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## **Twenty-Five Years of ICSR**

In the 1970s and 1980s the United States and Canadian governments recognized the decline in the quality of their coastal waters. Both NOAA's National Ocean Service and Environment Canada developed programs assessing declines and developing methods to restore once productive estuaries. Word spread throughout coastal communities and soon there was a cadre of scientists, community, shellfish industry and government individuals who shared concerns about coastal quality and declining resources and needed a forum in which to exchange ideas and talk about solutions.

Anxious to turn the tide on declining environmental quality, a small group of government, industry, and community representatives came together in 1995 to plan the first International Conference on Shellfish Restoration (ICSR) held on Hilton Head Island, South Carolina in 1996. The first ICSR was designed to recognize the importance of shellfish as indicators of environmental quality and to examine how the health of coastal ecosystems could be improved through shellfish restoration. The second conference returned to Hilton Head in 1998 where over 200 scientists, resource managers, and government officials met to consider how community, regional, national and international partnerships can help the shellfish restoration process. The focus was on successful techniques and how they could be applied to multiple estuaries.

In October 1999, the ICSR conference was held in Cork, Ireland, where it took on a European dimension, the agenda broadened to include non-molluscan shellfish such as sea urchin and lobsters. The emphasis throughout the conference was on the marriage of science and management. While highlighting shellfish as a valuable coastal resource, ICSR Europe also addressed important new restoration topics such as artificial reefs, interactions with birds, the carrying capacity of bays, red tides, and the genetic implications of sea ranching.

The Conference returned to Hilton Head in 2000 and, on the heels of that successful meeting, the ICSR continued an international tradition with a Canadian version held in Nanaimo, British Columbia in September 2001. The Canadian meeting showcased the importance of shellfish to the First Nations from the perspective of traditional use and current practice. The field trips, which have become an integral part of the ICSR program, showcased the farming techniques of two shellfish farms: Fanny Bay Oyster and Odyssey Companies. The major social event was The Traditional Feast of the Snuneymuxw First Nation.

There is a unique quality to the ICSR meetings in the US ...the lengthy breaks and social events. At most large conferences the audience is talked to by numerous scientists and students. We often rush from room to room, from one concurrent session to the next, trying to catch as many presentations as possible. A quick nod in the hallway or a moment or two at the coffee table is the extent of our interaction. At the ICSR, the coffee breaks, box lunches and evening social events take center stage. On center stage are our own shellfish musicians, ranging from saxophone to drums to guitar and violin. We dance as though no one were watching and eat as many oysters as we can possibly manage. Is it fun? You betcha! ... And much of the collaborations between scientists, managers and community activists begin in these settings.

In 2002 ICSR moved to Charleston, South Carolina, one of the most beautiful coastal cities in the United States. The hotel is situated right in the middle of the historic downtown area, a neighborhood replete with gift shops and excellent restaurants. Heated discussions took place on the role of exotic species in coastal estuaries, fueled by the potential introduction of the “Chinese” oyster, *Crassostrea araiakensis*, in the Chesapeake Bay. The field trips held prior to the meeting were a visit to Capers Island, a South Carolina Heritage Preserve and the ICSR Golf Tournament. We almost froze to death at the traditional oyster roast but kept warm with the hot debates and dancing. Charleston has remained the site for the ICSR held in the US on even years. The social traditions have remained constant but the focus of the meeting has shifted to topics such as the measurements (metrics) of success, community efforts in reef construction, shellfish depletion and restoration of indigenous species such as the Olympia oyster, *Ostreola conchaphila*.

In contrast to the US meetings the ICSR in Europe covers all of the scientific topics related to shellfish. For example, the 2005 meeting in Brest, France had concurrent sessions that ranged from genetics, pathology, hatcheries and fisheries management to shellfish-ecosystem linkages and the socio-economic, policy, outreach and education aspects of shellfish/habitat restoration.

On November 12-16, 2007, the ICSR was held in Vlissingen, the Netherlands. Titled “Innovation in the Exploitation and Management of Shellfish Resources” the Dutch program received over 200 abstracts covering recruitment (spatfall dynamics and management), ecosystem based management (carrying capacity, integrated multitrophic aquaculture), stakeholder involvement and management, (shellfish management and nature conservations, international legislation, education) and new technologies in offshore shellfish culture and hatcheries and nurseries. I asked the Co-Chairs, Aad Smaal and Jeroen Wjisman about their program and why the European programs are so scientific in nature. Both Aad and Jeroen commented that the ICSR is the only shellfish forum in Europe whereas in the US we have annual meetings of the National Shellfisheries Association, which now has a large percentage of international members and covers all of the scientific issues related to shellfish, as well as biannual meetings of the Interstate Shellfish Sanitation Conference which covers all aspects of water quality and public health.

Following the very successful meeting in the Netherlands, the 2008 ICSR was held again in Charleston. The theme of the conference was a departure from past meetings... highlighting the role shellfish have played in the development of society, ranging from the coastal tribal nations in the U.S. to the Maori in New Zealand, and from the early settlers in Brittany to Canada’s First Nations. Speakers discussed “shellfish and society” issues, including the current role of shellfish in society and how that relates to community stewardship and education. We realize that shellfish (food source and the shells) have been the "glue" that has held communities together and formed tight bonds of friendship.

The 2009 ICSR was hosted by our Canadian partners in beautiful Charlottetown, Prince Edward Island. The collaborative effort of industry, scientists and managers built the program around the theme of "Healthy Coastal Environments for Successful Shellfish Restoration". It was fitting that this conference took place in Prince Edward Island. Both levels of government and industry have been involved in the restoration and enhancement of public oyster grounds for more than 35 years. Prince Edward Island has worked with many of the techniques utilized for

shellfish restoration around the world. The efforts of the Prince Edward Island Shellfish Association to enhance the oyster fishery and restore habitat was a most welcome success story.

ICSR'10 in Charleston. ... an opportunity to celebrate the 25<sup>th</sup> year since the first ICSR was held on Hilton Head Island in 1986. Therefore, the highlighted theme for ICSR'10 is on the progress that has been made in shellfish restoration over the past 25 years, and how these efforts have shaped the role of shellfish restoration for the future. Presentations will address “the past, the present, and the future” of shellfish restoration efforts, and how this history relates to community stewardship, public awareness, and education.

Currently we are faced with a major oil spill in the Gulf of Mexico impacting oyster reefs and the industry that depends upon them. In response to the disaster in the United States, we will be including special tracks on the situation and response to the Gulf of Mexico oil spill on shellfish and shellfish habitat. We recognize the tragedy that has fallen on the shellfish resource and the industry it supports in the Gulf region, and want to elicit the best information to assist in restoration efforts.

There is a greater need than ever for the enhancement of our coastal ecosystems through shellfish restoration. Not only does the public have a keen interest in restoring water quality to shellfish growing areas, but also the aquaculture industry which is focused on advancing the quality assurance and safety of aquaculture products. The demand for seafood is expected to increase significantly in the next ten years, and the industry will need new sites with good water quality. Our goal is to provide forums throughout the world to draw attention to shellfish, shellfish water quality, and related issues, and to foster partnerships and the exchange of information to further the science of restoration and aquaculture.