

The *Sea Around Us* at the 2nd International Marine Conservation Congress

by *Devon O'Meara, Debbie Shon and Frederic Le Manach*

The UBC Fisheries Centre was unusually quiet May 14-18th, the week of the 2nd International Marine Conservation Congress (IMCC2). Members of the *Sea Around Us* Project made a prominent appearance, with over 25 representatives attending the conference, held at the Victoria Conference Centre on Vancouver Island in British Columbia. This conference was a big event in marine conservation, and drew over 1,300 academics and professionals from universities, governments and NGOs around the world.

The theme of the conference, "Making Science Matter", was aimed at creating discussion between policy makers and scientists through sessions of themed symposia, workshops and talks. Many members of the *Sea Around Us* Project experienced this interchange, as evidenced during the session on the Gulf of Mexico's oil spill led by Ashley McCrea-Strub, where Jennifer Jacquet and Kristin Kleisner also presented. Following the talks, a U.S. representative with the Bureau of Ocean Energy Management, Regulation and Enforcement expressed his concern for hasty predictions regarding the economic and environmental impact of the oil spill on fisheries in the Gulf of Mexico. "Science is not truth but it allows us to get closer to it" remarked Daniel



Drs Daniel Pauly and Ashley McCrea-Strub participated in a special session on marine protected areas.

Pauly, who was in the audience. The interchange was respectful and informative, and it underscored one of the fundamental problems between science and policy makers that the conference aimed to address: a communication gap.

Among the many presentations by *Sea Around Us* members during IMCC2, media coverage essentially focused on marine protected areas (MPA) and the implications for the ambitious deadline set by the Convention on Biological Diversity to protect 10% of marine habitats by 2020. Daniel Pauly was quoted by *Nature News* for commenting on the recent political fad of MPA establishment: "Now we have a competition for politicians to see who can have the biggest one" he said. The article goes on to explain Pauly's stance that it will take more than appealing to a politicians competitive side to get MPAs established. Ashley McCrea-Strub was also

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credited in the article for estimating it would cost \$2 billion per year to run current MPAs at full capacity compared to the \$16.2 billion already spent on negative subsidies resulting in increased fishing pressure. Ashley McCrea-Strub was additionally mentioned by *Discovery News* in an article calling attention to her research on the economic benefits of investing in large MPAs - "We shouldn't say we should never have small MPAs. Some countries don't have large EEZs [Exclusive Economic Zones] or the funds to establish large MPAs."

"We shouldn't say we should never have small MPAs. Some countries don't have large EEZs [Exclusive Economic Zones] or the funds to establish large MPAs"... Ashley McCrea-Strub on MPAs.

The conference centre - and surrounding bars! - were also a great opportunity for many *Sea Around Us* students to widen their network, by



Sea Around Us post-docs Jennifer Jacquet, Kristin Kleisner and Ashley McCrea-Strub, along with Jon Hocevar from Greenpeace, gave talks on the Gulf oil spill.



taking advantage of the conference to make contacts around the world. Following Leah Biery's presentation on estimating global shark catches, a small line-up formed of individuals waiting to exchange information and ask more questions - a common story for many presenters. *Sea Around Us* members collaborating with the Ocean Health Index (OHI) project were also able to put a human face to an email contact for the first time at an OHI reception hosted by the managing director of OHI and senior scientist from the New

England aquarium, Steven Katona.

The next edition of the IMCC will take place in the UK in 2014, and we hope it will be as successful as IMCC2 for *Sea Around Us* members.



The **Sea Around Us**

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The *Sea Around Us* website may be found at www.searoundus.org and contains up-to-date information on the Project.

Red Fish Blue Fish, an Oceanwise supporter in the Victoria Harbour, was a popular lunch spot for conference participants.

News story links

Nature News article:

<http://www.nature.com/news/2011/110516/full/news.2011.292.html>

Discovery News article:

<http://news.discovery.com/earth/marine-reserves-110516.html>

The *Sea Around Us* Project is a scientific collaboration between the University of British Columbia and the Pew Environment Group that began in July 1999. The Pew Environment Group works around the world to establish pragmatic, science-based policies that protect our oceans, wild lands and climate. Pew also sponsors scientific research that sheds new light on the dimensions of and solutions to the problems facing the global marine environment.

