

Whelk Permit Byelaw 2016: Flexible Permit conditions review



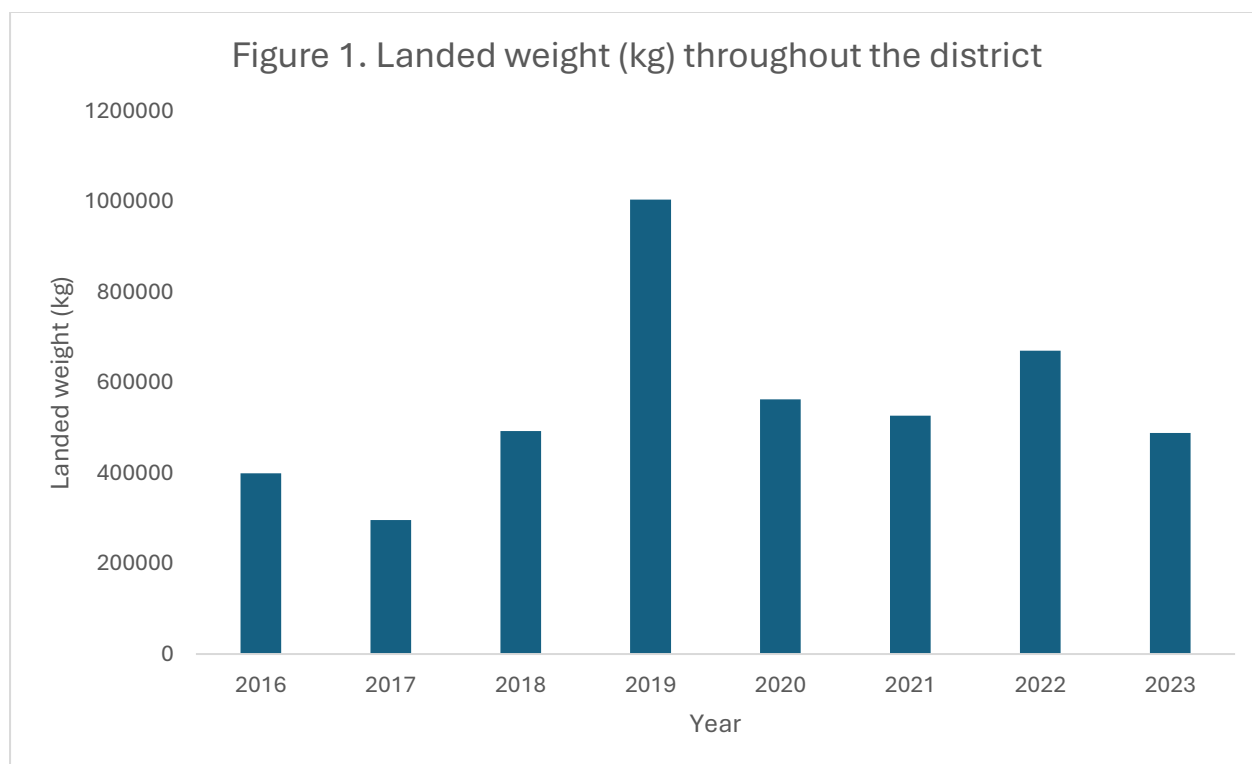
Situational Report: October 2024

This initial report is intended to inform a review of the effectiveness of flexible permit conditions issued under the Whelk Permit Byelaw 2016. It is intended that this report will be augmented by the context provided by the views from consultation with fishery stakeholders.

