

Date: 6th August 2025

Location: Microsoft Teams (online)

Subject: Octopus Bloom 2025 - Stakeholder Updates - August

Attendees:

Attendee	Primary Affiliation
MMO Colleagues	MMO Sustainable Fisheries
1x Defra Colleague	Defra
1x attendee	Marine Biological Association
1x attendee	Association of IFCA
1x attendee	Devon and Severn IFCA
1x attendee	Cornwall IFCA
1x attendee	Marine Biological Association
1x attendee	Plymouth Marine Laboratory
1x attendee	Plymouth Fishing and Seafood Association
1x attendee	South Devon & Channel Shellfishermen Ltd.
2x attendees	South Western Fish Producer Organisation Ltd
1x attendee	Senior Sea Fisheries Officer, States of Guernsey
1x attendee	Jonas Seafood
1x attendee	Brixham Fish Market
1x attendee	Merchant - Wings of St Mawes
1x attendee	Fisheries Consultant
1x attendee	Shellfish Association of Great Britain
1x attendee	Cefas
1x attendee	Waterdance Ltd.
1x attendee	Environment Agency
1x attendee	SeaFarms Ltd

3x attendees	Independent Fisher

Opening statements (MMO)

- Meeting purpose: Provide update on current situation and hold open conversation on future steps and preparations for subsequent octopus blooms.
 - o Open forum: New situation faced by all, cooperation key to success.
- Previous meetings and engagement recap
 - Meeting 1 (included regulators and scientists) 20th May 2025
 - Meeting 2 (included fisheries representatives, regulators and stakeholders) –
 6th June 2025
 - Meeting 3 (Processors) 27th June 2025.
 - Meeting 4 (stakeholder update meeting.
- MMO will continue to email stakeholders containing key updates (and vice versa).
 - o Please contact us at: <u>sustainablefisheries@marinemanagement.org.uk</u>
 - We are really interested in hearing from you about the kind of support you would like to see moving forward, including what form you would like engagement / meetings / updates to take.

MMO octopus response: key updates (MMO)

- MMO is continuously monitoring landings of octopus and the shellfish species impacted by ongoing bloom.
 - Updates to landings infographics can be found here: <u>Regional Fisheries</u>
 <u>Groups South West 7efg GOV.UK</u> (updated fortnightly)
 - o These will continue to inform potential future management decisions.
- Online survey for <u>processors</u> on the octopus bloom is open until 31st August to understand challenges it brings, as well as future needs and opportunities.
- MMO has published findings of an evidence study on the feasibility of a targeted octopus fishery in the southwest - <u>Feasibility of a Potential Emergent Octopus fishery</u> {MMO1440} - GOV.UK.
- MMO is also working on an international octopus fisheries paper, which looks into how these are being managed elsewhere (finalising)
- MMO has been supporting with FaSS applications, encouraging applications for the dispatching of octopus – <u>NOTE</u>: scheme now closed.
- MMO in the process of procuring ID cards, which will be circulated via MMO local offices.
- Western Waters Effort is a management measure for the over 15-meter shellfish fish vessels catching crab in ICES area 7, These vessels are restricted in the number of

days that they can fish in the area each year. In 2025, due to the Octopus bloom it has been decided that only the days fished in the area where crabs have been caught will count towards the vessels total days used in the year.

Ongoing Defra/MMO/MBA/PCC project (see below for update on this).

