Theme Session K
Quantitative value of coastal habitats for exploited species

Conveners:
Romuald Lipcius, USA (rom@vims.edu)
Ingrid Tulp, the Netherlands, (Ingrid.Tulp@wur.nl)
Håkan Wennhage, Sweden (hakan.wennhage@slu.se)

The primary goal of this session is to provide state-of-the-art review papers and recent research findings on the integration of habitat value quantitatively in mathematical, statistical, or empirical models of the population dynamics of exploited species, particularly those for which ICES gives management advice, as well as those species that are important in the foodweb of ICES species. The session is derived from the 2012 ICES workshop on the same issue (WKVHES; final report available from ICES), and seeks to determine the relative value of coastal nursery habitats (e.g. seagrass beds, salt marshes, kelp beds, rocky bottom), feeding grounds, and spawning areas for the suite of species of interest to ICES by (i) documenting and evaluating case studies where the quantity and quality of coastal habitats can be linked directly to the population dynamics of exploited species; (ii) producing reviews that synthesize and critically evaluate the evidence for the importance of coastal habitats to exploited species, and (iii)establishing quantitative methods for determining how coastal habitats influence population abundance and fishery yield. We expect the session to enhance our ability to predict fishery yield, age-class strength, and long-term population status for species of commercial and recreational value, and to define key habitats for restoration efforts.

Papers are welcome on the following topics (Note that the focus is on quantitative studies):

- Experimental or descriptive field studies on the value of coastal habitats for fish and invertebrates in Atlantic, Baltic, and Mediterranean habitats;
- Mathematical and statistical models that integrate habitat effects with population dynamics;
- Field, mesocosm, or laboratory studies on the effects of habitat features on demographic parameters/vital rates;
- Applied studies on habitat effects in metapopulation dynamics, marine reserve design, and other spatially implicit/explicit applications;
- Effects of habitat on fishery or population production;
- Effects of anthropogenic stressors on coastal habitats;
- Quantitative studies on habitat conservation/restoration.