



INTERNATIONAL SYMPOSIUM:
**Genetic Impacts from Aquaculture:
Meeting the Challenge in Europe**

Bergen, Norway, 2-4 July 2007

BACKGROUND

The continuing global decline of wild fish has been accompanied by a parallel increase in aquaculture. Over the past ten years, worldwide production of farmed fish has more than doubled, with farming activities now producing half of the fish directly consumed by humans.

The potential genetic effects of aquaculture on natural fish populations have aroused a great deal of concern among scientists as well as the general public. The perceived risks are often associated with cultured and native fish, and the adverse effects of ecosystem interactions. Public health issues are also a matter of concern.

The project Genimpact, financed by the European Commission, started in November 2005 to review existing knowledge necessary to assess genetic effects of aquaculture on biodiversity, review future research needs, and disseminate this information to a wider public. To achieve this, Genimpact has convened a series of expert workshops on risk assessment, interbreeding and aquaculture-ecosystem interactions:

- *Genetics of domestication, breeding and enhancement of performance of fish and shellfish*, Viterbo, Italy, 12 -17 June 2006
- *Monitoring tools for evaluation of genetic impact of aquaculture activities on wild populations*, Tenerife, Spain, 19-21 October 2006
- *The use of modelling to assess the risk of genetic impacts on wild populations from escapes of cultured fish*, Pitlochry, Scotland, UK, 15–17 February 2007

The gaps in our current knowledge, and the suggested research priorities identified during these expert workshops will be discussed with stakeholder representatives during a fourth workshop:

- *Development of management options to reduce genetic impacts of aquaculture activities*, Thessaloniki, Greece, 19-22 April 2007

This will be used to develop consensus statements on the “state of the art” as regards genetic impact of farming activities and its implications for aquaculture management, stock conservation and environment safety.

The outcomes of these workshops will be detailed and made available for public discussion in the announced International Symposium on *Genetic Impacts from Aquaculture: Meeting the Challenge in Europe*.

Key figures from science, industry, NGOs and government will be attending the symposium, which will represent an opportunity to take part in defining the European agenda with regards to management of this threat and setting the future research priorities.

The symposium will be held on 2-4 July 2007 in Bergen, Norway, a centre for marine science in northern Europe close to areas with large farming activity of Atlantic salmon and advanced research facilities for new aquaculture species such as Atlantic cod.

THEMES COVERED

Internationally recognised scientists and key persons from the aquaculture industry, aquaculture management and NGOs will present the latest update on the issues of genetic impacts from aquaculture, and possible management options to minimise these.

The symposium will cover the following themes:

European aquaculture: How does Europe address the challenge of genetic impacts caused by a growing industry?

Key note speakers from the aquaculture industry, aquaculture management and NGOs will address how they will meet this challenge.

Current state of the aquaculture industry and of wild stocks of key finfish and shellfish species cultured in Europe

Key note talks and posters presenting an updated overview of the knowledge available on the genetic effects of domestication, culture and breeding of fish and shellfish, and their impacts on wild populations of Atlantic salmon, Atlantic cod, European sea bass, gilthead sea bream, turbot, common carp, Atlantic halibut, scallops, mussels, Pacific cupped oyster, European flat oyster and European lobster. Recommendations of specific research priorities for the future.

Tracking cultured fish and assessing their impact in the wild

Overview of the knowledge available on the existing genetic tools for identification of aquaculture individuals in the wild, as well as for assessing their potential impacts on wild populations based on their fitness. Monitoring tools for identification of aquaculture escapees/ released individuals and their offspring, and for assessing their fitness. Recommendations of specific research priorities for the future.

Predictive and risk assessment tools for guiding management and policy development

Status of use and developing of modelling and simulation tools for assessing the risk of the genetic impacts on wild populations from introduced cultured fish and for evaluating management and conservation strategies for wild populations. Recommendations of specific research priorities for the future.

Management challenges and options

How to integrate the scientific basis for the establishment of preventive measures for some important species in European marine aquaculture – seeking consensus amongst scientists, industry, NGOs and policy makers.

POSTER PRESENTATIONS

Participants are welcome to present posters on their work or projects related to the themes covered at the Symposium. More information on posters will soon be posted on the Genimpact website and emailed to authors.

INFORMATION AND REGISTRATION

Please visit the Genimpact website:

<http://genimpact.imr.no>

The meeting will be held at the Terminus Hotel, Bergen, Norway, with rooms available at special conference rates on a first come basis.

The meeting will start Monday 2 July 2007 at 0900 (registration Sunday evening and Monday morning) and continue until Wednesday 4 July at 14.00.

Fee Early registration (by 20 May): 250 €
Registration: 300€

Registration will be limited to 120 participants.

IMPORTANT DEADLINES

Early registration: 20 May 2007
Closure of registration: 1 June 2007
Submission of abstracts for posters: 20 May 2007

STEERING COMMITTEE

Terje Svåsand	Institute of Marine Research (IMR), Norway
Donatella Crosetti	Istituto Centrale per la Ricerca scientifica e tecnologica Applicata al Mare (ICRAM), Italy
Eva García-Vázquez	Universidad de Oviedo (UOVE), Spain
Eric Verspoor	The Scottish Ministers acting through Fisheries Research Services, Marine Laboratory (FRS), UK

LOCAL ORGANIZING COMMITTEE

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