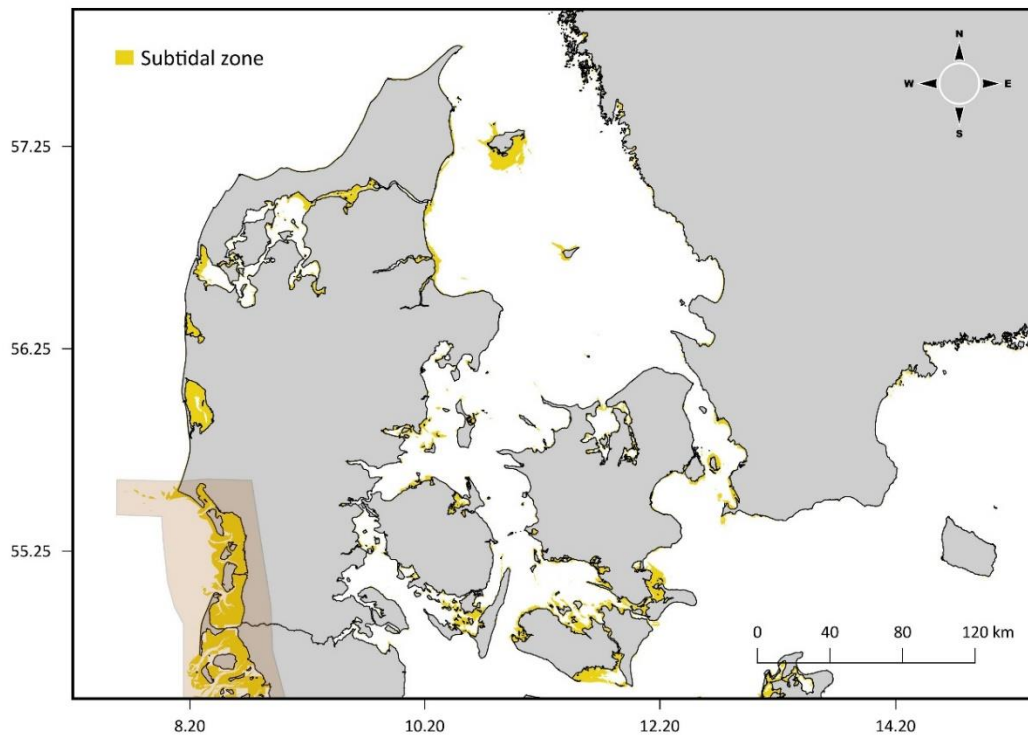
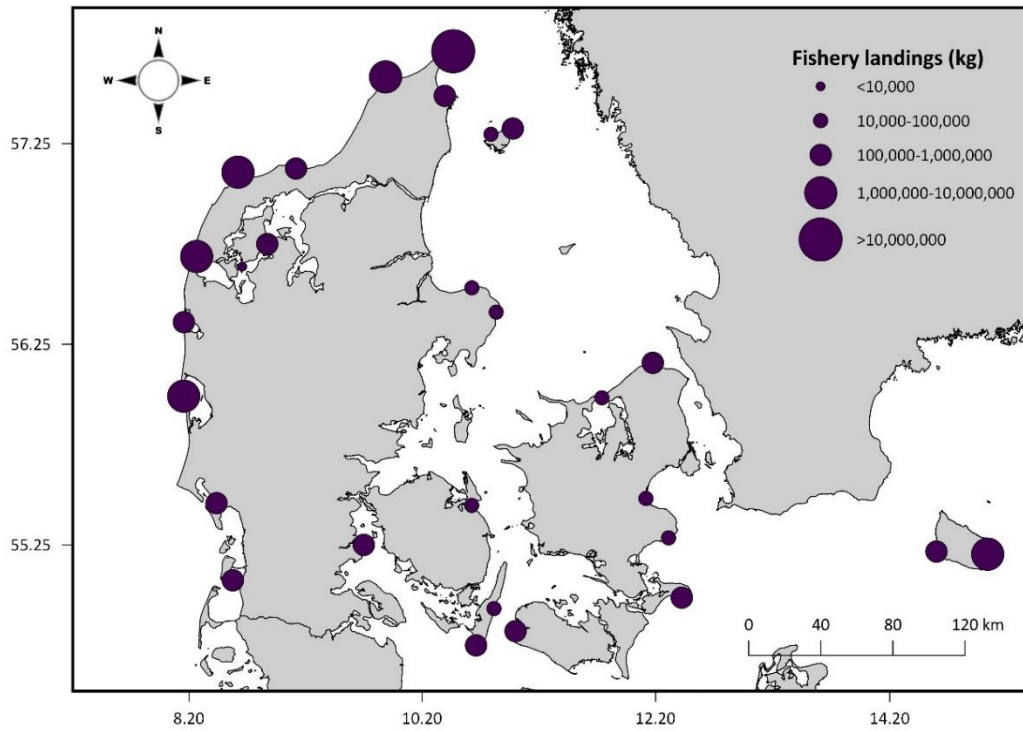


