

## Common Whelk Fishery

Traditionally, whelks (*Buccinum undatum*) or buckies as they are known locally, were fished in the western region during the closure of the velvet crab fishery in the summer months. Though in recent years the fishery has targeted whelks from as early as February through to September, with the fishery currently subject to closure from September to January during their breeding season. The fishery is targeted using pots and there is a local minimum landing size of 75mm (the national MLS is 45mm).

Landings and effort were variable from 2000 – 2006, with landings around 200 tonnes. This was followed by a decrease in fishing which saw low landings until 2015 (Figure 1). Much of this change was driven by market access. Landings have subsequently fluctuated around 200/300 tonnes in the period from 2016 to 2021, though a peak in landings was seen in 2020 at 450 tonnes. Landings per unit effort (LPUE) have shown a period of increase from 2005, with some interannual variability, and have stabilized in recent years. The mean LPUE data for 2017 was the highest recorded in the fishery with a value of nearly 2.5 kg/pot. This dropped in 2018 but has shown an increase to 2.5kg/pot in 2020 before falling to 2.1kg/creel in 2022.

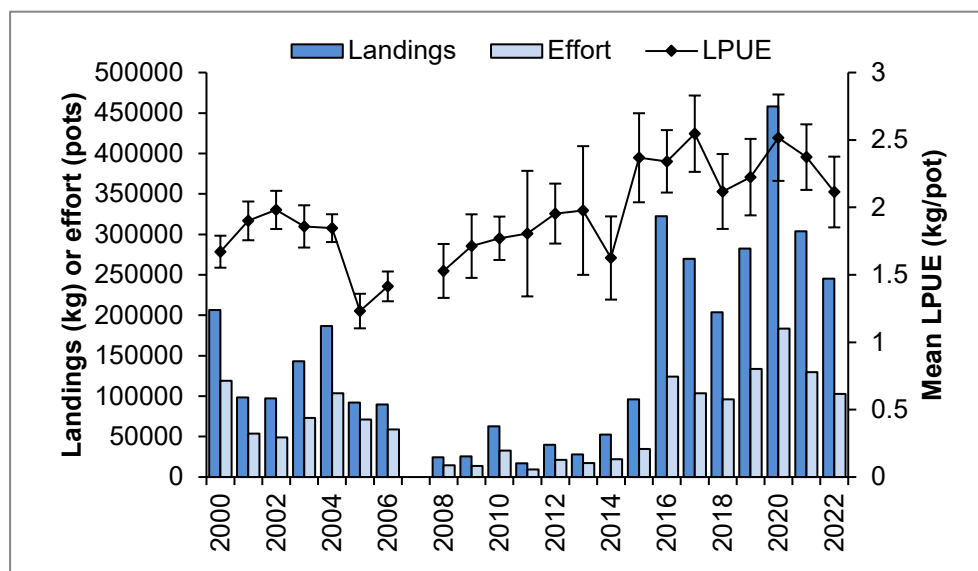


Figure 1 Total whelk landings (kg), total numbers of creels, and the average LPUE obtained from SSMO logbook data with 95% confidence intervals

The areas of highest LPUE are observed around Yell and Fetlar (Figures 2-4), exhibiting similar distribution to 2021 landings and effort. Whelks are highly substrate-dependent and therefore occur in distinct patches, which can mean they are vulnerable to localised overfishing.

Although the fishery appears to be relatively stable in recent years with respect to LPUE, a cautious approach may be appropriate as whelks are slow-growing and late to mature.

