

Since Mowi's Colonsay salmon farm has reported six escape incidents since the site was established in 2015 (under controversial circumstances) – including 15,000 to 20,000 escapees in June 2022 and 73,684 escapees in January 2020 – it begs the question: why the f**k is Mowi's Colonsay salmon farm currently certified as 'responsible' by the ASC up to July 2025?

Escape Id	Escape Start Date	Escaped Species	Final Number of Fish Escaped	Site Id	Site Name	Operator	Actions
					Colonsay	Mowi	
444	16/06/2022	Atlantic Salmon	15,000 - 20,000	FS1296	Colonsay	Mowi Scotland Ltd	More
439	29/09/2021	Atlantic Salmon	0	FS1296	Colonsay	Mowi Scotland Ltd	More
160	17/01/2020	Atlantic Salmon	73,684	FS1296	Colonsay	Mowi Scotland Ltd	More
158	08/11/2019	Atlantic Salmon	none	FS1296	Colonsay	Mowi Scotland Ltd	More
159	18/10/2019	Atlantic Salmon	none	FS1296	Colonsay	Mowi Scotland Ltd	More
157	20/10/2017	Atlantic Salmon	0	FS1296	Colonsay	Mowi Scotland Ltd	More

Photos disclosed by the Scottish Government via FOI-2023-00340514 on 28 February 2023 reveal how net failures led to another mass escape at Mowi's Greanem (Grey Horse Channel Outer) salmon farm in North Uist in June 2022 (three months after being certified by the ASC in April 2022).

Visual Illustration of Rope Damage

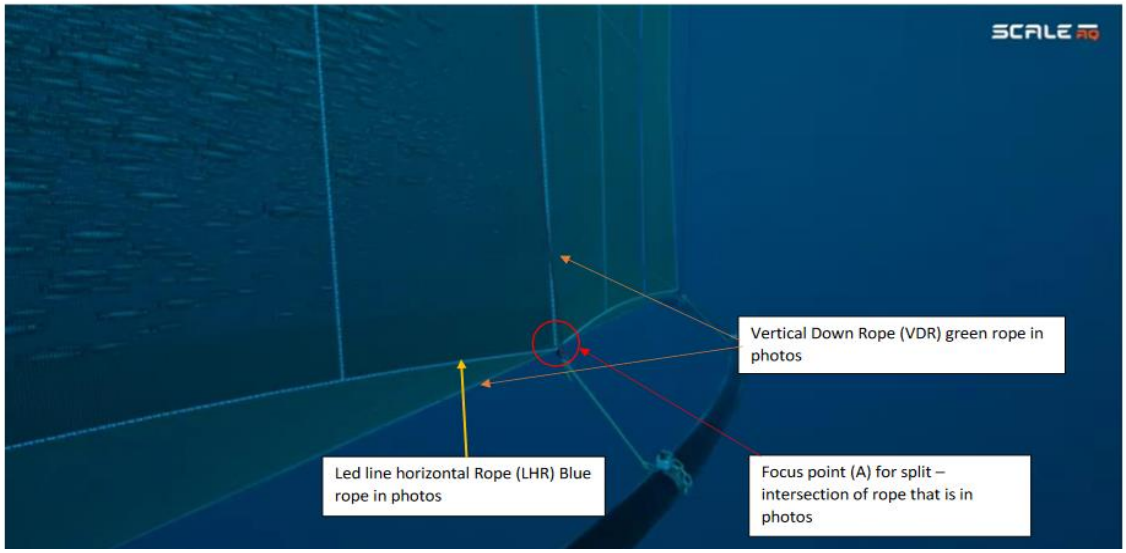
Example of the splice/binding of focus point (A) in Image 1.0. – note that VDR is running over LHR

Example of the splice/binding of focus point (A) in Image 1.0. – example of rubbing of VDR on the LGR

Photo of where split occurred – can see fraying of LHR causing it to break – transferring additional weight to net along VDR further exaggerated by the sinker tube being down.

