

Brown Crab Fishery

The brown crab (*Cancer pagurus*) fishery is active year-round using creels to target crabs in inshore waters. Landings from the fishery come from both a targeted brown crab fishery and as part of a mixed fishery with velvet crabs and lobsters. In addition to licensing there is regulation of the fishery via a limitation on creel numbers.

Since 2000, the SSMO recorded landings for brown crab have fluctuated with a low of around 200 tonnes in 2002 and 2003, and a peak of 600 tonnes in 2014 (Figure 1). After this, landings dropped to around 300 tonnes in 2016 and have stabilised at around 320 tonnes in recent years. Similar trends have been seen in effort data but the scale of change has differed, especially in 2014 compared to 2000 where landings doubled but not effort. Landings per unit effort (LPUE), a key metric for fisheries management, has been relatively stable since 2015 with a slow increase to a peak of 1.24 kg/creel in 2018. This has been followed by a sharp drop to below 1 kg/creel in 2019, the first such decrease since 2012 (Figure 1). Although LPUE appears to increase in 2020, it later declines in 2021 (0.80kg/creel) and 2022 to 0.75kg/creel, dropping below the average (0.87kg/creel) in 2022. However, this is not out with the range of historical fluctuations.

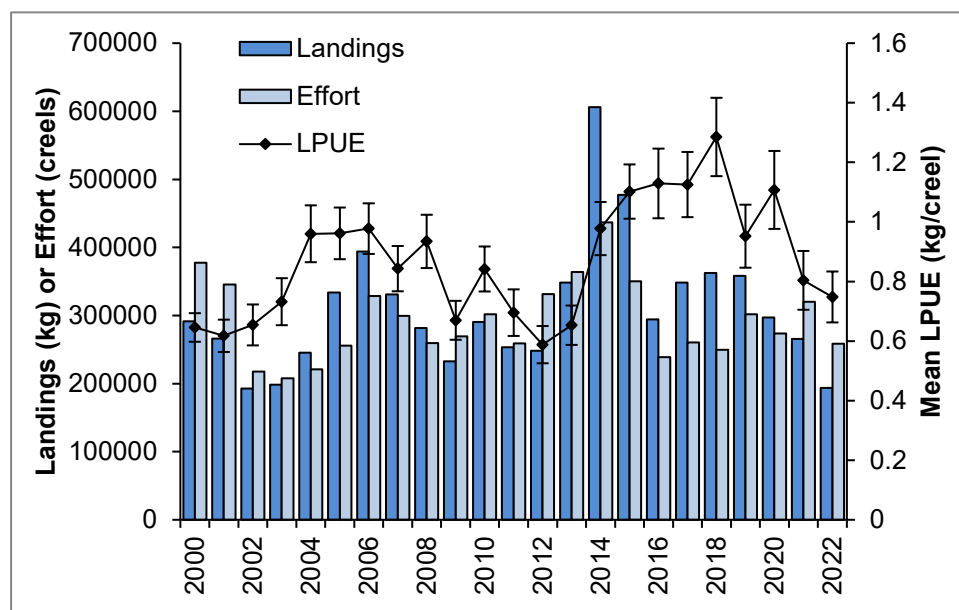


Figure 1 Total brown crab landings (kg), total numbers of creels and the average LPUE obtained from SSMO logbook data with 95% confidence intervals shown.

There is a strong geographical trend in brown crab LPUE, with the highest LPUE observed to the north and west of the Isles where most of the targeted fishery occurs (Figures 2 - 4) and is not observed to fluctuate annually. Lower LPUE is recorded in the south and east with this attributed to incidental bycatch in the velvet crab fishery.

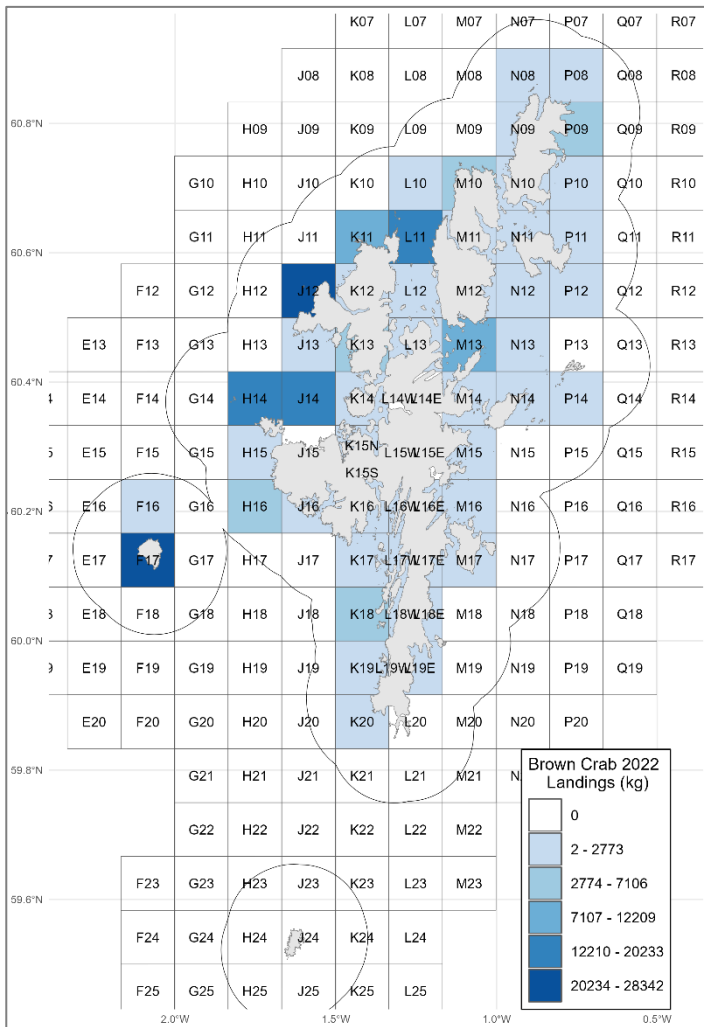


Figure 2 Geographic distribution of brown crab landings per SSMO statistical square in 2022.

