

Don Staniford
salmonfarmingkills@gmail.com

Our Reference: 202000018313

02 April 2020

Dear Mr Staniford ,

Thank you for your request dated 28 February 2020 under the Environmental Information (Scotland) Regulations 2004 (EIRs).

Your request

You asked several questions relating to farmed salmon ova imports and specific pathogen testing as well as requesting information relating to the testing of farmed salmon for diseases, pathogens and viruses. In addition you have asked for information relating to Marine Scotland Science's commercial testing service conducted on behalf of third parties. The exact specifics of the questions you ask and information you request are replicated under the 'Response to your request' section of this reply.

As the information you have requested is 'environmental information' for the purposes of the Environmental Information (Scotland) Regulations 2004 (EIRs), we are required to deal with your request under those Regulations. We are applying the exemption at section 39(2) of the Freedom of Information (Scotland) Act 2002 (FOISA), so that we do not also have to deal with your request under FOISA.

This exemption is subject to the 'public interest test'. Therefore, taking account of all the circumstances of this case, we have considered if the public interest in disclosing the information outweighs the public interest in applying the exemption. We have found that, on balance, the public interest lies in favour of upholding the exemption, because there is no public interest in dealing with the same request under two different regimes. This is essentially a technical point and has no material effect on the outcome of your request.

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Response to your request

Questions posed

Within your request you raise a number of questions concerning testing and screening relating to the import of ova and ova use in Scotland. Responses to individual questions are provided below but should be read in conjunction with the further contextual information supplied below which set out the wider rationale and regime in place regarding these issues.

1. How many salmon eggs imported into Scotland were tested for PRV and other viruses, pathogens and infectious diseases such as ISA?

No testing of salmon eggs, imported into Scotland, has been undertaken by Marine Scotland Science in relation to the pathogens and diseases you specify.

2. Has Marine Scotland Science conducted screenings of ova for PRV as an extra risk measure to avoid vertical transmission?

No screening of ova for PRV has been undertaken by Marine Scotland Science.

3. What % of ova used by 'Scottish' salmon farms are infected with PRV, ISA and other diseases, pathogens and viruses?

We hold no information on the percentage of ova, used by 'Scottish' salmon farms, which are infected with PRV, ISA and other diseases, pathogens and viruses.

4. What % of imported ova were screened prior to entry into Scotland for infectious diseases, pathogens and viruses?

Marine Scotland holds no information on the screening of ova (testing for the presence of pathogens) in relation to ova imported into Scotland.

5. How much of domestically produced ova is sourced from genetic material (ova, broodstock or smolts) sourced from overseas (e.g. Norway, Iceland and Ireland)?

We do not hold information on the genetic variability of the stocks used in Scotland for farming purposes to allow us to answer this question. While we do not hold this specific information, Section 2 of the Finfish Farm Production Survey provides some detail of the origin of ova laid down for farming in Scotland.

<https://www.gov.scot/publications/scottish-fish-farm-production-survey-2018/pages/4/>

6. What % of domestically produced ova has been screened for infectious diseases, pathogens and viruses such as PRV and ISA?

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Screening of ova (testing for the presence of pathogens) is not currently undertaken by Marine Scotland Science in relation to domestically produced ova within Scotland.

Further on in your request you posed an additional question:

What percentage of farmed salmon are infected with PRV, ISA and other diseases, pathogens and viruses?

Marine Scotland Science does not hold information that allows us to answer that question because we don't test all farmed fish in Scotland. Scottish Ministers are informed of the presence on Scottish fish farms of any listed diseases in order that controls may be imposed where needed. Presently, within Scotland no fish farms farming Atlantic salmon are under restriction for any of the listed diseases.

Context to the questions asked

It is important to consider the answers to all the questions detailed above with some further context. Specifically, in relation to the measures in place which offer protection through the trade in live aquatic animals and their products and the aquatic animal health surveillance programme conducted within Scotland. In that regard, please refer to Annex 1 of this reply.

