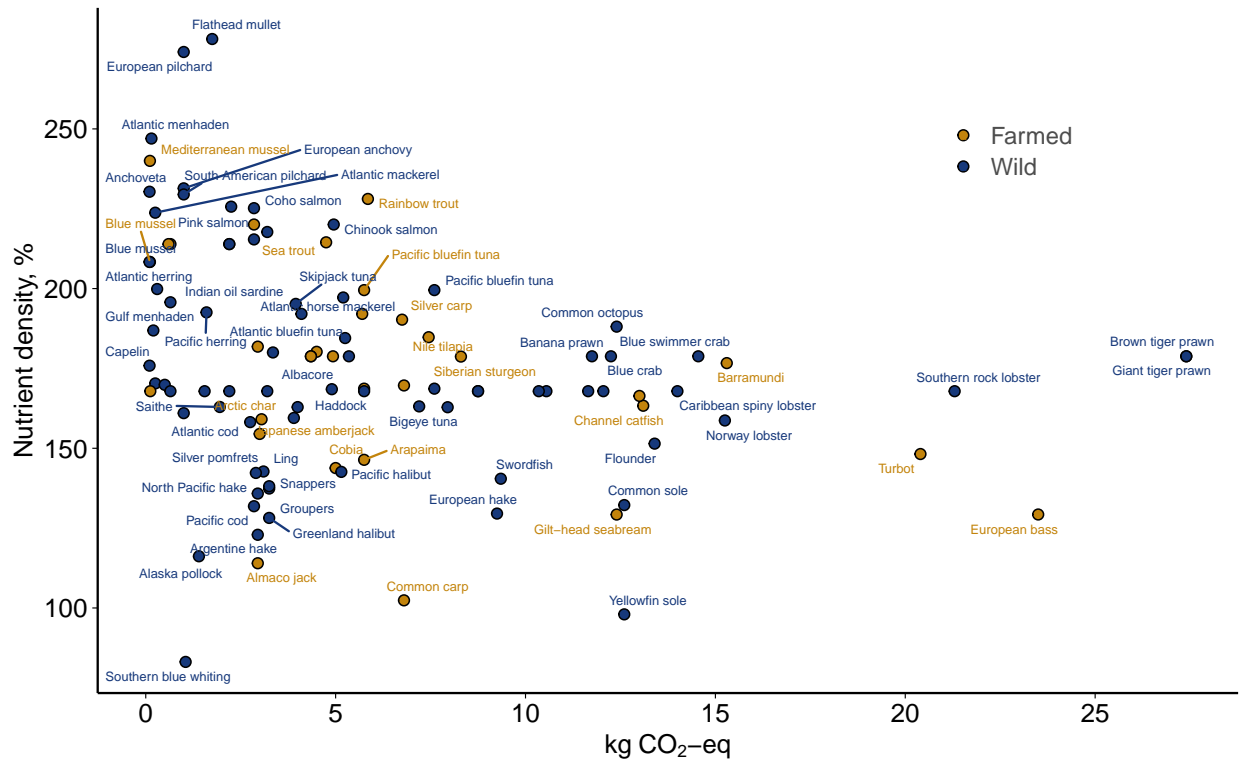


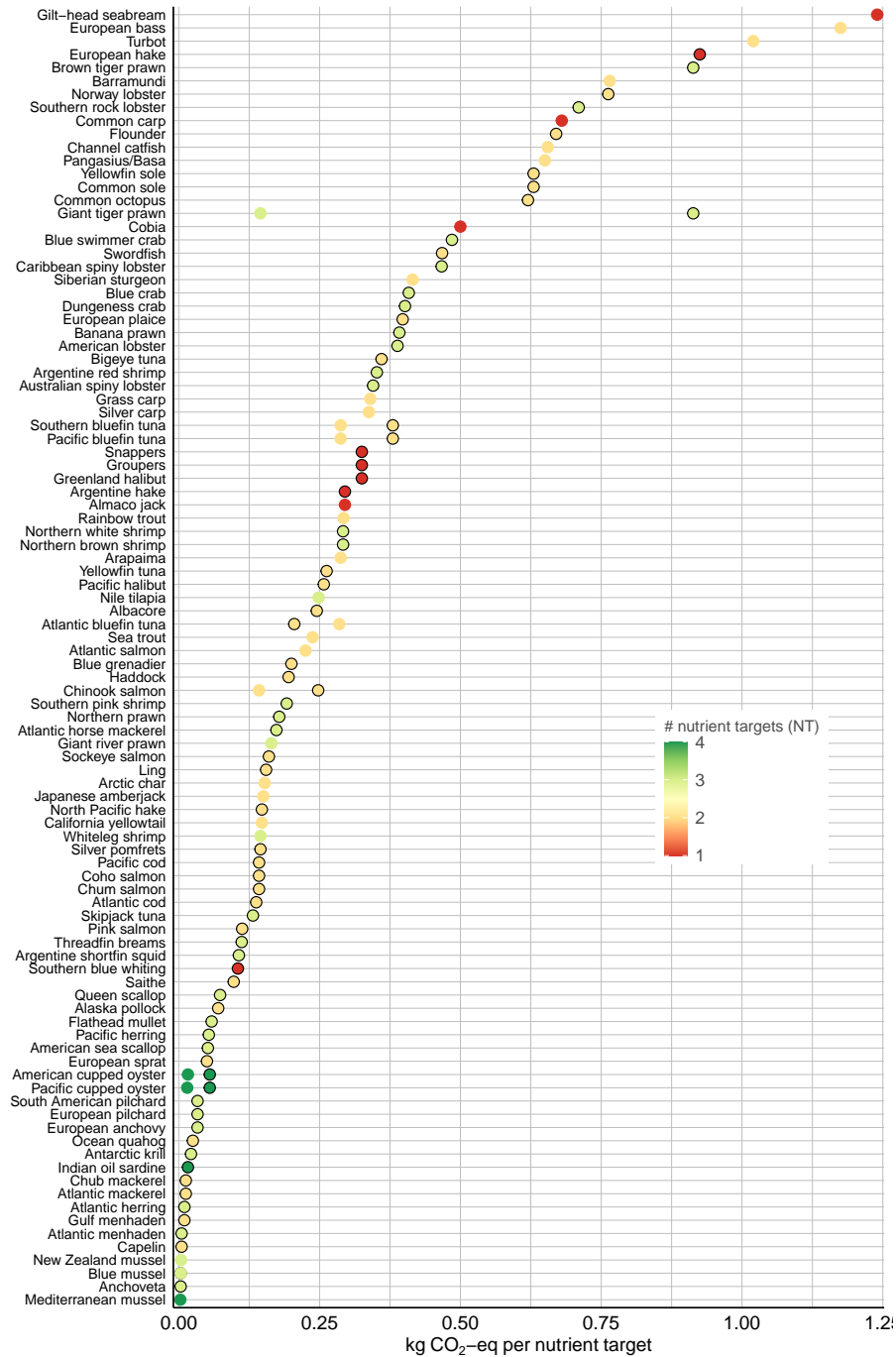
# **Supplementary Figures**

## **The carbon footprint and nutrient density of