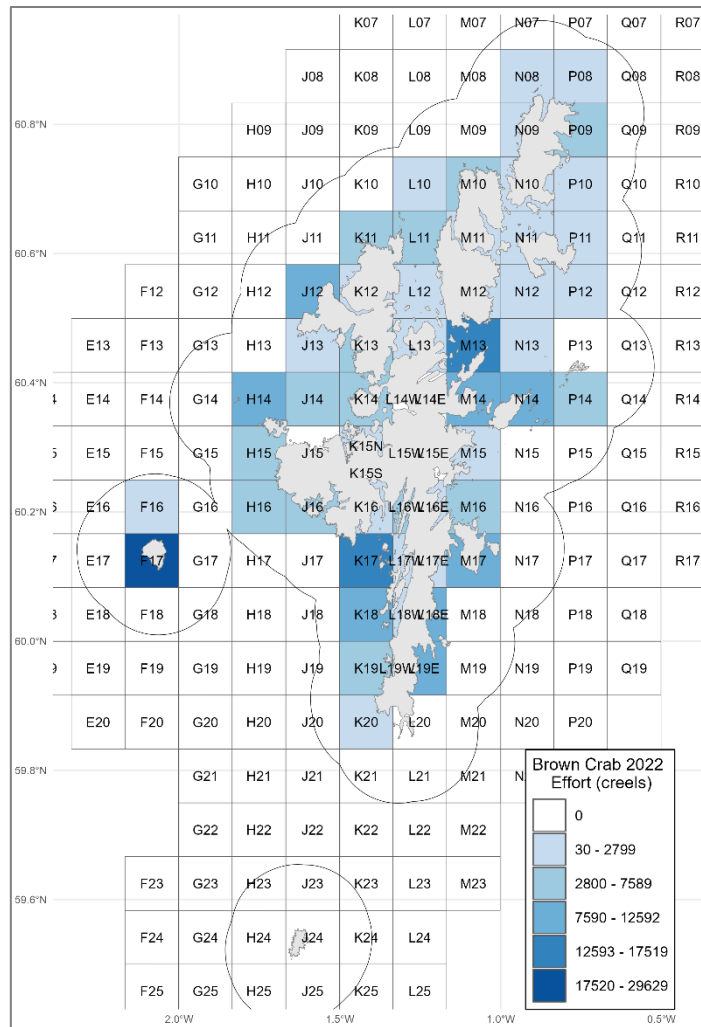


Figure 3 Geographic distribution of brown crab effort per SSMO statistical square in 2022.

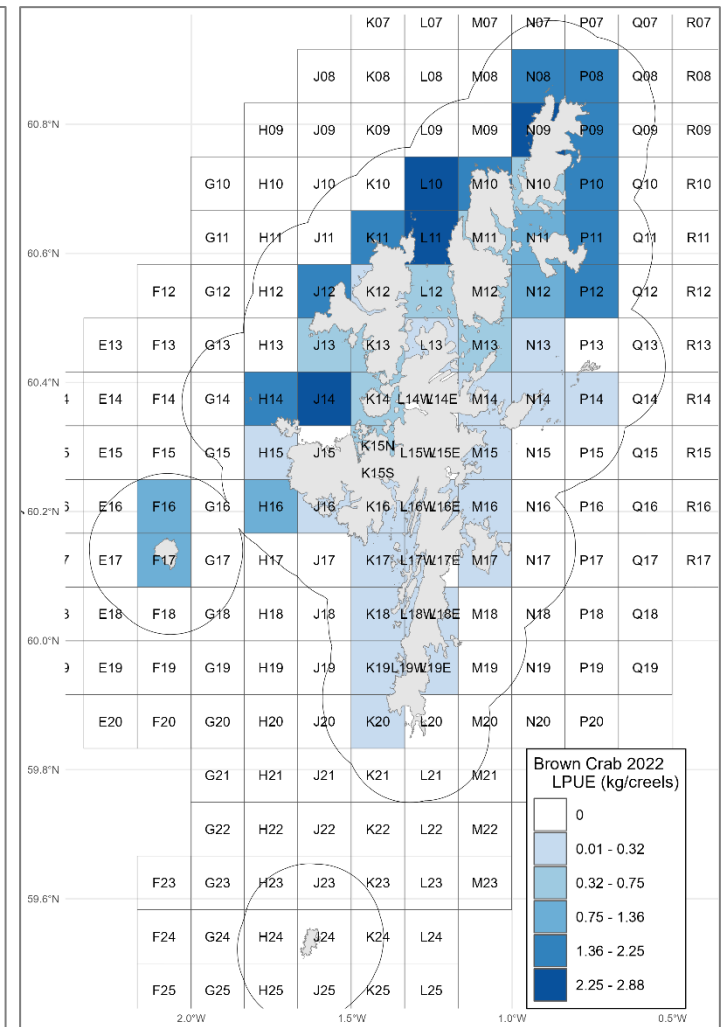


Figure 4 Geographic distribution of brown crab LPUE per SSMO statistical square in 2022.