It Takes a Project

by Daniel Pauly

For a few days this May, we moved the *Sea Around Us* Project to Victoria, B.C. for the 2nd International Marine Conservation Congress (IMCC). It would be easier (although not wiser!) to list the Project members who did not attend, than those who did. Furthermore, given the breadth of the presentations, almost every single member's work – past and current-- was represented. Preparing the more than 20 conference talks, coordinating travel to Victoria, as well as setting up and staffing the *Sea Around Us* booth for the duration of the conference took an extraordinary amount of foresight, effort, and positive energy. Each and every attendee met this challenge with the usual generosity of spirit that keeps the *Sea Around Us* cohesive and productive – and exceeded expectations with additional initiatives, such as the BBQ hosted by Michelle Paleczny. Many members even helped with both the Project's activities and also volunteered for IMCC itself. Thank you everyone for your contribution and for making IMCC2 a success.

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Sea Around Us Project: IMCC 2 presentations

Sarah Harper: The fisheries of small island countries

Leah Biery: [Estimating the global distribution and species composition of the shark fin supply from the bottom up](#)

Rhona Govender: Small but mighty: The real contribution of small-scale fisheries to global catch

Ashley McCrea-Strub: [Global financial investment in marine protected areas](#)

Daniel Pauly: Big reserves are better

Mark Hemmings: [Changes in Maldivian fisheries](#)

Colette Wabnitz: The ecological role of green turtles (*Chelonia mydas*) in Hawaiian and Caribbean marine ecosystems and implications for conservation

Megan Bailey: [Do Europe's reduction fisheries contribute to sustainability?](#)

Vicky Lam: Climate change and the economics of global fisheries

William Cheung: [Global changes in body size, distribution and productivity of marine fishes under climate change: implications for conservation](#)

Daniel Pauly (on behalf of Wilf Swartz): The spatial expansion of the world's marine fisheries: 1950 to present

Michelle Paleczny: [Are global marine fisheries starving seabirds?](#)

Marta Coll: Spatial overlap between marine biodiversity, cumulative threats and marine reserves in the Mediterranean Sea

Jennifer Jacquet: [Public vs. personal impressions of the Gulf oil spill](#)

Ashley McCrae-Strub: Oil and fisheries in the Gulf of Mexico: potential impacts on catch

Kristin Kleisner (on behalf of Rashid Sumaila): [Impact of the Deepwater Horizon oil spill on the economics of U.S. Gulf fisheries](#)

Dirk Zeller Arctic fisheries catches in Russia, USA and Canada: Baselines for neglected ecosystems

Frederic LeManach [Magnitude of missing catches in official fisheries statistics and implications for the local population – the example of Madagascar](#)

Jennifer Jacquet Intimacy through the Internet: Why Conservation Needs the Web

Sarika Cullis-Suzuki [Regional fisheries management organizations: effectiveness and accountability on the high seas](#)

Pablo Trujillo [Sea-Food from Space](#)

Kristin Kleisner [Exploring indicators of fishing pressures in the context of the OHI with a focus on correcting the Marine Trophic Index for geographic expansion](#)

Dalal Al-Abdulrazzak [Gaining Perspective on What We've Lost](#)

Megan Bailey (on behalf of Rashid Sumaila): [MPA cost-effectiveness study](#)

Fishing at the edge of collapse: 27 Years of Common Fisheries Policy in Europe

by Rainer Froese

Why were their considerable research efforts not dedicated to determining fishing regimes that maximize benefits for society while minimizing negative impacts on the stocks and the marine ecosystems?

In 2001, I returned to Germany from the Philippines, where I had worked for 10 years mostly on tropical fish and fisheries. I soon realized that the status of European fish stocks was no better than that in developing countries. Despite considerable efforts by hundreds of European fisheries scientists, data were lacking for most stocks, and even for the best researched ones, internationally agreed reference points, such as the maximum yield that can be taken sustainably (MSY), and the stock size required to support such catch were just not available. So, in the winter of 2008/2009 I sat down and analyzed the available data myself. The results made me want to cry. With few exceptions, fish stocks in Europe had been systematically decimated, even more so than in the rest of the world. In stock after stock, excessive fishing of 3 to 5 times above the internationally agreed reference point had reduced biomasses to 10 - 20% of their unexploited size. Extreme fishing pressure had shrunk cod to half of the length that our parents were used to. It had also reduced the natural adult lifespan of many years to a single spawning event, at best. Such fishing had effectively turned multi-spawning cod into single-spawning salmon.

