

King Scallop Fishery

The king scallop fishery is a dredge fishery, comprised mostly of vessels under 12m. The fishery is governed by gear limitations, a night-time curfew, and spatial management measures aimed at protecting vulnerable seabed habitats. In 2021, scallops constituted more than half of the shellfish landed by weight*, reflecting their significant importance to the fishery. SSMO logbook data indicate a steady increasing trend in scallop landings since 2000, reaching a peak of 5.3 million scallops in 2022 (Figure 1).

While there has been an overall increase in scallop LPUE since data collection began in 2000 (Figure 1), it is important to consider that initial rises in landings and effort might be attributed to enhanced compliance with data collection protocols during the early years presented. The mean LPUE demonstrates a general upward trend between 2000 and 2021, albeit with fluctuations. Notably, there was a significant surge in LPUE in 2008, followed by a stabilization and subsequent increase between 2009 and 2022, reaching a peak in 2022. LPUE remained stable in 2023 (Figure 1).

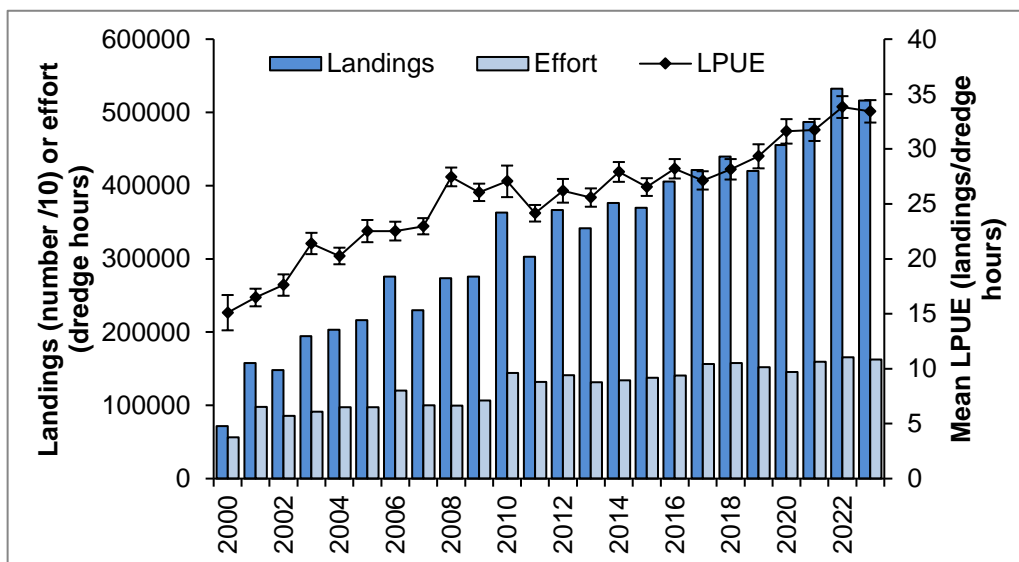


Figure 1 Landings of king scallops (displayed in numbers /10), effort (number of hours by dredge), and mean LPUE (number of scallops caught/hour towed by dredge). LPUE displayed with 95% confidence intervals.

The scallop fishery predominantly targets key fishing areas in Yell Sound, around Fetlar and Whalsay, and extends south along the east coast as far as Bressay (Figures 2-3). Areas of highest landings and effort are concentrated around Unst and Yell, as well as the South Mainland up to Levenwick. While there are areas of high LPUE off Sumburgh in the South Mainland (Figure 4), fishing effort in this region is relatively low (Figure 3). Given the spatial spread of the fishery, further research is planned to better understand regional variations in LPUE. While there is interannual variation observed, the spatial distribution of the fishery remains consistent.

*Napier, I., 2022. Shetland fisheries Statistics 2021.

