

Note of Aquaculture Common Issues Group meeting held at Friends House, London. Tuesday 26 September 2017

For minutes and further information see:

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

1. Welcome and apologies

Attendees

Alison Austen	Environment and Business, Seafish Board
Andrew Nicholson	2 Sisters Food Group
Aoife Martin	Seafish
Baukje de Roos	University of Aberdeen
Caroline Roberts	ABP Mer
Catherine Miller	Food Standards Agency
Catherine Murphy	Marine Management Organisation
Chris Ryder	Lyons Seafoods
Clare Blackledge	Environment Agency
Dave Little	Stirling University
David Cracknell	Food Standards Agency
Eleanor Adamson	The Fishmongers' Company
Elizabeth Vancura	ARCH UK
Emily Flowers	NERC
Hannah Macintyre	Marks & Spencer
Iona Campbell	Marine Conservation Society
James Wilson	Seafish Board
John Holmyard	Offshore Shellfish
José Constantino	Welsh Government
Julia Brooks	Seafish
Karen Green	Seafish (Minutes)
Katy Davidson	The Oyster Lady
Keith Jeffery	Cefas
Lars Johanning	University of Exeter
Lee Cocker	Seafish (Chair)
Martin Jaffa	Callander McDowell
Martin Sutcliffe	Dorset and East Devon FLAG
Michael Gubbins	Defra
Mike Berthet	Global Aquaculture Alliance
Mike Warner	Avocet Media Ltd
Olly Tanqueray	ClientEarth
Patrick Blow	Marks & Spencer
Peter Tarrant	Maritek Worldwide
Sara Catahan	Defra
Stacey Clarke	Marine Management Organisation
Sofia Cota-Franco	University of Newcastle
Tim Goodwin	Sustainable Leadership Ltd
Tom Pavitt	Marine Management Organisation
Tracy Westell	Defra

Apologies were received from:

Chris Williams	New Economics Foundation
Craig Burton	Seafish
David Jarrad	SAGB
David Fletcher	RAS Aquaculture Research Ltd
Dawn Purchase	Marine Conservation Society
Emi Kato	MRAG
Fernanda Balata	New Economics Foundation
Giles Bartlett	Caistor Seafoods Limited
Greg Clifford	Pig Shed Trust
Heather Jones	SAIC
Jonathan Shepherd	Consultant, Seafish Board
Katie Miller	ClientEarth
Marcus Coleman	Seafish
Martin Syvret	Aquafish Solutions
Neil Auchterlonie	IFFO
Nicki Holmyard	Offshore Shellfish
Oliver Robinson	British Trout Association
Richard Slaski	SARF
Robert Whiteley	Natural England
Rosie Peacock	BBSRC
Sally Moore	Acoura
Simon Kershaw	Cefas
Steve Bracken	Marine Harvest

2. Minutes from previous meeting held on 5 April 2017.

Lee Cocker welcomed everyone to the Aquaculture Common Issues Group (ACIG) meeting. The final minutes were accepted as a true reflection of the meeting and have been added to the ACIG web page. Attendees were asked to take note of the meeting guidelines. In the following minutes Seafish will provide a link to the various presentations given at the meeting but not summarise the whole presentation. In the main we do not attribute the comments made at the meeting. Matters arising: Various links were circulated.

Looking ahead**3. Seafood 2040 strategy report. Alison Austen, Consultant, Seafish Board.**

http://www.seafish.org/media/1713494/acig_sept2017_seafood2040.pdf

Alison explained the premise behind the Seafood 2040 strategy report and who had engaged with the project. This is an update on a presentation given by Neil Auchterlonie gave to the ACIG in April 2017. Defra requested Seafish submit an industry vision to support the 25 year Food and Farming Plan; the aim was to explore the challenges and opportunities facing the English industry and shape a long-term ambition that could realise its potential. The high level vision submitted to Defra in January 2016 included the recommendation for a Ministerially-appointed industry group to deliver an Action Plan. In May 2016 there were Ministerial appointments to the Seafish Industry Expert Group. The final document was submitted 12 September 2017. The ambition 'is to see a seafood industry that is sustainable and truly thriving, in every sense of the word'. Overall there are 25 recommendations (some 'quick' wins and some more long-term but for aquaculture there are seen to be enormous opportunities. The proposal is to establish an Aquaculture Leadership Group under the Seafood Industry Leadership Group and to look specifically at: the potential of priority aquaculture/coastal

development zones; fiscal incentives and financial mechanisms; to review current legislation/regulations; and realise common aim of “slow clean” water (terrestrial & marine).

