ICES Theme Session P

Operation cephalopod solutions

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Session P originated due to the increasing interest in the economic and ecological value of cephalopods. Cephalopods are both predators and prey and represent the target group for several fisheries, particularly (for their dependence on cephalopods), artisanal fisheries. However, even if the importance of cephalopods cannot be ignored, few assessments are routinely carried out for this group. To secure a sustainable exploitation of European cephalopod stocks, improved assessments based on a better sampling strategy for these species should be attempted. Cephalopods present the added difficulty of being extremely sensitive to environmental variation and therefore further research is needed to quantify environmental effects to improve our ability to explain and predict the wide fluctuations in cephalopod distribution and abundance, and hence in fishery catches, from year to year.

Twenty-three communications and 6 posters, all relevant to the broad objectives of the ICES Strategic Plan, were presented showing the scientific quality and innovation available for this group of animals. The contributions could be divided into:

1. environmental impacts on cephalopod populations (9 contributions)
2. directed cephalopods fisheries: e.g. small scale fisheries and their socio-economic importance (4)
3. environmental and human impacts on cephalopods in small scale fisheries (3)
4. management strategies for cephalopod fisheries, accounting for essential habitats (9)
5. optimal culture conditions taking into account new legislation on cephalopod welfare (2)
6. key issues for successful culture: artificial diets; quality product for human consumption (1)

In addition, and following the broader maritime picture advocated by the Integrated Maritime Policy (IMP) and its environmental pillar, the Marine Strategy Framework Directive, the suitability of cephalopods as indicators of Good Environmental Status (GES) was also discussed in one contribution.

The work presented during the session show that we now have a better understanding of the environmental effects on cephalopod biology and dynamics. These studies are essential, together with better assessment models that can help determine sustainable exploitation rates from current population levels, in the context of integrated assessment and management of the marine ecosystem since cephalopods play a fundamental role in ecosystem functioning.