## Appendix 1

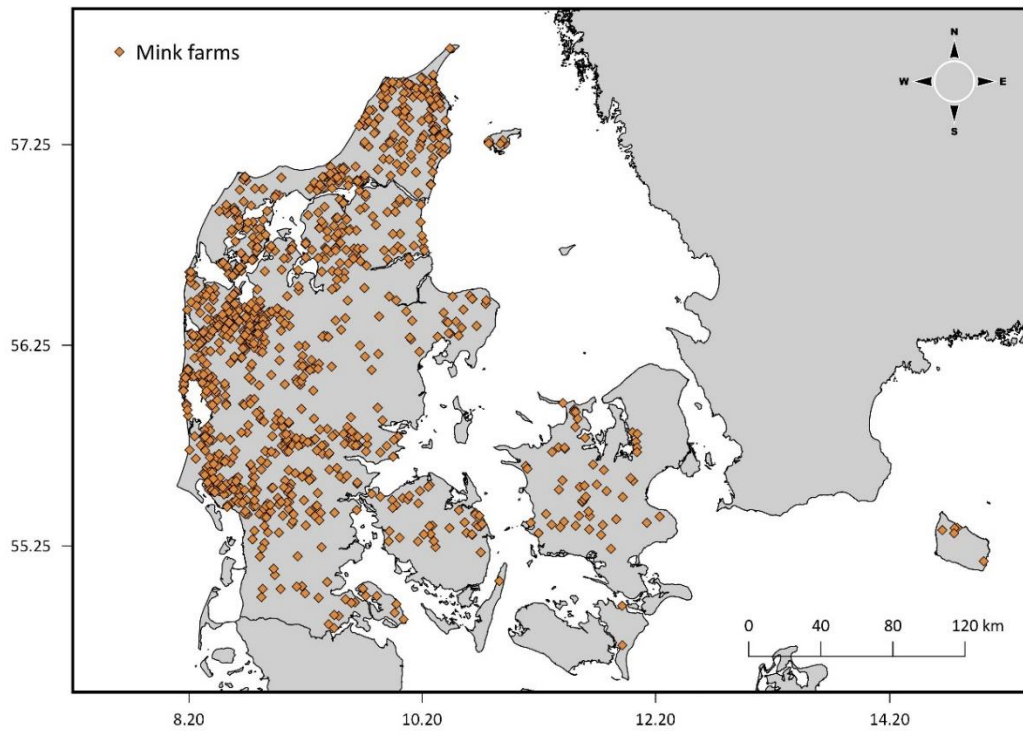
We extracted information on proxies that reflect the availability of potential-foraging habitats in order to investigate the relationship between gull population changes and resource availability. All the maps in this study were developed in QGIS 3.4.15.



