

## The use of joint modelling to integrate different fishery surveys results in a better niche identification and better prediction maps

The integration of different datasets is an attractive way to improve our understanding and prediction of species distributions. In fact, different surveys may sample a different section of a species' ecological niche, which makes data integration even more necessary. In this study, we used joint-likelihood models to better identify the ecological niche of common sole in western Iberian waters by combining data on two different fishery surveys. Each survey sampled using different gears and the distribution of the samples partially overlapped each other. Joint modeling clearly produced better results, obtaining better fitted effects and better distribution maps.