Sessions

SESSION 3: Identifying Trade-offs and Conflicting Objectives

Conveners: Rudi Voss (CAU) and Phil Levin (NOAA)

Session contents

This session will focus on case studies as examples of the application of tools to identify trade-offs between ecological, economic and social objectives in various fisheries around the world. These are envisaged to span case studies on selection of indicators to quantify trade-offs in specific ecosystems, as well as model simulations to explore and evaluate trade-off situations in selected case study ecosystems or fisheries. The aim is to provide concrete examples of how trade-offs are identified and explored, with the aim of providing sound scientific advice that can be incorporated into the decision making process (Session 4). We encourage cross-disciplinary studies.

Rudi Voss

Rudi Voss has his main scientific interest in analysing the population dynamics of harvested species in their ecosystem context. Rudi realised early that trying to understand the interplay of species ecology, human use, food web interactions, as well as feedbacks requires an interdisciplinary approach. Accordingly, he started a fruitful inter-disciplinary collaboration during his PhD thesis. Realizing that the human impact has the potential to rule out all other factors, Rudi increasingly incorporated management questions, e.g. multi-species assessment, trade-offs, and fisheries advice, in his work. Ultimately, he had to realise that in a market economy economic incentives determine how resources are used. Furthermore, unlike ecology, economics provides sound methods to operationalise normative societal objectives such as welfare and sustainability. Therefore, Rudi was grateful for the opportunity to join a newly established inter-disciplinary working group on resource economics at Kiel University in 2008. While being able to keep up biological research regarding key population parameters within the cluster, he could more and more include the human aspect, as driven by economic considerations and needs. Rudi contributed significantly to several national and international research project, with a main focus on the Baltic Sea. He also coordinated the field activities in the GLOBEC Germany project. Find out more about Rudi here: **www.eree.uni-kiel.de/de/mitarbeiterinnen-mitarbeiter/dr.-ruediger-voss**

Phillip Levin

Dr Phillip Levin is a community ecologist and conservation biologist with an interest in bridging the gaps between theory and practice in conservation biology and fisheries science, and developing modelling and statistical approaches to inform ecosystem-based management of marine systems. The main focus of his current work is on developing scientific tools to inform Ecosystem-based Management in the United States (and beyond). Levin has led the development of new analytical tools for characterizing ecosystem health and forecasting the cumulative effects of fisheries management and coastal zone management and climate change on living marine resources. Phillip Levin is a Senior Scientist and leads the Ecosystem Science Programme and the Nearshore Ecology Team at National Oceanic and Atmospheric Administration (NOAA) Fisheries' Northwest Fisheries Science Center in Seattle, WA, USA. Read more about Phillip Levin here: **www.nwfsc.noaa.gov/contact/display_staffprofile.cfm?staffid=389**