blue foods**

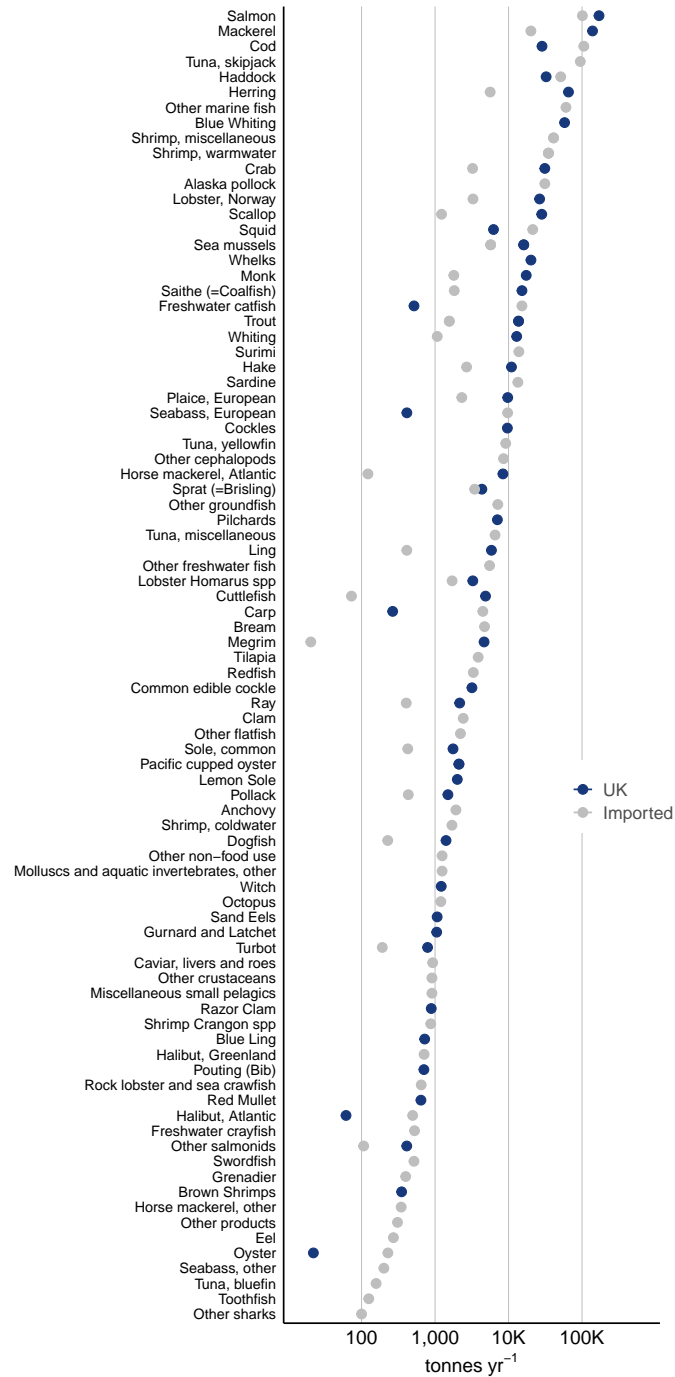
Authors: James Robinson, Angus Garrett, Juan Carlos Paredes Esclapez, Eva Maire, Christina Hicks, Nick Graham



