

Symposium on “Shellfish – Resources and Invaders of the North”

2017/3/EPISG02 A Symposium on “Shellfish - Resources and Invaders of the North” will be held during 3 days late in 2019, in Tromsø, Norway, with Carsten Hvingel (Norway), Gordon Kruse (USA) and Bernard Sainte-Marie (Canada) as conveners.

A Scientific Steering Group is being established in cooperation with relevant Working Groups or other relevant ICES bodies from among the ICES network of research institutes to assist the conveners in planning the symposium. In consultation with the conveners, the ICES Secretariat will solicit appropriate co-sponsorship from other international organizations.

Supporting Information

Priority:	<p>ICES’s activities focus on providing the scientific basis for the exploitation of marine living resources, i.e. providing advice for the management of fisheries and ecosystems. This conference will bring together the world’s leading experts on shellfish to discuss the role of cold water shellfish as a resource and player in the marine ecosystems: how should we exploit them sustainably; can we explain the recent changes for e.g. shrimp and snow crab and what should be the management response? The ecosystem effects of the coming and going of large shellfish populations are potentially massive: can these impacts be quantified?</p> <p>Shellfish are “the diamonds of the sea”. They are a high-quality food source and support substantial fisheries in cold-temperate and polar areas. There is a strong interest in both the North Pacific and the North Atlantic concerning shellfish resources, their population dynamics and the management of their exploitation.</p>
Scientific justification:	<p>Large fisheries for northern shrimp have been established across the North Atlantic since the mid-1990s. Several crab fisheries have also boomed, in particular those for snow crab and king crab off Alaska, Canada, Greenland, Russia and Norway. The Sea scallop fishery in western Atlantic has recently made a remarkable recovery, while fisheries for the Iceland scallop never sustained at a high level.</p> <p>Large changes in the population dynamics of the most important shellfish resources have, however, been recorded in recent years. These changes are believed to be related to climate, but the resulting stock dynamics are quite different across geography and species. In the western part of the Arctic and sub-Arctic shrimp and snow crab stocks are declining rapidly while in the eastern part the shrimp stock remains high. The non-native snow crab has invaded this latter area and is predicted to become the world’s largest snow crab resource.</p> <p>The edible crab, which supports fisheries from Spain through the North Sea to coastal mid-Norway, is spreading northwards and is now “meeting” the red king crab which is on the move westward, in the coastal waters off northern Norway. The blue mussel has reappeared in Svalbard after a 1000-year absence. As the coastal waters are warming, also the European lobster, the Norway lobster and the Great scallop are expanding their distribution northwards. Further south the invasive Pacific oyster is “moving” northwards, with unknown interactions and success. In the North Pacific, the snow crab has expanded its distribution from the eastern Bering Sea into the Chukchi and Beaufort Seas.</p> <p>We want this symposium to discuss the role of cold water shellfish as a resource and player in the marine ecosystems: how should we exploit them sustainably; can we explain the recent changes for e.g. shrimp and snow crab and what should be the management response? The ecosystem effects of the coming and going of large shellfish populations are potentially massive: can these impacts be quantified?</p>
Resource requirements:	<p>We would like ICES to support this symposium financially as support for travel expenses for early career scientists/students as well as publication in a special edition of the ICES Journal. We want to hold the symposium in Tromsø because it is close to several important shellfish stock including the emerging snow crab stock. The chosen location will impose an increase in travel expenses. In order to avoid deterring</p>

	people, especially students, from attending the symposium, it is important to set an affordable participation fee.
Participants:	We anticipate approximately 200 scientists, mostly from ICES member countries.
Secretariat facilities:	Involvement of the Secretariat for setting up a web page, handling abstract submissions and registration of participants, as well as general support for the symposium.
Financial:	The conveners expect a financial support to support early career scientists/students. In addition, we would welcome support for a special issue of the ICES Journal to cover output from the symposium.
Linkages to advisory committees:	ACOM, SCICOM, Assessment working groups, a.o.
Linkages to other organizations:	PICES (Gordon Kruse), NAFO (Bernard Sainte-Marie), NEAFC.
Publication of proceedings	The plan is to use a special issue of IJMS for the proceedings. The conveners agree to the 15-month turnaround schedule for publication and are willing to act as guest editors if requested by the journal.