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

1. Welcome and apologies

Tom Pickerell welcomed everyone to the Aquaculture Common Issues Group meeting.

Attendees

Alex Caveen	Seafish
Birgit Oitmann	Cefas
Caroline Roberts	ABPmer
Catherine Miller	FSA
Chris Leftwich	Fishmonger's Company
Clare Blacklidge	Environment Agency
Craig Burton	Seafood Scotland
Dan Lee	GAA
David Jarrad	SAGB
Dawn Purchase	MCS
Greg Clifford	Scallop Ranch Ltd
Heather Jones	Scottish Aquaculture Innovation Centre
Jill Wilson	FSA
Jodie Clarke	NERC
John Holmyard	Offshore Shellfish Ltd
John Humphreys	University of Bournemouth
Jonathan Shepherd	Seafish Board
Jose Constantino	Welsh Government
Justyn Jones	Small World Productions Ltd
Karen Green	Seafish (Minutes)
Katie Miller	ClientEarth
Caitriona Shannon	University of Leeds
Keith Jeffery	Cefas
Lee Cocker	Seafish
Mandy Pyke	Seafish
Mark McCaughan	DARD
Martin Jaffa	Callander McDowell
Mike Platt	Consultant
Patrick Blow	Marks & Spencer
Peter Andrews	BRC
Peter Richardson	MCS
Piers Hart	WWF
Richard Slaski	SARF
Robert Whiteley	Natural England
Roger Hall	Porlock Bay Oysters

Shaun McLennan	Defra
Stacey Clarke	MMO
Tom Pickerell	Seafish (Chair)

Apologies were received from:

Beverley Küster	FSA
Charlotte Maddocks	Tesco
David Mortimer	FSA
Estelle Brennan	Lyons Seafoods
James Wilson	Seafish Board
Jamie Smith	SSPO
Jane Tait	FSA
Karen Alexander	SAMS
Kate Hedges	Defra
Martin Syvret	Aquafish Solutions
Melony Nichols	Thomas Shellfish Limited
Melissa Pritchard	New England Seafood
Neil Aucherlonie	Consultant
Oliver Robinson	BTA
Simon Kershaw	Cefas
Steve Bracken	Marine Harvest
Suzanne Clift	ASC
Toby Parker	UFI

2. Minutes from previous meeting held on 15 April 2015.
The minutes from the previous meeting were agreed.
Matters arising:
Various links were all circulated + there were a number of topics suggested for the next meeting which are being covered today.

Species focus - oysters

3. 'Porlock Bay Oysters – A Community Story'. Roger Hall, Porlock Futures Community Interest Company.
http://www.seafish.org/media/1450452/acig_sept2015_porlockbayoysters.pdf
Roger explained the aim of Porlock Bay Oysters to create jobs, help the local economy and generate profit. This profit will be to help to develop more community projects.
A successful trial has been carried out and the company is now registered as a Community Interest Company and a commercial operation is due to commence in spring 2016. The project has been supported by grants from Fishmongers' Company, Exmoor National Parks Authority, Porlock Parish Council, EU Fish and Chips Fund and Hinkley Point Community Impact Mitigation Fund, as well as local financial support.
Discussion

- **Q.** There was mention of creating employment opportunities for local young people, has this happened? **Answer.** We are not quite there yet but are hopeful. We have developed links with the local College and with Seafish, and are employing some local people on a part time basis. We are also looking to employ an Operations Manager. There was the offer of links to Bridgewater College.
- **Q.** Which is the nearest inshore port with aquaculture farming? **Answer.** The nearest would be Devon or Cornwall. We have no local competition and this also helps with biosecurity issues.

- **Q.** What have been the biggest problems? **Answer.** Cashflow because of the need to buy seed oysters. We have been advised that at any one point we are six months away from bankruptcy.
- **Q.** What turnover do you need to break even? **Answer.** We are aiming for 500,000 oysters per year by year 6. We need to produce 300,000 to 500,000 to break even.
- **Q.** Although you have a Class A water you mentioned depuration. Where is this going to happen? **Answer.** We have planning permission to convert a derelict shed in Porlock Weir into a depuration plant.
- This is an excellent project and is great news for the industry as a whole. It is hoped it can be an example to others.