1. Landings

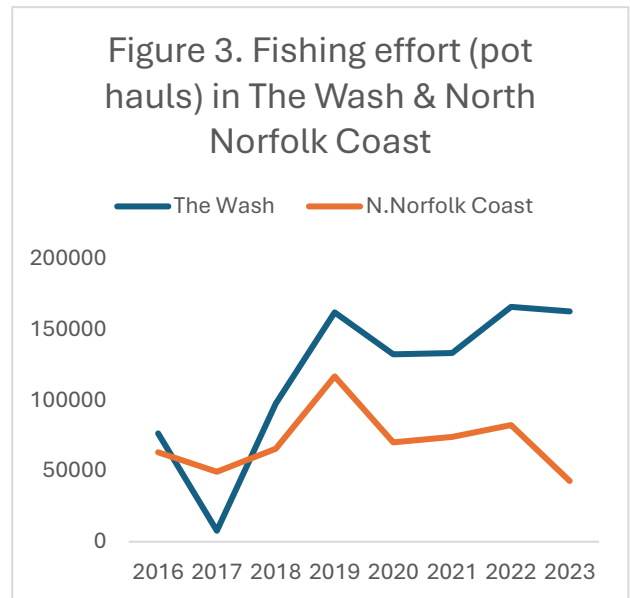
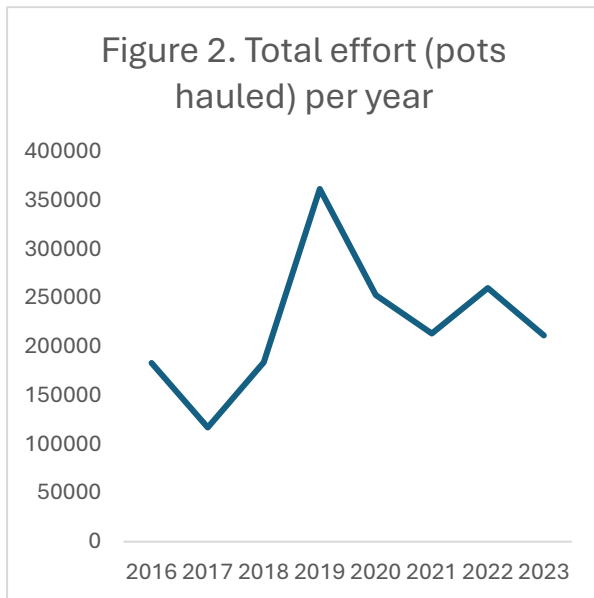
The whelk fishery was previously a winter-time, marginal fishery which did not attract much fishing effort within the district. In 2014, the Authority identified that whelk landings had increased significantly and introduced an Emergency Byelaw to manage the fishery and gather data.

Figure 1 (below) is produced from Eastern IFCA data gathering, representing whelk landings from within the district. Whelk landings have been relatively consistent since a peak in 2019. The landed weight in 2023 was 489 tonnes, slightly below the average of 555 tonnes (between 2016 and 2023 inclusive).



