



Workshop to explore the Aquaculture Stewardship Council standards and their relevance to interactions between salmon farming and wild salmon and sea trout



Tulloch Caledonian Stadium, Inverness

13th September 2017

The Atlantic Salmon Trust (AST) and Fisheries Management Scotland (FMS) jointly convened a workshop to discuss the [Aquaculture Stewardship Council salmon standards](#) and their relevance to interactions between salmon farming and wild salmon and sea trout. Attendees included representatives from District Salmon Fishery Boards and Fisheries Trusts, International Sustainability Unit, Aquaculture Stewardship Council, Marine Harvest, SSPO, Marine Scotland, Local Authority Planners, SEPA, Acoura Marine, Fidra and Sainsburys.

The following is a report of the key topics of discussion during the meeting.

1. Introduction

Presentation Link: <http://fms.scot/wp-content/uploads/2017/10/ASC-Workshop-FMS-AST.pdf>

Sarah Bayley Slater (AST) and Alan Wells (FMS) provided a short introduction. On paper, there are a number of elements of the ASC standards that are of potential benefit to wild fish interests and these were identified as: Strengthening of area-based management; establishing a maximum sea lice load for management areas; Farm by farm publication of sea lice levels in real time; a requirement to monitor sea lice levels on out-migrating salmonids; maximum permitted levels of lice/fish; low tolerance of escapees per production cycle; evidence of regular and meaningful consultation and engagement with community representatives and organizations; and - in the original standard - no allowance for producing or holding smolts in net pens in water bodies with native salmonids.

ASC is one part of a much wider picture, and the importance of changes to the current regulatory regime in Scotland, to ensure that regulation meets the needs of both wild fish and the industry was emphasised throughout the day.

The purpose of the workshop was to provide those involved in the management of wild fisheries a greater understanding of how the ASC standards should work in practice, the information that wild fish interests should expect to receive and crucially how the standards are monitored and enforced in the event that a farm cannot meet the standards. This will allow us to make an informed consideration of the value of ASC in its current and future forms to the health and welfare of wild salmonid fish.

2. Lessons from the Marine Stewardship Council

John Goodlad, fisheries advisor to the International Sustainability Unit provided an update on the role of the International Sustainability Unit in discussions between the aquaculture industry and wild fish interests, and the changes to sea fisheries that have arisen through the Marine Stewardship Council.

The ISU is one of the Prince of Wales' charities with a focus of sustainability across a range of work programmes. The Prince of Wales has taken an interest in interactions issues between wild fish and fish farming following a visit to the Marine Harvest Loch Leven site, which had recently gained ASC certification. This led to a working group being formed, chaired by John Goodlad to discuss the lessons that might be learned and how the Scottish salmon industry could become more sustainable. The group has recognised the importance of ASC in making progress on this issue and AST and FMS have convened this workshop as a result of those discussions.

20 years ago, marine fisheries were heavily overfished, poorly managed and unprofitable. Initially there was great hostility from the fishing industry to adopting the MSC standard. The breakthrough came when retailers made it clear that they weren't going to sell seafood that wasn't certified and sustainably harvested. This commercial driver was crucial to the success of MSC certification.

Huge changes were required for the fisheries in Scotland to meet the 3 principles which underpin the standard:

- sustainable stocks;
- demonstrate that minimum environmental impact occurs;
- demonstrate that an effective management regime is in place.

Now, 70% of UK fisheries and 15% of fisheries worldwide are certified. Certification ensures market access to retailers, but does not appear to result in a price premium. It also allows the fishing industry to demonstrate sustainability.

Discussion:

- The discussion focussed on the third of the principles outlined above. It was noted that regulatory change was required to support the sea fisheries industry in achieving MSC certification – examples quoted were proper enforcement of quotas and the EU-wide move to adopt Maximum Sustainable Yield as a guiding principle.
- The presentation highlighted that although the industry experience with MSC was initially challenging it became evident that it was highly beneficial and has been widely adopted.

3. Marine Harvest Implementation of ASC

Presentation Link: <http://fms.scot/wp-content/uploads/2017/10/ASC-Workshop-Marine-Harvest.pdf>

Ben Hadfield, Managing Director of Marine Harvest Scotland discussed the thinking behind Marine Harvest embracing ASC certification and discussed some of the issues that the industry has encountered, particularly in relation to sea lice control.

Marine Harvest want to operate in a more transparent manner and view ASC certification as a vehicle to demonstrate a different form of behaviour. It was accepted that salmon farming has been done badly and under a cloak of secrecy. Certain parts of the wild fish sector simply wish to close down the industry at all costs, and there are deniers in the aquaculture industry who underplay the impacts on wild fish – but what do the fish get out of this situation? Marine Harvest are concerned about the issues faced by wild fish and wish to work together with the fisheries sector to address these.