Discussion

- **Question.** Now the report has been produced is there still proactivity amongst the stakeholder group? **Answer.** Very much so. This is a visionary look at the seafood sector and how it can move forwards. It covers a lot of areas and we have received some very positive feedback. We have also widely engaged both with industry, academia, NGOs and financial institutions, and Defra has been very positive.
- **Q.** Who is the main audience for the proposed Seafood Industry Leadership Group? **A.** Predominantly George Eustice but we need to ensure that Defra, the regulators and the seafood value chain works together.
- It is important that we make the right connections and join the messages together in terms of ‘feeding the world’, good nutritional balance and Government strategies for increasing seafood consumption, and then disseminating those messages widely.

Policy and initiatives update

4. Seafish update. Lee Cocker, Seafish.

http://www.seafish.org/media/1713497/acig_sept2017_seafishactivities.pdf

Lee covered:

- The Strategic Investment Project Outputs: 1. Closing the Circle: Blueprint for Sustainable Aquaculture in Enclosed Embayments from Hatchery to Plate; and 2. Exploiting the Potential for a Sustainable Aquaculture and Fisheries Centre in SW England.
- Progress of the Aquaculture Regulatory Toolbox for England.
- The latest news on the RASS Aquaculture Profiles Development.
- A new Seafish research project looking at Intermittent Microbial Water Quality Barriers to Bivalve Shellfish Production: Improvement and Management Options for Change in Relation to Prioritised Aquaculture Areas in England.
- Seafish input to the Shellfish Stakeholder Working Group (SSWG) and the Aquaculture Research Collaborative Hub UK.
- Forthcoming Seafish events.

Action: Circulate various links.

5. Cefas regulatory toolbox. Keith Jeffery, Cefas.

http://www.seafish.org/media/1713500/acig_sept2017_cefasregulatorytoolbox.pdf

Phase 1 of the regulatory toolbox has been completed and is hosted on the Seafish website. This has specifically addressed potential new entrants and existing businesses having difficulty locating and understanding the regulations and the roles of the various regulators. Phase 2 will address six key areas:

1. The processes and flowlines for establishing classification and biotoxin status of new offshore shellfish growing areas - Cefas and the Food Standards Agency have published new joint guidance on site selection from a microbiological perspective.
2. The processes and requirements for Habitats Regulations Assessment (HRA) and the roles and responsibilities for doing this – with several agencies having

- responsibilities under UK legislation it will be necessary to have consistent approach.
3. Clarification of the policy to be applied when applications are received for farming of pacific oysters in England – this will feed into an ongoing evaluation of National Policy on the use of Pacific Oyster in aquaculture.
 4. Clarification and guidance to be made available on the shellfish exemption from marine licensing and subsequent variations.
 5. Explanation of how mapped aquaculture areas on marine plans fit with the need to go through the normal regulatory processes and how designation of new MPAS will affect this.
 6. The approach to be taken by regulators when an application is received to farm a non-native species.

The aim is to have the Phase 2 documents on the Seafish website by the end of the financial year. **Action:** Circulate various links.

6. Update on funds for aquaculture under EMFF. Catherine Murphy, Marine Management Organisation.

http://www.seafish.org/media/1713503/acig_sept2017_mmo_emff.pdf

Under the European Maritime and Fisheries Fund (EMFF) specific articles have been provided for aquaculture and funding is available to aquaculture enterprises and Government Departments. Under the current scheme there have been fewer projects funded than under the old EFF scheme, but they have been larger projects and the total funding is a lot more. To date there have been eight approved projects under the EMFF scheme in England with total project costs of £3.6m, with a grant contribution of £1.170M. Seven of these have been in Article 48 (productive investments in aquaculture) and these include and a vessel designed to harvest mussels, expansion of an existing offshore shellfish farm and a modernisation and expansion of a trout aquaculture facility aiming to increase outputs and also reduce environmental impact. Under the previous scheme EFF there were 26 projects approved with a total project cost of £2.2m with a grant contribution of £843. Defra and HM Treasury have confirmed that all European Structural and Investment Funds (ESIFs) projects, including EMFF, with signed contracts or funding agreements in place with government, and projects signed before Autumn Statement, will be fully funded, even when these projects continue beyond the UK's departure from the EU. There was encouragement to apply for funding as soon as possible. **Action:** Circulate appropriate links.

