

Queen scallop, *Aequipecten opercularis*, North Coast

ADVICE

Catches of queen scallops should be reduced in line with the survey index plus commercial declines in Landings Per Unit (LPUE). This supports that catches in 2021, 2022 should be no more than 11 tonnes.

FISHERY AND STOCK TRENDS

The primary areas for queen scallop fishing adjacent to NI are the Irish Sea (ICES rectangles 36E5, 36E6 and 37E5) and the North coast (ICES rectangles 39E3 and 40E3). This paper will provide advice for the North coast fishing ground.

In 2020 no queenies were landed from this area. The last landings were made in 2018 when 72 tonnes of queenies were fished from the area. This was a decrease from a peak of 6861 tonnes in 2012. LPUE has decreased from a peak in 2009

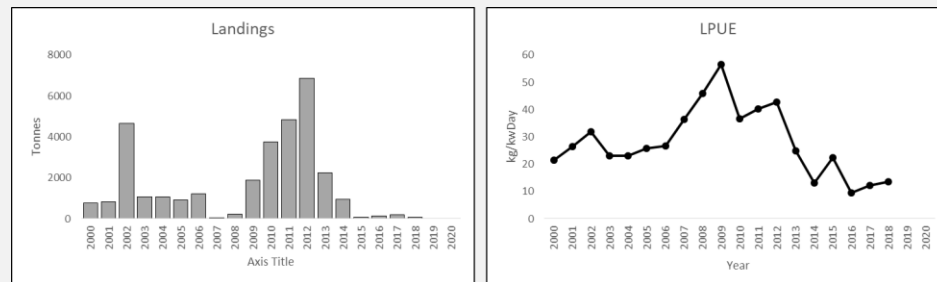


Fig 1. Queenies in ICES rectangles: 39E3 and 40E3. Summary of the stock assessment. Catches, LPUE.

Stock Survey

A survey has examined trends in queen scallop stocks within 39E3 and 40E3 from 2013. The survey is based on Under Water TV (UWTV) counts and fishing catches. No survey was possible in 2020 due to Covid-19 restrictions. In 2019, due to ship entanglement, fishing tows were not possible. The survey estimated abundance has decreased from the beginning of the time series. Average abundance (100m²) from UWTV counts have also declined. While biomass and abundance should follow a similar trend they may not be exact. For example, in 2017 estimated biomass decreased but abundance increased. This is due to a higher proportion of pre-recruits (<40mm) which have a lower biomass.

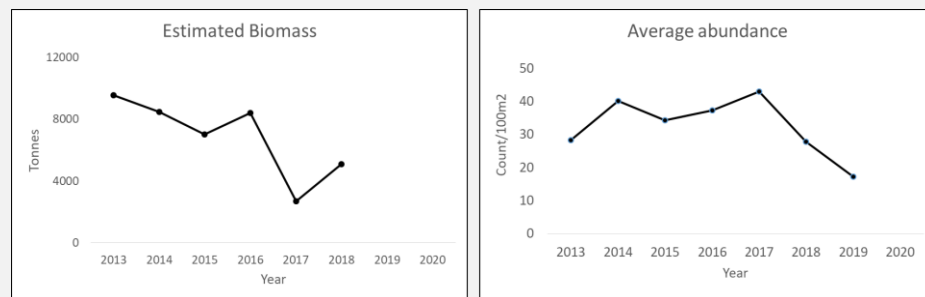


Fig 2. Queenie survey in ICES rectangles: 39E3, 40E3. Summary of the stock assessment. Estimated biomass and abundance.

Table 1. Queen scallops in ICES rectangles: 39E3, 40E3. State of the stock relative to qualitative fishing pressure and survey index.

Fishing Pressure				Survey Index			
2018	2019	2020	No landings from 2018	2018	2019	2020	Decreasing
→	→	→		→	→	-	

ADVICE BASIS

The Northern Ireland annual queen scallop survey is used to indicate stock trends (UWTV count per 100m²). 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 catch.

