

\$camon \$cotland, 2 October 2023

Scottish Salmon is Dead in the Warming Water



- **New government survey expected to reveal significant fall in salmon farming production**
- **Mowi’s annual report detailed a 16% decrease in production between 2021 and 2022 with the Scottish Government predicting an 8% fall**
- **2022 was the worst year on record for mass mortalities and 2023 could be even worse**
- **Rising temperatures, jellyfish blooms, gill health problems, viruses, infectious diseases & lice infestations are killing off ca. 30 million RSPCA Assured salmon in the sea each year**
- **Bakkafrost red-flagged “deadly cocktail” of microjellyfish & reduced gill health in 2022**

A survey [published by the Scottish Government](#) on Wednesday (4 October) is expected to reveal that salmon farming production in Scotland fell from 205,393 tonnes in 2021 to 189,693 tonnes in 2022 – a fall of 8% and lower than salmon farming production in 2017. The ‘Scottish Fish Farm Production Survey 2022’ will also predict salmon farming production in 2023 and provide ‘survival’ (i.e. mortality) data [1].

The Scottish Government’s prediction of an 8% fall in salmon farming production in Scotland appears conservative in view of Mowi’s ‘Integrated Annual Report 2022’ – [published in May 2023](#) – which detailed a 16.1% fall in salmon farming production in Scotland in 2022 compared to 2021 (179,300 tonnes gutted weight in 2021 falling to 150,500 tonnes gutted weight in 2022) “due to adverse biological issues throughout the year” [2].

A review of mortality data published already in 2023 – including information via the Scottish Environment Protection Agency, the Scottish Government and Salmon Scotland - indicates that farmed salmon mortalities in Scotland could be over 20% higher this year compared to 2022 [3].

Campaigners are now calling for the closure of salmon farms in Scotland and a consumer boycott of Scottish salmon.

“Scottish salmon is dead in the water with 2023 shaping up to be the worst year ever,” said Don Staniford, Director of \$camon \$cotland. “A deadly cocktail of warming water temperatures,

swarms of jellyfish, gill problems, infectious diseases, plagues of parasites and toxic algal blooms has already killed off millions of salmon this summer. The Scottish Government must end the welfare nightmare inside salmon cages by shutting down the 250 factory farms littering the Highlands and Islands of Scotland. Please join the global boycott against lethal Scottish salmon – and that includes the shameless greenwashing of ‘responsible’ Scottish salmon via RSPCA Assured, the Aquaculture Stewardship Council and Soil Association.”

“Scottish salmon farming is stomach-churning disaster in which fish suffer day in day out,” said Lex Rigby, Head of Investigations at Viva! “Putrid open-net cages have flooded the marine environment with parasitic sea lice, excess waste and deadly diseases that has thrown delicate ecosystems completely out of balance. As a result, we’re witnessing mass mortalities and colossal habitat loss that is entirely unsustainable. With so many delicious cruelty-free alternatives available, it’s time the tide turned against animal farming in its entirety and embraced a plant-based future instead.”



Video footage & photos shot inside RSPCA Assured salmon farms during 2023 are available via:

<https://www.flickr.com/photos/vivacampaigns/sets/72177720311285139/with/53196052138/>

<https://vimeo.com/862330351>; <https://vimeo.com/855925138> and <https://vimeo.com/854572118>

Further background on the welfare nightmare of Scottish salmon is available via:

<https://viva.org.uk/animals/campaigns/investigation-scottish-salmon-2023/>

<https://animalequality.org.uk/blog/2023/09/11/countryfile-deaths-scottish-salmon-farms-fish-welfare-expert-says-bbc-didnt-go-far-enough/>

<https://wildfish.org/latest-news/certification-of-farmed-salmon/>

Contact:

Don Staniford: 07771 541826

Lex Rigby: 07764 203908

Notes to Editors:

[1] On 4 October 2023, the Scottish Government will publish the ‘Scottish Fish Farming Production Survey 2022’ online via <https://www.gov.scot/collections/scottish-fish-farm-production-surveys/>

From: Lorna.Munro@gov.scot
Date: Mon, 4 Sept 2023, 15:44
Subject: RE: Date for 2022 fish farm production survey?
To: <salmonfarmingkills@gmail.com>

Hi Don

Just to let you know the 2022 production survey will be published at 9.30am on Wednesday 4th October.

