



Governance frameworks and implications for IMTA development



Policy and legislation are likely to have an impact on the development of more sustainable aquaculture practices such as integrated multi-trophic aquaculture (IMTA). To date the move towards IMTA at a pilot scale in Europe has been relatively seamless, with IMTA being treated as an experimental 'add-on' to existing mono-culture sites.

The current aquaculture legislation focuses on the single species approach, therefore an update of the policy framework is necessary, to incorporate bi-culture and poly-culture at a commercial scale. A change to some aspects of legal regimes may also be required in order to accommodate IMTA, particularly in relation to the transfer of disease, fish health and food safety.

These are the main highlights of a research paper titled *The implications of aquaculture policy and regulation for the development of integrated multi-trophic aquaculture in Europe*, published in the June 2015 issue of the journal *Aquaculture* (Elsevier). The paper by Karen Alexander (SAMS) et al. presents the results of a collaborative study conducted between 2013 and 2014 by eleven members of the IDREEM project.

This study investigated the flexibility within the current governance frameworks across six European countries to allow for the adoption and management of IMTA. A snowball approach was used to identify relevant EU legislation, which was used as the basis by which to identify national/regional legislation which implemented EU requirements. This data was combined with a desk study to create a legislation overview for each of six countries, which was then subject to a Comparative Legal Analysis of the regulatory frameworks. Overall, this study found that national frameworks were generally amenable to experimental IMTA pilot schemes, but that for commercial expansion substantial regulatory reform would be required.

Find the full paper here: <http://www.sciencedirect.com/science/article/pii/S0044848615001295>

IDREEM partner Loch Fyne explains IMTA on BBC Radio



David Attwood, Aquaculture Director at Loch Fyne Oysters, was interviewed by BBC Radio Scotland for the "Out of Doors" programme and had the opportunity to describe how Loch Fyne Oysters, together with the Scottish Salmon Company and SAMS are studying the implementation of IMTA at the Loch Fyne salmon farm on the west coast of Scotland.

In his chat with host Mark Stephen in January 2015, David tells of the possible benefits of IMTA and of the specific organisms that they are working with at Loch Fyne.



In what is probably the biggest IMTA site in Europe, three different types of seaweed for food consumption are being studied alongside mussels, oysters, queen scallops and sea urchins (grown on submersible structures and which are proving to be the most challenging organisms to grow).

Find the Podcast here: <http://www.idreem.eu/cms/wp-content/uploads/2015/03/BBC-Scotland-podcast-david-attwood.wma>

Register now for European Seaweed Production and Marketability Workshop



Registration closes 30 April for the first European Seaweed Production and Marketability workshop.

This meeting is a must for anyone involved in the production or marketing of seaweed, seaweed products or involved in seaweed research. The event will bring together Europe's leading seaweed research and development projects in a unique meeting to share lessons learnt, develop best practice, and to map the road ahead for the European Seaweed Industry. This two-day workshop will take place in Oban, Scotland at SAMS, on 13th and 14th May, alongside a Seaweed Cultivation and Breeding course, run by the GlobalSeaweed network on 11th and 12th May.

It will be a combination of invited talks and open panel discussion, including a social event and a visit to a local seaweed farm.

The event promises an interesting and challenging discussion of best practices in seaweed cultivation, harvesting, analysis and product extraction. It aims to:

- Establish the transnational value of the European seaweed resource, towards the marketability of its products, considering the conservation and genetics of the resource basis, the regulatory framework and social acceptability issues.
- Create a reference framework for the industry basis as well as for regulators and research and development service providers.

The deadline for registration is 30 April.

Contact: euseaweed@gmail.com

or visit the event page on: <http://www.sams.ac.uk/events/european-seaweed-production-and-marketability> for more information. The event is free and spaces are limited.

Read more: <http://www.idreem.eu/cms/2015/04/02/register-now-european-seaweed-production-marketability-workshop/>

Call for abstracts: special IMTA session at Aquaculture Europe 2015



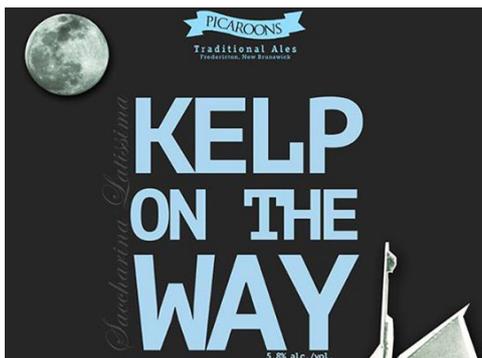
A special session on multi-species systems and IMTA will be held during the European Aquaculture Conference in Rotterdam (The Netherlands), on 20-23 October 2015. The session will feature presentations on a broad range of IMTA topics including production techniques, economics, and environmental and social considerations for both open and land-based, marine and freshwater integrated systems. We invite you to share the latest information and developments in Integrated Multi-Trophic Aquaculture during this session.