The recent increases in sea temperatures were discussed, and the poor performance of the industry in relation to mortalities and sea lice challenges was highlighted. Whilst sea lice levels on farms do not, in themselves, cause widespread losses of farmed fish, the management actions (treatment, crowding, movement etc.) does lead to problems. Marine Harvest acknowledged that a loss in control of sea lice in 2015 was unsatisfactory. In January 2016 Marine Harvest Scotland took the decision to increase efforts to address these issues through investment in new technology and early intervention. It was noted however, that this was not well communicated to the wild fisheries sector as the focus was on delivering solutions. Information on sea lice levels is now published on the Marine Harvest website.

With regard to production of smolts in freshwater lochs, Marine Harvest accept that genetic introgression is a risk and therefore commit to deliver proposed changes to the standard (see below) and, will also commit to two further safeguards: to stock fish at 15g rather than 5g to minimise the chances of early escapes; commit to close the farm, and move it to closed containment, if escapes and introgression occur.

Finally, the commitment of the industry was summarised by Marine Harvest as follows:

- The whole Industry led by MH & SSPO will become more transparent.
- It will acknowledge uncontrolled sea lice levels as a hazard to post smolt mortality
- It will contribute more financially, technically and politically
- We will seek to work with FMS as a professional Industry, confident in its product, use of the environment and conscious about reducing the risk our operations may pose to sensitive species and habitats.
- We will resource measures to further control lice and work with you to enhance and safeguard wild salmon/sea trout populations.
- We will defend our business and product against unfounded criticism
- We will fund and seek partners that can reduce wild fish decline
- We will be confident and professionally critical of your organisations when we feel the fish are not getting their share of the deal.

Discussion:

- Marine Harvest were asked if they are content with the principle in the ASC standards of a feedback loop between wild fish monitoring and farm management. Marine Harvest accept this principle and are keen to understand the mechanics of doing it well. MHS have recruited two oceanographers to look at developing off-shore facilities, avoiding sea lice exposure by developing expertise in modelling, in order to avoid the initial sea lice challenge. This is a move to treating farm-derived nauplii like a contaminant/pollutant.
- The recent situation in Loch Linnhe (where sea lice levels in 2017 were higher than recent production cycles, resulting in an early harvest) was discussed, in relation to the ASC standards. Marine Harvest noted that they would need to apply for a variation request, part of which would be to highlight what they would do differently in the next production cycle.
- It was noted that ASC certification should not be seen a single event but rather a process that evolves and improves, and that sometimes perfect can be the enemy of good. If ASC leads to improvements for wild fish, then it should be supported.
- It was felt that the attitudes at the extreme ends of the debate (within both sectors) wouldn't be there if there wasn't an issue to discuss – it is not within the gift of those in the room to control those extremes but it is within their power to enter dialogue and find solutions. The recent initiatives by MHS were welcomed, whilst noting that there is a need to build trust and demonstrate positive outcomes to help overcome the long history of mistrust.
- MHS were asked if they intend to use ASC certification, and the actions it requires, as part of engaging with the planning process. MHS responded that they are keen to move away from a set piece argument at the point of planning consent, to a more regular dialogue with wild fisheries interests and planners. It was noted that a more formalised local engagement or *modus operandi* would be useful and should be developed as an outcome of the workshop.
- MHS and Sainsburys were asked what it would mean if a farm lost ASC certification. It was noted that if a company makes a commitment to supply certified salmon, and then fail to follow through, the retailer would be duty bound to stop selling that product and source it from elsewhere. It was reiterated that there was not an expectation for a price premium in future – the driver was to develop and deliver a better product.
- On regulation, Marine Harvest stated that whilst they supported the thinking behind the Scottish Government's recent announcement on regulation of sea lice levels, they believed that 3 and 8 lice per fish was barely credible but was a starting point that should be ratcheted down annually and significantly.

4. Introduction to ASC

Presentation Link: http://www.atlanticsalmontrust.org/wp-content/uploads/2017/10/ASC_Scotland_13-September_chn_short.pdf

Chris Ninnes, CEO of the Aquaculture Stewardship Council provided some background to the certification process. ASC was established in 2010 as an independent, not-for-profit global, voluntary, certification and labelling program. The standards were developed through multi-stakeholder 'dialogues' based around 7 principles addressing key environmental, social and community impacts. The performance indicators developed through this process include several thresholds and require the disclosure of monitoring information. Stakeholder consultation is crucial to the process and the standards require continuous improvement through a 3-5 year cycle of review.

