

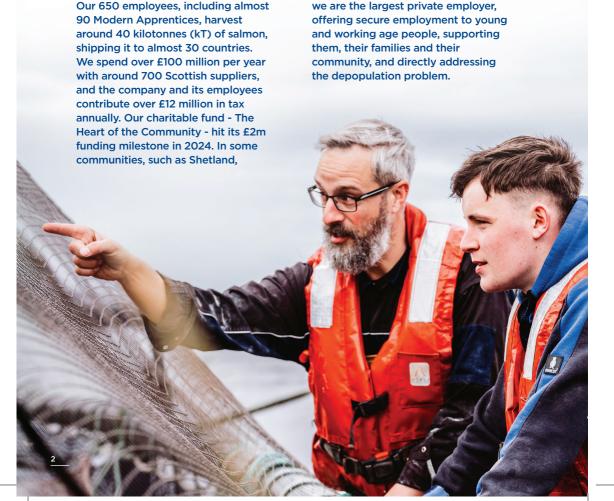
Salmon farming: A vision for tomorrow

Information for policymakers



About Scottish Sea Farms

Scottish Sea Farms began nearly 60 years ago on Scotland's west coast, and today has nearly 50 active marine farms, three freshwater hatcheries and two processing facilities, spread across its west coast home as well as Orkney and Shetland.



"Salmon farming is vital to our rural economy, supporting thousands of skilled jobs across coastal and island communities"

Rural Affairs Cabinet Secretary Mairi Gougeon MSP. Salmon Scotland press release, 14.8.2025



Our story has always been simple - we are farmers. Like our neighbours farming Scotch Beef, Scotch Lamb and Specially Selected Pork, we produce Scottish Salmon to be enjoyed at home and all over the world. Salmon is a very healthy, low carbon protein, reared by farmers whose number one priority is the welfare of their animals.

Farming is hard, though. As an industry, salmon farming faces constant challenges which we need to work with our communities, our regulators, and the country as a whole in order to address.

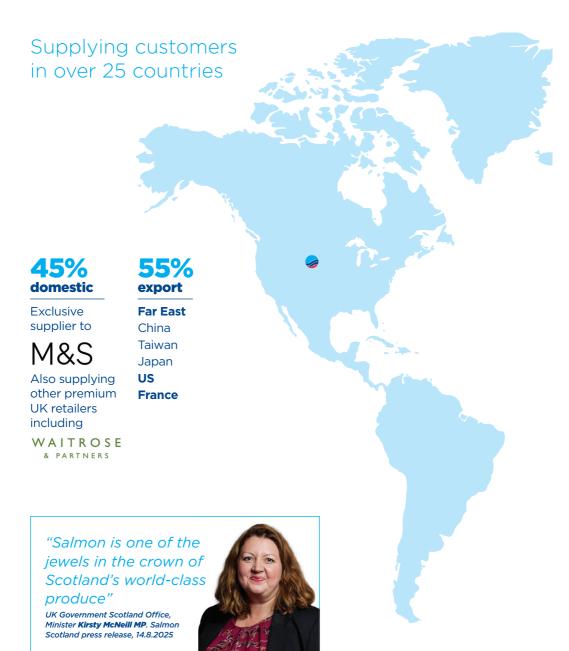


Mairi Gougeon MSP with Jim Gallagher (Managing Director of Scottish Sea Farms)

Salmon farms are important national infrastructure; just as we place wind farms in the location where they generate the best output, we must do the same with salmon farms. Salmon farming's challenges, in the main, are caused by climate change. Mild winters, extreme rainfall, prolonged dry spells and warmer water all combine to bring significant risks to the health and welfare of our fish. The placement of farms is one of the most important mitigations.

At Scottish Sea Farms, we are encouraging local authorities and national regulators to work with us to place our farms in the locations which help create the healthiest fish. We want to work closely with regulators and policymakers to meet our shared vision and objective - a growing, sustainable, popular Scottish industry.

