

Sussex IFCA Shellfish Permit Catch Returns Data Summary 2019

The Sussex Inshore Fisheries and Conservation Authority's purpose is to develop sustainable inshore fisheries whilst providing appropriate protection for the marine environment and the fisheries resources it supports.

In 2016, the Authority introduced a comprehensive suite of management measures for pot and trap shellfish fisheries under the Shellfish Permit Byelaw. The inshore controls built upon existing measures, such as minimum sizes, and introduced effort limitation, better selectivity for juvenile stock and protection of berried lobsters. The Byelaw effort and gear restrictions enable effective controls on the impacts of fishing activity on the District's shellfish populations and help achieve more productive and sustainable fisheries through improved stock management.

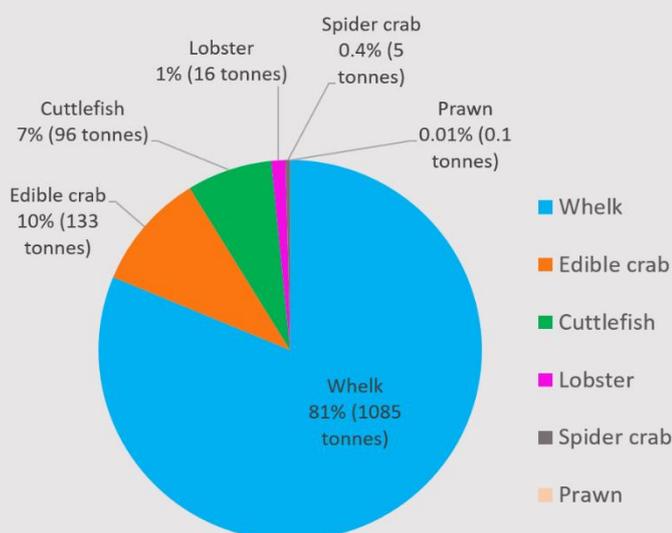
The Sussex IFCA Shellfish Permit Byelaw requires all permit holders to provide shellfish catch and fishing effort information to support inshore shellfish fisheries. This catch returns data is a vital part of shellfisheries' management and will help the IFCA to gather the evidence needed to make future management decisions. The Authority understands that permit data may also be of interest to permit holders, providing a better understanding of the fishery in the context of their own detailed knowledge. Trends such as seasonality of different fisheries and catch rates might be of particular interest for future planning.

Catch data submitted will enable Sussex IFCA and others to better understand the seasonality of the shellfish fisheries and changes over longer time periods. The data will also help to understand the changes in catches and the status of stocks in response to the levels of fishing effort within the fisheries.

Overview

- Since October 2016, (the introduction of the Shellfish Permit Byelaw) to the end of December 2019, 61% of the total 216 permits were assigned to commercial fishermen, with 39% to recreational.
- 16% of these permits expired in 2018 and were not renewed during 2019 (5% recreational and 11% commercial).
- There were 59 active recreational permits and 97 active commercial permits during 2019.
- A total of 1336 tonnes of shellfish was reported being landed on catch returns in 2019. 98% of landings were from pots and 2% were from bycatch in nets and trawls.
- The four main species landed were whelks (81%), edible crab (10%), cuttlefish (7%) and lobster (1%).
- Very few spider crabs or prawns and no velvet swimming crabs were reported as being landed.

Percentage and weight (tonnes) of shellfish species landed from pots, nets and trawls