It took me a while to realize that the sad state of European fish stocks was not a natural or societal failure that management just could not overcome despite its best efforts. No, the fact that most fish stocks balanced on the edge of collapse was the desired outcome of the Common Fisheries Policy of Europe (CFP), in force since 1984. In September 1996, the European Commission had asked the Council for the Exploration of the Seas (ICES), its main scientific advisory body for fisheries, to provide reference points that carry a low probability of stock collapse. ICES obediently provided limit reference points for stock size and fishing pressure and so-called 'precautionary reference points' slightly away from those limits. Fisheries management subsequently used these boundary posts of viable stock sizes as targets for fisheries management, but overshot the precautionary boundary for catches by 40 - 50% on average, effectively aiming for stock sizes on the slope to collapse.

Much of European fisheries research was dedicated to determining these boundary posts and next year's stock size with the highest possible precision. But why had my hard-working colleagues accepted such a questionable role, which strikes me as being similar to that of a medical doctor at a water boarding session? Why were their considerable research efforts not dedicated to determining fishing regimes that maximize benefits for society while minimizing negative impacts on the stocks and the marine ecosystems? Why were economists and social scientists not welcome in ICES advisory bodies? Why was the public not fully informed about the dismal state of European fish stocks? Why were fishers not informed about sustainable high catches and profits that healthy stocks could provide? Why were the internationally agreed reference points for sustainable fisheries management not made available and promoted by ICES?

These questions go to the root of the failure of fisheries management in Europe. The fishes in Europe's seas are owned by the citizens of Europe. These citizens have entrusted responsible management of this public good to their national Governments, where it is typically given to the Ministry of Agriculture with its associated research institutes. These institutes employ the fisheries scientists. Typically the ministry-approved heads of such institutes or someone from the ministry are the national delegates to the ICES Council, which determines ICES policies. ICES working groups give advice on stock sizes and potential catches to the European Commission. After extensive consultations, the Commission makes recommendations for fisheries management and for next year's catches. At several annual meetings in Brussels, the 27 EC ministers decide about fisheries management rules and also decide for each of the European stocks the catches that may be taken in the following year. Back at home, the ministries and their agencies administer the implementation of the decisions made in Brussels. They also control compliance by fishers. Such concentration of explorative, legislative and executive power within one ministry does not

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exactly resemble what we learned in school about the importance of separation of powers in a democratic system.

If this system was working in the interest of those who paid for it, fine. But clearly, it is not. ICES has blocked inclusion of social sciences (including economics), effective public outreach, and anything resembling ICES taking a stand on behalf of European fish stocks. It also has limited ICES advisory outputs to what the ministers deem useful for their negotiations in Brussels. Enforcement of fisheries management by member states is lax, with cases where actual catches exceeded the agreed amount by more than 100%. Fisheries in Europe are subsidized to an amount that in some cases equals the value of the landed fish. Without these subsidies, European fisheries would be bankrupt, because the cost of hunting the few remaining fish exceed the income from selling the catch.

Why did the ministers not act in the interests of the citizens who have elected them and who pay their salaries? Because the ministers are under constant pressure by the fishing lobby and only under occasional, if any, pressure by the public, which is made to believe that fisheries management is decided by bureaucrats in Brussels. The degree to which the European fishing lobby has infiltrated the system is astounding. Although the economic contribution of the fishing sector is less than, e.g., that of the industry producing sewing-machines, their political influence is considerable, probably because the public still has romantic notions about fishing, and because the media are drawn to stories of fishers blocking ports or dumping fish in the streets of Brussels. The European Commission has set up Regional Advisory Councils (RACs) which, among other, give recommendations on how to implement the scientific advice given by ICES. In these RACs, the fishing lobby has 2/3 of the seats, with the remaining seats being shared by all other stakeholders. If no consensus is reached, then decisions on recommendations are taken by simple majority, such as held by the fishing lobby, while other stakeholders may submit their minority opinion. But the main influence of the fishing lobby is probably exercised through their cozy personal relationships with the civil servants in charge of national fisheries, many of whom firmly believe that it is their job to protect the rights of their national fishing sector, including the rights to obtain subsidies and to overfish.