Our salmon, around the world





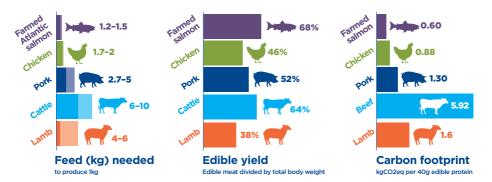
Sustainability

Scottish Sea Farms understands why salmon farming is in the spotlight. We do not seek to negate the industry's responsibility to address the issues which most concern our policymakers and stakeholders, such as welfare, disease, and mortality.

The interaction between wild and farmed salmon is often mentioned, whether in relation to sea lice, escapes, or disease transfer. We aim to mitigate our impact wherever possible by implementing best practice across all our farms.

When it comes to our environmental impact and our wider sustainability credentials, we consider Scottish Sea Farms, and industry colleagues, to be an exemplar.

Salmon is a remarkably efficient and sustainable form of food production, in addition to its renowned benefits as a healthy protein. Sea farming uses significantly less feed to produce the same weight of product than land farming, it generates a higher proportion of edible meat than land animals, and critically, the carbon footprint of farming salmon is the lowest of all Scottish meat



Sources: Global Salmon Initiative 2022 Sustainability Report; Navfarm; Penn State; Our World in Data



For every **1kg** of medicines used annually by the industry, **1.27M kg** of salmon is produced.

For context, the next best form of food production is potatoes with c.4,400kg for every lkg of pesticides used annually

> Pesticide Usage Survey Reports, SASA

As an industry, we are highly regulated with our impacts in the water environment controlled and monitored. Our environmental monitoring of both active and fallowed farms highlights the recoverable and regenerative nature of salmon farming.

Salmon also compares extremely favourably to agriculture in terms of its medicine and pesticide use, with both a higher yield and a lower pesticide/medicine use than products such as potatoes and oats. And the high-quality diet we give our salmon, as well as promoting high welfare standards, is increasingly sustainable, with now only one-quarter of marine ingredients, with the rest plant-based.

Sustainability is not just about our fish; it is also about our business and our processes. We have:

- switched to returnable, re-usable bulk bins wherever safe and practical to do so, and we've helped save almost 3.5 million single-use polystyrene boxes since 2017
- begun to repurpose fish waste into fertiliser and extract oils from fish mortalities
- begun to decarbonise our business fleet, trialling the potential of hybrid power systems to reduce diesel use
- switched to 100% renewable sources for our mains electricity, and we're exploring solar, wind and wave power.



SCOTTISH SEA FARMS HAS

96%

COMPLIANCE WITH ENVIRONMENTAL STANDARDS UNDER OUR FARMS (2024).

Welfare

The welfare of farmed salmon is a significant concern to policymakers. We have a deep understanding of why this is, because it is of even more concern to us. Our fish matter to our farmers more than to anyone outside the industry.

Just as you would expect from land farmers with their livestock, welfare is the number one priority for sea farmers. We want healthy salmon, and we need healthy salmon. It matters to our communities, and impacts on our reputation. It matters to our farmers, and impacts their morale. And it matters to our business.

Welfare from the beginning

Our work in fish welfare begins with selecting the salmon traits most likely to thrive in Scottish marine conditions. We source our eggs from our own farm stock, as well as specialist salmon breeders, selecting from over 20 different genetic and biological traits to help maximise resistance to common health challenges and deliver a higher quality product for customers.

Each batch is fully traceable and documented from egg to harvest, meaning we know exactly where each individual salmon came from.

Welfare through the life cycle

We are guided by the RSPCA Assured standards, a world-class welfare protocol based on ensuring that salmon have space to swim, have a high-quality diet, and face the minimum possible handling.

We have a very low density in our farms, of only around 1.5% fish to 98.5% water. And our salmon receive a specialised diet tailored to each life stage, comprising around three-quarters plant-based ingredients, and using less feed per kilogram of salmon produced than any other farmed protein.