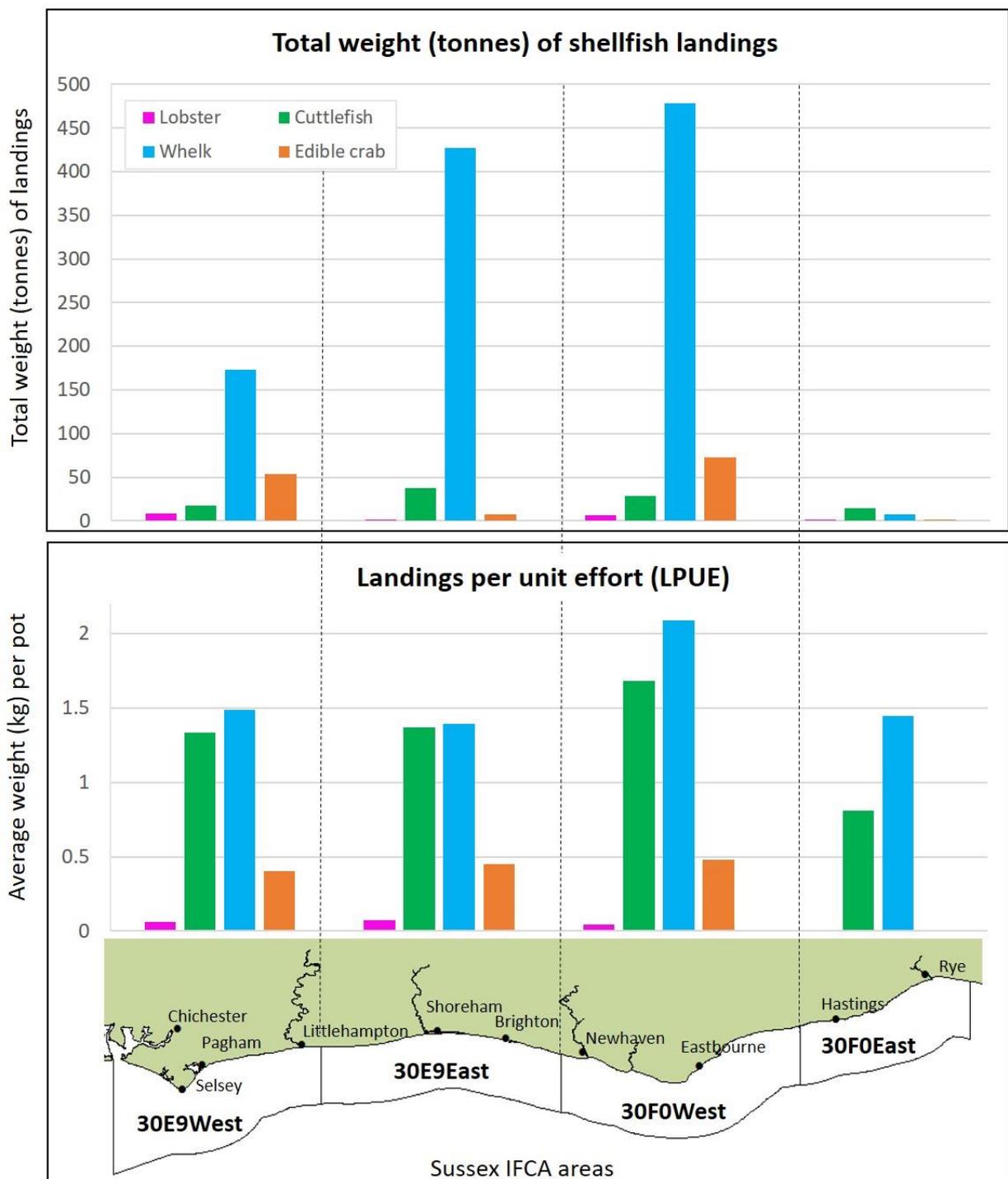
Spatial variation

Total landings

- Lobster landings were greatest in 30E9West and cuttlefish landings in 30E9East. Whelk and edible crab landings were greatest in 30F0West.
- Landings were lowest for all shellfish species in 30F0East. Almost no (<0.01 tonnes) lobster or edible crab were landed in 30F0East.