In addition, I note that many of your questions are focused upon the testing of ova. In general, screening of ova for aquatic animal pathogens is not a widely conducted practice. **The international standards for testing, as specified through the OIE Manual of Diagnostic Tests for Aquatic Animals and Commission Implementing Decision (EU) 2015/1554 recommend the screening of fish, rather than ova as the standard methods for pathogen detection.** Whilst the screening of ova can be undertaken, it is less preferential to testing fish tissues as there are relatively few aquatic animal pathogens which exhibit true vertical transmission. Technical complexities make this testing method difficult for many of the modern molecular techniques currently employed.

Within your questions you specifically refer to ISA (Infectious salmon anaemia – caused by ISAV) and PRV (Piscine orthoreovirus). These two pathogens are handled differently under the current legislation implemented within Scotland.

Infectious salmon anaemia (ISA) (infection with genotype HPR-deleted of the genus Isavirus (ISAV)) is listed under Council Directive 2006/88/EC and controlled within Scotland through the Aquatic Animal Health (Scotland) Regulations 2009. Scotland, as part of the Great Britain health zone, has recognised freedom for ISAV (HPR-deleted). **As a result, trade in live ova and fish can only occur from areas of equivalent recognised disease freedom and consignments must be accompanied by a valid health certificate, with appropriate health attestations signed by the competent authority within the exporting country.**

PRV differs from ISAV HPR-deleted. It is not a pathogen which is listed under the current regulations and therefore is not controlled within Scotland through the Aquatic Animal Health (Scotland) Regulations 2009.

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Aquatic animal health surveillance conducted within Scotland is undertaken to fulfil the legal requirements of Council Directive 2006/88/EC. This comprises both active (risk-based) and passive (intelligence driven) surveillance initiatives designed to detect and control listed and emerging diseases. The inspection and sampling programmes are subject to regular external audits to ensure compliance with technical and legal standards.

Our practice and approach is guided by current international and legislative standards concerning the detection of aquatic animal pathogens which as we have set out above, does not currently require the testing of ova. Further detail is provided within Annex 1 of this response.

Further information requested

In addition to the questions you asked detailed above, you also requested the following:

- information since 1 January 2019 in relation to the testing of farmed salmon for diseases, pathogens and viruses (expanding upon the scope of a previous request FoI/19/00882 seeking information on Piscine Reovirus (PRV) and Heart & Skeletal Muscle Inflammation (HSMI)).
- information relating to Marine Scotland Science's commercial testing service conducted on behalf of third parties. You have requested information since 1 January 2019 in relation to ISA, CMS, AGD, *Pasteurella skyensis*, Salmon Gill Poxvirus, Complex Gill Disease, Pancreas Disease and other diseases, pathogens and viruses (and PRV/HSMI since 24 March 2019).

Sampling and testing for various pathogens is undertaken as part of Scotland's Aquatic Animal Health surveillance programme, in line with the current regulations concerning aquatic animal health in Scotland. The results and outcomes of this surveillance are made publicly available through an active publication plan:-

<https://www2.gov.scot/Topics/marine/Fish-Shellfish/FHI/CaseInformation>.

Published information details the aquaculture sites and businesses at which testing was performed, the number of animals tested, the test methods conducted and the result of those tests.

You can find further information about the commercial testing service offered by Marine Scotland Science on our website:

<https://www2.gov.scot/Topics/marine/Fish-Shellfish/aquaculture/Diagnostics>

Commercial testing results relate to samples submitted from various third parties. In the majority of cases, from the records held by Marine Scotland Science, the owner or client to whom those samples relate cannot be identified. Therefore, samples and their results cannot be linked to any particular

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source. The sources of commercial samples not only relate to aquaculture sites both within and out with Scotland but may also include samples from transmission trials concerning experimental animals and facilities. Consequently, there are severe limitations in the interpretation of this data.

As previously explained in our response to request FoI/19/01397, a request submitted concerning information on commercial testing by salmon farming, we are unable to provide the information requested in this case. While our aim is to provide information whenever possible, in this instance an exception under regulation 10(5)(e) (substantial prejudice to confidentiality of commercial or industrial information) of the EIRs applies to the information in this case. The reasons why that exception applies are explained within Annex 2 of this letter.