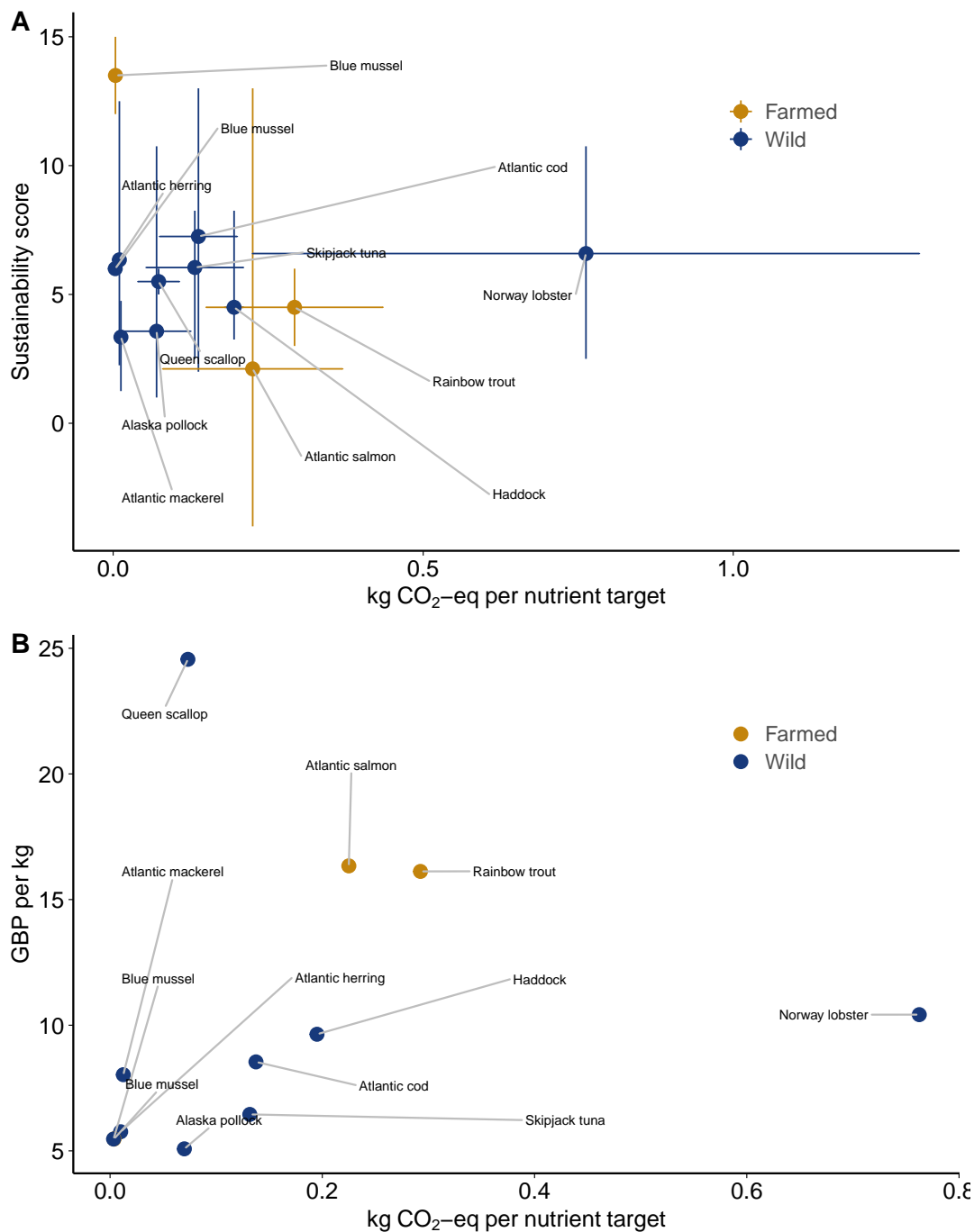
**Fig. S1. Nutritional value and carbon footprint of seafood species** Points are kg CO<sub>2</sub>-eq of each species and its corresponding the nutrient density (%). Nutrient density is the summed contribution of a 100g portion to recommended intakes of five nutrients (calcium, iron, selenium, zinc, omega-3 fatty acids) (recommended daily intakes for adults (18-65 years old)).