Visual Illustration of Rope Damage

Image 1.0 – Reference picture for context to photos



Mowi's 'Initial Notification' of the Greanem escape on 2 June 2022 cited 'net failure' as the primary cause and detailed PGD (Proliferative Gill Disease) and complex gill pathology:

2. Please supply the following details regarding the fish escape:

Date & time of incident (nearest estimate)	2/6/22, 0900hrs	OS grid reference:	
Site location:	North Uist	Estimated number of fish lost:	TBC
Species:	Salmon	Average weight:	2.9kg
Age in months:	14 months	Growth stage:	Grower/Harvest
Please supply details of any treatments administered for which the fish are in withdrawal:		None	
Please confirm whether the fish were healthy at the time of the escape, or the nature of any disease:		No issues other than PGD and complex gill pathology	
Please confirm mortality rates on site and the reasons for mortality:		4% for month of May. 70% gill related, 30% seal predation.	

3. Please provide details of the circumstances surrounding the fish escape or potential escape (if necessary continue on a separate sheet):

Circumstances Surrounding the Escape or potential Escape Consider: Human error, predation, suspected foul play, failure or wear and tear of equipment (mooring, ropes, netting, cages or pens, boats), weather conditions (wave height, wind speed and tidal strength):	Whilst lowering a sinker ring post-harvest, it appears something has snagged underwater and subsequently caused a tear in netting approx. 8m long and 0.3m wide. Nothing untoward was noticed at the time of lowering and the damage was identified this morning, and repaired quickly. Weather conditions have been good.
Suspected Primary Reason for Escape or potential Escape	Net failure
Suspected Underlying Cause of Reason for Escape or potential Escape(if applicable)	Underwater snag of netting on sinker ring

Mowi's 'Final Notification' dated 13 September 2022 detailed 32,463 fish as escaping from the ASC-certified site at Greanem (Grey Horse Channel Outer) on 2 June 2022:

FARMED FISH ESCAPES – FINAL NOTIFICATION

This form is to be submitted **not later than 28 days** following the submission of the initial notification of circumstances which caused or might have caused the escape of fish from a fish farm site.

Please refer to "WHAT TO DO IN THE EVENT OF AN ESCAPE OF FISH FROM A FISH FARM" for further guidance on how to complete this form: www.scotland.gov.uk/Topics/Fisheries/Fish-Shellfish

1. Please supply details of the business and the site **(Read our privacy notice to find out what we do with your information.)**:

Site Name:	Greanem	Site No:	FS1334
APB Name:	Mowi Scotland Ltd	APB No:	FB0119
Contact Name:	(REDACTED)	Telephone No:	(REDACTED)
FAX No:		Email Address:	(REDACTED)@mowi.com

2. Please provide final details of the escape or Potential escape:

Date of initial notification:	02/06/2022	Total number of fish lost (if none please specify "none") *:	32 463
Marine Scotland incident reference:	MSE020622SAL1	Number of fish recovered (if none please specify "none"):	N/A
Action taken by business to recover fish:	None	Have site movement records been updated:	Movement book was update after each harvest until empty

Confirmed Primary Reason for Escape or potential Escape	Tear in net
Confirmed Underlying Cause of Reason for Escape or potential Escape (if applicable)	Due to design, rubbing on a weight baring rope along with additional tension caused by partially lowered sinker tube caused rope to snap and weight transferred onto net causing tare.

3. Follow-up action:

What preventative measures have or will be taken to minimise the risk of a similar incident occurring on this or any of the business' other sites (continue on a separate sheet if necessary):	Removal of fish out of pens on site and discarding of nets with this design fault. These nets are no longer in circulation in the company.

The Scottish Government wrote to Mowi on 23 June 2022:

From: (REDACTED) (MARLAB)
Sent: 23 June 2022 09:00
To: (REDACTED) <(REDACTED)@mowi.com>
Cc: (REDACTED) <(REDACTED)@mowi.com>; (REDACTED) <(REDACTED)@mowi.com>
Subject: RE: Risk to Containment due to Pen Weighting Systems

Hi (REDACTED)

Thank you for the information on your ongoing investigations and the confirmation that the remaining stocks are safe. The FHI look forward to the information that becomes available from the investigations and an update on the mitigations in place to prevent abrasion and damage to nets from weighting systems.

I will also pass on your frustrations to colleagues regarding the publication of the new version of A Technical Standard for Scottish Finfish Aquaculture (STS), which required the updating and revision of some sections. I would note that the current version of the STS is still available for guidance and that, as far as I am aware, the requirements with regard to weighting systems on pen nets will remain the same when the revised STS is published.

