

## RURAL ECONOMY AND CONNECTIVITY COMMITTEE

### SALMON FARMING IN SCOTLAND

#### SUBMISSION FROM THE ROYAL SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS (RSPCA) AND RSPCA ASSURED

##### Introduction

The RSPCA is the oldest animal welfare organisation in the world, and is grateful for the opportunity to provide written comments to the Rural Economy and Connectivity Committee (RECC). In the late 1990s, the Society was approached by a Scottish fish farming company, and invited to produce a set of welfare standards for farmed Atlantic salmon, in the same way that we had produced welfare standards for a number of terrestrial species. Through consultation with a wide range of stakeholders and many farm visits, it took three years to develop these standards, and they were launched in 2002. The standards were initially implemented through the RSPCA's own Farm Assurance Scheme – Freedom Food, which has latterly been renamed RSPCA Assured. Throughout this time, the scheme has enjoyed a fluctuating majority of the industry being certified to its welfare standards, and has personnel visiting fish farming establishments and communicating with the industry on a daily basis.

One of the key factors in being able to successfully develop progressive welfare standards is the willingness of an industry to participate in a process of continuous improvement, and from our perspective the industry has, over the years, strived to continually improve. As a result of this, we believe that some very positive working relationships have been developed over the years. Adherence to such a philosophy has seen tangible improvements in many areas of salmon husbandry and welfare, such as larval rearing, fish handling, fish transport and fish slaughter. The RSPCA standards also pioneered the concept of written health planning in farm assurance with all species, and also introduced the first guidelines for cleaner fish in 2010.

The RSPCA standards are primarily devoted to the welfare of the fish, but they do pay heed to the importance of good environmental stewardship, and each site is required to have an Environmental Impact Plan. However, as an animal welfare organisation, we always defer to the existing regulatory system and the designated statutory bodies to address any environmental issues which may arise outside of our own areas of expertise.

We strongly believe that fish welfare and environmental management are not mutually exclusive. This is also recognised by other organisations, for example,

**'Freedom Food standards developed by the RSPCA for farmed fish are also good. Although the standards are primarily welfare-based, the better environment which they provide for the fish not only produces healthier fish, but also reduces the impact on the marine environment around the farm'** <sup>1</sup>

Similarly, in the **Marine Conservation Society Principles and Criteria for Sustainable Fish Farming, the RSPCA welfare standards are deemed to be the Gold Standard under Principle 5 – Optimal fish welfare and environmental management.** <sup>2</sup>

However, the relationship between fish welfare and the environment appeared to be overlooked by the Environment, Climate Change and Land Reform (ECCLR) committee, with only two lines in their report being devoted to the subject of animal welfare.

The ECCLR committee report covered a number of important issues, albeit in the form of a literature review, rather than from primary source material. There did not appear to be much in the way of an in depth objective critique of any of the evidence during the committee proceedings. As a result of this, our view is that the overall tone of the report was extremely negative, and failed to provide balance by acknowledging the positive aspects of the salmon industry. One can only speculate whether there had been any site visits prior to the publication of the report. If there had, it may have allowed a more informed approach to have been taken. Similarly, some of the lines of enquiry that the committee were pursuing during proceedings did not appear particularly robust, for example, where evidence was lacking or absent in Scotland, asking what happens in Norway.

## **The RECC inquiry questions**

### **1. Do you have any general views on the current state of the farmed salmon industry in Scotland?**

As possibly the youngest sector of livestock farming in the UK, the farmed Atlantic salmon industry in Scotland is not only Scotland's, but the UK's largest food exporter. In the 50 or so years since its genesis, as noted above, there has been substantive progress in fish husbandry including fish handling, transport and slaughter, as well as fish health and welfare. Technological turnover is rapid, and helps to provide answers to some of the husbandry challenges which can occur. The industry is subject to a comprehensive set of third party audits on a day to day basis, from a diverse range of agencies such as the RSPCA and the Fish Health Inspectorate (FHI). These audits are in addition to the daily fish health and welfare checks which are conducted by the fish farmers themselves.

In our view, the Scottish Atlantic salmon industry is unique in the way that it has applied itself to focusing on the welfare of the fish, which as well as benefiting welfare per se, has also been beneficial from an economic standpoint. This was illustrated by the Government Office for Science, in its report 'The Future of the Sea: Trends in Aquaculture' where it states,

**'Scotland's..... adoption of the Code of Good Practice for Finfish Aquaculture, and the industry adoption of specific assurances and standards such as Label Rouge designation and the RSPCA Freedom Foods' scheme: this contributes to the Scottish price premium achieved for Atlantic salmon compared to Norwegian products.'**<sup>3</sup>

This approach to salmon production has provided a template for fish production, health and welfare which we have seen being replicated in countries as far afield as Norway, Chile, Canada and Australia.

### **2. There have been several recent reports which suggest how the farmed salmon industry might be developed. Do you have any views on action that might be taken to help the sector grow in the future?**

Industry expansion to maintain viability is always going to be important. However, in our view, any prospective expansion plans must take full account of the health and welfare of the fish as an integral part of the process.