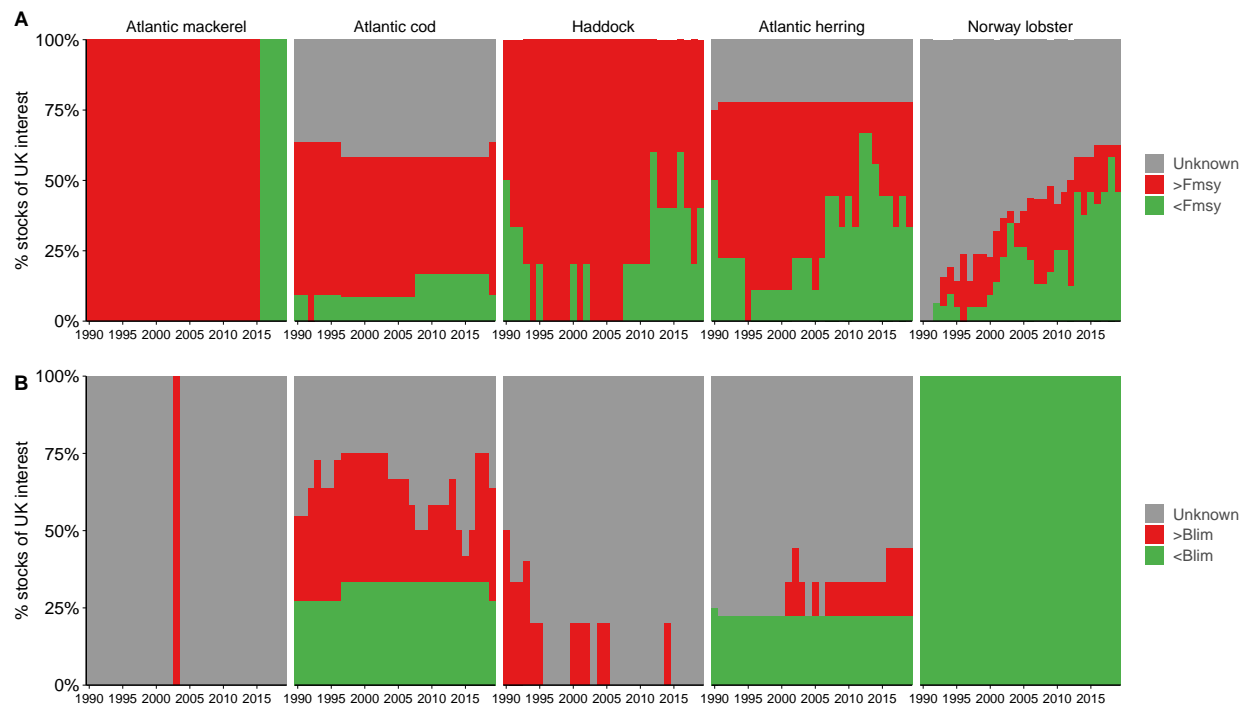
**Fig. S2. Carbon emissions per nutrient target for all seafood products in the carbon emissions database** Points are the mean kg CO<sub>2</sub>-eq per nutrient target for each seafood species, where a nutrient target was the recommended intake (adults 18-65 years old) contained in a 100g portion for 7 nutrients (calcium, iron, selenium, zinc, omega-3 fatty acids, vitamin A). Points are coloured by the number of nutrient targets in a 100g portion. Animal-source foods (beef, chicken, lamb, pork) are included for comparison using CO<sub>2</sub> values from (Clune et al., 2017) and nutrient values from (Widdowson, n.d.).



**Fig. S3. Seafood available for UK consumers.** Points are the estimated UK production (blue, landings and farms) and imported (grey) seafood per year, for all seafood with more than 100 tonnes total production.



**Fig. S4. Carbon emissions per nutrient target for UK seafood products against sustainability score (A) and average price per kg (GBP) (B)** Points are the mean kg CO<sub>2</sub>-eq per nutrient target for each seafood product by the mean sustainability score across multiple stocks or production methods (MSC REF) and price per kg (Seafish 2021). Error bars in A show the minimum and maximum value for sustainability scores and kg CO<sub>2</sub>-eq.



**Fig. S5. Pressure and state thresholds for wild fisheries stocks relevant to UK seafood production from 1990-2019.** Bars indicate the proportion of stocks that are underfished (green), overfished (red), or data deficient (unknown), according to estimates of fishing mortality (A,  $F_{MSY}$ ) or spawning stock biomass (B,  $B_{lim}$ ). Data from CEFAS [REF].