Landings per unit effort

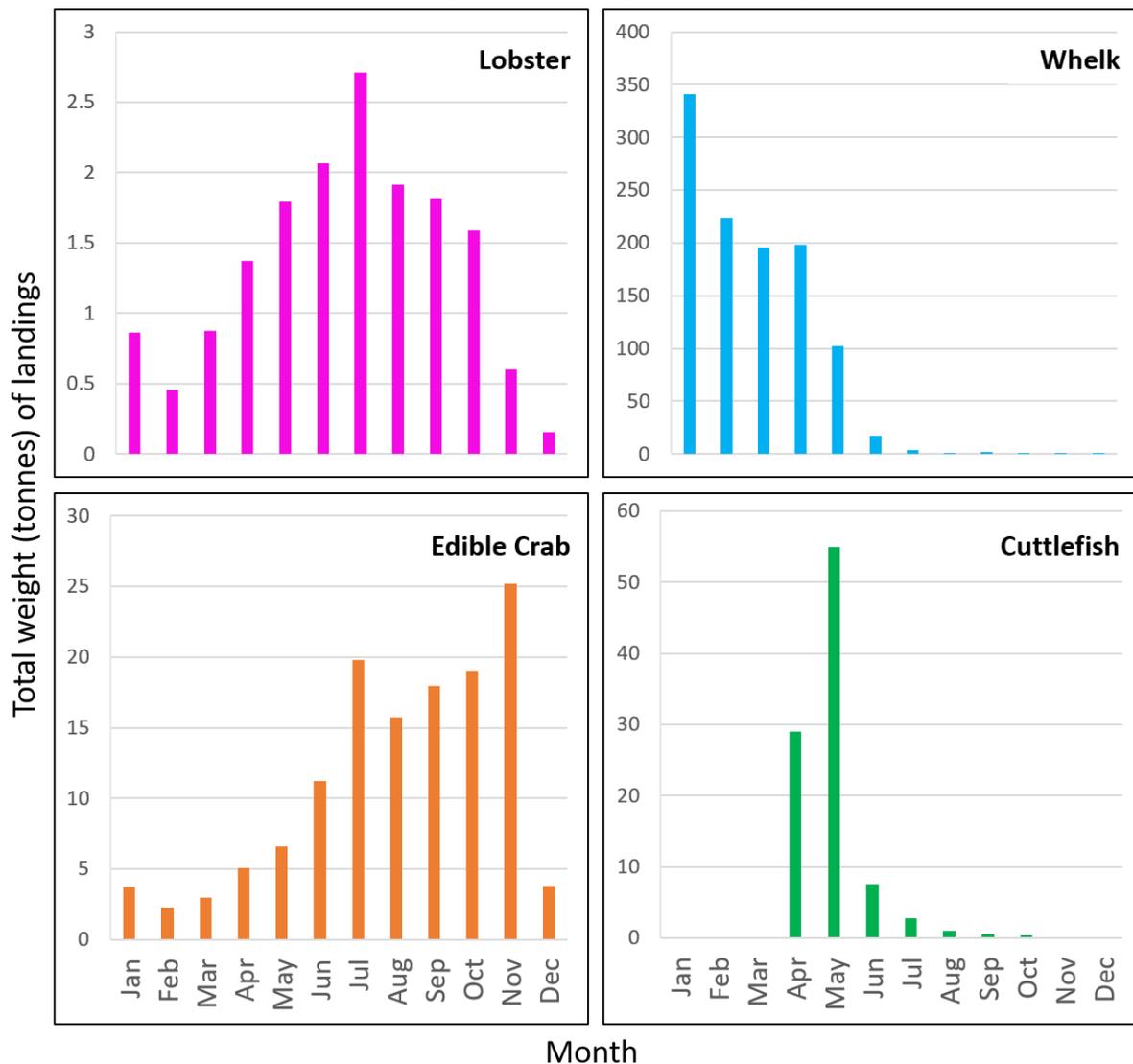
- The weight of each species per pot, or landings per unit effort (LPUE), was calculated by dividing the total weight of each species by the number of pots hauled.
- Lobster LPUE was greatest in 30E9East. Edible crab, whelk and cuttlefish LPUE was greatest in 30F0West.
- Lobster LPUE was lowest in 30F0West and edible crab in 30E9West (excluding 30F0East). Whelk LPUE was lowest in 30E9East and cuttlefish in 30F0East.



Seasonality

- Lobster landings were highest in the summer and lowest in the winter months.
- Edible crab landings were highest in July and November and lowest over winter.
- Whelk landings are highest during the winter months, with 31% landed in January. Whelk landings were lowest during the summer months. The rise in sea temperatures causes the whelks to move to deeper, cooler waters.
- The cuttlefish season is primarily between April and June, coinciding with seasonal migrations into the shallower coastal waters to breed. 57% of cuttlefish landings were in May.

Annual variation in landings for lobster, edible crab, whelk and cuttlefish



Comparisons with previous years

Total landings

- Lobster landings have gone down from 41 tonnes in 2017, 31 tonnes in 2018 to 16 tonnes in 2019.
- Edible crab landings have gone down from 179 tonnes in 2017, 176 tonnes in 2018 to 133 tonnes in 2019.
- Whelk landings were higher in 2019 (1085 tonnes) than in the previous two years.
- Cuttlefish landings were higher in 2019 (96 tonnes) than in the previous two years.

Landings per unit effort

- Lobster LPUE has gone down from 0.08 kg/pot in 2017 to 0.05 kg/pot in 2019.
- Edible crab LPUE in 2019 (0.44 kg/pot) was lower than 2018 (0.45 kg/pot) but higher than 2017 (0.38 kg/pot).
- Whelk LPUE was higher in 2019 (1.65 kg/pot) than the two previous years.
- Cuttlefish LPUE was higher in 2019 (1.29 kg/pot) than the two previous years

