

Category

BE Biology, Ecology, Ecosystems, Biodiversity

Session Number

BE-10

Session Title

Polar fish: physiological adaptations and their responses to climate change

Session Description

The Southern Ocean is considered to be one of the world's most environmentally stable habitats, containing a high percentage of endemic fish species. The Arctic Ocean experiences greater influence through mixing with the surrounding oceans, but also supports a multitude of local, cold-adapted stenotherm fish species. Both Oceans are concomitantly altered by anthropogenic influences and climate change. Consequently, the fishes adapted to these polar environments are under continued pressure to respond through acclimation and/or adaptation to these changes.

This symposium aims to bring together all those interested in the evolutionary adaptation, population structure, physiology and ecology of polar fishes. It will provide a multidisciplinary platform for all working on the responses on polar fishes to climate change (e.g. ocean acidification, ocean warming, pollution, species invasion...). It will cover all aspects dealing with environmental adaptations or influences on polar fishes, from the chemical analytical, genomic, molecular, biochemical, metabolic and organismic approaches, and include all life stages of individuals as well as effects at the population level. Topics which focus on molecular and genetics aspects, or take an integrative approach to comparative physiology and ecology are highly welcome. We are looking forward to discussing anthropogenic influences on or adaptive responses of polar fish communities related to aspects of biodiversity and population structure.

Keywords: Fish, Arctic, Antarctic, evolution, physiology, adaptation, climate change

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