

Current understanding of specific processes and pressures on Black Sea ecosystem and priorities for future research

Abstract:

This synthesis focuses on addressing current understanding of specific processes and pressures on Black Sea ecosystem and priorities for future research. Using the objectives and principles of the Marine Strategy Framework Directive as a vehicle, understanding on the selection and application of the appropriate descriptors and indicators of the MSFD, an analyses mainly on 3 categories, eutrophication, non-indigenous species, food web and fish/fish spawning is put forward.

1. Introduction
2. Eutrophication and its implications on the ecosystem/food web current state, challenges and gaps
 - 2.1 Inputs through straits and rivers
 - 2.2 Atmospheric nutrient input
3. Invasive ctenophores, current state, challenges and gaps
 - 3.1 Recent trends in invasive ctenophores
 - 3.2 Effect of *M. leidyi* and *Aurelia* on nutrients and plankton community
 - 3.3 Food preferences of invasive ctenophores
4. Anchovy spawning areas, current state, challenges and gaps
 - 4.1 Spawning Grounds
 - 4.2 Trends and changes in fodder zooplankton composition as the food source of anchovy
 - 4.3 Effect of Ctenophores
 - 4.4 Black Sea Fish Condition in relation to environmental status