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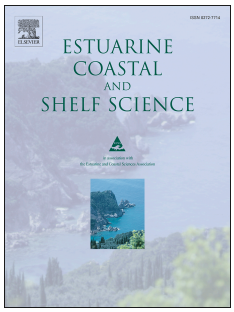

Local conditions affecting current and potential distribution of the invasive round goby – Species distribution modelling with spatial constraints

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TITLE: LOCAL CONDITIONS AFFECTING CURRENT AND POTENTIAL DISTRIBUTION OF THE INVASIVE ROUND GOBY – SPECIES DISTRIBUTION MODELLING WITH SPATIAL CONSTRAINTS.

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ABSTRACT

The establishment of non-indigenous species (NIS) has become a global phenomenon and is acknowledged as one of many potential threats against biodiversity and the functioning of marine ecosystems. To support effective management there is a need to predict NIS distribution and identify areas with the highest invasion risk. In this study we have developed local species distribution models by combining observations of one of the top-tier invasive NIS, the round goby *Neogobius melanostomus*, with high resolution maps of environmental conditions along the Baltic Sea coast of south-eastern Sweden. By applying the model with and without spatial constraints we