The process of certification, including the role of Conformity Assessment Bodies (see below) was described in detail. Following an earlier question about a variation request regarding the maximum number of lice per fish in British Columbia, the issue was discussed further. This variation recognised that it was becoming apparent that, despite the overarching principle that ASC is a global standard, some indicators did not work across all jurisdictions. It was felt that 0.1 lice per fish was not achievable in Canada due to the large number of wild fish in the area, and the associated sea lice loads. It was noted that the lice species in BC were generalist species, which infest a range of species in addition to salmonids. It was recognised that a consortium of NGOs in Canada were concerned about this variation and were in active dialogue with ASC to bring about changes. It was likely that the proposed changes to another standard (Parasiticide Treatment Index) would also have a regional backdrop (consultation opens 21st Sept 2017).

5. Role of the Conformity Assessment Body

Presentation Link: <http://fms.scot/wp-content/uploads/2017/10/ASC-Workshop-Acoura.pdf>

Richard Beckett, Acoura Marine gave an overview of the role of Conformity Assessment Bodies (CABs). Acoura Marine are an independent, accredited third-party organisation, who carry out the initial assessments and annual surveillance monitoring of producer compliance against the ASC standards.

ASC operates on a 3-year certification cycle – an initial assessment, followed by annual surveillance assessments and then a final year re-certification assessment. It was noted that stakeholder engagement is a crucial part of the certification and assessment processes and that Acoura are looking for ways to improve this. Stakeholder engagement was encouraged via

<https://www.acoura.com/sectors/aquaculture/audits/asc-farms/>

The most important stage of stakeholder input was at the initial assessment point but continuous stakeholder submissions could be given via asc@acoura.com

Two types of variation requests are permitted: Variations Against the Technical Aspects of the Standard (Type 2); and Variations Against the Assessment Process (Type 1). Variation Requests are submitted to ASC by Acoura, and then considered by the ASC. More information can be found on the dedicated VR Site:

<http://variance-requests.asc-aqua.org>

Discussion:

- The issue of the Canadian variation request was discussed in detail, and serious concern was voiced about the potential to 'water down' the standards if producers could not meet specific indicators. It was noted that all variation requests were published on the ASC website and that this was an open process.

- The current, open, variation request for a change to indicator 3.1.7. for all Marine Harvest sites in Norway was also mentioned, and this increased the feeling of unease about the robustness of the process. It was felt vital that any discussion around variation requests on indicators with a bearing on interactions with wild fish must only be taken forward through consultation and discussion with wild fisheries stakeholders. The context in Scotland was recognised as being very different from that of Canada, given the current status of wild fish stocks.
- There was a strong view that environmental protection and reducing environmental impact should be the end point, rather than basing outcomes on what farms can achieve.
- An alternative to granting a variation request was suggested – that if farms in B.C. cannot meet the standards, then perhaps those farms should not be certified. Given the focus of the meeting, our attention was on a small number of indicators that are important to wild fish interests, but it was noted that ASC is more than just indicator 3.1.7.
- The process of stakeholder engagement was discussed. It was felt that the process had not worked well to date, with the onus being on stakeholders to engage, rather than being proactively asked for views. AST and FMS would ensure that all wild fisheries stakeholders were provided with the appropriate information as an output of the workshop.

6. Modification of the standards for salmon smolt production

The proposals for modifications to the salmon and trout standards are currently out for consultation (1st draft consultation closes 21st Oct 2017) and were summarised. This would represent a move from no allowance for producing or holding smolts in net pens in water bodies with native salmonids to allowing smolts to be raised in cages in any water body, as long as the smolt site is certified to the ASC Freshwater Trout Standard. Associated changes to the trout standard for salmon smolts include:

- A genetic baseline must be established for local wild salmon and this should be monitored appropriately to demonstrably ensure there is no (further) introgression
- Appropriate monitoring of wild salmon stocks must be undertaken in collaboration with the local wild fishery organization(s).
- Ongoing wild salmon sampling must be undertaken to confirm that any introgression detected is historic.
- Underwater cameras must be used during feeding periods to minimise the risk of waste feed from the pens.
- Farms must have a minimum fallow period of 8 weeks
- A new requirement for a containment plan under Appendix IV

Discussion:

- It was noted that genetic introgression from escapes was only one of the possible impacts of smolt production in freshwater lochs, and that a range of other potential impacts would need to be considered in any monitoring required as part of the certification process. Specifically, the presence of large 'slob trout' (10lb plus) in lochs containing freshwater production and the potential resulting predation pressure on juvenile salmonids. The presence of large numbers of farmed fish in freshwater and an understanding of what this might mean for homing ability of wild fish were discussed. These issues would be raised through the consultation process and ASC would welcome this input.
- It was recognised that without changes to the standards to allow freshwater cage production of smolts, there was unlikely to be any further uptake of the standards in Scotland. However, some participants suggested that this highlighted the need for regulation, rather than a change to the standards.
- Overall it was felt that shifting the burden of proof onto the operator, and away from wild fish interests was a step in the right direction.