Table 2 Queen scallops in ICES rectangles: 39E3, 40E3. Basis for advice.*

Index A (2018-2019)	22.595
Index B (2015-2017)	38.279
Index ratio (A/B)	0.590
Recent catch for 2018 - 2020	24.13 t
Precautionary Reduction	Applied 0.8
Catch advice**	11 t
% Advice change ^	-52.8 %

* 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.
** [Mean recent catch (2018 – 2020)] × [Index Ratio] × [Precautionary buffer].

^ Advice change is based on the current advised catch compared to mean recent catch (2020).

REFERENCE POINTS

The stock status relative to candidate reference points is unknown, therefore the precautionary buffer was applied to the advice.

QUALITY OF THE ASSESSMENT

The assessment is based on

- landings from ICES rectangles 39E3 and 40E3 by UK registered vessels. These landings are made into NI, other UK and Irish ports.
- The annual AFBI scallop survey, from 2013 to 2019

No survey was possible in 2020 due to Covid-19 restrictions. In 2019 no survey fishing tows were possible so estimated biomass is unavailable. Camera tows were also limited following ship issues.

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.

ISSUES RELEVANT FOR THE FISHERY

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

2020 landings may have been affected by Covid-19 impacting markets.

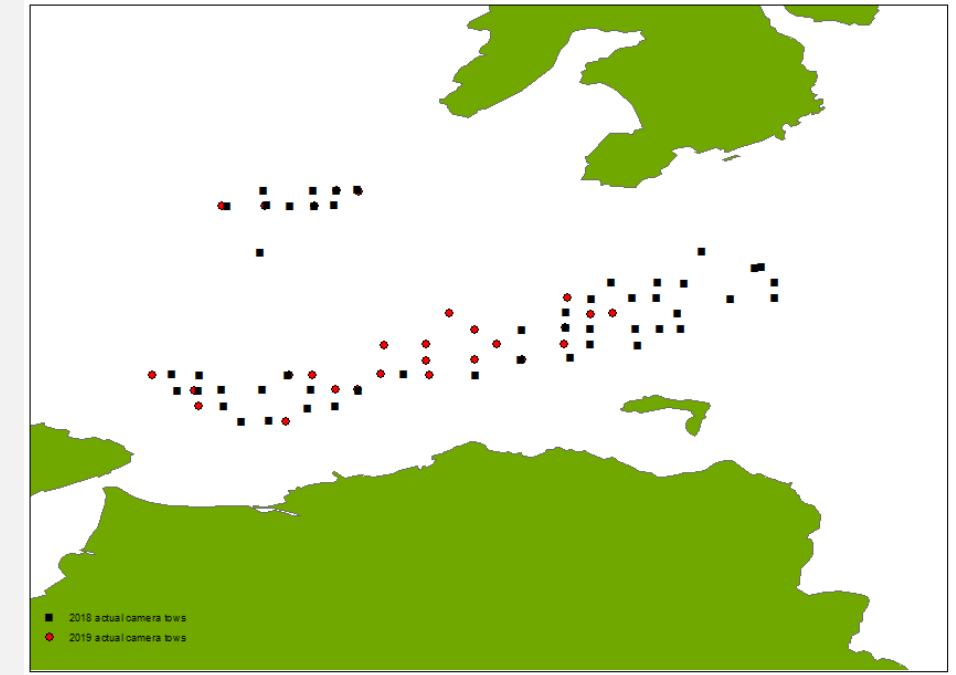


Fig 2. Location of camera tows carried out during the 2018 and 2019 queenie survey.

SUMMARY OF THE ASSESSMENT

Table 3 *Pecten maximus* in ICES rectangles: 39E3, 40E3. Assessment summary.

Year	Landings Tonnes	Effort kwDays	Average survey density (100m ²)
2000	782.03	35453	-
2001	814.86	30036	-
2002	4658.37	147081	-
2003	1076.43	53922	-
2004	1082.09	56775	-
2005	920.84	41997	-
2006	1235.49	49311	-
2007	40.66	1345	-
2008	220.55	4866	-
2009	1897.72	35364	-
2010	3756.90	97694	-
2011	4849.09	116714	-
2012	6860.76	154879	-
2013	2235.85	91150	23.39
2014	956.02	65313	40.42
2015	89.08	4027	34.34
2016	144.97	14354	37.37
2017	196.31	14372	43.13
2018	72.40	5856	27.92
2019	0	-	17.27
2020	0	-	-