Octopus bloom – stats updates and observations (MMO)

- Octopus landings have shown significantly higher value per tonne in 2025 compared to previous years.
- The octopus bloom is concentrated in ICES area 7e.
 - o There have been reported of Reports of dead octopus and eggs.
 - Divers have observed octopus gathering together, which is atypical for this solitary species — possibly indicating breeding behaviour.
- Internal MMO landings data indicates a recent drop in both landings and value of octopus over the past few weeks. Note: this data is still pending QA.
- MMO is Monitoring Impacts via Shellfish Landings
 - Crabs: Landings are down compared to previous years. Not only in 7e, but interestingly also in ICES Area 4, where no octopus bloom has been reported.
 There are likely also other factors impacting this.
 - Lobster, Crawfish, Scallops: according to MMO landings data, these landings appear stable overall.
 - South Western Fish Producer Organisation Ltd disagreed with scallop landings remaining stable, noting that there have been extremely poor yields in 7e. These are reports from fisherman who have needed to relocated to 7e due to 7d closures. Some have even needed to abandon fishing in 7e due to these low yields.
 - MMO clarified that the graph represented UK-wide landings, not broken down by ICES area.
 - South Western Fish Producer Organisation Ltd request future data be presented by ICES area for clarity and relevance.

Action – MMO to ensure that future landings data be presented by ICES area.

MBA Project Update - Marine Biological Association

Lead Organisation: Marine Biological Association (MBA)

Collaborators: University of Plymouth, Plymouth Marine Laboratory and independent consultants

Working group: D&S IFCA, Cornwall IFCA, DEFRA, MMO, CEFAS, South Devon & Channel fishermen, and local fishers

Project Contact: Bryce Steward, bryste@mba.ac.uk

Project Focus: Investigating the 2025 octopus bloom, both current and historical.

- Engaging with fishermen to understand how the bloom developed and its impacts.
- Exploring how similar blooms may occur in the future.

Part I (2-month timeline) - History, Causes, and Consequences of Octopus Outbursts

- Review of Octopus vulgaris biology
- Historical analysis of blooms off the Southwest UK and in the NE Atlantic
- Investigation into the potential causes of octopus blooms, including a focussed
 analysis of environmental considerations during the octopus bloom periods identified
 above. The project will assess the likelihood of these blooms becoming more
 common in future due to climate change. (e.g. climate change)
- Reported effects of current bloom: includes of survey of fishermen to document the impacts of the current bloom.
 - Timelines and geographical extent
 - o Interactions with different gear types, including spatial-temporal factors
 - Impacts on fishing operations and income.

Part II (7-month timeline) - Current Octopus Abundance and Environmental Conditions

- MBA Trawl Surveys looking at octopus abundance at three historical sites (July, August, October).
- Baited Remote Underwater Video (BRUV) used to assess octopus abundance
 - o Analysis of existing surveys in Lyme Bay, Plymouth Sound and Isles of Scilly
 - New surveys at five additional sites are commencing next week, including areas informed by fishermen.

Biological and environmental context

- Octopus have a short life cycle (1–2 years). Post-breeding die-off is being observed, consistent with octopus life cycle.
- The 2025 bloom is described as bizarre and extraordinary.
 - While octopus blooms have occurred historically, this year's scale is unprecedented — not seen in ~70 years.
 - o This year's bloom likely stems from eggs laid last summer.
- What key environmental factors made this bloom possible?
 - o Conditions last summer supported breeding.

- Ocean currents carried the egg larvae
- Winter conditions led to strong survival of juveniles
- o Spring feeding conditions were likely excellent, supporting high survival rates

Questions for MBA:

- Fisherman, Plymouth: reported that octopus distribution is highly patchy. In some locations, octopus are overabundant, while just 50 yards away there may be none.
 Emphasised the importance of precise location data for effective monitoring.
 - MBA confirmed similar findings from other sources. Noted that BRUV (Baited Remote Underwater Video) surveys are being widely used.
 - Typically, 5–6 BRUV setups are deployed for 1-hour rotations.
 - As the last camera is deployed, the first is retrieved and reset for a new location.
 - Some BRUV units have 12-hour battery life, which will be tested overnight, as octopus are generally more active at night.
 - Fisherman, Plymouth: Asked whether there is any data on freshwater impacts on octopus in the Sound, as they are curious about any observed effects.
 - MBA responded that this has been noted, but so far only trawl surveys have been conducted in the area.
- D&S IFCA is interested in further discussing BRUV survey locations with MBA.
- D&S IFCA mentioned that previously raised the need for continuous larval data, but did not see included in the current work package.
 - MBA: Clarified that there is a separate survey focused on continuous plankton larval monitoring, which will be considered.
 - Acknowledged reports from fishermen of juvenile octopus sightings.
 - Confirmed he has also heard of octopus breeding activity several months ago and suspects the breeding season is nearing its end.
- **Fisheries Consultant:** asked for clarification on the use of baited cameras in the project.
 - MBA: explained that baited cameras (BRUVs) are used to:
 - estimate octopus abundance and identify preferred habitats.
 - Potentially track blooms earlier in the future, contributing to a warning system.

- The bait helps lure typically evasive octopus into view.
- MAXENT method is used: the maximum number of octopus seen at once in a location is used to estimate abundance. This avoids counting the same individual multiple times.
- Fisheries Consultant: questioned the current usefulness of baited camera surveys. Suggested that if the surveys had started in May, they would have been more valuable.
 - Emphasized that fishermen were the first to report sightings and breeding activity.
 - Proposed holding the budget for future use when the next bloom begins, rather than deploying resources now as octopus numbers decline.
- MBA: agreed that earlier deployment would have been ideal but explained that the project is already underway and funding must be used within the current financial year.
 - Reassured that the project is informed by fishermen, and their survey responses will provide valuable insights.
 - Confirmed that they are seeking funding to repeat the work during the next bloom, aiming to avoid future delays.
- Fisheries Consultant: emphasised that while she understands the rationale,
 she doesn't see the value of deploying baited cameras at this stage.
 - They suggested that the key takeaway from the meeting should be to ensure such work is ready to launch at the start of the next bloom, rather than experiencing a delay when octopus numbers are already declining.
- **Fisherman, Plymouth**: questioned the use of bait in survey methods. Noted that they had collected valuable data from shelters without bait.
 - Suggested that using unbaited pots provides a more accurate picture of where octopus naturally seek shelter.
 - Warned that baited setups may skew results, as they could attract octopus to areas they wouldn't normally visit, potentially misrepresenting their natural range or movement.
 - MBA: Agreed, acknowledging that no method is perfect.
 - Added that while bait does attract octopus, they generally do not travel very far to reach it, which helps limit distortion in the data.

- D&S IFCA: also noted that many fishermen are using less bait, yet octopus are still entering pots. Emphasised the need to also consider oceanographic factors in understanding octopus distribution.
- MBA: agreed, pointing out that the current bloom is highly concentrated, even though suitable habitats exist in adjacent areas to where the bloom is occurring.
 - Suggested that oceanography likely played a key role in restricting the bloom to specific areas.
- MMO: encouraged anyone to reach out to MBA for octopus insights and ways to improve / contribute to the methodologies.
- **Fisheries Consultant:** asked when Simon Thomas will begin speaking with fishermen.
 - Highlighted that landings data only provides information at the level of statistical rectangles, but what is really needed is the specific location of pots used by fishermen.
 - MBA: confirmed that Simon Thomas will begin outreach next week, and will be actively engaging with fishermen over the next 4–6 weeks, in addition to the online survey.
 - Mentioned they are still waiting for funding to contract all contributors involved in the project.

Open Discussion: next steps and future engagement

As regulators, how can we best support the industry as the bloom draws to a close? With the MBA work underway and the bloom season ending, we are keen to understand what role we can play in supporting octopus and shellfish management going forward:

- Are there specific ways regulators can assist the industry during this transitional period?
- What steps should we take now to better prepare for future blooms?
- What management strategies should be considered to sustainably capitalise on octopus, while continuing to support the shellfish fleet?
- How should we engage with stakeholders to share updates on actions still in progress?

