

**Note of Aquaculture Common Issues Group meeting held at Friends House,
London. Wednesday 15 April 2015**

For minutes and further information see:

<http://www.seafish.org/industry-support/aquaculture/aquaculture-groups/aquaculture-common-issues-group>

<http://www.seafish.org/industry-support/aquaculture/aquaculture-support/guides-and-information>

Attendees

Andy Smith	British Trout Association
Caroline Roberts	ABPmer
Chris Leftwich	SAGB
Clare Blacklidge	Environment Agency
Craig Burton	Seafood Scotland
David J Fletcher	RAS Aquaculture Research Ltd
David Jarrad	SAGB
David Lees	Cefas
Dawn Purchase	MCS
Elaine Connelly	Defra
Emi Katoh	MRAG
Faith Smith	BBSRC
Greg Clifford	Pig Shed Trust
James Wilson	Seafish Board member
Jennifer Hopkins	FSA
Jill Wilson	FSA
Karen Green	Seafish (Minutes)
Katie Miller	ClientEarth
Keith Jeffery	Cefas
Lee Cocker	Seafish
Mandy Pyke	Seafish
Martin Jaffa	Callander McDowell
Natasha Hill	Fishmongers' Company
Neil Auchterlonie	Cefas
Piers Hart	WWF
Robert Whiteley	Natural England
Sarah Horsfall	SAGB
Stacey Clarke	MMO
Tom Pickerell	Seafish (Chair)

1. Welcome and apologies

Tom Pickerell welcomed everyone to the Aquaculture Common Issues Group meeting. Apologies were received from:

Andrew Mallison	IFFO
Charlotte Maddocks	Tesco
Claire Tibbott	SAGB

Dan Lee
David Mortimer
Estelle Brennan
Huw Thomas
Jonathon Shepherd
Kaori O'Connor
Martin Syvret
Nick Lake
Richard Slaski
Steve Bracken
Suzanne Clift
Toby Parker
Tristan Hugh-Jones
Valeska Weyman

GAA
FSA
Lyons Seafoods
Morrisons
Consultant
UCL
Aquafish Solutions
ASSG
SARF
Marine Harvest
ASC
UFI
Loch Ryan Oyster
GlobalG.A.P

2. Minutes from previous meeting held on 23 September 2014.

The minutes from the previous meeting were agreed.

Matters arising:

2.1 The Environment Agency consultation on proposed update to River Basin Management Plans (RBMPs) closed on 10 April. 250 responses were received. The vast majority of responses were district specific with a number of responses from Local Authorities, NGOs, rural land management interests, water companies, marine interests and representative bodies. These will all be reviewed on the basis of scale of impact. It is difficult at this stage to see themes but there were views on the polluter pays principle, the effectiveness of measures, health and wellbeing. There will be a formal response from Defra later in the summer. The final plan will be published just before Christmas. There will be a similar exercise in Wales.

Actions

2.1.1. Update on the English and Welsh plans at the next meeting.

2.1.2. Look out for publication of spatial planning report which follows this consultation.

2.2. What is happening in other Member States with regard to River Basin Management Plans?

Elaine Connolly has provided this link to the Commission's review of the 2009-2015 RBMPs which will give info on what other Member States are doing.

http://ec.europa.eu/environment/water/participation/map_mc/map.htm

Species and industry focus

4. Focus on trout. Andy Smith, BTA.

http://www.seafish.org/media/1391561/acig_april2015_bta.pdf

There are around 350 registered (trout) businesses across the UK, made up of mainly SME's, owner/proprietor, employing around 1200 jobs. The table market (farmgate) for rainbow trout is circa £25 million (stable / slow decline); for brown trout circa £3 million (stable), and for large trout circa £16 million (growing). Plus: trout restocking circa £26 million and trout fisheries (est. turnover £150 million).

Discussion

- **Q.** How does trout compare on price with cod and haddock? **Answer.** Trout is cheaper than line caught cod and haddock, and cheaper than salmon
- **Q.** How does price compare with salmon? **Answer.** Fish is generally not a cheap option in comparison with chicken, beef and pork.

- It is very difficult, when talking about food security globally, to apply this to the UK position. Seafish talks about the 'Big Five'. A lot of trout is exported. It is not straight-forward to talk about producing in the UK to feed the UK.
- There is very little practical Government support, particularly in England. There was mention of a Cefas regulatory portal which is in the pipeline. The aim is to support the aquaculture sector with guidance on the regulatory process at each stage of development and production. The prototype is likely to be hosted on the Seafish website.
- **Q.** The biggest producer of trout in the EU is Denmark where I would anticipate the costs are high. What are the profit ratios in different sectors? **Answer.** No big trout are likely now. The future is portions. They use a recirculation system in Denmark, predominantly 4oz to 5oz trout and they use the eggs – so everything is put to use.