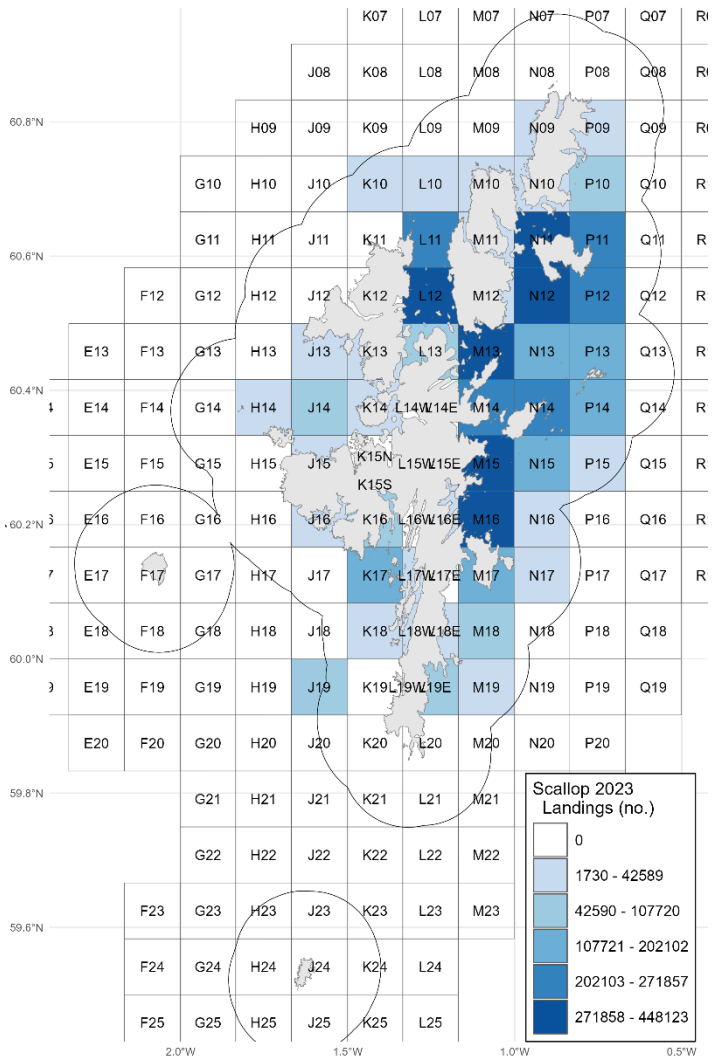


Figure 2 Geographical distribution of scallop landings per SSMO statistical square in 2023.