7. Progress report on ARCH UK. Elizabeth Vancura, ARCH UK.

http://www.seafish.org/media/1713506/acig_sept2017_archuk.pdf

ARCH-UK is an integrated aquaculture network that aims to solve the shared and specific issues preventing the sustainable growth in all sectors of the UK aquaculture industry. It is funded by the BBSRC/NERC UK Aquaculture Initiative for four years commencing 1 March 2017. There are eight work groups/networks covering: Finfish nutrition; Finfish health and welfare; Shellfish health and disease; Human health and food safety; Stock improvement; Markets, economics, social science and technology development; Environmental interactions, climate change and environment and capacity; and Career development and training. These work groups create research priorities to help advise the Research Council in their development of aquaculture funding. The network coordinators were due to produce a final (single) document to BBSRC-NERC by the end of October 2017. **Action:** Circulate link to ARCH UK website.

Overall discussion

- **Question.** How many businesses are making applications to start up new aquaculture businesses currently? **Answer.** There is some activity – freshwater finfish is declining but there are applications for shellfish farming (mussels have the greatest potential), aquaponics, small carp farms, but nothing of a large scale, these are mostly small concerns and by that we mean owner-operator generally.

Action: Circulate links to Seafish aquaculture funding guides.

Shellfish marketing

8. Shellfish consumption - implications for human health. Baukje de Roos, University of Aberdeen.

http://www.seafish.org/media/1713509/acig_sept2017_shellfishconsumption_nutrition.pdf

Talked about the health properties of fish and that shellfish can compete very well with oily fish and white fish on nutritional benefits. This looked at fish consumption and mortality and that either low (one serving/week) or moderate fish consumption (two to four servings/week) has a significantly beneficial effect on the prevention of mortality from heart disease, reducing risk by 16 and 21%, respectively. It appears that fish, rather than fish oil, affects cardiovascular health. A shellfish human intervention study has been undertaken to establish the dose of mussels (i.e. 1, 2 or 3 portions per week) were necessary to produce a physiologically meaningful change in nutrient status. The study showed that eating mussels does not affect plasma vitamin B12 levels, but that eating mussels does improve folate status. Whilst eating mussels does increase cadmium and lead levels the levels remain well below levels considered hazardous. In conclusion increased consumption of shellfish may increase nutritional status of omega-3 fatty acids and folate, and that shellfish are a rich dietary source of omega-3 fatty acids, vitamins and micronutrients to the effect that a nutrient claim may be achievable for a range of shellfish species.

Discussion

- **Question.** There is a lot of talk of superfoods. Would oysters fit into that title? **Answer.** I don't really believe in superfood, but focus more on a healthy diet and the foods that can make a diet healthy. Very few studies have been conducted with shellfish and these intervention studies are important.
- **Q.** Have any claims been made for folate? **A.** The folate level was a surprising result for us however it is unlikely we would be able to make a nutrient claim. Our real aim was to persuade people it is better to eat fish than a supplement,

9. Shellfish/bivalve markets in the UK. Julia Brooks, Seafish.

http://www.seafish.org/media/1713512/acig_sept2017_shellfishmarkets.pdf

This looked at figures for aquaculture production, UK vessel landings into UK and imports of shellfish and bivalves and the opportunities for growth in the commercial foodservice, retail and export markets. To highlight:

- Overall shellfish production increased 12% to over 25k tonnes however, value has also increased 5% to £37m. Mussels constitute the majority of shellfish aquaculture by volume and value. Cockles and oysters also hold reasonable share of value due to their higher price per kg.
- Landings of shellfish by UK vessels into the UK have also increased. Volume only by 2% but the value of the catch increased 21% to £307m. UK catches account for over half the UK's supply volume but under 30% of the overall value.

Bivalves are almost 45% of this catch in terms of volume but with a lower price per kg than crustacea they hold just under 30% share of value.

- Shellfish imports average price has also increased but only 2%, but volume has increased 9%, so combined the value of shellfish imports increased 11% to £793m in 2016. Looking just at bivalves they have seen a very strong increase across all measures and now account for 10% of shellfish import volume and 8% of value.
- The export of all species except mussels are increasing and the top five destination countries account for 96% of bivalve exports.

Discussion

- **Question.** A lot of shellfish is imported, especially Asian prawns, what can we learn from this? **Answer.** We need to innovate more and experiment with flavour combinations.

Action: Provide link to market insight web pages on the Seafish website.