Having acknowledged the uniqueness of the Scottish industry in terms of its approach to fish welfare, it is of some concern that the main documents which quite rightly set out ambitious plans for the future, unfortunately appear to omit anything about the welfare of the fish within these plans. For example, in the executive summary of the document **Scottish Aquaculture: a view towards 2030**, it states that, **'sea lice controls and gill health treatments are an absolute priority to prevent long-term stagnation of volume.'**<sup>4</sup> This may be true, but it would be useful to see some acknowledgement that it was also the health

and welfare of the fish which is of equal importance under such circumstances, rather than merely within the context of a barrier to production volume. Care needs to be taken in how such plans are presented, because commoditising the fish in this way risks tarnishing the image of the industry as a whole in our view.

As dispassionate observers, the RSPCA, whilst acknowledging the importance of looking to expand, would urge caution about rushing headlong into such an expansion programme at the present time, when some of the health and welfare issues relating to the fish appear to be an often daily and unpredictable challenge, in terms of being able to plan robust methods of dealing with them.

We believe that against such a backdrop, consideration should be given to the appropriateness of having a period of consolidation, until there is more confidence in being able to deal with, and control some of the biological challenges that are currently being addressed. Consolidation may actually be a short term reality due to some companies already predicting that their production tonnages will actually go down next year.

We would also assert that success is not necessarily defined simply by producing more numbers, but by making more of what we already have, a pursuit that in itself will result in more fish (for example, through improved survival rates) being produced.

One way that the industry could develop in the future is through more offshore production, and this is an area that the RSPCA has been asked to look at previously. However, it is difficult to look at offshore farming in the absence of meaningful definitions of what it actually constitutes. It would be useful for a body such as the Scottish Environmental Protection Agency (SEPA) to provide cogent guidelines, and quantify what terms such as 'exposed' and 'deep water' actually mean. This would then allow a more consistent approach to what would constitute offshore farming.

An interesting scenario to consider is that a premature move towards offshore farming could be catalysed if restrictions on the use of medicines such as Emamectin benzoate (SLICE) are introduced. This could pose a problem for fish health and welfare if a reduction in its use does take place, and oceanic sites prove not to be as effective in improving health and welfare as was hoped for.

### **3. The farmed salmon industry is currently managing a range of fish health and environmental challenges. Do you have any views on how these might be addressed?**

Unpredictable, as well as the more predictable scenarios relating to the health and welfare of the fish can, and do occur, and work is ongoing to try and find solutions to any health issues affecting the fish, as one would expect. However, such scenarios also occur in other farming sectors, but do not appear to attract the same level of scrutiny as the salmon farming industry in Scotland.

The concept of health planning in farm assurance schemes was pioneered by the RSPCA in the late-1980s and remains an important part of the RSPCA standards development process. An integral part of the site specific health plans is the review process which must take place at regular intervals to help address any health issues which have occurred. This is a prime example of adaptive management.

Adding to the unpredictable nature of some of the health based issues, is the challenge of climate change and a rise in sea temperature, which can increase both the threat from marine diseases and invasive parasitic species.

There are a number of methods being used in order to combat these biological challenges, such as enclosed marine systems or growing smolts to heavier weights, so that the marine phase of their lifecycle is foreshortened, which should then ameliorate the threat from marine born diseases and parasites.

There are a number of health issues worthy of specific mention, and these are noted below:

### **Sea Lice**

Sea lice are a problem, and the focus for dealing with them is to use a combination of all available medicinal and non-medicinal treatments where treatments are necessary. The misleading impression often given is that sea lice are a problem at all sea sites, but in our experience this is not the case, and there are some areas/sites where sea lice are not an issue, and chemical treatments have not been used for a number of years.

### **Gill Disease**

Warmer sea temperatures have increased the threat from a number of gill conditions such as Amoebic Gill Disease (AGD). A number of non-chemical treatments have been developed, such as producing freshwater on a wellboat and passing the fish through the freshwater, which treats the gill condition.

Where new non-chemical treatments have been developed to treat gill conditions or sealice, the RSPCA standards require a fish risk assessment, in order to identify and eliminate potential risks to the health and welfare of the fish, before subjecting them to any particular process.

### **Escapes from fish farms and the potential effects on wild populations**

Unless the whole industry moves onshore, there may always be a background level of escapes from both fresh and seawater sites, however hard we try to eliminate them and aspire to a goal of zero escapes. The causes of escapes are varied, and range from human error to equipment failure. In terms of freshwater loch sites, the general welfare of the fish in these systems is often considered to be very good, and the RSPCA would like to see these systems prevail. There is an aspiration that the Technical Standard for Scottish Finfish Aquaculture combined with advances in genetics will go some way to mitigating any problems associated with escapes.