4. 'A reappraisal of the history and economics of the Pacific oyster in Britain'. John Humphreys, Bournemouth University and Chairman, Southern IFCA's Technical Advisory Committee.

http://www.seafish.org/media/1450455/acig_sept2015_pacificoysters.pdf

John estimated that currently 1,200 tonnes of Pacific oyster are produced annually; 67% is exported across the globe from France to south-east Asia; and that estimated total economic contribution including indirect and induced effects is £13 million (5 times the value at first sale) gross output and GVA (Gross Value Added) = £10 million. He also illustrated that in 1851 43,000 tonnes of Pacific oysters were produced and this increased to 120,000 tonnes in 1871, but dropped to 3,500 tonnes in 1886. However production in 2012 is estimated at 1,200 tonnes. He posed the question with a world market of 4 million tonnes and growing, a coast with over 150 fertile estuaries and a warming climate and sea temperature why is British oyster production 100th of what it was and why is British oyster production 100th that of France?

Discussion

- Issues surrounding limited class A waters, contamination and cash flow were raised.
- British consumers don't eat shellfish, and it is often difficult to buy. This was countered by reference to a Waitrose article which mentioned that when Waitrose markets shellfish it sells.
- There could be a 'visual amenability' issue with shellfish and the landscape. Consumers, if they have seen an aquaculture operation, are likely to be hostile because this will be perceived to be a blot on the landscape of the particular port, harbour or bay.
- Billingsgate market used to sell 500 million [CHECK FIGURE] oysters annually in the 1870's and there was been a major decline over the following years. There were issues over pollution, contamination and illness and the industry never recovered. It is not easy to get good publicity. The UK is doing well at the moment due to problems in France. However the problems in France raise the question over whether intensive French production has caused these problems. It is worth noting that in the 1870's this would be the native oyster not Pacific.
- There is the appetite in Scotland to scale up operations however Local Authorities have been reluctant to approve as they felt it was not appropriate relevant to the local economy.
- Q. Have you considered the benefits of an expanded industry in addressing issues over climate change, carbon fixing and ocean acidification? Answer. Mussel and oyster production does generate nutrients and there is evidence that

if you removed oyster and mussel production from a harbour you could do a lot of damage, but this has not been studied or modelled.

- There is a big difference between French and UK production figures. In France there is an infrastructure which supports the industry and lets it grow. In the UK the infrastructure does not support growth. There are issues with marine planning over Marine Conservation Zones, SACs and areas of Special Interest (Poole Bay was cited as an example). There are a lot of restrictions.

Plans and strategy

5. Practical experience of the regulatory framework. John Holmyard, Offshore Shellfish Ltd.

John gave a synopsis of his own experience in getting an offshore mussel farm off the ground. In recognising that volume production to keep prices down was the only way to compete economically, an offshore site in the South West was really the only real option. In 2007 there were no marine farms outside the estuaries so there was no template to follow and no definitive way forward. The help I had from Seafish and CEFAS was words and not any practical actions. It took a year to demonstrate the feasibility of the project and the scale to aim for.

As this was pre marine licence days, so this was an MFA application and a whole host of organisations needed to be consulted including Natural England, the Environment Agency, English Heritage, Town Councils, Local Authorities, the Food Standards Agency, Crown Estate and the Ministry of Defence. The planning application had to be published in the local newspapers to invite comments. Responses were received over issues of navigation, environmental concerns and socio/economic issues. The local press was generally against the idea and there were serious objections from others within the shellfish industry. As there were no existing offshore suspended culture mussel farming in the UK there was no model for evidence so research and modelling exercises had to be undertaken with respect to possible environmental concerns. The initial advice was that the licence application would take 10 weeks, but it took a year. The main delay was that Natural England did not have the necessary background information to advise the MFA and were reliant on our modelling and research. Obtaining the Crown Estate lease took another year.

The first harvest was spring 2015 but there are still difficulties. A whole host of organisations still need to be kept informed of activities. The site is offshore and must have a sampling programme which is a costly and time consuming activity. There is little clarity on who has jurisdiction 3-6 miles offshore and the water classification has not been received yet. There is no great rush in the UK to develop an offshore aquaculture industry but for this to happen there needs to be a central hub of information.

The main issues were over: interpretation (it should not be down to one person); a lack of technical knowledge in the organisations advising the regulators; jurisdictional concerns over who is legally responsible for collecting samples; too much use of the precautionary approach; the practicality of the regulations; co-operation and coordination between agencies, regulators and the industry.