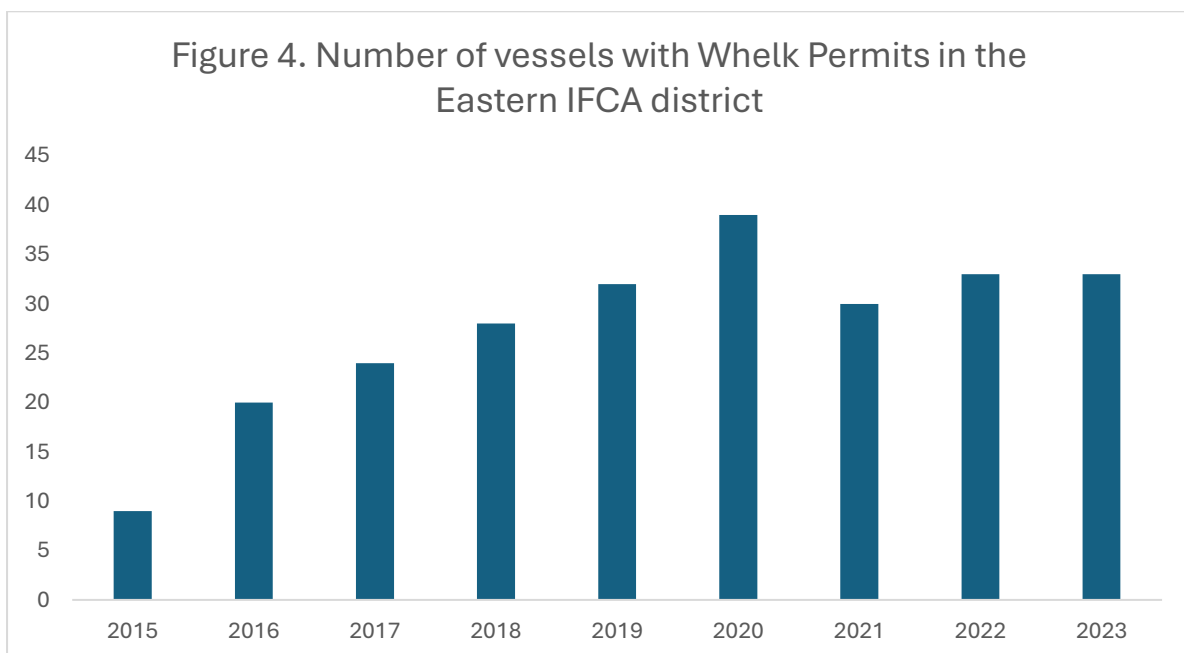
2. Fishing effort

Fishing effort has fluctuated over time, with sharp increases seen between 2016 and 2019 followed by a decline from a peak to relative stability from 2020 to 2023 (inclusive) (Figure 2).



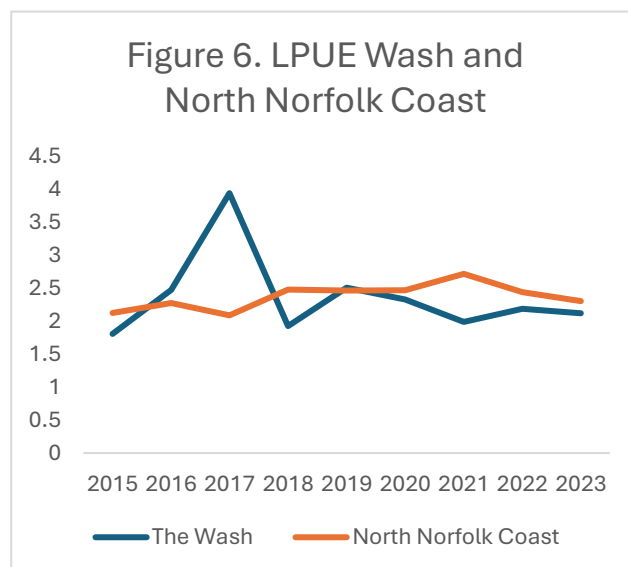
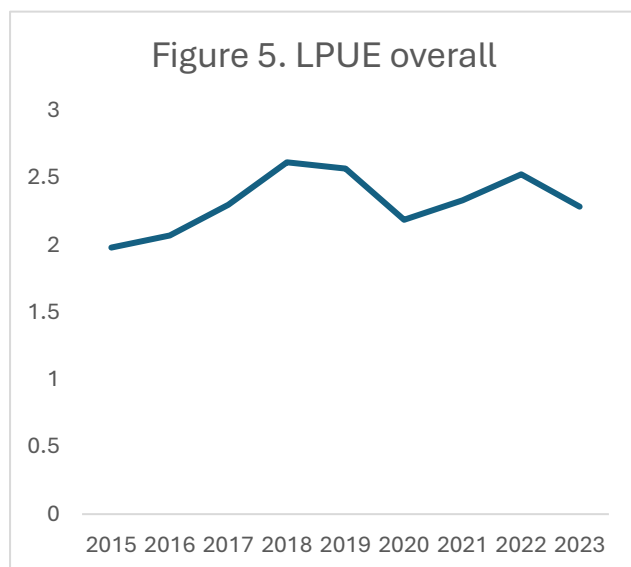
Fishing effort is concentrated in The Wash and the North Norfolk Coast (representing over 90% of fishing effort since 2021). Fishing effort in The Wash now represents the majority of fishing (75% in 2023), gradually increasing since the fishery established in The Wash in 2015 (Figure 3) whereas it is understood that historically, whelk fishing effort was more focussed off the North Norfolk Coast.

