

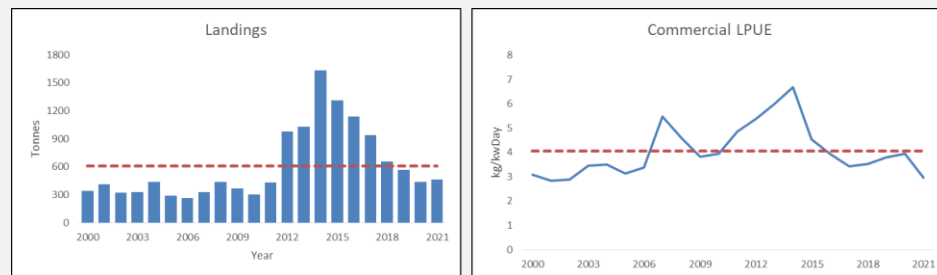
# King scallop, *Pecten maximus*

## ADVICE

Landings of scallops should be reduced in line with the survey index plus commercial declines in Landings Per Unit Effort (LPUE) since 2014. It is advised that landings in 2023 should be no more than 507 tonnes.

## FISHERY AND STOCK TRENDS

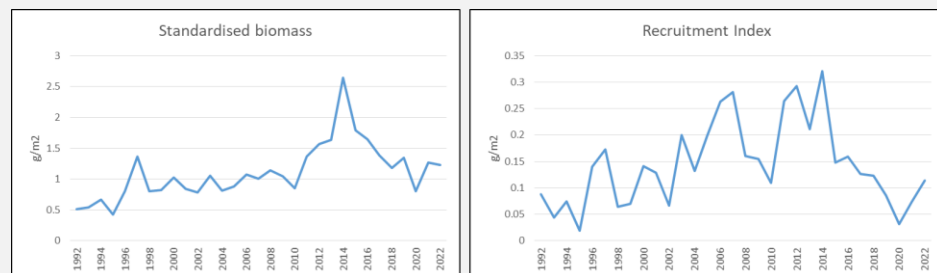
In 2021, 466 tonnes of scallops were landed by dredge by UK registered vessels from the ICES rectangles 37E3, 37E4, 38E4, 39E3 and 39E4 (excluding the Clyde fishery). This is a reduction in landings from a peak in 2014 (Fig 1). The LPUE series is derived from reported landings data. The LPUE trend has decreased from a peak in 2014. There was a reduction in commercial LPUE in 2021 from 2020 (Fig 1).



**Fig 1.** Scallops in ICES rectangles 37E3, 37E4, 38E4, 39E3 and 39E4 (excluding Clyde fishery). Landings and LPUE. Red dashed line indicates time series average.

## Stock Survey

A survey has examined trends in scallop stocks within NI waters from 1992. The survey Index (standardized biomass caught during the survey) has decreased in recent years from a peak in 2014 (Fig 2). The recruitment index (standardized catch of scallops below 106mm) has also decreased over this period. In 2022 there was little change in standardised biomass of scallops from 2021, with a small increase estimated in the recruitment index.



**Fig 2.** Scallop survey in ICES rectangles 37E3, 37E4, 38E4, 39E3 and 39E4 (excluding Clyde fishery). Summary of the stock assessment. Standardised biomass and recruitment index

**Table 1.** Scallops in ICES rectangles 37E3, 37E4, 38E4, 39E3 and 39E4. State of the stock relative to qualitative fishing pressure and survey index.

| Fishing Pressure |      |      |                              | Survey Index |      |      |      |                              |
|------------------|------|------|------------------------------|--------------|------|------|------|------------------------------|
| 2019             | 2020 | 2021 | Increasing;<br>Above average | 2019         | 2020 | 2021 | 2022 | Decreasing;<br>Below average |
| ↓                | ↓    | ↑    |                              | ↑            | ↓    | ↑    | ↓    |                              |

## ADVICE BASIS

The Northern Ireland annual scallop survey is used to indicate stock trends. The advice is based on the ratio of the mean of the last two index values (Index A) and the mean of the three preceding values (Index B), multiplied by the recent average landings (3 years).

The precautionary buffer was considered and applied as there is a decreasing trend in LPUE.

**Table 2** Scallops in ICES rectangles 37E3, 37E4, 38E4, 39E3 and 39E4. Basis for advice.\*

|                                   |             |
|-----------------------------------|-------------|
| Index A (2021 - 2022)             | 1.25        |
| Index B (2018–2020)               | 1.11        |
| Index ratio (A/B)                 | 1.13        |
| Recent landings for 2018 – 2021** | 563.3 t     |
| Precautionary Reduction           | Applied 0.8 |
| Landings advice***                | 507 t       |
| % Advice change ^                 | -10 %       |

\* The figures in the table are rounded. Calculations were done with unrounded inputs and computed values may not match exactly when calculated using the rounded figures in the table.

