

Aquaculture Innovation Network News



Highlights

- Some of the topics that have come under the spotlight during the project study on innovation in European aquaculture
- Updates on future activities and the development of the project web site
- A focus on the European Aquaculture Society and the Aquainnovation study tour to Norway where EAS will run a special innovation workshop

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Facing challenges, exploring opportunities

Change is a simple fact of life, we change, the world changes. Synchronising the two can sometimes be difficult, but more significant is the pace of change, which seems to be increasing all the time, and the direction the change will take. The road ahead has many forks and turns. Each change challenges current practices, but opens up new opportunities for commercial exploitation. Major computer companies are increasingly focusing on change and adaptability in their marketing. For instance slogans such as “when change is part of the plan (IBM)” or “solutions for the adaptive enterprise” (HP). The Aquaculture Innovation Network is for organisations and individuals in the aquaculture sector who sense those same pressures and are keen to discern and take advantage of new opportunities. For people who see the junctions in front of them and understand the need to take decision and change direction; Who understand the need to adapt, but who find that difficult on their own. The Aquaculture Innova-

tion Network is about helping people form new partnerships and cooperations, and introducing



Members of the project team discuss plans to introduce new environmental control technologies with a producer in Estonia

new skills and knowledge into your organisation to support that process of adaptation. In this newsletter we start to explore some of the ways in which challenges are being turned into opportunities.

Presentations at “New Challenges in Pond Aquaculture” 2005

The Aquaculture Innovation Network is supporting the workshop on “New Challenges in Pond Aquaculture” in České Budějovice, Czech Republic from 26 to 28 April 2005. Project partners presenting include Zdenek Adámek from the University of South Bohemia (Computer assisted image analysis in evaluation of fish injuries caused by cormorant attacks); John Nikolaidis from the University of Stirling (A study on the processing potential of European com-

mon carp as a means of enhancing the carp market); and John Bostock also from the University of Stirling (Responding to challenges—fostering innovation). László Váradi from Aquapark will also participate as a session chairman.





“Producing carp organically could provide economic advantages to farmers”

Organic carp

There is growing appreciation of the opportunity for improving the market image and price of carp through organic certification. At present six certifying associations are recognised for the establishment of organic carp production standards. These included Ernte of Austria, Bioland, Demeter, Biokreis and Naturland of Germany. Of these the most pioneering and actively engaged in the promotion and development of organic aquaculture in Europe and globally is Naturland. The association began their activities in 1995 with development of organic standards and initial certification of organic carp and tench production in Southern Germany using traditional pond culture techniques cumulating in the publishing of Naturland Standards for Organic Aquaculture in 2002. Organic aquaculture products are just starting to gain footholds

in European markets and this trend is expected to grow due to increasing environmental and health concerns of consumers. Producing carp organically could provide economic advantages to farmers as many carp are already reared naturally in a non-intensive environment with traceable sources, which guarantees the authenticity sought after by today's consumers.



Carp are often reared in extensive natural environments

Sturgeon

“The production of market sized farmed sturgeon is steadily increasing and major investment is now being made in caviar production”

The first trials into sturgeon farming were conducted in Russia, Germany and North America in the mid-nineteen hundreds to compensate for declines in wild stocks. Farming techniques developed throughout the 60s and 70s and by the 1980s had spread to more Western European countries, especially France and Italy. Many observers consider the market for sturgeon meat to be under-developed with potential for expansion, especially in Western Europe. Of even greater interest to many however is the potential for caviar production, especially as the beluga sturgeon is now categorised as an endangered species. Commercial production is

already underway in France and Italy, and the largest plant yet built is shortly due to start production in Germany. Several project partners including Aquacultur Fischtechnik and Double Delta have experience with these species.



Sturgeon can be cultured in ponds, raceways or intensive tank systems

Recycle systems



Recycle systems can be constructed almost anywhere

Recycle systems are attractive as they offer a means of overcoming resource constraints such as shortage of water and suitable land. They also enable environmental discharges to be limited and more easily controlled, and provide greater biosecurity to protect the cultured species from disease. On the other hand, they are more capital intensive and at greater risk from equipment failure and other technical hazards, although continued advances in understanding and technology are addressing these issues. In practice, there are a range of approaches that

can be made, from modest water re-use through to closed, highly recirculated systems involving complex treatment equipment. These systems will be the subject of a special Aquainnovation course in Hungary in September 2005

