## **Devon and Severn IFCA News**

## **Mollusc Reports 2022**

After a year full of mollusc surveys, the mussel and cockle stock assessment reports for the Devon and Severn IFCA District have now been finalised.





During 2022 D&S IFCA officers conducted the full suite of intertidal mollusc surveys across the District. Alongside the annual mussel surveys on the Taw-Torridge estuary, mussel and cockle surveys were also undertaken on the Teign and Exe estuaries, and for the first time a cockle survey was completed on the Taw-Torridge estuary, to establish the population structure, biomass, and distribution of cockles within the estuary. Data collected from the surveys are used to build up a long-term picture of the stock status of each bed, which is used to inform future management of the resource, and for the Taw-Torridge, data is fed into a shellfish ecological requirement model provided by Natural England, which allows an estimate to be made of the ecological requirements of wading birds.

## The full survey reports can be read here:

- 2022 Exe Estuary Mussel Stock Assessment Report.
- 2022 Exe Estuary Cockle Stock Assessment Report.

The Exe mussels have shown an improvement in percentage cover and density since the last survey in 2020, but the bed area is still small relative to historic levels. It is recommended that the stock assessments continue to be carried out on a biennial basis to monitor any future changes and to detect any signs of recovery, especially whilst D&S IFCA's closure of mussel harvesting from the public shellfish beds remains in place. Details of the closure can be found here.

Adult cockle density on the Exe appears to have been relatively stable over the last eight years, though there is a high degree of variation between sampling stations, and the overall tonnage of the bed has recently been fluctuating. Although there is currently no commercial fishery for cockles on the Exe Estuary, there have been reports of recreational gathering of cockles in recent years – some of which report large quantities being removed. D&S IFCA will continue the autumn survey every two years to monitor the cockle stocks that are harvested recreationally and that form part of the SPA birds' diet. These data may help to inform development of future management of hand working activities, though this does not form part of D&S IFCA's Annual Plan for 2023–2024.

- 2022 Teign Estuary Mussel Stock Assessment Report
- 2022 Teign Estuary Cockle Stock Assessment Report

On the Teign estuary, mussel tonnage remained low, but there is potential for expansion in the east of the bed. On the other hand, cockle stocks on the estuary had increased in biomass and density since previous surveys. Although there is currently no commercial fishery for mussels or cockles on the Teign Estuary, D&S IFCA will continue surveys every two years to monitor the future change, detect any recovery in the mussel stocks, and to inform future management of the site.

- 2022 Taw-Torridge Estuary Mussel Stock Assessment Report
- 2022 Taw-Torridge Estuary Cockle Stock Assessment Report

There was an overall decline in tonnage and density of mussels on the Taw-Torridge estuary compared to 2021, despite an apparent strong settlement of seed mussel before the summer survey was undertaken. The largest declines were seen in mussels over 30 mm in length. The total tonnage of cockles found at Instow was 28.2 tonnes, mostly made up of cockles <15 mm. The shellfish ecological requirement model, provided by Natural England, indicated that 9 tonnes of shellfish is excess to the requirements of the oystercatchers on-site and therefore is both available to the fishery and to remain on the surveyed beds as brood stock and for further recruitment within the estuary.

It is recommended that the Taw Torridge Estuary mussel and cockle stock assessments continue to be carried out on an annual basis, to monitor any future changes to the stock of the beds. This will help to inform any site-specific management, including D&S IFCA's work with Natural England to ensure the mussel harvesting limit remains suitable to balance the environmental and economic interests in the mussel stocks.

If you would like to find out more about D&S IFCA's environment and research work, please visit the <u>Environment & Research webpages</u>.