- The possibility of placing a ‘sunset clause’ on this change was discussed. This would mean that the standards would automatically revert to the current situation, *unless* monitoring demonstrated no escapes and no genetic introgression. ASC noted that if there was any introgression in freshwater lochs, this would have to be taken into account in the review process (every 3-5 years).
- The modification of the standards to include freshwater smolt production also highlighted the need for establishing techniques to set the genetic baseline for freshwater lochs and monitor introgression. Marine Scotland Science were asked if they could provide guidance and ASC/ Acoura were asked whether other jurisdictions with similar issues could have helpful information to share.

7. ASC Salmon Standard Principle 3: “Protect the Health and Genetic Integrity of Wild Populations”

A short summary of Principle 3 was provided, followed by a group discussion of the standards.

- There were a number of questions about how the CABs assess the various indicators relating to wild fish interactions, and specifically monitoring. Marine Harvest are open to discussing the approach to such monitoring with wild fish interests and Marine Scotland. It was agreed that this would be progressed with some urgency.
- Local authority planners noted that they are in a very poor position when consenting fish farms. No-one has yet fleshed out where responsibility for wild fish should sit. It was noted that existing requirements for ongoing monitoring required through the planning process have never actually taken place. The ASC standards have the potential to improve this situation.
- Marine Scotland noted that there were a number of potential changes that would be brought forward soon which would represent a meaningful programme of activity. The programme for Government includes a Fish Health Strategy which includes wild and farmed fish. FMS would be a key part of that discussion.
- SSPO agreed that there was a willingness to work collectively, but there was a need to draw a distinction between ASC and wider discussions as, to date, only Marine Harvest have committed to ASC.

8. ASC Salmon Standard Principle 5: “Manage Disease and Parasites in an Environmentally Responsible Manner”

A short summary of Principle 5 was provided, and this included an update on proposed changes to the indicator relating to Parasiticide Treatment Index (PTI) which will be consulted on soon. This was followed by a group discussion of the standards.

- It was recognised that there is a balance between reducing sea lice treatments for wider benefit to the environment and ensuring that there are the appropriate ‘tools in the box’ to keep sea lice under control.

9. ASC Salmon Standard Principle 7: “Be a Good Neighbour and Conscientious Citizen”

A short summary of Principle 7 was provided, followed by a group discussion of the standards.

- The discussion revolved around the audit process, with a view to making this more regular and meaningful. AST and FMS would engage with Acoura to try and agree improvements to this process. A key outcome of the workshop should be an agreed *modus operandi* for local and national engagement.
- It was confirmed that DSFBs and Fisheries Trusts were a key part of the ‘community’ and should be included in any consultations, and receive any information, required by the standard.

10. Closing comments

Whilst there was some disappointment and concern about the potential for variations to the indicators of importance for wild fish interests there was a general view that the ASC standards represented a real opportunity for significant progress to be made between the salmon farming industry and wild fish interests. It was clear that the standards could not be met without regular and meaningful engagement between the two sectors.

The development of a new monitoring protocol for wild fish, with a feedback loop to management, and a move to an area-based sea lice threshold, which recognises the production volume within an area, were all seen as major steps forward. The standards offer the opportunity for a level of accountability, that is missing in the current regime.

Marine Scotland welcomed the positivity, honesty and candid discussion throughout the day and stated their willingness to facilitate dialogue and progress in future.

It was emphasised that changes to the current regulatory regime in Scotland were required, and that an appropriate regulatory backstop could potentially benefit both sectors. Several examples of regulatory and planning lacunas in relation to the protection of wild fish had surfaced during discussion throughout the day. It was also emphasised that whilst the wild fish sector were keen to engage with the industry to make progress, that process of engagement did not negate the need for regulation. It was also emphasised that engagement was not an end unto itself, and progress towards tangible outcomes was the only outcome on which we should be measured.

11. Suggested Outcomes

- FMS to work with Marine Harvest to agree a more formalised process of local engagement or *modus operandi* based on the requirements of the ASC standards.
- AST and FMS to ensure that all wild fisheries stakeholders are provided with the appropriate information to allow them to engage positively with the ASC and Acoura.
- AST and FMS to engage with Acoura to discuss the ongoing audit process for certified farms.
- AST and FMS to meet with ASC to discuss the proposed changes to standards.
- FMS to liaise with Marine Scotland Science on protocols for assessing genetic introgression.
- Marine Harvest, Marine Scotland Science and wild fish interests to discuss how a new monitoring protocol for wild fish, with a feedback loop to management, might be taken forward in Scotland.