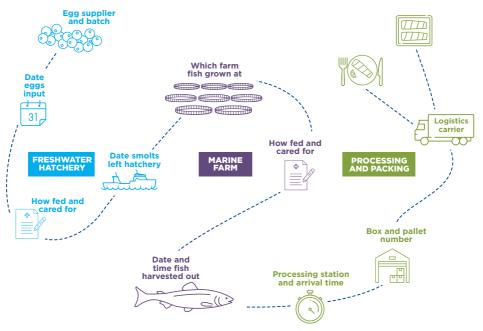
Investing in people and technology

Fish welfare is not easy. Location problems and climate change make welfare a constant challenge, which requires constant dedication and innovation, under the guidance of our Head of Fish Health and Welfare, Head of Veterinary Services and the team of 40+ in-house vets and Fish Health Specialists.

Our investment in welfare is an investment in people, but also an investment in technology, including artificial intelligence. We have high-tech feeding systems installed on feed barges, allowing our farmers to start, stop and adjust portion size according

to fish appetite. Our farms have the ability to operate these systems remotely ensuring that our fish can continue to be fed, even if severe weather makes it unsafe for our teams to make it out to the farm. We have underwater cameras enabling the team to watch for any changes in behaviour as a welfare check and ensure that fish are feeding well. And we have environmental monitoring equipment measuring water temperature and oxygen levels in real-time so that any potentially harmful changes in water quality such as a phytoplankton or algal bloom can be quickly identified.

We are farmers.
These are our animals.



Disease and mortality

Of course, we cannot take every fish through to adulthood, although we aim to. In common with our land farming neighbours, we experience disease and mortality in our livestock, although as sea farmers we are fortunate to have relatively low levels.

Our target survival rate is 95%, and with our five-year average nearing 90% we are getting ever-closer to that goal. For illustration, the survival rate of an Atlantic salmon in the wild is around 2.5%.

We continue to invest significantly in welfare and prevention to drive the survival rate of our salmon as high as possible. As an industry, we have made c.£1B investment in fish health and welfare since 2018.

There are four reasons why we invest so heavily in welfare, disease, and predator mitigation:

1. For the fish

Unless there has been a mass mortality event caused by a predator such as a seal, mortality is likely the result of ill-health caused by something entering the waters around the farm. Our fish suffer discomfort and pain, and as farmers focused on animal husbandry that is a very obvious reason to invest in prevention.





Low stocking densities -1.5% fish to 98.5% water



Specialist diet tailored to each life stage



Farming to RSPCA Assured welfare standards



Low-stress, humane harvesting methods



Minimal handling throughout

2. For the farmer

We want our staff to have a good day at work. Every day. But it is never a good day for a farmer when they lose an animal; unhealthy salmon sap morale, and mortality is always an emotional low. They are farmers - their job is to rear healthy animals. So, protecting our fish and protecting our farmers are two sides of the same coin.

3. For the bottom line

Scottish Sea Farms is a business. Revenue and profit matters to us, and it matters to our staff and our communities, because profit means jobs and profit means investment. For every 1,000 salmon we cannot sell, as a result of disease or mortality, we lose £50,000 in sales.

4. For the business

We have a number of public facing staff whose responsibility it is to liaise with policymakers like you, at meetings, at committee appearances and at roundtable discussions. Rather than spend their time talking about welfare and disease challenges we have faced, they would prefer to speak to you about our modern apprentices, or our supply chain in every constituency in the country, or our sponsorship of the 2025 Island Games, or the £2m we have given to local causes, or our new processing centre. This is not a complaint; it is a challenge to us to continue to do better.



Our challenge

Salmon farming's challenges, in the main, are caused by climate change. Mild winters, extreme rainfall, prolonged dry spells, and warmer water all combine to bring significant risks to the health and welfare of our fish.

This isn't location-dependent; we see this challenge across our regions, which has resulted in a conscious choice to not farm in some of our historical locations; deliberately fallowing open-net farms in specific areas which have seen repeated and prolonged challenges to fish health.

In the last

10 years, we've fallowed 15 farms with a capacity of producing

21,000T of salmon in total.



