What is the impact on fish recruitment of anthropogenic physical and structural habitat change in shallow nearshore areas in temperate systems? A systematic review protocol - DTU Orbit (08/11/2017)

What is the impact on fish recruitment of anthropogenic physical and structural habitat change in shallow nearshore areas in temperate systems? A systematic review protocol

Background: Shallow nearshore marine ecosystems are changing at an increasing rate due to a range of human activities such as urbanisation and commercial development. The growing numbers of constructions and other physical and structural alterations of the shoreline often take place in nursery and spawning habitats of many fish and other aquatic species. Several coastal fish populations have seen marked declines in abundance and diversity during the past two decades. A systematic review on the topic would clarify if anthropogenic physical and structural changes of near-shore areas have effects on fish recruitment and which these effects are. Methods: The review will examine how various physical and structural anthropogenic changes of nearshore fish habitats affect fish recruitment. Relevant studies include small- and large-scale field studies in marine and brackish systems or large lakes in temperate regions of the Northern and Southern hemispheres. Relevant studies may be based on comparisons between undisturbed and disturbed areas, before and after disturbance, or both. Relevant outcomes include measures of recruitment defined as abundance of juveniles of nearshore fish communities. Searches will be made for peer-reviewed and grey literature in English, Dutch, Danish, Finnish, German, Swedish and Spanish. All fish species and species groups will be considered in this review. Included relevant studies will be subject to a critical appraisal that will assess study validity. From relevant included studies, we will extract information on study characteristics, measured outcomes, exposure, comparators, effect modifiers and critical appraisal. Data synthesis will contain narrative and summary findings of each included study of sufficient quality. Meta-analysis may be possible in cases where studies report similar types of outcomes

General information

State: Published

Organisations: National Institute of Aquatic Resources, Section for Ecosystem based Marine Management, Stockholm Environment Institute, Uppsala University, Umeå University, University of Bologna, University of Groningen, Cornell University

Authors: MacUra, B. (Ekstern), Lönnstedt, O. (Ekstern), Byström, P. (Ekstern), Airoldi, L. (Ekstern), Eriksson, B. (Ekstern), Rudstam, L. (Ekstern), Støttrup, J. G. (Intern)

Publication date: 2016 Main Research Area: Technical/natural sciences

Publication information

Journal: Environmental Evidence Volume: 5 Issue number: 1 Article number: 61 ISSN (Print): 2047-2382 Ratings: Scopus rating (2016): CiteScore 2.5 SJR 1.24 SNIP 0.865 Scopus rating (2015): SNIP 1.036 SJR 1.301 CiteScore 2.46 Scopus rating (2015): SNIP 1.036 SJR 1.301 CiteScore 2.46 Scopus rating (2014): SNIP 0.9 SJR 0.851 Scopus rating (2013): SNIP 0.225 SJR 0.207 ISI indexed (2013): ISI indexed no Scopus rating (2012): SJR 0.122 SNIP 0 Original language: English Electronic versions:

s13750_016_0061_z.pdf DOIs:

10.1186/s13750-016-0061-z Publication: Research - peer-review > Journal article – Annual report year: 2016