



MUSSEL GROWTH ESTIMATIONS

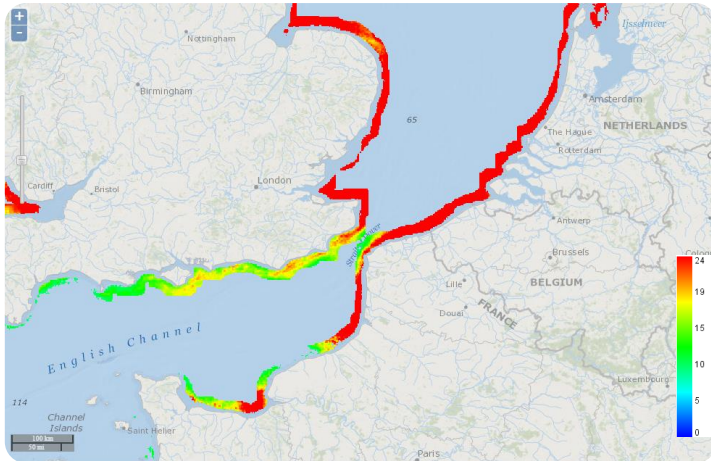


FIGURE 1: ESTIMATED MUSSEL WEIGHT AT THE END OF THE FARMING SEASON (IN GRAMS)

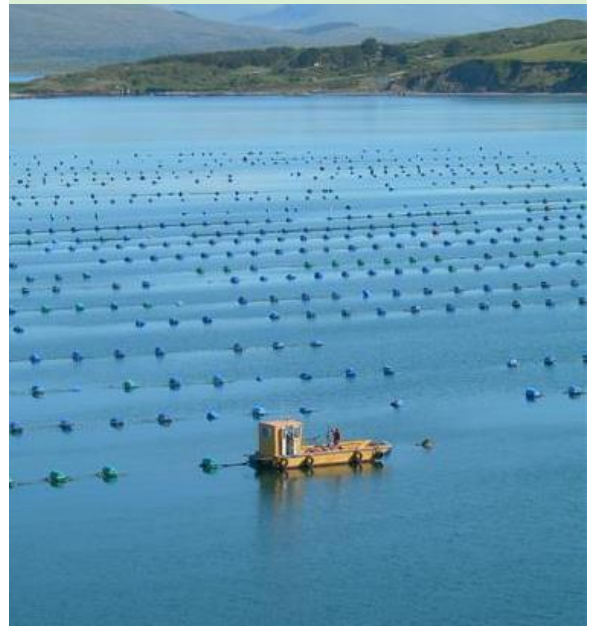


FIGURE 2: MUSSEL FARMING, IRELAND (PICTURE: MARY AND ANGUS HOGG)

Source data: This product requires a combination of:

- the mapping of optimal site location for mussel farms (another SAFI product) and
- a Chlorophyll-a (Chla) climatology computed over the previous six years of daily Chl-a concentrations

Methodology: The algorithm developed by Thomas *et al.* in 2011, based on Chl-a concentration for estimating mussel growth, is applied to the potentially suitable sites for mussel farming.

Limitation: Impact of specific events like production loss due to diseases or harmful algal bloom occurrence cannot be considered in this yearly growth estimation.

This indicator estimates the potential total weight before being marketed, based on the mean climatology of Chlorophyll-a and the Optimal Site Location for Mussel farming. This is readily adaptable from *Mytilus edulis* to other mussels species.

References: ¹Thomas, Y., J. Mazurié, M. Alunno-Bruscia, C. Bacher, J.-F. Bouget, F. Gohin, S. Pouvreau, and C. Struski. 2011. Modelling spatio-temporal variability of *Mytilus edulis* (L.) growth by forcing a dynamic energy budget model with satellite-derived environmental data. *Journal of Sea Research* 66:308-317.