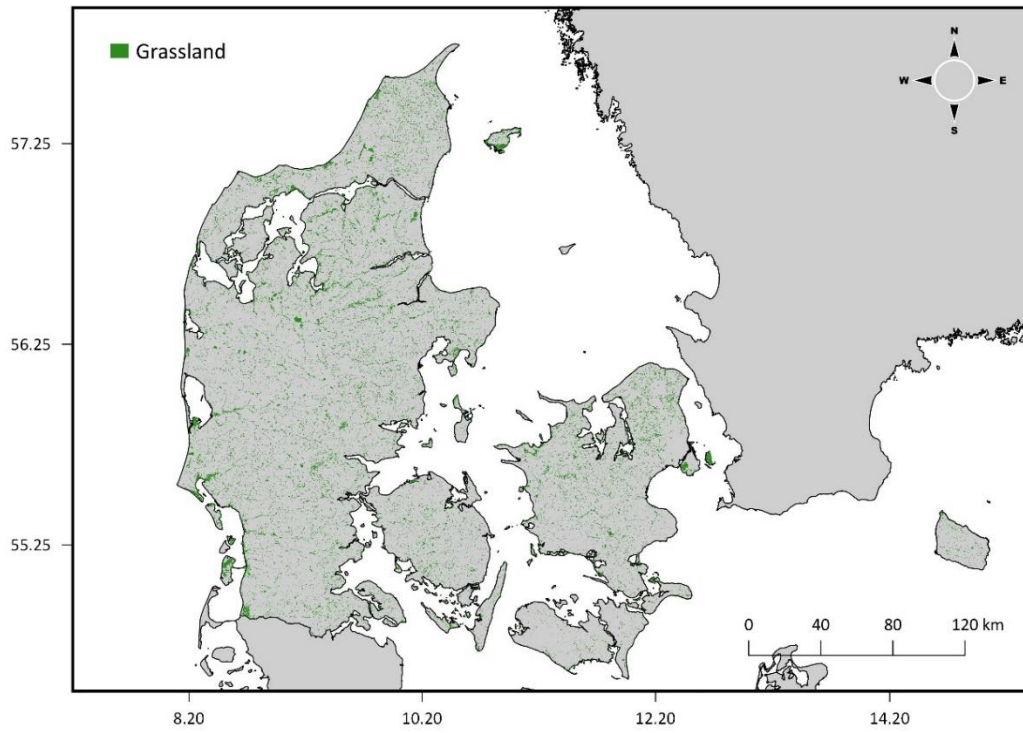
**Fig. A1.1.** Spatial distribution of subtidal zones in the study area. Subtidal zone was defined as the area between the shoreline and 3 m depth, except in the most south-western region of Jutland, where the maximum depth was set in 4 m (the shaded area in the map).



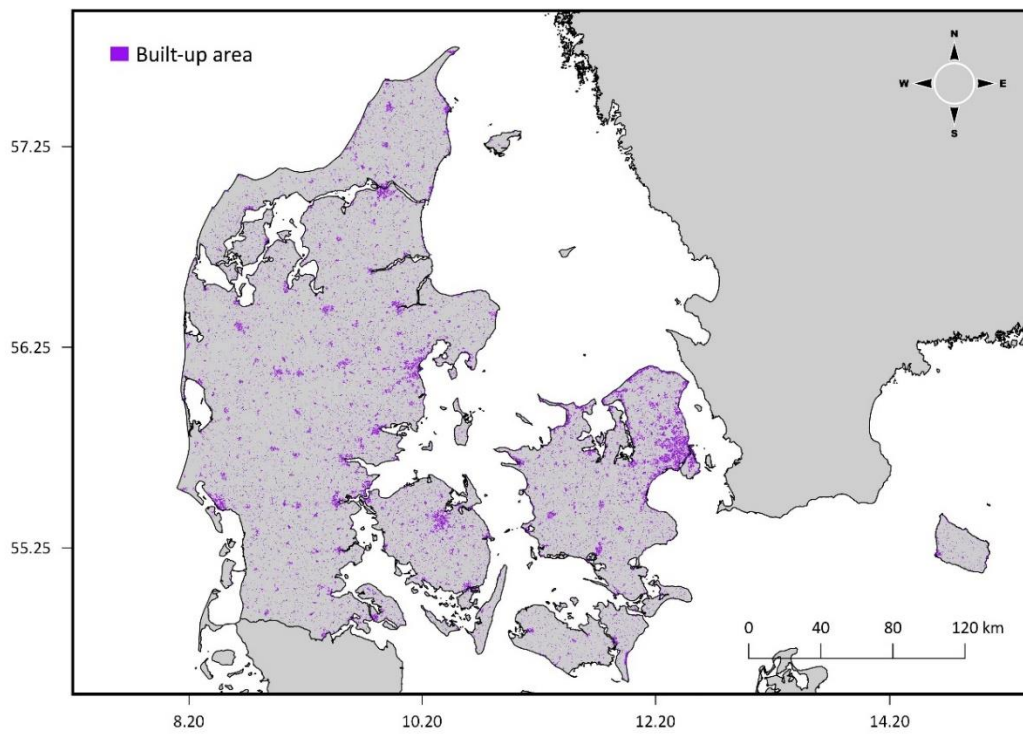
**Fig. A1.2.** Spatial distribution of harbors with commercial fisheries in the study area. The size of the circle reflects the average weight of landings from the 2<sup>nd</sup> quarter of the year for the period 2010-2019.



**Fig. A1.3.** Spatial distribution of active mink farms in the study area in 2019.



**Fig. A1.4.** Spatial distribution of grasslands in the study area.



**Fig. A1.5.** Spatial distribution of built-up areas in the study area.