The conclusions of the investigations in to Mowi Scotland Ltd's recently reported potential escape incidents could be very helpful in advising any future revisions of the STS and should perhaps be used to provide advice to be considered by the Improved Containment Working Group. This could ensure the STS guidance remains fit for purpose and help prevent any loss of containment for aquaculture animals, as farm pen sizes increase and farms are developed in areas with more challenging environmental conditions.

Here's the [Scottish Government report detailing 32,463 escapees] (with zero fish recovered):

Fish Escape Details

Escape Id	443	
Operator at Time of Escape	Mowi Scotland Ltd	
Escape Water Type	S	
Escape Start Date	02/06/2022	
Escape Start Time	09:00	
Escape End Date		
Escape Grid Reference	No data available	
Escaped Species	Atlantic Salmon	
Stage	Grower fish (salmon only)	
Age	14 months	
Average Weight	2.9kg	
	Initial Notification	Final Notification
Date	02/06/2022	14/09/2022
Number of Fish Escaped	TBC	32,463
Number of Fish Recovered		N/A
Escape Reason	Equipment damage - EQD	Equipment damage - EQD

Data supplied by Marine Scotland on 12/02/2023

Site Details

Site ID	FS1334
Site Name	Grey Horse Channel Outer
Address	Hoebeg Cheesebay Loch Maddy North Uist HS6 5AT
Telephone Number	
Date Registered	18/09/2019
Operator	Mowi Scotland Ltd
Aquaculture Type	Fish
Water Type	Seawater
Species	Atlantic Salmon, Lumpsucker, N/A, Wrasse
Health Surveillance Frequency	Medium
Production reported to Marine Scotland within last 3 years?	Yes
National Grid Reference	NF993754
Easting	99300
Northing	875400
Marine Scotland Management Area	5c - E North Uist
Local Authority	Western Isles
Region	Western Isles
View on Map	View on map

Data supplied by Marine Scotland on 12/02/2023

A briefing to the Cabinet Secretary for Rural Affairs and Islands (Mairi Gougeon) and the Minister for Environment and Land Reform (Mairi McAllan) dated 16 September 2022 included:

Ministers and communication colleagues will wish to be aware of the following fish farm escape and mortality incidents.

Details of Escape

- Date of Incident: 2 June 2022
- Site Location: North Uist – Mowi
- Species: Atlantic Salmon
- Age in months: 14
- Weight: 2.9kg
- Reason for Escape: Hole in Net.

A final notification received 13 September 2022 confirmed that the total number of fish escaped was **32,463.**

Circumstances surrounding the Escape (as reported)

Whilst lowering a sinker ring post-harvest, it appears something has snagged underwater and subsequently caused a tear in netting approx. 8m long and 0.3m wide. Nothing untoward was noticed at the time of lowering and the damage was identified and repaired quickly. Weather conditions were good.

Follow-up Action

Removal of fish out of pens on site and nets with this design fault have been discarded. These nets are no longer in circulation by the company. A containment investigation was completed by the Fish Health Inspectorate. An audit report with recommendations will be provided to the site.

An Scottish Government report dated 16 August 2022 on the Greanem (Grey Horse Channel Outer) escape included:

Grey Horse Channel Outer Escape Report

Grey Horse Channel Outer (FS1334) is an Atlantic salmon (Salmo salar) seawater site owned and operated by MOWI Scotland Ltd, located near Cheesebay Isle of North Uist (NF993754) and is situated within the disease management area 5c - E North Uist. The site consists of 12 circular floatation collar pens each measuring 120m in circumference. The site currently uses 18mm Aqualine AS Midgard nets. The site is authorized to stock Atlantic salmon (Salmo salar), Lumpsuckers (Cyclopterus lumpus) and Wrasse (of the genus Labridae).

The site was registered in 2019 and has reported an escape on the 2nd June 2022, escape incident number: MSe020622SAL1.

Background

The incident was first reported to the FHI on 02/06/2022 following the discovery and repair of a tear in the netting of approximately 8m in length and 0.3m wide. The tear occurred during harvest procedures at pen position 42 on the 1st June 2022, believed to have happened whilst lowering the sinker ring following completion of the harvest. The damage was first discovered by staff operating a net washer on the 2nd June 2022 and divers were immediately called in for repair that morning. Following the escape incident all fish from Grey Horse Channel Outer (GHCO) were moved to the nearby site Groatay (FS1083) to allow for an in-depth inspection of the facilities at GHCO to be conducted.