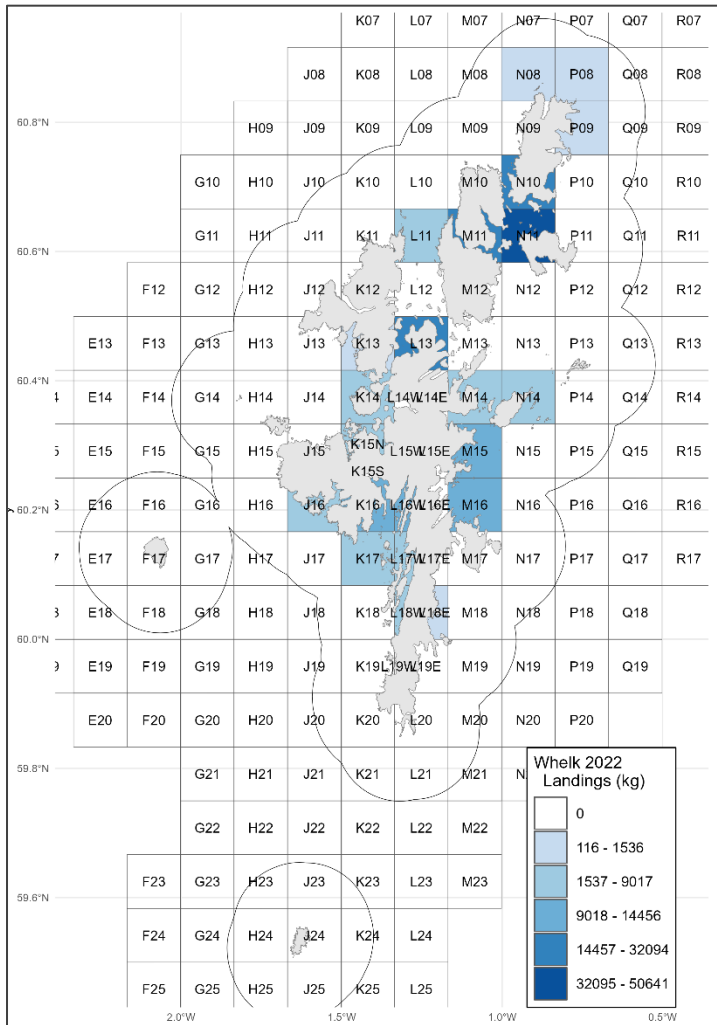


Figure 2 Geographic distribution of whelk landings per SSMO stat square in 2022.

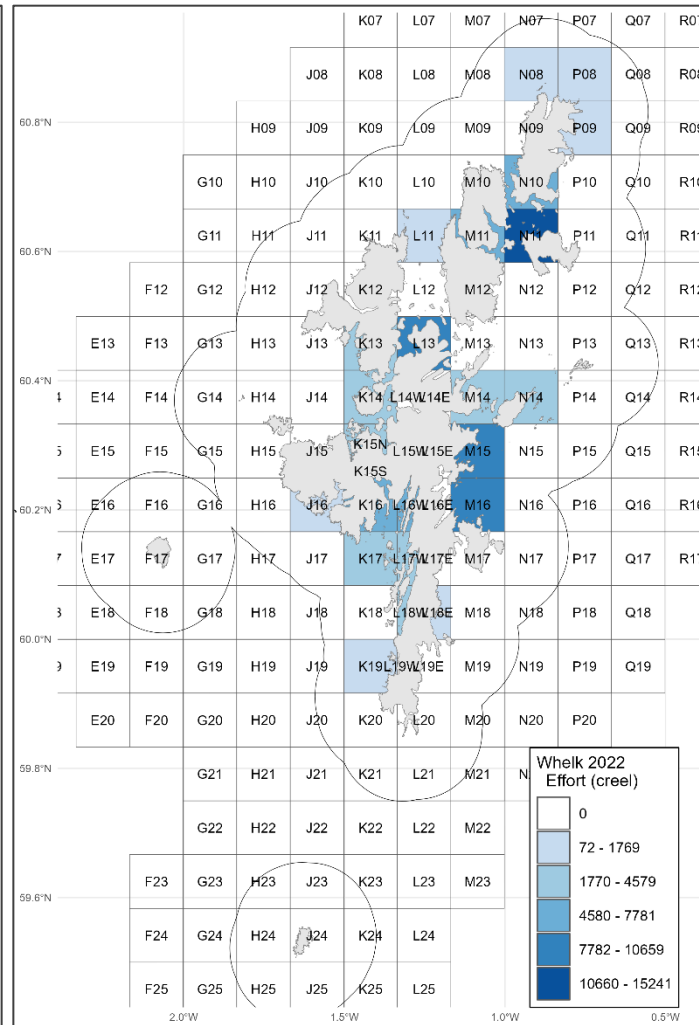


Figure 3 Geographic distribution of whelk effort per SSMO stat square in 2022.



Figure 4 Geographic distribution of whelk LPUE per SSMO stat square in 2022.