5. Ongoing work on norovirus. David Lees, Cefas.

http://www.seafish.org/media/1391555/acig_april2015_norovirus.pdf

Various work programmes were explained surrounding what influences Norovirus risk:

- Desk study of risk factors for Norovirus (NoV) in shellfish water catchments in England and Wales Correlation between number of sewage spills (CSO discharges) and NoV levels in oysters
- Fate and behaviour of norovirus in shellfish waters
- Characterisation of norovirus in sewage and treated effluents
- Assessing the contribution made by the food chain to the burden of UK-acquired norovirus infection
- Retail level study of norovirus in oysters
- Virus viability

Discussion

- **Q.** Could we compare the results from the CSO alert system and these results? **Answer.** I am not sure that is possible but it would be interesting. Recent court cases will help as it is likely going forward that water companies will have to make more information available on sewage spills and effluent.
- The difficulty has always been linking illness caused by Norovirus and the source of the virus. This research programme will make it easier to quantify the link between the environment and Norovirus but it will still be difficult to link Norovirus and the environment with illness in consumers.
- Within the CSO text alert programme underway in East Anglia harvesters have indicated they are making management decisions and taking action on the back of the text alerts they are receiving. It would be interesting to see if these changes help reduce Norovirus levels in oysters.
- It needs to be emphasised that even if consumers stop consuming oysters there will still be Norovirus in the community. The crucial part is that we must convince Government agencies of the need to improve water quality and do more with untreated sewerage. A comprehensive UK-wide text alert system has to be the aim.
- **Q.** Under the retail level study of norovirus in oysters will the samples be followed to assess the impact on the community of samples that test positively? **Answer.** Under this study we will not be making that connection but this is something the FSA could take forward.
- **Q.** There is a lot of diffuse pollution. Is there any evidence what proportion of Norovirus outbreaks are attributed to sources other than water quality? **Answer.**

- There is a lot of agreement that there are other sources but there is no real data to support this assertion i.e. one person with gastro enteritis can cause a lot of problems.
- We need to see a change in the attitude of water companies. There have been cases where there were three mechanical breakdowns. The water company was not fined for this but was fined for not letting industry know. There are instances where water treatment facilities, which are self-regulated, are not being worked to full capacity and this can create more CSOs.

6. SAGB Update - WFD/RBMP's, text alert and Gigas. David Jarrad. SAGB.

http://www.seafish.org/media/1391573/aciq_april2015_sagb.pdf

Under the Water Framework Directive and the consultation on the River Basin Management Plans the key proviso of the SAGB is that the ambition for all designated shellfish waters is that they should aim to achieve Grade A status and that designated shellfish harvesting waters are given the mandatory protection that is required. Norovirus is a significant threat to industry (it does not respond very well to traditional depuration process) and water companies should ensure untreated human waste is not put in waters where it can affect shellfish harvesting waters.

A small trial Text Alert project was run by Seafish working with a water company to develop a system where events likely to affect the water quality were notified to shellfish cultivators. This was the first stage of a three stage process to ensure aquaculture companies throughout England have access to predictable quality water. SAGB took responsibility for the pilot in March 2015 i.e. enquiries, registration and administration from Seafish. This project has now entered its second stage which involves:

- A review of the current pilot system, its operation and an assessment of its impact (on recipients)
- Production of a written report on the effectiveness of the pilot text alert system.
- Assessment of the viability of the data analysis system developed by SAGB member Myles Bloodsmyth, Exmouth Mussels, for use in other harvesting areas.
- Application to MMO for EMFF funding and others to request funding for the 'rolling out' of the TAS to other areas of England. This is planned for July/August 2015.

The Pacific Oyster (*Crassostrea gigas*) is the mainstay of the cultivation industry in the UK and any decisions made could have a serious impact on UK aquaculture. Rob Whiteley, Natural England was successfully seconded to SAGB and he secured a decision from Defra on the species and Rob's final review should allow Defra to make that decision. The timeline for the important species response to the Gigas issue has not been defined. This is viewed as an economically important species and the management measures adopted won't necessarily be the same as for other non-native species.