MOWI Scotland Ltd submitted their final notification of escape on 29/06/2022. The event has been classed as a multifactorial incident as the investigation of the incident by the company found that the design of the nets had a flaw regarding the position where the vertical rope meets the base lead line. Where these ropes join at the base of the net chaffing had been occurring due to the ropes not being spliced efficiently together. This is thought to have caused a weakness in the net. During the harvest procedure on 01/06/2022, two of the pens eight built in winches had failed, the site had to use boat operated winches to temporarily take the strain from faulty pen side winches to lower the net. It is believed that this operation has resulted in an imbalance of weight distribution and tension when lowering the sinker ring, which has led to the net tearing the weakened area.

FHI Investigation

The FHI conducted an escapes investigation and enhanced containment audit on 26/07/2022.

GHCO was fallowed on the 23rd June 2022 following the notification of an escape incident at pen 42, all fish were transferred to a nearby site Groatay. Pictured below are that of pen 42 on the date of inspection and a picture of one of the 8 built in Gael Force winches installed at the pen.

Winches

Each pen at GHCO has 8 electric winches, positioned approximately with one every six stanchions. Winches are all connected to one electrical box per pen. To operate the winches, this box is manually plugged into the sites work boat where operation of the winches can be conducted to offer either individual operation or synchronous operation. There is a manual kill switch for health and safety on each winch (red button on the side). All winches have a "failsafe" rope and chain near/next to them connected to the sinker tube and the cage. The failsafe rope can be used to lift the sinker tube if the winch was to fail.

On the 1st June 2022 during the preparation of pen 42 for harvest it was found that two winches, positioned side by side were not functioning. The winches had been checked a week prior to the harvest by site staff and were reported to be operational. At the time, pen 42 was the only pen on starve and ready to be harvested, so the harvest could not be deferred to another pen. According to the (REDACTED), the normal 'procedure' for when a winch fails is to lift the working winches to the halfway point, then manually lift the rope for the winch that has failed with the boat to the half way point, after that lift the winches the remainder of the way up, followed by the manual lift with the boat to the top. This procedure was followed in order to carry out the harvest on the 1st June and no further issues were reported by site staff to site management.

Damage to the net of pen 42 was identified the following morning by the net washing team, divers were then deployed to fix an approximate tear of 8m x 0.3m to the side of the net, originating from the base up the side wall of the net.

Following the identification of this damage, Gael Force visited the site to repair the faulty winches and service the remaining winches at pen 42. It was found that the two failed winches had suffered from an electrical fault which was repaired onsite. All winches were deemed fit for use following the service.

Following the escapes incident, all remaining fish at GHCO were transferred to the companies nearby site Groatay to allow for an in depth investigation of the sites equipment. It was found that the nets, 18mm Aqualine AS Midgard nets had a flaw in their design which is now believed to have caused a weakness in the net which otherwise would have prevented this damage from occurring. It was found that the lead line was not properly spliced into the vertical rope at the join, instead the vertical rope was "looped" over the leadline. This had allowed for friction to occur overtime causing chaffing of the net around this area. Following the discovery of the issue with the design in the net, a meeting occurred between site management and the net manufacturer which resulted in all nets of this type and design being altered to prevent any chaffing at the rope joins along the base of the nets by spicing the ropes of the base lead line and vertical ropes together. All nets at GHCO are to be removed from service and to be replaced with new HDP nets for the next production cycle.

Mowi is a serial offender in terms of mass escapes with over 433,000 fish officially reported as escaped since 1999 – including the following incidents reported by the Scottish Government:

Escape Id	Escape Start Date	Escaped Species	Final Number of Fish Escaped	Site Id	Site Name	Operator	Actions
						Mowi	
444	16/06/2022	Atlantic Salmon	15,000 - 20,000	FS1296	Colonsay	Mowi Scotland Ltd	More
443	02/06/2022	Atlantic Salmon	32,463	FS1334	Grey Horse Channel Outer	Mowi Scotland Ltd	More
155	15/02/2021	Atlantic Salmon	19,686	FS1261	Hellisay	Mowi Scotland Ltd	More
140	20/08/2020	Atlantic Salmon	48,834	FS1176	Eilean Grianain	Mowi Scotland Ltd	More
160	17/01/2020	Atlantic Salmon	73,684	FS1296	Colonsay	Mowi Scotland Ltd	More
154	10/10/2019	Atlantic Salmon	23970	FS1261	Hellisay	Mowi Scotland Ltd	More
156	12/11/2018	Atlantic Salmon	24,752	FS1261	Hellisay	Mowi Scotland Ltd	More
139	02/06/2015	Atlantic Salmon	16,000	FS1176	Eilean Grianain	Mowi Scotland Ltd	More
115	02/03/2010	Atlantic Salmon	10,775	FS0150	Loch Lochy	Mowi Scotland Ltd	More
135	28/06/2009	Atlantic Salmon	10534	FS0865	Marulaig Bay	Mowi Scotland Ltd	More
132	13/10/2008	Atlantic Salmon	7424	FS0248	Loch Duich	Mowi Scotland Ltd	More
93	11/07/2008	Atlantic Salmon	5500	FS0464	Ardmaddy	Mowi Scotland Ltd	More
102	29/11/2007	Atlantic Salmon	23,805	FS1084	Isle Ewe	Mowi Scotland Ltd	More
161	28/12/2006	Atlantic Salmon	11,900	FS1042	Seaforth	Mowi Scotland Ltd	More
133	15/07/2006	Atlantic Salmon	1950	FS0245	Ardintoul	Mowi Scotland Ltd	More
94	05/04/2006	Atlantic Salmon	5500	FS0464	Ardmaddy	Mowi Scotland Ltd	More
149	09/10/2005	Atlantic Salmon	7000	FS0602	Sconser	Mowi Scotland Ltd	More
120	11/11/2004	Atlantic Salmon	3,000	FS0413	Camas Glas	Mowi Scotland Ltd	More
91	11/08/2004	Atlantic Salmon	10,000	FS0615	Arbhair	Mowi Scotland Ltd	More
90	10/05/2004	Atlantic Salmon	4227	FS0615	Arbhair	Mowi Scotland Ltd	More
114	01/12/2003	Rainbow Trout	1560	FS0150	Loch Lochy	Mowi Scotland Ltd	More
88	27/04/2003	Atlantic Salmon	16, 000	FS0206	Loch Ewe Poolewe	Mowi Scotland Ltd	More
89	20/03/2003	Atlantic Salmon	11, 476	FS0729	Aultbea	Mowi Scotland Ltd	More
118	20/03/2002	Rainbow Trout	2400	FS0150	Loch Lochy	Mowi Scotland Ltd	More
113	30/03/2001	Atlantic Salmon	3000	FS0240	Linnhe	Mowi Scotland Ltd	More
147	15/06/2000	Atlantic Salmon	5776	FS0016	Loch Alsh (Sron)	Mowi Scotland Ltd	More
82	06/06/1999	Atlantic Salmon	20 000	FS0224	Portnalong Hatchery	Mowi Scotland Ltd	More
119	18/01/1999	Rainbow Trout	2000	FS0150	Loch Lochy	Mowi Scotland Ltd	More
86	09/01/1999	Atlantic Salmon	20000	FS0557	Lochmaddy	Mowi Scotland Ltd	More

$camon $cotland [reported in August 2022]:

Don Staniford
@TheGAAIA

REVEALED: Mortality rates at feedlots across Scotland are leaping like a lice-infested salmon - with a staggering 55.9% (i.e. more than half of the fish dying) @MowiScotlandLtd @rspcaassured @ASC_aqua Greanem in North Uist salmonscotland.co.uk/reports @ScotlandSalmon @tavishscott

Salmon SCOTLAND

Monthly Mortality Rate: June 2022

Company	Farm	Monthly mortality (%)	Notes	Cumulative mortality over full production cycle (%)
Mowi Scotland Limited	Greanem	5.2 (Farm fallowed in Jun.)	Gill health related	55.9
Scottish Sea Farms Ltd	Foraness	1.7 (Farm fallowed in Jun.)		38.9
Mowi Scotland Limited	Ardnish	0.1 (Farm fallowed in Jun.)		32.9
Bakkafrost Scotland	Portree	0.0 (Farm fallowed in Jun.)		30.6
Mowi Scotland Limited	Ardintoul	1.8 (Farm fallowed in Jun.)		27.1
Mowi Scotland Limited	Loch Alsh	8.8 (Farm fallowed in Jun.)	Gill health related	22.1
Scottish Sea Farms Ltd	Vidlin	0.6 (Farm fallowed in Jun.)		18.8
Bakkafrost Scotland	Scadabay	53.9	Gill health related	In production
Bakkafrost Scotland	Reibinish	11.2	Gill health related	In production
Bakkafrost Scotland	Eughlam	9.2	Viral disease, Gill health related	In production
Scottish Sea Farms Ltd	Loch Creran (B)	8.8	Viral disease	In production