An exception under regulation 10(4)(e) of the EIRs (internal communications) also applies to a small amount of the information you have requested because it is internal communication between Scottish Government officials about diagnostic testing of samples from farmed fish.

This exception is subject to the 'public interest test'. Therefore, taking account of all the circumstances of this case, we have considered if the public interest in disclosing the information outweighs the public interest in applying the exception. We have found that, on balance, the public interest lies in favour of upholding the exception. We recognise that there is some public interest in release as part of open, transparent and accountable government, and to inform public debate. However, there is a greater public interest in allowing officials to discuss preliminary testing and novel diagnostic methods in a professional setting. The final results of the tests discussed in the correspondence being withheld have been published, and the discussion adds nothing to the public understanding of the presence of diseases or pathogens on Scottish salmon farms.

Your right to request a review

If you are unhappy with this response to your EIRs request, you may ask us to carry out an internal review of the response, by writing to

Graham Black
Director Marine Scotland
Scottish Government
Area 1B South
Victoria Quay
Edinburgh
EH6 6QQ

Email: directormarinescotland@gov.scot

Your review request should explain why you are dissatisfied with this response, and should be made within 40 working days from the date when you received this letter. We will complete the review and tell you the result, within 20 working days from the date when we receive your review request.

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If you are not satisfied with the result of the review, you then have the right to appeal to the Scottish Information Commissioner. More detailed information on your appeal rights is available on the Commissioner's website at:

<http://www.itspublicknowledge.info/YourRights/Unhappywiththeresponse/AppealingtoCommissioner.asp>

ANNEX 1

FURTHER CONTEXT RELATING TO TRADE AND SURVEILLANCE IN AQUATIC ANIMALS IN SCOTLAND

The approach taken by the Scottish Government is guided by current international and legislative standards, ensuring the safe trade in live aquatic animals, appropriate surveillance and the detection of aquatic animal pathogens.

The OIE World Organisation for Animal Health Aquatic Code and Aquatic Manual are international standards which provide solid principles to help protect aquatic animal health on a global basis. They include standards supporting safe trade, at the international level, of aquatic animals (fish, molluscs, crustaceans and amphibians) and their products.

Scotland, as part of the Great Britain health zone, has approved disease free status for many of the listed fish diseases specified within Council Directive 2006/88/EC and is also recognised as free from *Gyrodactylus salaris* under Council Decision 2010/221/EU.

Under the current regulations, trade between countries, zones or compartments can only occur between those of equal health status or take place from an area of higher to lower health status – measures to help prevent the spread of disease. Health status is based upon historical testing and appropriate surveillance to prescribed levels, recognised through international processes.

Within Scotland, The Aquatic Animal Health (Scotland) Regulations 2009 (the 2009 Regulations) implement Council Directive 2006/88/EC on animal health requirements for aquaculture animals and products thereof, and on the prevention and control of certain diseases in aquatic animals.

Under these regulations the importation or introduction of aquatic animals from third countries, EU or EFTA member states can only occur if the consignment is supported by a valid health certificate with appropriate health attestations applicable to the health status of the importing country, zone or compartment. No imports of aquatic animals (including ova) can be accepted without appropriate certification testified by the Competent Authority of the exporting country. These measures help to reduce the risks associated with the trade in live aquatic animals.

In addition, the Trade in Animals and Related Products (Scotland) Regulations 2012 require that the importer or consignee of ova from an EU Member State notifies the Scottish Ministers prior to arrival of the consignment. This notification is made to the Fish Health Inspectorate and allows them to confirm that the source is located in a country, zone or compartment recognised as free from the

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appropriate listed disease. They will advise the importer if the source does not meet the required health standards and the consignment cannot enter the country. Consignments originating from a third country must enter Great Britain via a Border Control Post where the accompanying health documentation is presented to the official veterinarian. If the consignment fails to meet the health standards, permission to enter will be refused.

Under the 2009 Regulations, Aquaculture Production Businesses (APBs) can be granted authorisation to farm, where it is considered that the operation of the business will not lead to an unacceptable risk of spreading disease. Specific conditions of operation are stated, including the requirement for the business to follow good bio-security practice at each farm site in operation.