5% Shellfish Bycatch Rule

- South Western Fish Producer Organisation Ltd: At earlier fisheries industry
 meetings, they requested that the MMO suspend the 5% shellfish bycatch quota.
 Unfortunately, this suspension did not take place. As a result, scallop fishers were
 unable to fully capitalise on octopus catches due to the bycatch rule, which requires
 that 95% of the catch be scallop.
 - MMO clarified that they did pick up on this issue and discussed it with Defra.
 It is on their radar and it will be considered for the next bloom.

Stock assessments of shellfish

- South Devon & Channel Shellfishermen Ltd.: Asked whether there are any plans
 for the next stock assessment, particularly for crab and lobster, but also for other
 shellfish. It would be helpful if something could be available by the end of the year.
 - MMO confirmed that they have raised this with Cefas and will update them as soon as possible.
 - South Western Fish Producer Organisation Ltd: mentioned that scallop surveys are ongoing and that they will be mindful of the timing and scope of the next stock assessment.
 - Noted that scallop stock assessments may show lower numbers, but this will not necessarily be due to fishing pressure alone.
 - Environmental conditions—such as the recent bloom—are not always adequately accounted for in stock assessments, so this context should be considered.

Suggested actions for the MMO

- D&S IFCA: Appreciated that MMO statistics have been published regularly and in near real-time.
 - They emphasised the importance of maintaining this frequent and responsive data sharing, as it can help indicate the potential for future blooms.
 - Noted that the FASS funding closed quickly and they are unsure whether fishers had sufficient opportunity to apply for equipment such as stunners.
 - Suggested that when the scheme next opens, MMO should promote it earlier and more visibly so fishers can better prepare.
 - Also recommended that, ahead of the next application window, a code of practice for the humane killing of octopus be published, along with guidance on what is required to sell octopus into the market.

- **Fisherman, Plymouth**: Shared that social media posts from Guernsey fishers— when octopus catches were high—served as an early indicator for them. It helped them anticipate when the octopus might move north, allowing them to prepare slightly ahead of the bloom. Them credited Guernsey fishers' social media activity as a useful informal early warning system.
 - MMO: noted that this kind of insight is extremely valuable. Suggested that working with fishers to incorporate this type of information into a more formal early warning system would be beneficial.
- South Devon & Channel Shellfishermen Ltd: Added that it would be helpful for authorities to engage directly with the Channel Islands. Their experience could offer useful lessons for managing future blooms.
 - Guernsey experienced a severe bloom early on, followed by a relatively stable summer, but conditions have worsened again in the past week.

The current octopus bloom remains an ongoing issue

- South Devon & Channel Shellfishermen Ltd: Noted that some members of their group do not target octopus and are also unable to relocate to other areas to fish for lobster or crab.
 - As a result, they are concerned about the viability of their businesses if catches remain low and they remain confined to their current locations.
 - Mentioned that some may soon be seeking emergency support, as the situation could become very serious for their livelihoods.
- **Fisherman, Plymouth:** Agreed with BP and added that they believe another bloom is likely. They are already seeing a significant number of juvenile octopus that are growing rapidly.
 - MBA: Agreed, noting that octopus have a protracted breeding season. If juveniles are already present and growing, they could reach adult size within a month or two.
 - Also commented on the recent resurgence of the bloom in Guernsey. While it may appear that octopus are moving back to the Channel Islands, he believes it's more likely a new batch rather than a return migration.
 - Despite being a well-studied species, there is still much to learn about their movement and population dynamics.

Chat comments:

- **Fisherman**: Brown crab catches have been lower around the UK on a year to date comparison for the first 6 months of the year. I do not think we have seen the actual impact on multiple fisheries yet.
- **Cefas**: Does anybody know what is approximate size of these juveniles? Approximate total length, or total weight?
 - South Devon & Channel Shellfishermen Ltd: We have seen palm sized in recent couple of weeks (less than half a kilo, possibly 6-7 months old)