The 46th Annual Conference SAGB Dinner and AGM is at Fishmongers' Hall, London on 19 and 20 May 2015. The Programme and Booking Forms are available to download from <http://tinyurl.com/sagbdropbox> or can be emailed on request by contacting Claire at Projects@Shellfish.Org.UK

Policy

7. New Seafish Domestic Aquaculture Strategy Manager. Lee Cocker, Seafish.

http://www.seafish.org/media/1391576/acig_april2015_seafish.pdf

Seafish is funded by a levy on the first sale of seafood products in the UK, including imported seafood. Levy is collected on all 'wet' farmed marine animal species but not canned or bottled, salmonids, tilapia or pangasius. Around 5% of the levy (£400,000) comes as a result of aquaculture production including imported shellfish (e.g. warm water prawns), fishmeal imports, sea bass/sea bream and UK farmed mussels. A review of the services provided by Seafish in relation to the aquaculture industry was conducted by Maritek Worldwide Ltd from February to July 2014. Seafish has supported the aquaculture sector but it has never been identified as a standalone objective/work stream in any Corporate Plans since 2004, and there has been no dedicated 'aquaculture' role/position. Via the Panels, these recommendations have fed into the new Seafish Corporate Plan 2015 – 2018. These include maintaining the important bivalve, and import work; continuing the highly regarded forums i.e. ACIG, CLG; and creating a new domestic strategy role to establish working relationships with key stakeholders – internal/ external; engage a wide range of stakeholders to identify/agree main challenges and opportunities facing UK aquaculture; and scope out and produce work programme strategies for each nation. For example Seafish is very keen to get the English Aquaculture Consultation Group up and running again.

Discussion

- This is very welcome and it is great hearing about the need for engagement.
- Lee's role is not to provide technical support but to support the strategic development of the sector.
- There was mention of the historic involvement of Seafish in the 1980's and 1990's in work focused on technical issues in shellfish and finfish, and on the Ardtoe lab in Scotland, and in particular in cod farming. Current lobster cultivation programmes still draw on this work, and there are close links between cod and halibut. The closure of this facility was a big loss.
- The Seafish review was not that positive about Ardtoe with the view that resources could have been directed more wisely. There is a different landscape now and different challenges.
- **Q.** This does come down to the question as to where the mandate to support the aquaculture sector comes from i.e. Government. **Answer.** We understand that aquaculture remains a priority area for Defra. Seafish will be exploring the idea of an England Aquaculture Producer Organisation. There is certainly support at an EU level to expand the aquaculture sector but Member States must take the lead.

Action: Circulate link to Seafish review paper.

8. Sustainable development of aquaculture in the context of WFD and MSFD implementation. Neil Auchterlonie, Cefas.

http://www.seafish.org/media/1391564/acig_april2015_cefas.pdf

Neil updated the group on a project undertaken by Cefas on Sustainable Aquaculture Development in the context of the Water Framework Directive and the Marine Strategy Framework Directive. The work was commissioned in late 2013 with the aim to gather information on European aquaculture development in the context of environmental protection. The focus was on European environmental legislation including the Water Framework Directive (WFD) and Marine Strategy Framework Directive (MSFD). The

project provides background information for a guidance document on the application of environmental legislation in relation to aquaculture that will be developed by the Commission. Recommendations fall into four categories (1) for national administrators and regulators (2) for the aquaculture industry (3) for further research (4) for the EC.

Action: Circulate the reports (or links to the reports).

9. Aquaculture in marine plans. Stacey Clarke, MMO.

http://www.seafish.org/media/1391570/acig_april2015_mmo.pdf

Marine Plans are progressing: East Marine Plan was completed in April 2014, South marine plan is in progress, with all marine plans due to be completed by 2021. An implementation and monitoring plan (IMP) was published on 27 June 2014 which sets out the approach to plan implementation and monitoring approach being adopted by the MMO. The Marine Information System MIS (is to be used alongside the statutory marine plan document) and is an interactive tool which allows users to pick an area of interest – from climate change to tourism and recreation – and see the plan policies this involves. There are specific references to aquaculture within the marine plans.

Discussion

- **Q.** If you apply for a licence now to set up a fish farm what will be different?
Answer. Under the new plan for the East we have not received any applications yet so this has not been tested yet.
- **Q.** Does this replace Several Orders? **Answer.** No this is different altogether and Several Orders still apply. Several Orders infer a property right and allow the user to take the property out of public use.
- The Marine Plans should accelerate the planning process, will be used to influence licensing decisions and should lend more weight to aquaculture.

Action: Circulate link to the MIS.

New initiatives

10. BBSRC and NERC Planning for a Sustainable Aquaculture Industry Initiative.

Faith Smith, BBSRC.

http://www.seafish.org/media/1391558/acig_april2015_bbsrc.pdf

The Sustainable Aquaculture capacity-building research call (phase I) was launched in September 2014. The priority challenges are: Assessing the long-term environmental capacity for increased aquaculture production; New technologies for monitoring and predicting weather and climate-related hazards and risks to the expanding aquaculture sector as it moves into environments more exposed to wind and waves; Determining interactions between wild and farmed fish; Mechanisms of infection and spread, including environmental interaction; Tools and technologies for assessment and diagnostics; Biology of health and resistance (including gut health and genetic resistance); Immunology of infection and protection, and vaccinology. Under this phase 61 applications were received from over 120 different academics. As a result 21 projects were funded from 13 ROs. The next step is to foster industry involvement (following a workshop in March 2015) and pull together industry, policy and funding stakeholders.