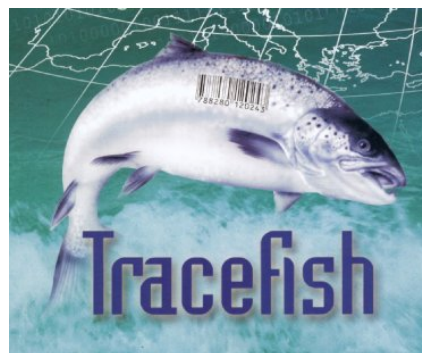


Eels in a high-rate recycle system

Traceability in fish farming

From January 1st 2005 the European Commission set into force a new food law (Common food law), and establish the European Food Safety Authority. The general principles and requirements of this law are specified in Regulation (EC) No 178/2002. The ability to carry out recalls of contaminated products is considered as an important functionality in a future food safety regime. This requirement is partly built into 178/2002 by the so called "one-up, one-down approach", where all producers have to document from whom they have received food stuffs (raw materials and ingredients) and to whom they have sent their products. In the fish industry, following an EU financed project completed in 2003, there is now available a standard, called TraceFish (see www.tracefish.org), that may be used to fulfil most of the demands

set by both international food law and the retailer sector. The standard specifies both the information elements to be recorded and the electronic coding to be used when transmitting the data. SINTEF Fisheries and Aquaculture and the Norwegian Institute of Fisheries and Aquaculture (NIFA) have given recommendations and guidelines for how to implement the Tracefish standard in the fishing industry. The TraceFish standard and implementation guide is also used for establishing traceability in the EU projects Seafood plus and Trace.



Future events

Based on the initial findings of the study, a number of actions are being arranged to help foster technology transfer:

- April 26-28, 2005: Workshop on New Challenges in Pond Aquaculture, České Budějovice, Czech Republic
- June 14-15, 2005: Course on new vaccines and vaccination strategies for trout, Nowa Wies Leborska, Poland
- August 7-12, 2005: Study visit to Norway (including AquaNor and Innovation Workshop at Aquaculture Europe Conference)

- September 26-30, 2005: Course in environmentally controlled systems (recycle and ecological), Szarvas, Hungary
- November 7-11, 2005: Study visit to Germany

Further details about these events, including booking details, will be available on the project web site, or on request from the address at the end of this newsletter. Project partners will also be taking the opportunity to present the network at other international, national and local aquaculture meetings.

"The project is facilitating meetings and knowledge exchange through study visits, workshops and courses"

Aquainnovation.net

The project's website at www.aquainnovation.net is now part of the Aquamedia site with facilities for pages to be made available in a range of European languages. With this framework in place, the project is working on more comprehensive content and developing useful tools for supporting collaboration between organisations and accelerating innovation and technology transfer. Discussions sections are available in both the partnering and knowledge base sections that enable business contacts to be established and topical

issues to be discussed. The site also includes an archive of project documents and details of forthcoming events. A "what's new?" section allows frequent visitors to check the latest updates and additions to the site. With many things planned over the coming months, why not make a note to re-visit the site every week or two? Registration on the site also enables you to sign up to receive this Newsletter by email.





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Partner focus

The European Aquaculture Society (EAS):

EAS www.easonline.org is an independent non-profit association (created in 1976) that **promotes contacts** and **disseminates information** among all involved or interested in aquaculture in Europe. EAS currently has members in more than 60 countries. These two major EAS objectives are achieved by the organisation of an annual aquaculture meeting/conference (the "Aquaculture Europe" events), since 1981; the organisation of workshops either as stand-alone meetings or associated with an annual meeting/conference; the publication of a peer-reviewed scientific journal (Aquaculture International) and a magazine (Aquaculture Europe); the publication of Special and other publications, treating various topics related to the development of European aquaculture; the co-ordination of AquaFlow – a European network for the dissemination of aquaculture RTD information; the involvement of EAS as a dissemination partner in European RTD projects and the formalisation of ties with other aquaculture organisations, notably, the World Aquaculture Society, FAO, ICES, The European Association for Animal Production, EUROFISH, CIHEAM, AquaTT and Aquacultural Engineering Society. EAS has full liaison status with the Food and Agriculture Organisation of the United Nations. EAS is a dissemination partner in the Aquaculture Innovation Network and will be organising an Innovation Forum and a special workshop as part of its Aquaculture Europe 2005 conference, to be held in Trondheim Norway, 5-9 August 2005.



Aquaculture Europe meetings provide great networking opportunities.

Event focus—Study visit to Norway & Aquanor, 7-12 August 2005

The Aquaculture Innovation Network is hosting a study tour to Norway that will be of particular interest to fish farmers and companies seeking to start or improve their processing operations and address new markets.

Participating in this event will provide outstanding opportunities to see new technologies, meet suppliers and existing users and find out what might be suitable for your business. The visit will provide a focus on innovation and how you can take advantage of new technologies and market opportunities to advance your business. There will also be opportunities to explore mechanisms that give support to innovation, including networks and national and European funding prospects. A particular feature of the programme will be an innovation workshop that is to be organised within the Aquaculture Europe 2005 conference.

The Aqua Nor trade shows are held biennially in Trondheim (Norway) and recent events have attracted around 20,000 visitors from close to

50 nations. 300 exhibitors representing more than 600 manufacturers and suppliers from all over the world present current developments in the fields of aquaculture technology, fish feed, fish health, quality assurance, research, training, funding, insurance, fish farmers network, grading, processing, packaging and distribution.



Processing salmon fillets at a modern line in Norway

Further information, including details of financial support available, is available from the Aquainnovation web site or the address at the top of this page.

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