

CIESM Congress Session : Aliens biology and adaptations
Moderator : Anders Jelmert, Inst. of Marine Research, Flødevigen, Norway

Moderator's Synthesis

The introductory presentation made a very generic outline of how incomplete knowledge of biological traits and adaptation in NIS lowers our ability to predict the effects of NIS in the recipient ecosystems. The concept adaptation was broken down in three different meanings: A species adaptation to a shifting or a new environment (plasticity and evolution), the ecosystems response to a new (NIS) species, and finally, the human response (how to manage NIS). The introduction also pointed to the fact that issues related to biodiversity (and thus NIS) are partly normative - both for the scientific and the general community.

To stimulate debate after the presentations, and taking into account the session presentation of the concept "tropicalization" of the Mediterranean, one question was put to the audience: "We conventionally regard the effects of a NIS as negative: How are we evaluate NIS in a situation where indigenous species (having key ecosystems functions) no longer can deliver these ecosystem services, whereas a NIS can? "

The question stimulated a fairly lively debate, although some misunderstandings regarding the example of herbivory (macro-algae grazing fishes vs zooplankton) needed to be sorted out. Other issues were commented: the time-span for functional and numerical response (many NIS have been shown to have a rapid growth and impact, but later to become less prominent in effects). This was contrasted to the risk of overlooking NIS that have long lag-phases; both issues call for long-term studies of the presence and effects of NIS.