\*\* 2020 landings excluded due to Covid-19 impacts on landings

\*\*\* [Mean recent landings (2018 – 2021)] × [Index Ratio] × [Precautionary buffer].

^Advice change is based on the current advised landings compared to mean recent landings.

## REFERENCE POINTS

The stock status relative to candidate reference points is unknown.

## QUALITY OF THE ASSESSMENT

Survey data is only available for 39E3 and 39E4 from 2011 onwards when the survey was extended to cover ICES area VIa (historically the survey concentrated on the Irish Sea only).

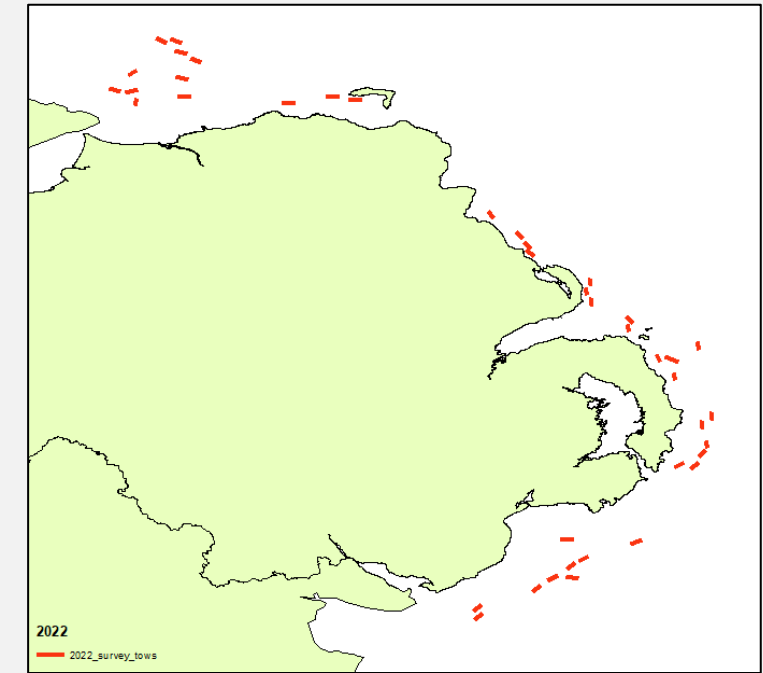
Commercial landings and effort information is derived from reported landings data from all UK vessels. This data is reliant on accurate self-reporting from commercial fishers. Methods for automated data collection would provide more detail on effort trends, including the duration over which pots are deployed.

The landings and effort in 2020 may have been impacted by Covid-19 due to market factors and public restrictions to limit Covid-19 spread.

## ISSUES RELEVANT FOR THE FISHERY

EU Minimum Landing Size of 110mm.

Commercial landings and effort information is derived from reported landings data from all UK vessels. Irish vessels may also fish in the indicated ICES rectangles but information is not recorded in this assessment.



**Fig 3.** Location of tows carried out during the 2022 scallop survey.

## SUMMARY OF THE ASSESSMENT

**Table 3** *Pecten maximus* in ICES rectangles 37E3, 37E4, 38E4, 39E3 and 39E4 (excluding Clyde fishery). Assessment summary.

| Year | Landings<br>Tonnes | Effort<br>kwDays | Survey<br>standardised catch |
|------|--------------------|------------------|------------------------------|
| 2000 | 340.07             | 108238.76        | 1.022                        |
| 2001 | 413.33             | 152708.47        | 0.844                        |
| 2002 | 325.31             | 118123.80        | 0.782                        |
| 2003 | 332.84             | 109645.10        | 1.056                        |
| 2004 | 441.44             | 140868.00        | 0.814                        |
| 2005 | 293.23             | 93492.30         | 0.878                        |
| 2006 | 267.63             | 81503.38         | 1.078                        |
| 2007 | 332.01             | 60768.74         | 1.002                        |
| 2008 | 440.05             | 93123.09         | 1.141                        |
| 2009 | 371.05             | 93517.88         | 1.041                        |
| 2010 | 302.04             | 73395.50         | 0.850                        |
| 2011 | 430.90             | 86627.31         | 1.360*                       |
| 2012 | 979.00             | 183777.39        | 1.565                        |
| 2013 | 1028.87            | 166088.40        | 1.640                        |
| 2014 | 1633.60            | 261199.08        | 2.640                        |
| 2015 | 1310.27            | 290699.52        | 1.793                        |
| 2016 | 1138.25            | 281619.84        | 1.641                        |
| 2017 | 942.81             | 263764.06        | 1.388                        |
| 2018 | 658.20             | 180969.11        | 1.179                        |
| 2019 | 565.47             | 149221.82        | 1.343                        |
| 2020 | 442.05             | 109516.15        | 0.797                        |
| 2021 | 466.30             | 161059.95        | 1.264                        |
| 2022 | -                  | -                | 1.226                        |

\*Indicates the first year the survey was extended to cover ICES area VIa.