



Aim

This project examined the potential feasibility of a targeted octopus fishery in southwest England based on stakeholder observations of generally increasing abundance of octopus and subsequent increase in bycatches. The project explored opportunities and threats emerging from the increased abundance of octopus, ethical concerns around a fishery, supply chain feasibility and potential for growth, as well as further research and monitoring needs.

Stakeholders who participated in this project reported early fishing season catches of octopus that suggested 2025 was to be a year of high octopus abundance although this project was completed prior to recognising an octopus bloom in the southwest.

Introduction and methodology

In preparing the Channel demersal non-quota species Fisheries Management Plan (the FMP), stakeholders in the southwest reported increases in octopus abundance and resulting octopus bycatch. Stakeholders also raised concerns that increases in octopus activity could affect the livelihoods of fishers who rely on crab, lobster and lesser spotted dogfish, as octopus eat dogfish eggs and prey on crabs and lobsters from pots. As a result octopus was prioritised for management intervention within the FMP. An increase in octopus bycatch suggested potential for an emergent fishery, which could provide additional fishing opportunities as well as reduce impacts on other fisheries resulting from increased octopus numbers should they occur.

This project used a desk-based approach, consisting of: i) a literature review to understand octopus physiology and life traits, diet composition, population dynamics, distribution and seasonality; ii) stakeholder engagement through interviews and an online workshop; iii) analysis of MMO landings data (2017 to 2024); and iv) case studies of two existing octopus fisheries (western Asturias octopus trap fishery in Spain and the Brittany octopus fishery in northern France).

Results

Between 2017 and end of 2024, the year with the highest volume of octopus landings was 2019 with 325 tonnes. Trawlers were responsible for 97% of these landings by weight, although potters have started landing higher amounts since 2022. Octopus landings show a seasonal pattern, with peak landings by trawlers between November and January and peak landings by potters in May and June. Since most trawlers fish offshore, this indicates that octopus is more abundant in deeper waters during winter. The highest concentrations of catch have been recorded around Brixham and the Lizard.

Stakeholders' greatest concern regarding octopus is related to the impact on shellfish stocks, which are the staple year-round fishery. Other 'high importance' ranked issues were market price, availability of markets and stock abundance. Stakeholders expressed concern over the unpredictable nature of octopus numbers which fluctuate spatially and temporally, meaning that they are unsure whether octopus would be available consistently enough in large enough quantities to support a targeted fishery.



The average price of octopus has been steadily increasing since 2017, reaching a maximum annual average in 2024 of £3.78/kg for trawlers, and £5.94/kg in 2022 for potters. The current UK market through food outlets and fish retail shops is limited to around 1 tonne a day, but the export market is good and it is believed export could handle >4-5 tonnes a day.

Both the case study fisheries (western Asturias and Brittany) have co-management systems, where decision-making is shared among government authorities and industry. MSC certification of the western Asturias octopus improved the octopus market value considerably (from €5.5/kg pre-certification to €10.15/kg in the 2023/2024 season). Overall, the western Asturias fishery operates under a scientific-based management approach with clearly defined sustainability objectives. In contrast, Brittany's fishery was created with the objectives of addressing socio-economic concerns. The fisheries also differ in their approach to regulatory frameworks and stock management employing variously TAC limits, vessel quotas, closed seasons, minimum capture size limits, gear restrictions and technical specifications to control fishing effort.

Conclusions and recommendations

- Differentiation between the two prevalent octopus species should be promoted in landings data to improve understanding of species composition.
- Real-time data collection and long-term monitoring should be prioritised to understand octopus abundance and distribution in the English Channel in time and space and the factors that influence it. Abundance has not been consistent enough to support a targeted fishery currently.
- Sentience guidelines should be established for the supply chain to address concerns over humane slaughter methods and ethical live transport of octopus to improve their marketability.
- Case studies highlight two different frameworks to establish a potential fishery in the future.
- Collaboration between the fishing industry, academia and government should be encouraged, which would allow different perspectives to be integrated into the management framework.
- Clear objectives and targets for a potential fishery should be set, which would inform decisions on the type of fisheries management measures that are suitable.

MMO comments

This project was completed prior to the octopus bloom reported since March 2025, so some findings may not reflect the most recent perspectives of stakeholders or data.

In collaboration with Cornish Fish Producers Organisation MMO have produced octopus ID cards for the fishing industry and included species codes on the catch recording application to support enhanced data collection. Primary barriers to establishing a fishery appear to be variability in octopus abundance year to year and thus monitoring long term population trends and exploring how highly variable fisheries can be undertaken could be next steps. The findings of the report can inform MMO's response to this recent surge in octopus abundance. Early season octopus trawl catch appears predictive of later pot fisheries potential.

Further information

Please direct any correspondence to the Evidence Team (evidence@marinemanagement.org.uk)