Hamish Macdonell and 8 others

7:56 AM · Aug 23, 2022

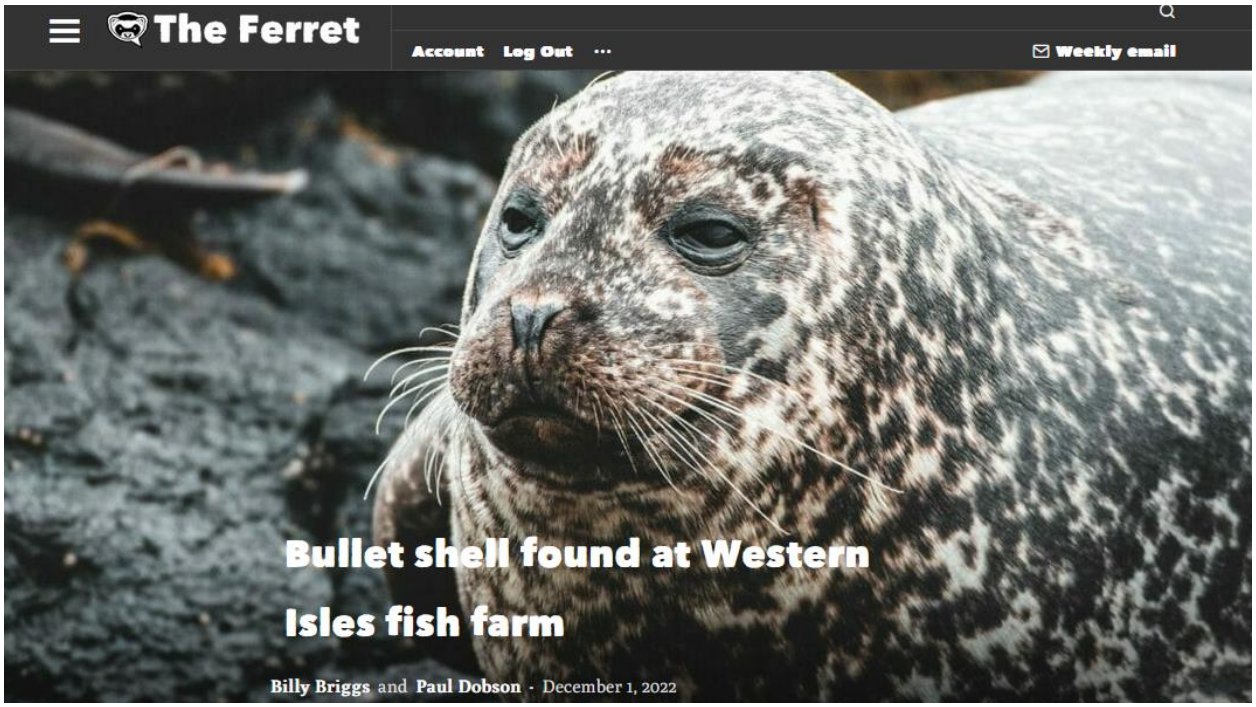
Read more via: [56% Mortality at RSPCA Assured Mowi (but don't worry, it's certified as "farmed responsibly" by the Aquaculture Stewardship Council)!]

Mortality data [published by the Scottish Environment Protection Agency] reveal that Mowi's ASC-certified Greanem (Grey Horse Channel Outer) salmon farm reported [67 tonnes of morts in June 2022]; [53 tonnes of morts in May 2022]; [46 tonnes in April 2022] and [70 tonnes in March 2022].