Discussion

- **Q.** Given that shellfish farming is not considered to be an issue re environmental damage to the seabed (the opposite to how bottom-trawling is viewed) could there be options for shellfish farms in Marine Protected Areas (MPAs)? **Answer.**

We withdrew our application for sites within the MPA and applied for a site adjacent to the MPA, although to do even that we still had to carry out an environmental baseline study, and also have to follow it up with a long-term program of ongoing monitoring, and this is costing a lot of money.

6. Cefas regulatory toolbox. Keith Jeffery, Cefas.
http://www.seafish.org/media/1450458/acig_sept2015_cefas_regulatoryportal.pdf
There has been concern about the regulatory framework underpinning aquaculture in England particularly concerning the aquaculture regulations; the most significant impacts on new businesses; the difficulty in understanding and locating regulations; and the roles of the regulators.

Defra have commissioned a toolbox of guidance with the aim in phase one to provide a summary of regulatory requirements for new and existing aquaculture businesses; and a step by step walk through the regulation necessary to establish a new APB. This should cover all the main sectors and species across terrestrial and marine environments. Progress has been made: this has been broken down into 13 sectors with a document for each sector detailing the consents required, all the regulators in the UK, key links, contacts etc. A draft regulatory portal webpage has been created. Seafish will host the regulatory portal. Phase two of the project will build on this guidance site and cover regulators guidance (2015 – 2016) to contextualise developments for regulators, improve consistency of the way aquaculture is treated and provide guidance for and by regulators

Discussion

- **Q.** The aquaculture industry in the UK will evolve and it is important that legislation and regulations are adaptable to cope with change. Will that be reflected and could a review of legislation be built into it? **Answer.** In the longer term regulations and legislation will need to be adaptable to cope with change but for now it is about raising awareness of this portal. There are resource implications of building a review into this but that would be the ultimate aim.
- It is imperative that this is kept up-to-date and that it is well publicised. This will be a very useful resource, however we do need to also be aware that personnel changes at the offices of regulators and legislators does also have a significant impact.
- **Q.** Are there any plans to test this with an end user panel? **Answer.** Not a user panel as such but this will go out to industry for comment.
- **Q.** Are there any plans that this model could be used as a mechanism to respond when there are proposals to change EU legislation? **Answer.** We are not anywhere near that yet but this could be considered.

7. Aquaculture strategy across the UK.
Incl: activities of the Devolved Administrations; progress of the England Aquaculture Consultation Group; SARF/SAIC Update.

7.1 Seafish and Aquaculture – England and across the UK. Lee Cocker, Seafish.
http://www.seafish.org/media/1450461/acig_sept2015_seafishaquaculture.pdf
The UK remains a leading aquaculture producer within the EU (1st by value, 3rd by production). UK finfish and shellfish industry produced over 205,000mt in 2012 valued at ~£0.59bn at first sale. Scottish Atlantic salmon continues to dominate UK aquaculture harvest tonnage and value. Production is diverse in England, Wales and NI with 35

species/varieties produced. The majority of businesses are small - of the 300 authorised finfish enterprises across England, Wales and NI in 2012, 81% employed less than five staff. The Seafish Domestic Aquaculture Strategy Programme divides into two major projects – an English Aquaculture Strategy project (covering the England Aquaculture Consultation Group and the regulatory portal with Cefas), and a Domestic Aquaculture Strategy covering NI, Scotland and Wales (covering aquaculture stakeholder engagement, increased web provision and external aquaculture projects and initiatives. In addition two aquaculture reports are in the pipeline. The first will look at the contribution to, and value of, Several and Regulated (and Hybrid) Orders in relation to UK shellfish farming/aquaculture; and the second is an Aquaculture Economic report for England, NI and Wales to demonstrate quantitatively how the economic performance of the existing key species could be improved and capacity increased. Both reports are due to be completed by end of 2015 and will be published on the Seafish website.

7.2. Challenges and opportunities to develop the industry in Wales. Jose Constantino, Welsh Government.
http://www.seafish.org/media/1450464/acig_sept2015_aquacultureinwales.pdf
In Wales the aquaculture targets for 2020 are to increase shellfish production from 8,376 tonnes in 2012 to 16,000 tonnes per annum, and finfish from 761 tonnes in 2012 to 2,000 tonnes. There are also other aquaculture projects covering algae, hatcheries and R&D.