The number of vessels operating in the fishery also appears to have become more stable (Figure 4). Interestingly, the number of vessels with whelk permits increased beyond the peak in landings seen 2019, but fishing effort reduced significantly.



3. Landings Per Unit Effort (LPUE)

In the absence of a stock assessment, LPUE is monitored as an indication of the health of the fishery. Where LPUE is stable, it is an indication that the fishery is sustainable. A decline in LPUE indicates that the stocks may be suffering from over-fishing.



LPUE appears to be relatively stable throughout the district over time (Figure 5). When considering the two main whelk fishing areas (The Wash and the North Norfolk Coast), with the exception of an exceptional peak in 2017, LPUE appears stable (Figure 6). The peak in LPUE in The Wash in 2017 coincides with a period of very low fishing effort (Figure 3) and most likely reflects a random deviation from the mean rather than a true reflection of LPUE.

4. Consideration

The whelk fishery within the district increased in importance from 2014 onwards and Eastern IFCA management and monitoring came into effect during 2015. Since then, landings and effort peaked in 2019 before reducing and stabilising. Analysis of Marine Management Organisation 'buyers and sellers' data identifies that the first sale value of catch also peaked in 2019 before reducing (by around £0.20 per kilo) in 2020 and has remained relatively stable thereafter. This change in the market value of catch may explain the peak in activity. It is also likely that the fishery was still establishing itself, particularly in The Wash, as more fishermen explored the potential of exploiting the fishery.

Importantly, whilst overall LPUE also declined following the peak in landing and effort in 2019, the LPUE in the North Norfolk Coast remained stable and the decline in The Wash was marginal. In both cases, the LPUE appears to have remained relatively stable since 2020 and, although both have declined slightly, both remain above 2kg per pot which is generally considered to indicate a relatively productive fishery.

Overall, the fishery appears to have naturally reached a plateau and appears relatively stable.

However, there are concerns that the data used to understand the fishery may be impacted by non-compliance with the pot limitation (maximum of 500 pots for commercial fishers), which

may be artificially inflating LPUE and potentially hiding declines. This concern is based on observations and compliance monitoring. In addition, the LPUE in The Wash appears to be declining (albeit marginally) and may warrant further consideration if the situation does not change (LPU increases) in the near future.

Noting that whelk fisheries are particularly prone to over-fishing and were historically observed as 'boom and bust' fisheries, it is noteworthy that the fishery has not 'crashed' and has been remained productive over a number of years now. It is considered likely that the increased minimum size for the district (55mm compared with 45mm outside of the district) has contributed to preventing removal of whelks to the extent that stocks are 'fished out'.

5. Initial conclusions from the perspective of the permit condition review

On their introduction, the permit conditions were initially intended to reduce the rate of uptake into the whelk fishery primarily to prevent a crash (due to over-fishing) whilst additional data was gathered to better inform our understanding of the fishery. At the time (2014 to 2016), fishing effort was increasing significantly and landings were reducing but data was limited to that provided by the Marine Management Organisation which did not include detailed effort data and did not provide the spatial resolution necessary to understand the fishery's dynamics within the district.

The inshore fishery business model relies on the ability to diversify into different fisheries as they become available. This concept was central to the decision not to impose a limitation on the number of permits initially despite a minority of industry calling for such a limit. It was intended instead that a pot limitation and increase in the minimum size for whelk would be sufficient to safeguard the stocks against increasing effort and prevent a collapse in the fishery.

It would appear that the measures have achieved this to date, and the relative stability of the LPUE, landings and effort indicate that the fishery has naturally found a sustainable level of fishing, tempered by the measures in place. There does not appear to be a strong driver for change in the management measures at this time. However further consideration may be required in the Wash in the near future.