Mortality data [published by the Scottish Government's Fish Health Inspectorate on 8 March 2023] included 13 'Mortality Event Reports' at Mowi's Greanem (Grey Horse Channel Outer) salmon farm totalling 176,895 dead fish during 2022:

Mortality Event No	Reporting Business	Site Name	Date reported	Mort %	Explained reasons	Mort #s	Action taken by FHI
MRT03091	Mowi Scotland	Grey Horse Channel Outer	09/08/2022	1.76	Complex gill issues	7858	not reported, discovered during record check for case 2022-0230, site now fallow.
MRT03004	Mowi Scotland	Grey Horse Channel Outer	23/06/2022	2.67	Gill infections / Seal predation	11693	AGD confirmed on site, freshwater treatments currently in progress. Seals seem to be targeting fish affected by gill issues. FHI to monitor.
MRT02964	Mowi Scotland	Grey horse Channel Outer	26/05/2022	1.08	Seal Predation		Buisiness corrospondat contacted, awaiting response. Mortality levels are reducing and are expected to be below reporting threshold. FHI Visited WB 23/05/2022
MRT02967	Mowi Scotland	Grey Horse Channel Outer	25/05/2022	1.43	Complex gill issues, Seal damage	8705	Data collected during inspection. Site visited 25/05/2022. Report for 2022-0164 to remind business of agreement in relation to mortality reporting as detailed in A Code of Good Practice for Scottish Finfish Aquaculture.
MRT02968	Mowi Scotland	Grey Horse Channel Outer	25/05/2022	1.04	Complex gill issues	6174	Data collected during inspection. Site visited 25/05/2022. Report for 2022-0164 to remind business of agreement in relation to mortality reporting as detailed in A Code of Good Practice for Scottish Finfish Aquaculture.
MRT02969	Mowi Scotland	Grey Horse Channel Outer	25/05/2022	1.26	Complex gill issues	6213	Data collected during inspection. Site visited 25/05/2022. Report for 2022-0164 to remind business of agreement in relation to mortality reporting as detailed in A Code of Good Practice for Scottish Finfish Aquaculture.
MRT02950	Mowi Scotland	Grey Horse Channel Outer	10/05/2022	1.19	Gill disease / Treatment Loss (Freshwater)	5763	Extended FW treatment conducted in week 18, which exacerbated mortalities. Complex gill disease still prevalent on site. A reduction in mortality has been observed. FHI to consider visit as inspections are planned in the area w/b 23/05/2022. FHI to monitor. - Report updated 9/8/22 by SAE based on records collected for 2022-0230 from 1.01% to 1.19% and 4914 to 5763.
MRT02917	Mowi Scotland	Grey Horse Channel Outer	14/04/2022	1.39	Gill Infection & Predation	7065	FHI to increase monitoring
MRT02902	Mowi Scotland	Grey Horse Channel Outer	29/03/2022	1.04	Gill Disease / Treatment Loss	6268	Salmosan treatment administered in week 11 to reduce sea lice load on site. Complex gill disease continues. Extended FW treatment planned for week 14. FHI to monitor.
MRT02891	Mowi Scotland	Grey Horse Channel Outer	15/03/2022	1.22	Gill Disease / Yersiniosis	7551	FHI to monitor.
MRT02887	Mowi Scotland	Grey Horse channel outer	09/03/2022	1.08	Gill Disease/ Predator/ Yersiniosis	7184	Contacted site manager, antiobiotics have been administered which has reduced the mortalities below the reporting threshold. FHI to monitor.
MRT02854	Mowi Scotland	Grey Horse Channel Outer	16/02/2022	1.16	Complex gill diseases and AGD	7886	Mortalities have reduced since H202 treatment. FHI to monitor.
MRT02838	Mowi Scotland	Grey Horse Channel Outer	04/02/2022	1.27	Treatment losses / Complex gill diseases and AGD	8864	increased mortalities the result of peroxide treatment for AGD. FHI to monitor.

Mowi is suspected of killing seals illegally. The Ferret reported in December 2022:



The Scottish Government has launched an investigation after a bullet shell was found during an inspection of a fish farm off North Uist.

A report by the Scottish Government said that its fish health inspectorate (FHI) found a "loose bullet casing" on one of the walkways between the cages at Mowi's Groatay fish farm on 26 July 2022.

Inspectors also noted "multiple sightings of seals near the cages" while they were at Groatay, and added the site was "experiencing seal predation".

A Scottish Government spokesperson confirmed to The Ferret that an investigation — led by Marine Scotland — is underway following the inspection at the site.

Read more via:
Mowi has not reported a seal killed at Groatay since March 2018 - how can a loose bullet casing survive over 4 years on a stormy salmon pen?!
"Loose Bullet Casing" found at Mowi salmon farm - the £10,000 smoking gun to prosecute for illegal killing of seals?