The call for abstracts is open until May 1. Find more information here:

<http://www.easonline.org/component/content/article/39-uncategorised/320-ae2015.%20>

See all the slides of last year's event at: <http://www.idreem.eu/cms/publications/presentations/>

Canadian brewery launches beer made with aquaculture kelp



Picaroons Traditional Ales has launched a beer made with Cooke Aquaculture-grown organic sugar kelp, the Canadian beer company said. Called "Kelp is on the Way", the beer is sold at the Brewtique in Fredericton, Canada.

*This dark and smokey ale has been brewed with a generous helping of real organic sugar kelp (*Saccharina latissima*) harvested off of the shores near St. George, New Brunswick, by way of Dr. Thierry Chopin of the University of New Brunswick, Saint John, the company*

says.

About Sugar Kelp (*Saccharina latissima*): Produced by Cooke Aquaculture Inc., at its Cove IMTA farm site near Back Bay, New Brunswick, this particular kelp is now being marketed under the True North Salmon brand after gaining Organic Certification in the Spring of 2014. Sugar Kelps, with superior sweetness and flavour, are rich in proteins, trace minerals, phytochemicals and vitamins, and are low in fats. Because of their composition and attributes, some nutritionists believe that, in fact, kelps should be recognized as being on par with other well-known super-foods.

More: <https://www.facebook.com/picaroons/photos/a.358849697004.151616.233394352004/10152800890152005/?type=1&fref=nf>

Green Aquaculture as Part of the Blue Revolution



Why is a Scottish shellfish producer stocking lines of seaweed among its oysters? What brings Mediterranean sea bream growers, Norwegian salmon farmers and Irish algae experts together? The answer is Integrated Multi-Trophic Aquaculture, write IDREEM partners Richard Corner, Marieke Steuben and Adam Hughes, in an article featured in Fish Farmer magazine. The article gives a general explanation of IMTA, followed by a detailed description of the aims and partners of the project, together with the

www.idreem.eu

info@idreem.eu

activities that each partner will be undertaking to allow a practical implementation of this sustainable aquaculture technique.

Read full article: <http://content.yudu.com/Library/A2ssdd/FishFarmerMagazineMa/resources/53.htm>

IDREEM and Ardtoe Marine Research Facility featured in Fish Farmer Magazine

Another article in the September 2014 issue of Fish Farmer shone the spotlight on Ardtoe Marine Research Facility, one of the SME partners in IDREEM. Located on the west coast of Scotland, since 1965 Ardtoe has been developing farming techniques for finfish and shellfish alike. The facility focuses its work in developing innovative aquaculture farming methods including terrestrial farming and onshore integrated aquaculture. For this latter system they have been partnering with the IDREEM project and are currently studying IMTA set-ups at their facility. In particular they are running a demonstration trial looking at running the nutrient flow from fish tanks through raceways, where they keep shellfish to take out the organic deposition, and an algal species to remove phosphates and nitrates.

Read full article: <http://content.yudu.com/Library/A33tb9/FishFarmerMagazineSe/resources/32.htm>

Kelp wanted-New Scientist Magazine introduces IMTA



“Kelp Wanted” in the July 2014 issue of *New Scientist* describes the potential of seaweeds and their applications for multi-trophic aquaculture. The article focuses on the new revolution that the cultivation of seaweed could bring to the marine aquaculture industry, based on the multitude of products that can be obtained from it: from animal feed additives to thickening agents already being produced to innovative biofuels, building insulations and medical substances that may be further developed in the future.

The article describes the work of Dr Julie Maguire of Daithi O’Murchu Marine Research Station in Bantry, Ireland, in the framework of the IDREEM project, who is studying techniques for seaweed cultivation near salmon farms, together with sea cucumbers. The article cites also the work that is being conducted at SAMS aimed at developing new growth structures for seaweed to maximise production, such as growth blankets composed of various ropes strewn together to create a web on which the organisms can develop. In addition to the list of positive results obtained from these studies and of possible future improvements, the article also explores the possibility of integrating these aquaculture systems with offshore wind farms and tidal energy plants: this could prove to be an efficient solution and create savings and extra revenue for all the players involved.

Read full article: <http://dl.yazdanpress.com/MAGAZINES/SCIENCE/NEW-SCIENTIST/2014/JULY/New-Scientist-July-19-2014%28marked%29.pdf>

Events

April 21-23, 2015, Brussels – Belgium

Seafood Expo Global

April 22-28, 2015, Galway - Ireland

20th International Pectinid Workshop

May 13-14, 2015, Oban - United Kingdom

European Seaweed Production and Marketability Workshop

September 22-23, 2015, Cherbourg - France

Seagriculture 2015

October 20-23, 2015, Rotterdam - the Netherlands

Aquaculture Europe 2015

IDREEM PARTNERS



IDREEM is supported by the European Commission within the 7th Framework Programme