10. Marketing oysters. Katy Davidson, The Oyster Lady.

Katy explained the ethos behind The Oyster lady website which is designed to give an insight in to oyster culture in a similar way to that of wine (in that oysters will take on the characteristics of an area). The biggest issue with oysters over the years has been consumer perception and a 'fear' of oysters. To overcome this events have been organised, and demonstrations given at food festivals, to teach people how to prepare and eat oysters. An Oyster Academy is in the pipeline as a social enterprise that provides training programmes for the oyster industry which are similar to the format of sommelier and master of wine education. Those who undertake the training will be prepared for serving oysters with authentic skill and knowledge having been trained in all aspects of oyster culture, from merroir to storage, to shucking and service. This global first in the world of hospitality and food training will qualify you as an Ostrellier™ a new discipline designed especially for the oyster. Oysters events were mentioned and specifically the London Oyster Week where different oyster dishes will be promoted in different London venues.

Discussion

- **Question.** The London Oyster Week sounds great. What about the rest of the UK? Other regions could proportionately benefit more. **Answer.** I agree and we do travel to food festivals around the UK, but London gets a lot of transient traffic and for something like this it is easier to co-ordinate and secure good promotional support, plus of course it has to work financially. We are also trying oyster pairings with alcohol and other foods to raise the value perception.
- Q. Is there any innovation amongst growers to look at how oysters could be made to be more user-friendly for chefs? Even shucking experts can have difficulty. A. Margins are very tight and we like to adopt a purist approach however French producers are looking at this.

Action: Circulate link to website.

11. New aquaculture network collaborative project on Markets, Economics, Social Science and Technology Development. Dave Little, University of Stirling.

http://www.seafish.org/media/1713515/acig_sept_2017_archuk_markets.pdf

This ARCH UK work programme has identified short-term and long-term knowledge needs for the UK aquaculture sector.

1. Markets & Economics. Short-term: review potential solutions for the recycling of waste products from the fish and shellfish sector and look for opportunities to add

- value to products and to reduce production costs. Long-term: investment in the sector, financial incentives and barriers especially in relation to SMEs; and addressing socio-economic issues and the rural economy.
2. Social Sciences. Short-term: to review of societal issues required to continue ability to operate within the biological scope of the species cultivated and look at how consumer preferences change and vary between, and within, domestic and export markets. Long-term: meeting the societal challenges: welfare and 'eco-labelling'; and looking at the availability and training of a suitably skilled workforce.
 3. Technology Development. Short-term: requires technical innovative solutions to ensure animal welfare and condition (e.g. during exports of high quality, and in many cases live shellfish from the UK to continental Europe, and beyond); and to review technology development required to continue ability to operate within the biological scope of the species cultivated. Long-term: look at integration of new technologies with the aquaculture sector; assessing the capacity to monitor, manage and conduct operations and husbandry remotely; and review the physical engineering challenges such as advanced technology.

This review will feed into the final (single) ARCH UK document to BBSRC-NERC.

12. Promotion and Growth of the UK Shellfish Trade. SAGB marketing project. Mike Warner, Avocet Media Ltd.

http://www.seafish.org/media/1713518/acig_sept2017_sagbshellfishmarketing.pdf

This is a two year EMFF-funded project to endorse and promote multiple benefits of eating UK shellfish - in all forms; to promote a better and increased understanding of wild capture and aquaculture techniques; to educate and inform key influencers as to how utilising domestically produced shellfish can benefit their businesses and to assist them in growing their sales; to foster dialogue between the catch/aquaculture sector leading to better understanding of the "boat-to-plate" process and thereby instilling a better understanding of the inherent value of shellfish; to change the overall public perception of shellfish as a food source ultimately, leading to increased consumption; to promote sustainability, not just for fish stocks themselves, but right through to viability of the economic communities that they support; to increase SAGB membership at all levels. It will work through:

- Education and outreach - fostering links between fishermen, processors and consumers
- Restaurant/retailer accreditation through direct producer support for total traceability
- Promoting seasonality and tying that concept into better marketing
- Promoting traceability and the "boat to plate story"
- Recognising and grasping new export opportunities as they arise
- Focussing on under-utilised and non-quota species e.g. cuttlefish

Discussion

- **Question.** There are great aims and objectives but how are you going to communicate to consumers such diversity. **Answer.** There is a huge story to tell and we need to focus on seasonality and promote different species throughout the year. We will be looking at the opportunities presented by food festivals and Seafood Week.

13. Date of next meeting.

The next meeting will be in April 2018.