In the last **10 years**, we've gained new consents (increased tonnage at existing open-pen farms or brand-new farms) with a capacity of producing **22,000T** of salmon.



Our solution - fewer but larger farms

We understand the problem. And we all - salmon farmers, our communities, local authorities and national regulators - have a shared interest in solving it.

Our view, at Scottish Sea Farms, is that the solution has to achieve three outcomes:

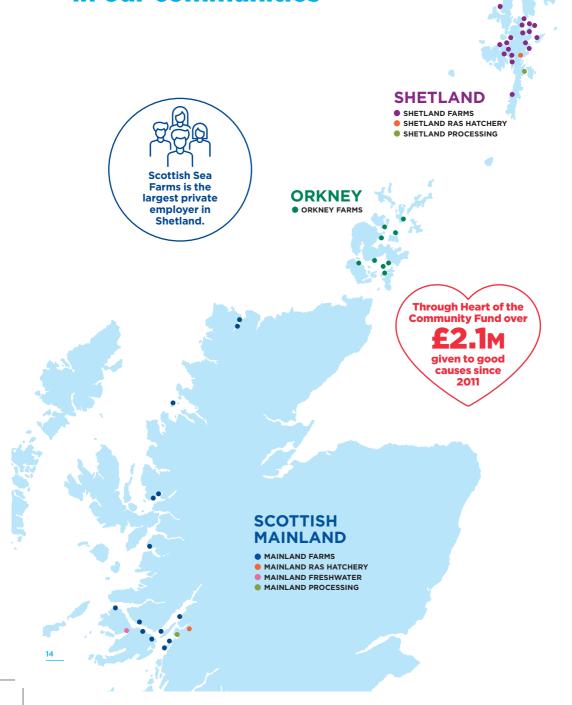
- **1.** A substantial reduction in disease and mortality
- 2. An improved reputation and regard at local and national level
- **3.** Continued growth of the salmon farming industry to help reclaim our competitiveness on the world stage.

We believe we know and understand the solution, and we want to work with local and national regulators to turn our vision into a reality. For this ambition to be realised however, industry and regulators need to work better together, in terms of speed of achievement and ambition for sustainable growth. At Scottish Sea Farms, our vision can be summarised as 'fewer, but larger farms', and in better locations. Fewer but larger farms, with fewer but larger pens, strategically placed to maximise output.

Salmon farms are important national infrastructure; just as we place wind farms in the location where they generate the best output, we must do the same with salmon farms. Better placement of bigger salmon farms is the principal requirement in achieving those three outcomes: a reduction in disease, improved reputation and growth.

There is room for us all and, working with Crown Estate Scotland, we want to partner with our neighbours to make sure we are all in the right place, delivering the best outputs.

Scottish Sea Farms in our communities



In 2024:

£160M+

SPEND WITH SCOTTISH SUPPLIERS

660 JOBS

17% FEMALE STAFF

occupying c.**0.021**%

OF SCOTLAND'S INSHORE WATERS

2

PROCESSING FACILITIES

550+

SCOTTISH MALE SUPPLIERS STAFF

B3%

5 EDECLINA

FRESHWATER HATCHERIES

96%

COMPLIANCE WITH ENVIRONMENTAL STANDARDS UNDER OUR FARMS **89.7**%

MARINE SURVIVAL 46

MARINE FARMS 74

MODERN APPRENTICES

How we can support communities:



Access to broadband



Employee and visitor housing



Community transport funding



Community defibrillators



Laptop donation for online learning

Through Heart of the Community Fund more than

1,200

grants & donations awarded since 2011 "Aquaculture is such a fast-moving sector and there are so many different opportunities for development"

Lori Smith, Fish Health and Welfare Manager



Come and see us!

Scottish Sea Farms has an 'open door' policy.

We want you, as policymakers, to come and see our freshwater hatcheries, marine farms, and processing facilities; to meet our farmers and discuss their work, and speak to our team to find out more about their vision for the sustainable growth of salmon farming.

To organise visits, ask questions, or speak with one of the team, get in touch with community@scottishseafarms.com or visit our website for further details.



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