The role of the European fishing lobbies is a particularly unpleasant one: In order to increase allowable catches, the lobby routinely discredits the scientists and their advice, denies the depleted status of stocks, fights the establishment of protected areas, defends the usage of destructive gears, insists on the right to catch juvenile fish, and requests the abandonment of closed spawning seasons and areas. In doing so, they destroyed the very foundation that fishing depends upon. As a result, profit margins of European fishers are about 3-6%, whereas profit margins of their colleagues in New Zealand, which has successfully reformed its fisheries, are about 40%. Given the considerable influence of the European fishing lobby on the system, why do they not act in the interest of their fishers, whose profits could multiply in a few years if stocks were allowed to recover? The answer to this question eludes me.

Fisheries management in Europe culminates in the closed-door meetings of the Council of Ministers. While the public is excluded from this debate about a public resource, the fishing lobby is always only a cellphone away and often physically present in the building, being supplied with press cards by their national delegations. Decisions in the Council are typically taken by a 2/3 majority but need consensus if the Commission feels that its proposal has been ignored. That was recently the case in a preparatory meeting dealing with the threatened Atlantic bluefin tuna. The member states were unhappy with the proposal by the Commission which followed the scientific advice. They asked the Commission to leave the room, and then agreed unanimously with a few abstentions on much higher catches.

While the ministers may change every few years, their civil servant advisors with their cozy relationships to the fishing lobby stay on and oppose any true change. As a result of years of midnight micro-management, the CFP has accumulated over 600 regulations, many of which contradict each other. For example, regulated mesh sizes catch smaller fishes than the fishers are allowed to land. These fish are then dumped dead at sea. The setting of next year's catches has been described as political horse trading, with unholy alliances supporting each other in an effort to secure the highest possible share for the national fishing sector. Thus, Germany and Poland will support higher French catches in the Atlantic, and France will support higher catches in the Baltic. As a result of such coalitions, the cod and herring stocks in German waters are more strongly

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overfished than adjacent stocks. Since the proceedings of the meetings remain secret, the ministers can happily go home and wear blue ties at the next 'Save the Oceans' event, because clearly, they themselves fought hard for healthy oceans and ecosystem-based fisheries management, but others prevailed.

The situation described above is what Maria Damanaki was confronted with when, in 2010, she took over the post of Commissioner of DG Mare, the European Directorate General in charge of European fisheries. Building on the excellent Green Paper on the Reform of the Common Fisheries Policy of 2009, which officially documents much of what I have described above, she confronted the Council of Ministers with clear demands for rebuilding European fish stocks until 2015, in accordance with international agreements.

Her courage has shown some success: Europe is gradually abandoning the fishing at the edge of collapse, and ICES now provides at least one of the international reference points (Fmsy) for 39 out of 190 commercial stocks. The number of stocks that are known to be on the slope to collapse has also slightly decreased. But will this be enough to overcome overfishing in Europe and in the rest of the World, where much of the European fleet is operating and where Europe plays a crucial role as the largest importer of seafood products?

The proposal of the Commission for the reform of the CFP will be officially published on 13 July this year. Considering the mess that we are still in, it proposes big steps in the right direction. The internationally agreed reference points will finally be recognized in Europe, allowing the stocks to grow away from the edge of collapse. Discarding of perfectly good fish for bureaucratic reasons will be phased out. But the proposal clearly falls short of similar reforms that have been enacted in New Zealand, Australia and the USA. These countries have precautionary fishing targets, slightly away from the reference points to account for uncertainty, and they close fisheries when stocks enter the slope to collapse. In contrast,

Europe will have no precautionary margins and will gradually reduce fishing pressure only when stocks are on the slope to collapse, with no default rule for closing a fishery. Where the other countries have phased out or drastically reduced subsidies, the Commission only proposes to reshuffle subsidies. Also, the root causes of the CFP failure

will not be addressed, i.e., the concentration of power with the agriculture ministers and the excessive influence of the fishing lobby. Such restraint may not be surprising, because the Commission is well aware that these very ministers and their lobbies will decide the implementation of the proposal and the future of fish and fishing in Europe.

Do I have a final wish? Yes. Given the systemic failure of fisheries management as enacted by the ministries of agriculture, I wish Europe would leave them in charge of aquaculture, but give the management of wild fish to the ministers of environment. The Marine Strategy Framework Directive of 2008 shows that they have understood that only healthy ecosystems can support healthy fish stocks, which, in turn, can provide healthy profits from environmentally-friendly fisheries.

Supporting Literature

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