Devon and Severn IFCA News

Assessment Completed for the Salcombe Estuary Scallop Fishery 1998-2020

Analysis has been carried out on data collected since 1998 for the Salcombe Estuary scallop fishery.



There has been a small-scale scallop fishery in the Salcombe Estuary for a number of decades. In the past it was undertaken on an ad-hoc basis by a few fishers with small dredges, during periods of bad weather when conditions were too dangerous to go out over The Bar at the mouth of the estuary. The fishery then declined in the 1960s for a number of reasons but gained traction again in the 1990s. There was a sudden increase in effort which included some larger vessels in Salcombe and from other Devon ports. Concerns were raised about the impact this effort could have on the stock and the fishery was closed for several years. In 1995 the fishers produced a signed petition requesting that the fishery be reopened. The fishery was opened under the Dredging in Salcombe Estuary Byelaw brought in by Devon Sea Fisheries Committee (DSFC) in 1998, subject to various restrictions, many of which were suggested by the fishers.

With the development of the of the D&S IFCA Mobile Fishing Permit Byelaw, which came into force on 1st January 2014, the conditions of the DSFC Byelaw were transferred over to the Permit Conditions of the D&S IFCA Mobile Fishing Permit Byelaw. The Salcombe scallop fishery is a highly regulated fishery with limits of vessel size, dredge size and number, prohibition of toothed dredges, a requirement for hand hauling of dredges and various temporal and spatial restrictions. More detail of the Category Two (Estuary) Mobile Fishing Permit Conditions can be found <u>here</u>. The Annexes (charts) that accompany the Category Two Mobile Fishing Permit Conditions can be found <u>here</u>.

Since 1998, fishers taking part in the Salcombe Scallop Fishery have been asked to return information on their catch and effort; this became a requirement within the Mobile Fishing Permit Byelaw in 2014. The categories of information gathered have differed over the seasons.

From 1998 to 2011, when the DSFC was the relevant fisheries management authority, the total number of scallops caught, number of scallops returned, and total days fished in the season was recorded. D&S IFCA superseded DSFC in 2011. From 2011 onwards, the same information was collected for each date fished along with number of hours fished on each day and since 2013 the number of tows were also reported.

An in-depth analysis of the catch data collected from Salcombe scallop fishery from the 1998-1999 season to the 2020-2021 season has now been undertaken. Catch per unit effort (CPUE) analysis based on days fished was undertaken for the full data set and then more in-depth analysis was undertaken on the more detailed data which were collected from 2011 onwards. For the 2011-2012 season onwards, CPUE was calculated by dividing catch by both the number of hours and number of tows fished per catch report. Hours and tows were also used to calculate landings per unit effort (LPUE) from the data covering 2011 onwards. A statistical approach known as generalised linear modelling was then used to identify which variables influenced CPUE since 1998, and which influenced CPUE and LPUE of scallops in the Salcombe scallop fishery for the period 2011–2020. The results indicated that although there has been variation between the years, there have been no sustained declines in CPUE or LPUE. This suggests the fishery, at its current and recent historical level, is not having a detrimental impact on the harvestable scallop stocks of the estuary and that the current management measures provide an effective way to manage the fishery. The full report and results can be read <u>here</u>:

Further Information

A large collection of environment and research information can be found in our <u>Resource</u> <u>Library (Section H)</u>. We also have a drop-down menu on the home page of the website – <u>Environment & Research</u>.