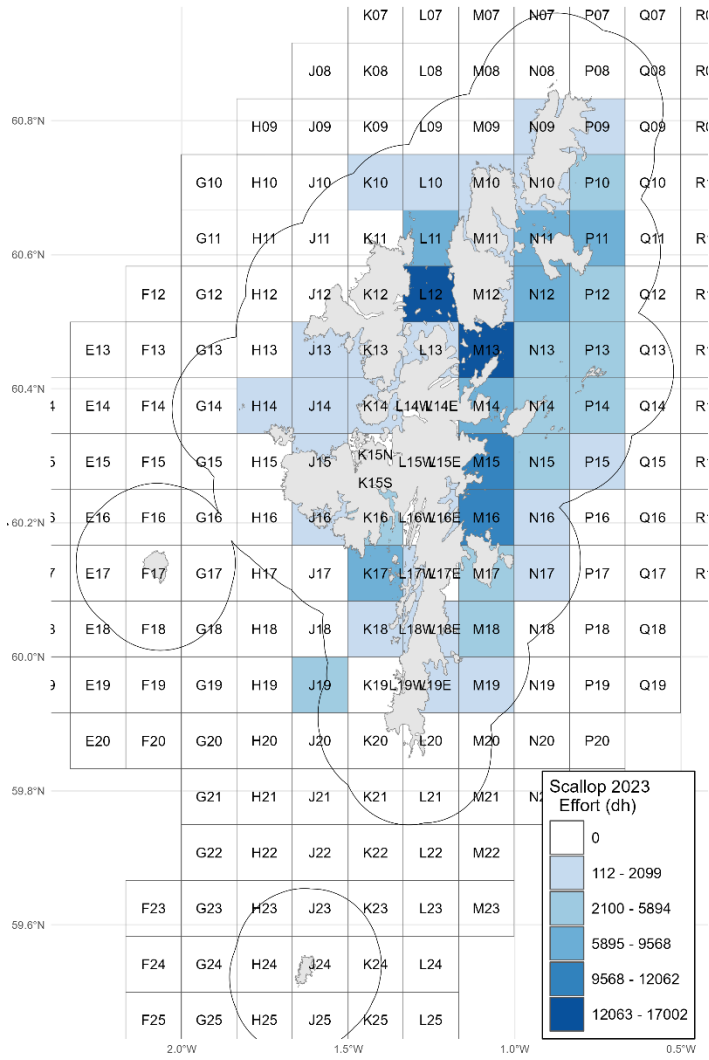


Figure 3 Geographical distribution of scallop effort (dredge hours) per SSMO statistical square in 2023.

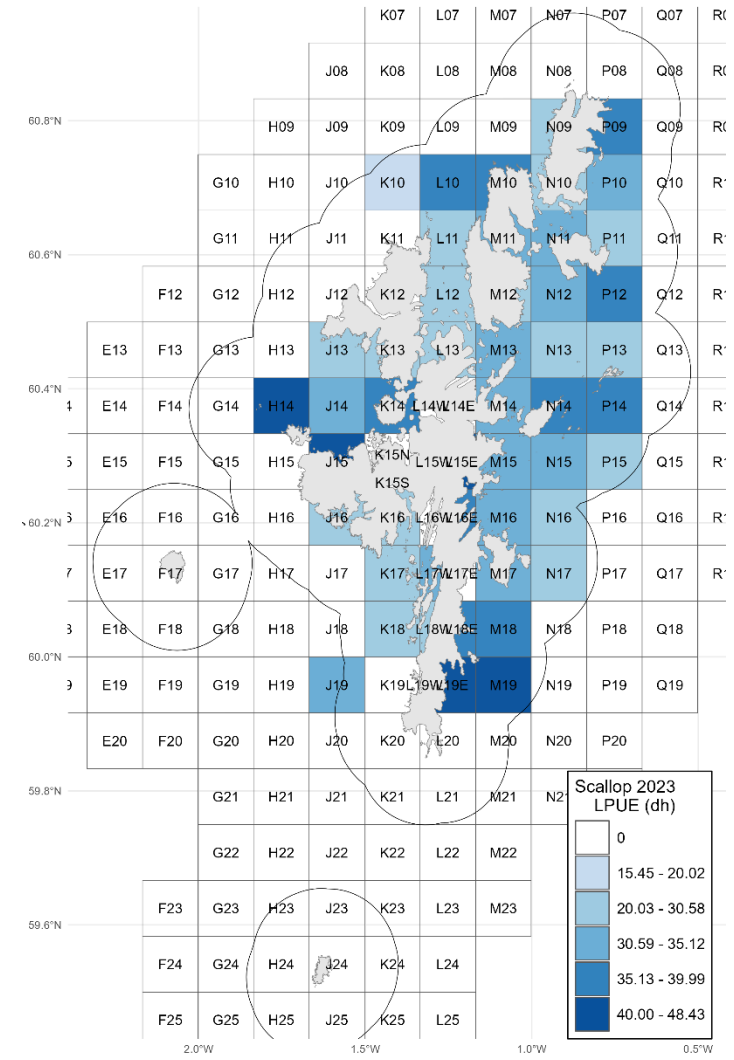


Figure 4 Geographical distribution of scallop LPUE per SSMO statistical square in 2023.