Discussion

- **Q.** What is the budget? **Answer.** There is a budget of £5.8m (£5m from BBSRC and NERC).
- **Q.** This is being led by academics but does require industry engagement. In my experience academics apply for funding for a project and then approach industry for support. But when industry approaches academics for support there never seems to be any funds available. How can this be addressed? **Answer.** We

realise that industry does need support and have looked at how we can bring about better collaboration between industry and academia.

- **Q.** There did seem to be a big gap between industry and academia at the workshop. How can this be addressed? **Answer.** The funding is there for applied industry research. Industry needs to approach us and overarching support is needed to drive this forward.

11. Introduction of re-circulating aquaculture systems (RAS) for Southern England (turbot farm on Portland). Joint Landfish/Cefas workshop to discuss the Landfish project on Portland. Keith Jeffery, Cefas.

http://www.seafish.org/media/1391567/aciq_april2015_landfish.pdf

Keith outlined how this development had come about and the workshop that had been held. Landfish has investigated many potential re-circulating aquaculture systems (RAS) sites in Scotland and the West Country. An MOU was signed with Cefas in July 2014. The most advanced is a site found on Portland with the aim to farm turbot. The proposed building will be 5,000 square metres. This site is close to other potentially compatible organisations. It is likely to employ 4 – 6 jobs on the farm and there is potential for an add-on processing plant. Landfish has secured outline planning permission.

Discussion

- **Q.** I am a passionate advocate of aquaculture development but can't understand why turbot has been chosen, when there is no market in the UK for turbot. This is not the first turbot farm in the UK. There is push to develop large scale RAS systems which will take the fish to full market size. Are you sure there is a market? **Answer.** A number of species have been considered.
- It is important to know your market. There are views that the best use of RAS is to grow small fish for re-stocking purposes. There is certainly interest in growing turbot to 2kg.
- A lot of issues were flagged up at the workshop. Whilst this sort of initiative should certainly not be discouraged, and RAS could certainly have a place in the future, every venture that does not succeed hinders future economic planning and the UK aquaculture sector cannot afford for another project to fail.
- Desk research is crucial and there is concern that the aim to take turbot to full market size is not the right approach and turbot is not the right species. The approach should be to grow small fish for re-stocking (producing juvenile fish for further growth in another system).
- There was constructive feedback at the workshop. This was all about collaboration and the advice received has been taken on board. There is a possibility that the species could change to sole.

12. North Devon Aquaculture Centre Feasibility Study. Caroline Roberts, ABPmer.

http://www.seafish.org/media/1391552/aciq_april2015_abpmer.pdf

This is a North Devon Coast Area of Outstanding Natural Beauty (AONB) initiative which has involved the Northern Devon FLAG, Seafish, and Devon and Severn IFCA to look at the sustainable development of Northern Devon's fishing communities. The aim of the project is to scope: the need and potential for an aquaculture centre in Northern Devon – including local demand for services; potential stakeholders in the commercial, research and environmental sectors; the optimal operational model, size and location; potential funding sources. A project workshop has looked at the demand/needs analysis to appraise the options and review funding sources. The four main themes that emerged

were: the development of an information hub – ‘one stop shop’; diversification opportunities including hatchery, land based RAS, seaweed; vocational training and education; and conservation and restoration opportunities. The draft report is due at the end April 2015 with the final report published in May 2015.

Discussion

- **Q.** Did South West Water attend? **Answer.** No but they have engaged.
- **Q.** Have terrestrial farmers engaged, as 98% of nitrates are coming from the land? **Answer.** We did invite landowners, but no farmers, but we are very happy to engage.
- **Q.** Are these B or C category waters, as Torridge has a history of water quality problems. **Answer.** It is a mix but mostly B class in the producer area. However we do acknowledge that water quality is a weakness and could limit potential.
- If water quality is such an issue this should have been considered first and foremost.

12. Any other business/next meeting

Aquaculture meetings are held twice a year to dovetail with the CLG. The next meeting will be in September 2015. The suggested date is Tuesday 15 September. The group will be canvassed for agenda topics. Possible topics mentioned for the next meeting are:

- Discussion-led meeting on aquaculture strategy especially if we could get all the Devolved Administrations present. Could do with a wish-list of who we would like to be present.
- Mussel farm that took ten years to get a license.
- The first ACS accredited oyster farm is in Jersey.
- Artisanal oyster initiative in Porloc, North Somerset (Mumbles Oyster Company). Although small this is being done very well. This is an ‘A’ class water.