

ICES Annual Science Conference 2007

Observer's Report (Iceland)

The 2007 Annual Science Conference (ASC) of ICES (International Council for the Exploration of the Sea) was held in Marina Congress Center, Helsinki, Finland, 17-21 September 2007. At the opening ceremony, ICES president, Joe Horwood, as well as the General Secretary of ICES, Gerd Hubold welcomed the participants before the ASC was declared open by the President of the Republic of Finland, Mrs. Tarja Halonen.

During the ASC a special attention was given to the Baltic Sea. Among many presentations on the Baltic Sea was the opening lecture, given by Professor **Erik Bonsdorff**, at Åbo Akademi University, Finland: "The role of science in the management of environmental problems of the Baltic Sea". In his talk he described the current environmental state of the Baltic Sea as a product of an unfortunate cocktail of multiple primary and secondary stressors (natural and anthropogenic), with unforeseeable effects. He discussed how eutrophication (i.e. the secondary effects of nutrient over-enrichment), effects of overfishing, harmful substances (including their transports), traffic, loss of habitats, and general threats to biodiversity, are some of the main problems. Further, he concluded that these threats are further enhanced by the ongoing global climate change, presumably dramatically affecting the Baltic Sea within the next 100 years. After his lecture he commented, "To find ways to engage or draw out the innovation of fishers and solve problems, then put the right incentives and governance in place. It's almost a self-regulating process. That's really where I see sustainable fisheries management going in the long term. A really strong element of that, or a third leg if you will, is data: to actually know what is going on at sea and use that information to solve the problems and basically keep things straight. Without it, there's a great deal of uncertainty, and the futures of the people involved in fish harvesting are jeopardized. The combination of fishers' knowledge, incentives, and data is a really powerful combination".

During the ASC, two Invited plenary lectures were given:

1. **Dr Serge Garcia**, Director Fishery Resources Division, FAO, Rome, Italy gave a talk titled "From New Atlantis to New Alliance: Society, Science, Governance and the Ecosystem Approach to Fisheries". In his talk, he among other things, discussed the effective recognition of the complexity of the fishery system and its interconnections with its broader political, social, legal, and environmental environment requires a series of simultaneous and interconnected shifts towards *inter alia* a better information systems, combined model use, much stronger inter-disciplinary framework for scientific enquiries, strongly participative assessment and decision making processes, connect predications with socially elaborated precautionary foresight and in general better communication between stakeholders. He focused on one central implication of this New Alliance, which is the needed to develop a much stronger interface between natural and social sciences, and between them and society through more integrated advisory processes, in a post-modern vision of the science and management relation and he concluded that balance is needed in affordable transitional pathways for change, in both research and management institutions, compatible with industrial adaptation.
2. **Dr Ed Melvin**, Fisheries Specialist, Washington Sea Grant Program, Seattle, USA: "Bycatch mitigation; tales of success and failure across ecosystems; technologies and cultures" In his talk he discussed discards and the challenge for bycatch reduction which now could be to engage the innovation and resourcefulness of individual fishers by moving toward replacing top down, prescriptive management with a bottom up, output driven model that gives industry ownership of both the problem and the solution. As a part of such approach, he suggested to provide individual fishers with a certain future in the fishery can create a strong incentive for stewardship and allow their innovative energy to be applied in real time. He further called for

a collaborative effort between fishers and gear technologists to develop and refine bycatch mitigation technologies that are safe, reliable, and tamper proof remain critical to achieving bycatch reduction, especially in data poor fisheries.

This year's ASC provided contributions in 17 science theme sessions on topics which included the ecosystem approach to management with a special focus on the Baltic Sea, structure and dynamics of the benthos in ICES waters, and marine biodiversity from a fish and fisheries perspective. The ASC addressed some of the most challenging issues of today's science needed for a better management of our seas tomorrow. Over 675 scientists from 30 countries attended the conference to present their latest research results and discuss how these could be applied to improve the sustainable management of the oceans and their resources. For the first time, ICES in cooperation with national institutes and RACs invited a few young fishermen to participate in the conference. Seven fishermen were present. Also, the conference includes an increasing number of participants with industry background, which is very positive for communication and better understanding between the science community and the industry.

With respect to fisheries management, the sessions of particular interest at the ASC were:

- **C** Developing the ecosystem approach to the management of human activities for the Baltic Sea
- **D** Comparative marine ecosystem structure and function: Descriptors and Characteristics
- **E** Marine biodiversity: A fish and fisheries perspective
- **H** Effects of environmental changes on the biology, physiology, and behaviour of pelagic fish
- **K** Monkfish across the world: common problems and common solutions
- **L** Stock identification – applications for aquaculture and fisheries management
- **M** Increasing energy costs and impact on fishers activities and economics - another challenge for fishers and managers
- **O** Flying outside the ICES Assessment WG paradigm – Alternative approaches to providing fisheries management advice
- **Q** Science underpinning stock abundance survey practice, including unaccounted fishing mortality, especially ghost fishing
- **R** The ecosystem approach: what's the impact on marine science, science based advice and management of marine ecosystems

Most of the papers and posters presented can be downloaded at the ICES website;

<http://www.ices.dk/products/CMdocs/CM-2007/CM2007.pdf>

Those interested are also encouraged to visit the following website where short reports from all the theme sessions are also available:

<http://www.ices.dk/iceswork/asc/2007/themesessions.asp>

The quality of the 306 papers and 90 posters was acknowledged and the organising of the conference was excellent. In addition to the marine scientists registered, numerous observers attended the meeting. In addition there were observers from other international organisations.