7.3. Mark McCaughan, DARD.
In Northern Ireland the principle is 'small is beautiful' with a focus on 'Going for Growth'. The NI Marine Plan supports sustainable aquaculture and there is a clear mandate to grow the aquaculture sector and funding available to support this. It is likely a team will put in an application for a new facility on behalf of industry and will be guided through the process by someone from DARD; all applications have to comply with the Habitats Directive; there needs to be adequate primary production for nature and aquaculture; there is no application fee; the Crown Estate typically responds very quickly; all mapping details are shared; once an application is received it is judged on whether it is deemed to be 'substantially profitable'; consultees have 28 days in which to respond; these responses are judged on whether they are justifiable.

7.4. Shaun McLennan, Defra.
In England there have been budget cuts, and whilst there have been attempts to develop and grow aquaculture. Defra has had to rely on industry to try to facilitate growth. The current focus is on building an understanding of economics, value chains and regulatory burdens. The Several and Regulated (and Hybrid) Orders in relation to UK shellfish farming/aquaculture are fairly archaic and these are being looked at by Seafish. This whole process is likely to be reviewed. There are ongoing discussions refunding opportunities. Defra is working with BBSRC and NERC on R&D projects. There will be funding available through the European Maritime Fisheries Fund (EMFF) for knowledge transfer, technical innovation and regulatory advisory support.

7.5. Scottish Aquaculture Research Forum (SARF) Update. Richard Slaski, SARF.
http://www.seafish.org/media/1450473/acig_sept2015_sarf.pdf
SARF commissions research to address knowledge gaps. There are six current projects covering fish health (trout); predators; environmental; engineering; shellfish regulation; and sea lice. The value of current projects is £829,000. Two new projects are in development: sea lice and locational regulation. SARF is a Scottish initiative but there

has been some discussion about opportunities for a SARF equivalent south of the Border.
Action: Circulate SARF link.

7.6. Heather Jones, Scottish Aquaculture Innovation Centre (SAIC)
The aim of the SAIC is to transform the relationship between the aquaculture industry and the research community. SAIC is able to support a range of research projects and also has a rapid response category for small and medium sized businesses to fast track research projects under £100,000 in value. On all cases a critical need for the research must be demonstrated and there needs to be match funding (either funds or help in kind). SAIC is looking for research ideas.
Action: Circulate SAIC link.

Looking ahead
8. The development and reasoning for a Global Zone Management Initiative. Mike Platt, RS Standards and Dan Lee, Global Aquaculture Alliance.
http://www.seafish.org/media/1450467/acig_sept2015_globalzonemanagement.pdf
The zone management initiative is supported by: the Global Aquaculture Alliance, World Bank, industry, markets, consultants/vets, financial institutions, environmental groups and government organizations. The aim is to provide a key collaboration mechanism where aquaculture service / product providers, regulators and farmers can come together to work within a joint industry/science/government working group and establish a successful platform that will deliver the controls and changes required to better manage and protect from disease within a designated zone.
Discussion

- The aquaculture industry seems to be the target for more and more standards and this just seems to be ill-conceived. The aquaculture industry does not need to have more and more standards imposed on it – industry will learn by its own experience. **Response.** The mistakes made in Chile re disease control highlight that lessons can be learned. This is a bottom-up approach which will pick up on the lessons learned and try to apply good practice.
- A prime example of zonal management in the UK is the current text alert system operating on the East Coast whereby harvesters are quickly alerted to pollution issues. This information is being shared by the water authorities. Seafish set this up and still supports the electronic component but industry now leads on this.
- There have been big problems in Chile and zonal management could be a big help in addressing issues such as these however there is a concern that this could be overly ambitious. The focus at the moment is very much on disease control. We are starting with pilot zones in Honduras/Guatemala, Canada and Asia. The aim is to work collaboratively with industry, not to dictate, and to provide a framework for moving forward. In some respects it could be seen as a form of improvement programme.

Action: Any comments to Mike Platt mike.platt@rsstandards.com

9. Aquaculture in Seafish Risk Assessment for Sourcing Seafood (RASS). Alex Caveen and Lee Cocker, Seafish.
Seafish currently has eight aquaculture responsible sourcing guides which contain information on sources and quantities, biology and cultivation, through to management and certification, as well as product characteristics.

RASS is an online tool to enable seafood buyers to make informed choices to comply with their own corporate social responsibility requirements by providing information relating to many aspects of responsible sourcing of seafood. The concept of RASS aquaculture is a work in progress. RASS aquaculture profiles will profile the most important farmed species pertinent to the UK buyers, retailers and consumers and will become the second facet of the RASS portal

Focus is currently on the most sensible and manageable level of focus that RASS aquaculture profiles need to drill down to that will be of value to the industry. Species to be covered will be Atlantic salmon, warm water prawns, rainbow trout, sea bass, sea bream, pangasius, tilapia, mussels, oysters and scallops. A number of models are being considered but RASS aquaculture profiles can be as granular as needed. The Global Sustainable Seafood Initiative (GSSI) and industry input will be integral. The RASS Steering Committee (a dedicated group that source farmed products) is due to meet on 20 October. The aim is to produce mock profile/s by the end of the financial year.