### **Sustainability of feed supplies including substitution with plant derived ingredients**

The dialogue surrounding this issue is well known, and the RSPCA would expect that all diets are able to maintain fish in full health and vigour. Decreasing the level of fishmeal and oil in the diet to the extent that it satisfies environmental concerns but creates chronic welfare issues and subsequent negative welfare states in the fish will create an ethical dilemma. Urgent dialogue is needed to discuss such a scenario. This is a good example of one of the existing tensions between fish welfare and the environment.

### **Emerging Environmental Impacts**

The RSPCA standards for farmed Atlantic salmon include requirements that aim to minimise welfare impacts on marine mammals, birds and wild caught cleaner fish, and in doing so, help minimise adverse impacts on the environment. The standards also mandate that lethal predator control is only enacted as a last resort. Further, they require that records of the number of fish which are injured or killed in predator attacks are maintained, which provides useful information regarding the significance of such attacks that is currently not reported on.

## **Cleanerfish**

In writing the first set of guidelines used by the industry for wild cleaner fish in 2010, we have tried to ensure that the welfare of these wild fish was given full consideration when they were caught. The RSPCA believes that the most sustainable way forward with cleaner fish is to be reliant wholly on hatchery reared fish, and there is a great effort from the industry to work to achieve this. The RSPCA are writing new lumpfish standards with this in mind.

## **Mortality rates**

The higher than normal mortality figures which have occurred over the last year as a result of unprecedented biological challenges, have been accepted by some outside of the industry as being the norm. This point was raised at the ECCLR committee and went unchallenged. Frustratingly, it was also raised in one of the oral sessions by a member of the RECC committee, who was also a member of the ECCLR committee. As well as being extremely unhelpful, it is also inaccurate. Similarly, the suggestion that other sectors of the livestock industry do not suffer from high mortality/disposal rates simply does not stand up to scrutiny, one example of which was shown on television recently.<sup>5</sup>

## **Welfare outcome measures**

The RSPCA is keen to encourage the objective measuring of animal welfare indicators for all species, which will enable the articulation of the welfare state of both individual as well as groups of animals. This will produce up to date information, and therefore negate the need for reliance on often outdated literature or subjective opinion, which in a fast moving industry is very important. This up to date information may also allow an evaluation of how issues such as climate change may be affecting the environment in which the fish are produced, and enable any necessary action(s) to be taken in order to mitigate potentially negative scenarios. Such a methodology will also be useful in assessing fish welfare when testing new offshore sites or fully enclosed systems of marine production.

### **4. Do you feel that the current national collection of data on salmon operations and fish health and related matters is adequate?**

This is a matter for the statutory bodies.

### **5. Do you have any views on whether the regulatory regime which applies to the farmed salmon industry is sufficiently robust?**

We would agree that the regulatory framework may need to be simplified or made more streamlined. There can at times appear to be a tension between bodies looking at the different aspects of salmon farming, for example, medicine use versus discharge consents and fish health.

### **6. Do you have any comments on how the UK's departure from the European Union might impact on the farmed salmon sector?**

One key principle relating to this market related question is that the Scottish salmon industry must not be disadvantaged by imports from countries with lower welfare standards, if the current philosophy of continual improvement to fish health and welfare is to continue.

## Conclusion

One of the points in the conclusion of the SAMS document, was that due to a lack of primary source data, ***'an overall diagnosis of the impact of salmon farming has not been attempted within this review.'***<sup>6</sup> However, having followed the proceedings of both committees to date (the farming sector witnesses have yet to give evidence) it would seem that a rather negative diagnosis has already been formulated, despite a paucity of primary evidence.

Similarly, both committees seem to be asking many of the same questions, although our understanding was that the scope of the RECC committee was supposed to be much wider than the ECCLR committee.

The RSPCA believes that the key to a sustainable future for Scottish farmed Atlantic salmon, will largely be dictated by the health and welfare of the fish, which in turn will determine the type of environmental impacts which may or may not occur. Unfortunately, the debate in both committees has ignored this point.

The Scottish farmed Atlantic salmon industry has to deal with a range of issues that can affect both the health and welfare of the fish and the environment in which they live, just like any other farming sector. Our observations and assessments over the last sixteen years has provided ourselves with a lot of primary evidence showing that industry stakeholders work very hard to overcome the challenges that they encounter.

It seems very puzzling therefore, that stakeholders working together to try and find solutions to often unexpected problems, appear to attract a disproportionate level of negative scrutiny, misleading headlines and vilification in the press, compared to other farming sectors.

It is also extremely disappointing that despite making a concerted effort for the RSPCA to be able to give oral evidence to both committees, it appears to us that there has been an equally concerted effort to prevent us from doing so.

We can only speculate as to why this is.

## References

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4. Imani Development & SAMS Research Services Ltd (SRSL), **Scottish aquaculture: a view towards 2030, Steps to success: the road ahead to 2030**, Executive Summary, p.10. February 2017.
5. BBC Countryfile, 19/03/2018
6. SAMS Research Services Ltd, **Review of the Environmental Impacts of Salmon Farming in Scotland**, p.126. January 2018.

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