Such measures include the establishment, maintenance and compliance with a Biosecurity Measures Plan (BMP) aimed at identifying and mitigating the risk of contracting and spreading disease at the site level. One of the minimum requirements of a BMP is to detail the minimum health status of aquaculture animals to be stocked on the farm site, to ensure that stocks being placed on the farm site shall only be sourced from farms of an equal or higher health status and where required, certified as such. Specific measures for operators importing or introducing stocks may involve the disinfection of ova to reduce the risks from horizontal transmission of pathogens and disease, or the initial isolation of new stocks brought on site as a precautionary disease control measure.

The BMP is subject to inspection by Marine Scotland's Fish Health Inspectorate as part of the aquatic animal health risk-based surveillance programme.

Aquatic animal health surveillance, undertaken in accordance with Council Directive 2006/88/EC and the 2009 Regulations, is designed to support the early detection of disease and to help minimise the risks of disease introduction and transmission. One aspect of surveillance is an active risk-based surveillance programme aimed at assessing the risk any individual site poses to contracting and spreading diseases and their pathogens. The greater the risk posed, the greater the frequency of inspections conducted. The movement of aquaculture animals onto a site, including imports or introductions from other areas is one factor which can increase the risk an individual site poses and result in a higher inspection frequency.

ANNEX 2

REASONS FOR NOT PROVIDING INFORMATION

An exception applies

An exception under regulation 10(5)(e) of the EIRs (substantial prejudice to confidentiality of commercial information) applies to the information you have requested. This exception applies because disclosure of this particular information would, or would be likely to, prejudice substantially the confidentiality of commercial information relating to the companies who have provided the samples, and thus cause substantial harm to their commercial interests. The companies who use our commercial testing service are most usually commercial veterinary companies. We also carry out

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some contract work for overseas interests, again not salmon farming companies themselves. Disclosing the results of samples submitted to us for analysis, with the expectation that results would be confidential, is likely to lead to the loss of clients for the commercial companies using our service. Their clients are likely to be a) extremely disappointed that this information was disclosed and b) concerned that any future use of their diagnostic services may be disclosed. Release of the information is therefore likely to cause substantial harm to their interests. Further, substantial harm is likely to be caused by the release of this information to the salmon farming companies themselves. Some of the commercial work that we carry out relates to experimental trials, and does not have any relevance to the status of farmed fish. We are unable to separate out any such results from data originating from farmed fish samples. In addition, the testing is done to confirm the presence of pathogens, and results do not necessarily indicate the presence of disease. Disease diagnosis is not made from sample analysis, and pathogens are often present in clinically healthy fish. Any data from our commercial sampling activities cannot, therefore, provide a picture of the fish health status of the Scottish aquaculture industry, but has the potential to provide a misleading picture of the industry in Scotland because we are unable to provide any context to explain the results. This is likely to cause substantial harm to the aquaculture companies involved in Scotland.

This exception is subject to the 'public interest test'. Therefore, taking account of all the circumstances of this case, we have considered if the public interest in disclosing the information outweighs the public interest in applying the exception. We have found that, on balance, the public interest lies in favour of upholding the exception. We recognise that there is a public interest in disclosing information as part of open and transparent government, and that there is a strong public interest in providing information about salmon farming and fish health. However, there is a greater public interest in protecting the commercial interests of companies that help to ensure that Scottish farmed fish are as healthy as possible. There is also a public interest in allowing such analysis to be carried out by Marine Scotland scientists. This builds capacity and ensures best use of publicly funded diagnostic facilities, meaning that Marine Scotland are able to respond to emerging diseases in aquaculture and deal effectively with any disease outbreaks. The loss of this work to Marine Scotland, which is what would happen either through commercial veterinary companies losing clients or those same companies choosing to get future samples analysed elsewhere (probably out with Scotland), is not in the public interest. Further, the limitations of the information for building a picture of the health status of the aquaculture industry in Scotland, are such that there is a limited public interest in that information on its own merits.

Yours sincerely

Neil Purvis

MSS : Aquaculture and Fish Health

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