Actions:

9.1. Circulate link to responsible sourcing guides.
9.2. Any comments to Lee Cocker lee.cocker@seafish.co.uk or Alex Caveen alex.caveen@seafish.co.uk

10. Introducing aquaculture to consumers. Dawn Purchase, Marine Conservation Society.

http://www.seafish.org/media/1450476/acig_sept2015_mcs_aquaculturetoconsumers.pdf

MCS is working on several films which aim to educate the public, dispelling the myths about aquaculture. A rough cut for several films has been produced and now MCS is seeking funding and is looking for partners.

Discussion

- This will be an uphill battle. Consumers don't really distinguish between aquaculture and wild caught and the press is more often 'anti-aquaculture' (although not usually anti-shellfish). There was discussion around NGO messaging on aquaculture, both positive and negative. This is not to suggest that this should not be done but it needs to be carefully done with simple, factual messaging. **Response.** The intention was to address a legacy of mis-information.
- It is not evident that as a whole the consumer really wants to know, purchasing is more about quality and price, however there will be consumers who do want to know more, and if this addresses some of the misconceptions this would be good news.

Actions:

10.1. Circulate link to Aquaspark website.
10.2. Send comments or expressions of interest to Dawn Purchase dawn.purchase@mcsuk.org

11. Mussel Power. Justyn Jones, Small World Productions Ltd.

MusselPower has secured crowd funding to make a film which explore the way farmed shellfish can help in the fight against climate change. The plan is to film a trailer, mini case studies and interviews with scientists at Lyme Bay, at other locations in the UK and in the Baltic. The end target is a 60-90 minute film. There were a number of expressions of interest.

Action: Provide web address and contact details for Justyn Jones jjones@smallworldtv.co.uk

12. Any other business

12.1. SAGB Position Statement following spurious bacteria readings

During the week commencing 13 July 2015, regular samples of bivalve shellfish were tested at the Public Health Laboratory Service, Porton Down, Wiltshire, for the purposes of routine Shellfish Harvesting Water monitoring and the subsequent classification of these waters. The results of these tests suggested that the shellfish in question had been contaminated by bacteria to an unprecedented level. The samples were taken from a number of different sites from both inshore and offshore environments and represented different coastlines, catchments and different shellfish species. An obvious common factor connecting the samples was that they were all tested in the same laboratory. The numerical results for the E. coli numbers reportedly found within the shellfish were so far out of character as to be instantly questionable. They included one that was beyond its normal range by a multiple of 1 million.

Industry, via SAGB, requested that FSA re-open the areas immediately, whilst offering to enhance their end product testing in order to demonstrate their due diligence. This request was declined. There must be clear and transparent answers as to what occurred during the testing in question. This brings into question the whole classification arena.

Action

12.1. Send round link to SAGB position statement on this.
12.2. Include an update at the next meeting.

13. Date and topics for next meeting

Aquaculture meetings are held twice a year to dovetail with the CLG. The next meeting will be in March/April 2016. The group was canvassed for agenda topics at this meeting. Suggestions included:

- The first ASC accredited oyster farm in Jersey
- Exploration of ideas to develop aquaculture in England and the support available
- More examples of developments like John's
- Keep up updates on devolved administrations activities
- A summary of aquaculture around England ie what is farmed where, future areas for development, preferred locations
- Similar to the toolbox for regulation it would be great to have an overview of what funding is available (it seems to be very piecemeal at the moment)
- Macro algae and Biofuels
- A UK overview of aquaculture as a primary food sector
- Farmed cod, sea bass, tuna
- Disease management
- Views from industry – what could regulators do to help/get some constructive dialogue and input
- More on shellfish
- Invite someone from NFU/CLA to future meetings to join terrestrial and aquatic sectors – share lessons learned/best practice etc
- Ecosystem service – research
- Marketing of products
- Update on Cefas/Seafish regulatory toolbox
- Offshore Shellfish Ltd is sponsoring a PhD place to look at the socio-economic and ecosystem effects of their farming activity. This could be a potential topic for a meeting in about a year or so when reasonable before and after data is available.