Best regards

Lorna

As background to the forthcoming survey, we can expect a significant decline in salmon farming production. The ‘[Scottish Fish Farm Production Survey 2021](#)’ – published in October 2022 - predicted an 8% fall in salmon farming production in 2022 to 189,693 tonnes (just lower than the level in 2017) and it will give a prediction for 2023 (which could be even lower than 2022):

Table 24: Annual production of salmon (tonnes) 2001-2021 and projected production in 2022

Year	Tonnes	Percentage difference	Year	Tonnes	Percentage difference
2001	138,519	7	2012	162,223	3
2002	144,589	4	2013	163,234	1
2003	169,736	17	2014	179,022	10
2004	158,099	-7	2015	171,722	-4
2005	129,588	-18	2016	162,817	-5
2006	131,847	2	2017	189,707	17
2007	129,930	-1	2018	156,025	-18
2008	128,606	-1	2019	203,881	31
2009	144,247	12	2020	192,129	-6
2010	154,164	7	2021	205,393	7
2011	158,018	3	2022	189,693*	

*Industry estimate of projected tonnage based on stocks currently being on-grown.

The total production of Atlantic salmon during 2021 was 205,393 tonnes, an increase of 13,264 tonnes (7%) on the 2020 total. This was the highest level of production recorded in Scotland.

[2] Mowi's 'Integrated Annual Report 2022' – [published in May 2023](#) – detailed a 16.1% fall in salmon farming production in Scotland in 2022 compared to 2021 (179,300 tonnes gutted weight in 2021 falling to 150,500 tonnes gutted weight in 2022) “due to adverse biological issues throughout the year” (p32):

The Market in General

SUPPLY

Global harvest volume of Atlantic salmon was approximately 2 581 300 tonnes gutted weight in 2022. This was 25 400 tonnes less than in 2021, a decrease of 1%. Supply from Norway decreased by 14 700 tonnes in 2022 on less biomass going into 2022 compared to the previous year. Supply from Scotland decreased by 28 800 tonnes, equivalent to 16.1% y-o-y, due to adverse biological issues throughout the year. Supply from Chile increased by 29 900 tonnes on early harvesting caused by biological challenges. Standing biomass at the end of December 2022 was estimated to be down by 5% compared to the same period last year, hence Chilean supply growth is expected to be modest in 2023. Supply from other regions decreased by 11 800 tonnes compared with 2021.

GLOBAL SUPPLY OF SALMON

(GWT)	2022	2021	CHANGE %
Norway	1 365 400	1 380 100	(1.1)%
Scotland	150 500	179 300	(16.1)%
Faroe Islands	89 600	95 000	(5.7)%
Other Europe	55 400	51 700	7.2%
Total Europe	1 660 900	1 706 100	(2.6)%
Chile	676 400	646 500	4.6%
North America	136 100	144 900	(6.1)%
Total Americas	812 500	791 400	2.7%
Australia	79 700	79 000	0.9%
Other	28 200	30 200	(6.6)%
Total	2 581 300	2 606 700	(1.0)%

Mowi's '[Integrated Annual Report 2022](#)' cited "poor production and high mortality" and "issues with micro-jellyfish bloom and SRS following the warmest summer on record in Scotland" (p39):

SALMON OF SCOTTISH ORIGIN

Operational EBIT

Our Scottish farming operations had a challenging year in 2022 related to poor production and high mortality on stocks grown from externally sourced eggs, in addition to issues with micro-jellyfish bloom and SRS following the warmest summer on record in Scotland. Operational EBIT for salmon of Scottish origin was EUR 42.6 million for the year ended December 31, 2022 compared with EUR 77.2 million in 2021. Improved prices were more than offset by the above-mentioned challenges. Operational EBIT per kg was EUR 0.89 in 2022 compared with EUR 1.20 in 2021. Our EBIT for salmon of Scottish origin was EUR 54.3 million for the year ended December 31, 2022 compared with EUR 85.1 million in 2021. EBIT per kg was EUR 1.12 in 2022 compared with EUR 1.32 in 2021.

[Bakkafrost's 2021 Annual Report](#) - [published in October 2022](#) - red-flagged the "deadly cocktail" of micro-jellyfish and reduced gill health of farmed salmon:

In Scotland, we had severe mortality in Q3 and Q4, with a total of 262 mDKK in exceptional mortality costs. The underlying issue was linked to the reduced gill health the fish develops due to the extended growth cycle in the marine environment, up to 22 months, due to the small average smolt size on release. The fish are exposed to hazards that impair their gills during this period. Late in Q3 and into Q4, there was a significant bloom of hydrozoans and micro-jellyfish, which deteriorated the gill health even more and led to very high mortality across several sites. In short, the micro-jellyfish bloom on top of reduced gill health was a deadly cocktail.

"Scottish Sea Farms has reduced its estimated harvest volume for 2023 from 37,000 gutted weight tonnes to 27,000 gwt as a result of biological problems at some sites that have continued from 2022," [reported Fish Farming Expert in August 2023](#).

[3] Read more via [Media Backgrounder: Scottish Salmon is Dead in the Warming Water](#) (2 October 2023) – including:

