# Influx of Octopus into South of the D&S IFCA's District and the South West

# Officers' Recommendation

That Members note the contents of this Officers' paper on the influx of octopus into the South of the D&S IFCA's District and actions taken by D&S IFCA.

# Background

## Octopus Biology

An octopus is a soft-bodied, eight-limbed mollusc of the order Octopoda. The order consists of some 300 species and is grouped within the class Cephalopoda with squids, cuttlefish, and nautiloids. Like other cephalopods, an octopus is bilaterally symmetric with two eyes and a beaked mouth within the mantle (the main bulbous body part containing the internal organs) at the centre point of the eight limbs. An octopus can radically deform its shape, enabling it to squeeze through small gaps. The beak of the common octopus (*Octopus vulgaris*) is relatively small compared to its mantle, but it's incredibly strong and sharp. The beak is 1-2cm long in an adult octopus compared to its mantle size which can be 15-25cm in a common octopus. The beak is therefore typically 1/10<sup>th</sup> the size of the mantle¹ and it is often used as a reference size for the minimum size of a hole the octopus can squeeze through. Octopus trail their appendages behind them as they swim. The siphon is used for respiration and locomotion (by water jet propulsion). Octopus have a complex nervous system and excellent sight and are among the most intelligent and behaviourally diverse invertebrates.

The common octopus, *Octopus vulgaris* is found in tropical and temperate waters around the world, especially in the Atlantic Ocean, Mediterranean Sea, and along African and European coasts and is found in UK waters. They can grow up to about 1m(3-4ft) in length including the arms. They typically live for between 1-2 years. The curled or horned octopus *Eledone cirrhosa* is common in UK water. It is much smaller than *O. vulgaris* (50cm including the arms). Both of these octopus feed on crabs, lobsters, crawfish, scallops and other mollusc and gastropods. Both species can be found on rocky reefs, sediment and sandy and muddy habitats in deep and shallower waters. Strategies to defend themselves against predators include expelling ink, camouflage, and threat displays, the ability to jet quickly through the water and hide.

Most species grow quickly, mature early, and are short-lived. In most species, the male uses a specially-adapted arm (hectocotylus) to deliver sperm directly into the female's mantle cavity, after which he becomes senescent and dies, while the female deposits fertilised eggs in a den and cares for them until they hatch, after which she also dies. The common octopus reproduces at approximately 1kg weight whereas the curled octopus reproduce when the male is approximately 200g and the females is 400-1000g. They usually reproduce between April

<sup>&</sup>lt;sup>1</sup> Ying et al (2013) Beak measurements of octopus (Octopus variabilis) in Jiaozhou Bay and their use in size and biomass estimation. September 2013. Journal of Ocean University of China 12(3) DOI:10.1007/s11802-013-2194-9

and July, the spawning being temperature dependent, Octopus undertake vertical migrations during mating and maturation.

Octopus have a home range, thought to be relatively small and varies depending on the individual and environmental conditions. The home range of a common octopus typically spans a few square meters to a few hundred square meters. It is not fixed, but studies show that most individuals stay within a relatively confined area unless disturbed or searching for food or mates. They usually have a central den, often in a rock crevice or burrow, where they spend much of their time. This den acts as a base for foraging trips, which generally occur within their home range. Common octopuses exhibit site fidelity, meaning they may stay in or return to the same den for days or even weeks, as long as it's safe and food is nearby. They are solitary and territorial, often defending their home area from other octopuses. Movements are usually restricted unless environmental pressures; prey availability or reproductive needs push them to move farther.

Adult common octopus generally do not travel over large distances or follow fixed migratory routes over long distances. However, they do exhibit localised movements that can resemble small-scale or seasonal migrations under certain conditions or environmental shifts. The common octopus move offshore to deeper waters in colder seasons and inshore to shallower waters in warmer months or for spawning. These shifts are seasonally timed but are usually over short distances and influenced by sea temperature, food availability, and reproduction. Mature octopus often leave their usual home range to find a mate or suitable nesting site. After mating, females seek a den to lay eggs and typically die after brooding (semelparous life cycle). While juveniles can disperse more widely via planktonic stages, adult movement is typically restricted to a local area, sometimes extending several kilometres if driven by habitat changes or food scarcity.

The larval dispersal of the common octopus is a critical part of its life cycle and is the stage where the species achieves its widest distribution. After hatching, common octopus hatchlings enter a planktonic (paralarval) stage, during which they are part of the zooplankton in the open ocean. The planktonic stage typically lasts 30 to 60 days, depending on water temperature and food availability. Warmer waters usually lead to faster development and shorter planktonic duration. During this stage, larvae are carried by ocean currents, which can disperse them tens to hundreds of kilometres from their hatching site. This wide dispersal helps connect populations across regions and enables the species to colonise new habitats. Paralarvae are active predators, feeding on small zooplankton. They are highly vulnerable to predation and environmental changes, resulting in high mortality rates during this stage. After several weeks, they transition to a benthic (bottom-dwelling) juvenile stage. This settlement usually occurs in coastal or reef environments, where shelter and food are more abundant. Larval dispersal plays a major role in the population connectivity of *O. vulgaris*, meaning populations in one area can help replenish those in another.

# What is happening in the South West of England?

## Recorded Explosions in Octopus Abundance

2025 has seen an influx of common octopus into the South West. This influx has been referred to as a 'bloom' or 'explosion' or 'plague'. The horned octopus has also appeared in more numbers than is usual. The influx of octopus is not a unique occurrence. It has been

documented that a similar 'plague' of octopus occurred in 1899² and 1950 both of which lasted for several years. In 1900 it was reported that the influx of octopus between 1899 and 1900 had decimated crab and lobster stocks in Devon, Cornwall, the Channels Isles and along the coast of France and severely impacted the crab and lobster fishers' livelihoods. The influx of octopus at this time was attributed to warmer sea temperatures with warmer summers and mild winters. In 1950 a similar influx was reported³ and this lasted until 1952, and octopus were caught throughout each of these years. Prior to the adult explosion octopus larvae were caught at many sampling stations in the Channel between 1948-1950. This paper concluded that the plankton had originated on the south side of the Channel along the French coast and around the Channel Islands. Whilst there was the suggestion that mild winter may have caused the abundance along the French coast, the authors concluded that octopus abundance appeared to 'be influenced very little by sea temperature'. The authors suggested that dearth of food seems to be the cause of the trans Channel migration of adults.

# Recent changes in abundance of Octopus in the South West of England

More recently an increase in octopus landings were seen in pots in 2022 with bigger increase in 2023 in particular in Cornwall. Charts of landings and value of landings for octopus landed into Devon and Cornish ports from 2016 to April 2025 from MMO national statistics are displayed in Annex 1. Prior to 2022 landings of octopus into Devon ports remain under 250kg and between 2016 and 2021 the landings of octopus averaged at 70kg in total into all Devon ports caught by pots and traps. Other gear types prior to 2023 had consistently larger landings averaging at about 200 tonnes mostly caught by trawlers working offshore. Whilst some inshore fishers in Devon saw an increase in octopus landings in 2023 (up to 7.5 tonnes into Devon ports by pots and traps) this was not widespread and evenly distributed across fishers

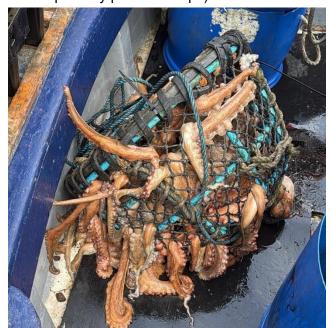


Photo of ocotpus in an Inkwell pot (collective noun for many ocotpus is- a' consortium' or 'tangle') © South Devon and Channel Shellfishermen Ltd.

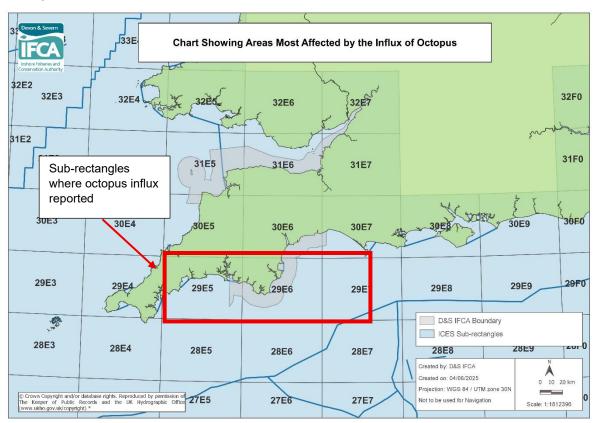
in South Devon. Cornish potters saw landings in 2023 of 12.8 tonnes. In 2024 landings were much lower in Devon and Cornwall although still up on pre- 2023 landings. Up until April 2025 octopus were being caught in Devon mainly by inshore potters using inkwell pots. Cornwall catches remained low during this time. From pers. comms with Cornwall IFCA very few, if any, Cornish potters are using inkwell pots. It would appear that earlier in 2025 octopus were going into inkwell pots perhaps as shelter or preparing to mate and lay eggs. Catches have increased in parlour pots and creels since April which may be partly due to the inshore fishers starting to work these types of pots as the fishing season started or deploying their

<sup>&</sup>lt;sup>2</sup> Garstang W. 1900. The Pague of Octopus on the South Coast and its effects on the Crab and Lobster Fisheries. MBA Journal (1900). pp.260-273

<sup>&</sup>lt;sup>3</sup> Rees, W.J, and Lumby, J. R. 1954 The Abundance of octopus in the English Channel J. Mar.bio.Ass.UK (1954) 33.pp 515-536

pots in the sea or being able to get out to the pots during more settled weather.

The chart below shows the areas where the influx of octopus has been most apparent, and octopus recorded in catches. D&S IFCA's District falls within ICES sub- Rectangles 29E5 and 29E6. Catches in 29E7 are reported to be at the western part of this sub-rectangle in particular by the offshore fleet (MMO pers. Comms). There are also catches reported in the inshore area of sub-rectangle 30E6 although these are not to the same levels as recorded in other sub-rectangles.



On 3<sup>rd</sup> June 2025 D&S IFCA received finer scale data following a Data Protection Request to MMO for crab, lobster and octopus landings per month from 2023 to May 2025 landed by 127 D&S IFCA Potting Permit Holders. These data are displayed in charts in Annex 2. These data reinforce the data shown in Annex 1 and show the changes in landing in 2025 for crab and lobster as the octopus landings increase. The crab landings in particular are much reduced in May compared to previous years where the landings would normally be increasing as the season starts. Crab landings for this month are approximately a third of the landings for May in 2023 and 2024. Whilst lobster landings appeared to be good in April there was decline in May 2025 compared to previous years. It would appear from these data that the octopus influx into Devon is having an impact of landings of crustacea species. Reports from fishers have also highlighted the number of empty scallop shells in pots along with the remains of crustacea species and gastropods.

Annex 3 includes charts produced by the MMO containing data, which was discussed at a meeting with the MMO, Defra, South West IFCAs and Cefas. These data shown in figures 11-14 show they the landings of octopus, crab, lobster and scallop per month over three/ four years into all English Ports. The charts show the increase in octopus landings in 2025 since

February and also show that for May the landings of crab and lobster at lower than expected for this time of the year and lower than previous years. This change in 2025 may be due to less time at sea due to weather conditions but it would appear that the influx of octopus is the cause of the decline. These data in Annex 3 are for all vessel and into all English ports so may mask what is truly happening in the South West.

# **Issues Raised**

# Communications and Engagement

D&S IFCA started to receive reports of catches and landings of octopus in March 2025 mainly from those fishers who use inkwell pots. It wasn't until April that a few were being seen in



Photo of Octopus Predation in a Parlour Pots © South Devon and Channel Shellfishermen Ltd.

parlour pots or creels that have an entrance constructed of net. Some fishers thought that octopus may be entering and escaping these types of pots. D&S IFCA attended a meeting of South Devon and Channel Shellfishermen on 7<sup>th</sup> May 2025 and octopus were discussed at the meeting and it was reported that they were predating on crab and lobster and scallops. Officers asked if any of the fishers present would be happy to do some research with D&S IFCA Officers to trial closing escape gaps in alternate pots in a string of parlours/creels to see whether the escape gaps were making a difference and whether octopus would be retained in parlour ports or creels with the escape gaps closed. One Member has been doing research since then with D&S IFCA but fishers at the meeting did not ask if D&S IFCA could change or adapt potting permit conditions to remove the requirement to have escape gaps fitted or requested to be able to close the

#### escape gaps.

# Actions taken by D&S IFCA

On 12<sup>th</sup> May D&S IFCA Chair Professor Mike Williams and Vice Chair Dr Pamela Buchan received a letter from the Leader of Plymouth City Council. The letter followed a meeting that Cllr Evans and fishers had with Minister Daniel Zeichner and Anne Freeman of Defra in Plymouth. At this meeting concerns were raised by fishers that escape gaps were allowing the octopus to enter the pots, feed on the crab and lobster in the pots and leave. In his letter to D&S IFCA Chair and Vice Chair, Cllr Evans requested that D&S IFCA remove the regulation that requires the escape gaps to be fitted to pots with an entrance constructed on net as he stated that the Devon fishers were unfairly affected by the requirements compared to Cornish fishers whose pots do not require escape gaps.

Between 12<sup>th</sup> May and 15<sup>th</sup> May D&S IFCA Officers received numerous calls and e-mails from fishers and their representatives, and other Plymouth Council employees, to act urgently to change the regulations. Officers sought legal advice on the wording of the Potting Permit Condition relating to the requirement to have escape fitted to pots that have entrance constructed of net if the pots are targeting species other than crab, lobster, and spiny lobster.

The requirement for the fitting of escape gaps was industry driven and introduced by D&S IFCA's predecessors Devon Sea Fisheries Committee in 2007 as a conservation measure to allow juvenile crab and lobster to escape the pots and from predation in the pots.

On Friday 16<sup>th</sup> May, four days later, D&S IFCA produced clarification on the wording of the Potting Permit Conditions relating to the requirement to have escape fitted, which was circulated to all D&S IFCA Potting Permit Holders and those stakeholders who had communicated with D&S IFCA throughout the week raising



Photo of the contents of pots showing predation of octopus on crab, lobster and scallops © South Devon and Channel Shellfishermen

their concerns. These included fishing representatives, Plymouth Council Members and employees, and members of the press who had sought information from D&S IFCA. A News Item was produced detailing the clarification on the applicability of Potting Permit Conditions with a view to address issues relating to predation by octopus and concerns raised by the fishing industry about the use of escape gaps. The Permit Conditions **have not been changed**, rather that clarification of the applicability of our Permit Conditions has been provided. The News Item as a blog can be viewed on the D&S IFCA website as a blog <a href="here">here</a>, and as PDF <a href="here">here</a>.

Since this information was disseminated, D&S IFCA has received and responded to many enquiries from national and local press including Sky News, ITV and the BBC. D&S IFCA's Chief Officer gave an interview with the Fishing News and an article was printed in the 5<sup>th</sup> June 2025 edition. This can be read in Annex 4.

The clarification produced by D&S IFCA Officers is as follows:

- The requirement to have escape gaps in the pots, which have an entrance or entrances to the pot or internal chamber of the pots constructed from netting, relates to 'fishing for crab, lobster or spiny lobster'. It does not apply if these types of pots are being used to fish for octopus only.
- Where fishers that are targeting octopus with pots, rather than crab, lobster or spiny lobster, none of those pots require escape gaps to be fitted. Consequently, a fisher can choose to remove or close as many escape gaps in pots as they wish, if they target octopus.
- If hauling pots with escape gaps closed or removed, the fisher can retain any octopus, but the fisher must <u>return any crab, lobster and spiny lobster caught</u>, as these are no longer the target species for those pots.

- Fishers who wish to target crab, lobster or spiny lobster must continue to use escape gaps in any pot with an entrance constructed from netting to the pot or internal chamber.
- Fishers may target different species and retain a combination of crab, lobster, spiny lobster and octopus on a fishing trip.
- Alternatively, fishers can choose to remove all the entrances constructed from netting and replace the entrances with a funnel or alternative (hard eye) entrance.

Escapes gaps, as previously mentioned, are a conservation measure and their size reflects the size of juvenile crab and lobster so that they can escape predation through the gaps. Some fishers have highlighted in the past that escape gaps save them time sorting through their catch. Potting Permit Condition 2.2(b) stipulates the any escape gap must 'be of sufficient size that there may be passed through the gap a rigid, box shaped gauge, 84 millimetres wide by 46 millimetres high and 100 millimetres long'. As previously mentioned octopus can squeeze through very small holes and the size of a hole or gap through which it can escape is only limited by the size of its beak. The adult octopus beak is approximately 1-2cm in size and therefore octopus will be able to escape through the escape gaps and may be able to escape through the pot mesh depending on the size of the mesh.

#### National Discussions

The explosion of octopus in the South West has been discussed regionally and on a national level with Defra, MMO, Cefas and other IFCA. Meetings were attended by D&S IFCA Officers on 20<sup>th</sup> May and 6<sup>th</sup> June 2025 to discuss the increase in landings of octopus, octopus biology, the fishing industry's priorities, what the industry require including potential funding opportunities, the protection of existing crustacean and molluscan stocks, further exploitation of octopus, what evidence is available and required, and potential management solutions concerns. Also, within these meetings other octopus fisheries along the French and Spanish coasts have been discussed and how their regulators, working with fishers, have started to manage the octopus fishery due to the fishery and occurrence of octopus in large number having continued for several years.

Octopus and the impacts of the influx has been discussed at FMP meetings including at the Crab and Lobster Implementation Group meeting held on 29<sup>th</sup> May 2025 and the FMP South West Crab Fishery Trial meeting on 3<sup>rd</sup> June 2025. At this meeting discussion were had on what measures could be trialled without further impacting the crab and lobster fishers who have been affected by the octopus predation on their catches.

# **Next Steps**

D&S IFCA, as previously mentioned, is currently working with a commercial fisher, to record the difference in contents of pots with entrance constructed of net that have escape gaps alternately open and closed on the strings of pots. Two strings of 40 pots each have escape gaps closed alternatively along the string so 20 pots with escape closed and 20 pots with escape gaps open. The area where these pots have been set is close inshore and they have not been subjected to the level of extensive predation that has been seen by other fishers working in deeper water and on different ground. However, some predation has been noticed with pots containing the remains of crab and lobster that have been eaten, as well as the

occasional octopus remaining in the pots when hauled. The data collected from two survey days at sea are shown in table 1.

Table 1 – Results from two haulings of pots with a netted entrances that have escape gaps closed in alternate pots along the string

Cateogry of species	No of crab/lobster	No of crab/lobster caught in	Total number
caught	caught in pots with	pots with escape gaps left	caught
	escape gaps closed	open	
Sum of landable	18	23	41
lobster			
Sum of undersized	25	0	25
lobster			
Sum of landable	0	0	0
brown crab			
Sum of undersized	9	1	10
brown crab			

Within the pots spider crabs and velvet swimming crabs have been seen. Spider crabs, both meeting the Minimum Conservation Reference Size (MRCS) and undersized, have been seen in pots with escape gaps closed and also in those where gaps were open in quite high numbers. This is possibly due to the shape of the spider crab and its long legs making it more difficult for them to escape through the gaps. Velvet swimming crabs were seen only in those pots that had the escape gaps closed. On the hauling on 2<sup>nd</sup> June 2025 there were 22 velvet swimming crab in 40 pots all with the escape gaps closed. None were seen in the pots with the escape gaps open. The fisher working with D&S IFCA Officers has also reported seeing very small octopus (two inches long) in his crab pots located further offshore and reports from other fishers have also confirmed the siting of small octopus, which may mean larvae have settled on the inshore ground in Devon and are now growing and may be present in the fishery next year when they reached maturity depending on their home ranges and food availability.

D&S IFCA Officers are discussing the possibility of undertaking similar surveys with other fishers to gain data from different areas and at different depths. Officers are also developing an online survey for fishers to provide information and data on their octopus catches, evidence of octopus predation, whether escape gaps being closed retain octopus, whether escape are providing a conservation measure to crab and lobster stocks, other species caught, ground and depth worked, and bait used. The forms will be available to complete online, phones, laptops or in paper form depending on the fisher's preference. These data will help inform the distribution of octopus and will also be shared with Cefas who is also trying to gather information to help understand the octopus population and its prevalence in future years.

D&S IFCA will also investigate the efficiency of escapes gaps, in terms of a conservation measure, from the recording of crab and lobster in the pots with escape closed compared to those left open. The outputs for this work may be used to consider further consultation on the on-going requirement for escape gaps to be fitted to those pots with an entrance or entrance constructed of net.

D&S IFCA met with Defra, MMO, Cefas and fishing representative on 6<sup>th</sup> June 2025. Cefas provided more information on the biology of octopus and set out that winter sea temperatures

were key to determining the survival of juvenile octopus. It was too early to say but increased sea temperatures may lead to more successful recruitment events in the future. MMO presented further landings data that showed that landings in May continued to increase. MMO was requested to breakdown the shellfish landings to show the decline across individual ports in the Southwest.

Fishing representatives were not in favour of any immediate management interventions but to use the year to gather as much information as possible. Cefas, CIFCA, D&S IFCA and MMO agreed to discuss further how best to capture the environmental information that fishers can provide. Fishing representatives urged Defra to consider how to financially support some fishers and processors during this period of significantly reduced crab and lobster catches. The distribution of the octopus if variable and some fishers are experiencing low catches of crab and lobster and little, if any, octopus. The spring run of shellfish is critical for the survival of both fishers' and processors' businesses and the dramatic drop in landings is already jeopardising their viability.

# **Background Papers**

News item – Octopus & Escape Gaps (16th May 2025) – Blog and PDF

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# Annex 1 – Landings of Octopus between 2016 and end of April 2025 from MMO Data

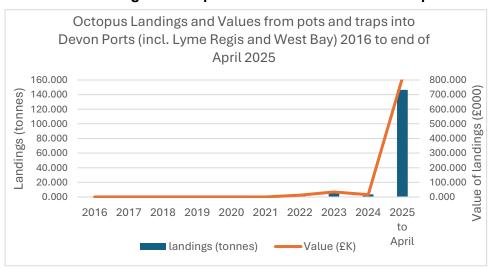


Figure 1 Octopus Landings by pots into Devon Ports(incl. Lyme Bay and West Bay) 2016-

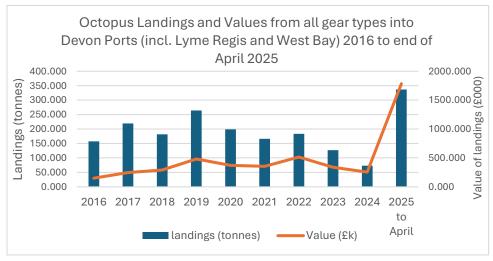


Figure 3 Octopus Landings by all gear types s into Devon Ports(incl. Lyme Bay and West Bay) 2016-2025

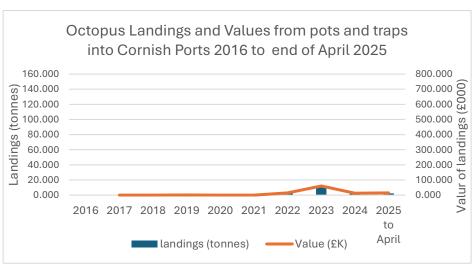


Figure 2 Octopus Landings by pots into Cornish Ports 2016-2025

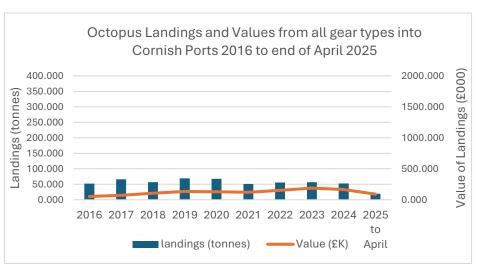


Figure 4 Octopus Landings by all gear types into Cornish Ports 2016-2025

# Annex 2 – Landings of Crab, Lobster and Octopus for 127 D&S IFCA Potting Permit Holders

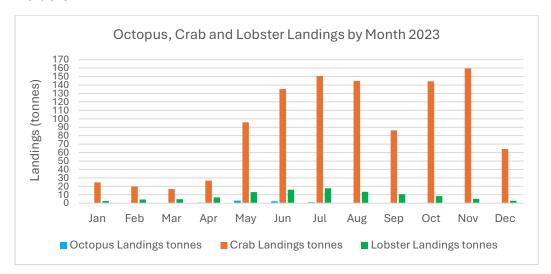


Figure 5 Octopus, crab and lobster landings per month for 2023 to May 2025

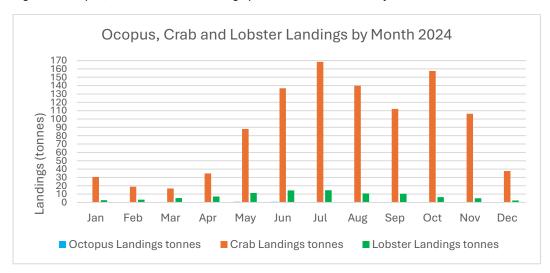


Figure 6 Octopus, crab and lobster landings per month for 2023 to May 2025

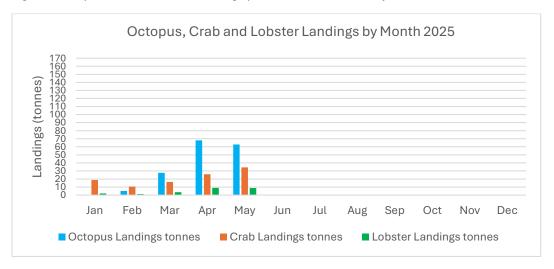


Figure 7 Octopus, crab and lobster landings per month for 2023 to May 2025

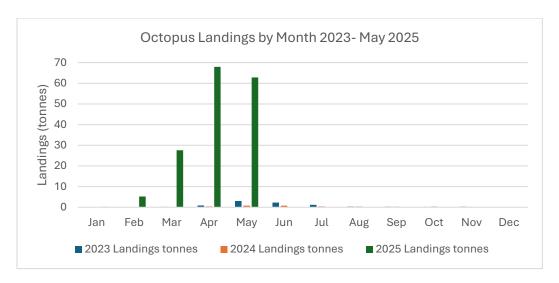


Figure 8 Octopus Landings per month for 2023 to May 2025

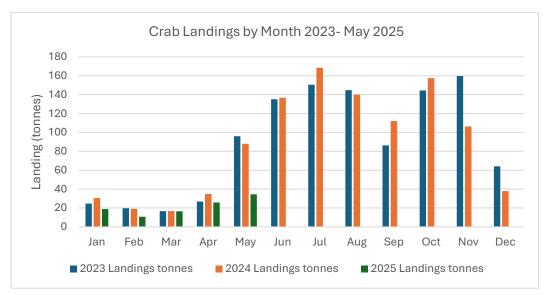


Figure 9 Crab Landings per month for 2023 to May 2025

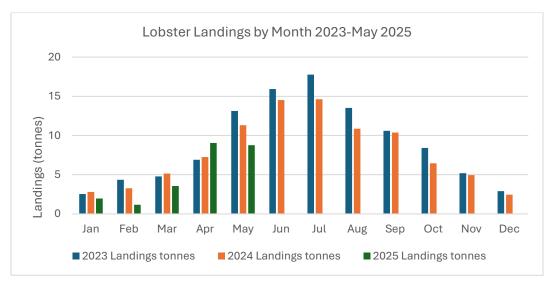
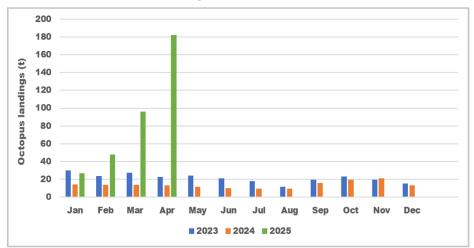


Figure 10 Lobster landings per month for 2023 to May 2025

# Annex 3 Charts produced by MMO from MMO datasets for all Vessel into English Ports



2000
1800
1600
1400
1200
1200
800
600
400
200
1 2 3 4 5 6 7 8 9 10 11 12

Figure 11- Octopus Landings per month from MMO data for 2023 -2025 by all vessels landing into English Ports

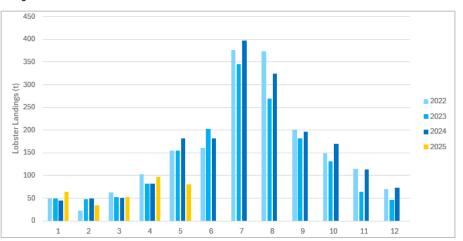


Figure 13 Lobster Landings by month from MMO Data for 2022 to 2025 by all vessels landing into English Ports

Figure 12 Brown crab Landings per month from MMO data for 2022 to 2025 by all vessels into English Ports

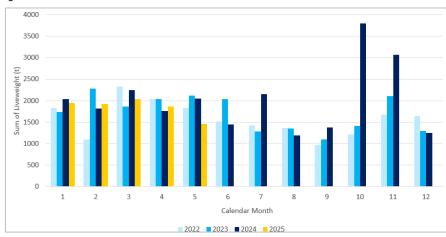


Figure 14 King Scallop Landings by month from MMO data for 2022 to 2025 by UK vessels in UK waters

Annex 4 Fishing News Article 5th June 2025

# Industry and regulators set to address octopus issue

Major impacts on South West shellfisheries, with many crab and lobster potters forced to switch to targeting octopus

ISHING INDUSTRY
representatives are due to
meet industry regulators to
try to find ways to address
the abundance of octopus
in the Western Channel that is
severely affecting shellfisheries.

Industry regulators including Defra, Cefas, the MMO and IFCAs met on 20 May to discuss the issue and a further meeting was scheduled for 28 May that would include industry representatives, but this was postponed to allow more industry leaders and spokespeople to be present.

There has been an explosion of octopus in southwestern waters in recent months, and while this has given the opportunity of an alternative non-quota targeted fishery, the sheer numbers of animals have impacted the crab, lobster and scallop fisheries (FN, 20 February, 'South West octopus explosion'). Warmer waters are thought to be one reason behind the abundance.

Devon and Severn IFCA (D&SIFCA) has been closely involved with the other regulators in trying to address the issue, and chief executive Mat Mander said it was 'really important' to get fishermen involved.

#### By TIM OLIVER

He said the planned meeting of regulators and industry wanted to hear about previous experiences of this level of octopus abundance, and to understand how it is impacting the shellfisheries.

"There is also an emphasis on understanding what the industry is expecting the regulators to do, and what are their priorities in trying to get a grip of the issue," he told *Fishing News*.

"It's really important to get the fishers fully involved, because from my point of view easy options for management are not going to be available, so we need to get our collective heads together to find out what's the best approach.

"It's not something many of in the past, so trying to understand how we best manage it going forward is going to be a challenge to all of us. It's frustrating that the 28 May meeting had to be postponed on such an urgent issue, but it's really important to get that industry input."

He said the IFCA had taken

legal advice on the question of closing escape gaps in crab and lobster pots in order to target the octopus. Fishermen had asked to be allowed to do this, because octopus were eating the crabs or lobsters in their pots, and then exiting through the escape gaps, leaving them with no catch of any species.

The IFCA has now advised that this is permissible – with the proviso that any crab or lobster caught in those pots must then be returned, as they are no longer the target species. "We've clarified that in those circumstances where they have

an inundation of octopus on the grounds they work, they can tie up the escape gaps, and that was really well received by those fishers that have been calling for that," said Mat Mander.

But he said this was a shortterm measure, and 'we now have to look at what we can do as a group of regulators, scientists and fishers, how we can come together and try to get the best plan we can going forward'.

Longer-term matters would include what might happen after the octopus eventually move away. "All the key shellfisheries are being impacted, and only time will tell to what degree," said Mat Mander.

"Landings into Brixham, in particular, show no signs of reducing, and potters and other boats are targeting octopus while they are there. It will be interesting to see what impact directed fishing can have in terms of reducing the numbers.

#### **OCTOPUS**

"We know from Cefas that they are a short-lived species, and there are signs they are dying in the pots now. We don't know how long it will last this year, and then we've got the aftermath to monitor – and then we have to be better prepared for the next time it comes around.

"One positive from this is that there will be more engagement between regulators and fishers to try to find solutions."

D&SIFCA is in the process of gathering information and evidence. One survey of the octopus fishery has been carried out, and another is planned.

The fishing industry is assisting the IFCA with some research work and information, and evidence will be presented to the Byelaw and Permitting Sub-Committee on 26 June, when the issues relating to the octopus fishery will be considered in more depth.

#### **CLIMATE CHANGE IMPACTS**

# Waters heat up after warm spring

ater temperatures in some sea areas around the UK are 4°C higher than normal, as the seas experience a marine heatwave.

Sea temperatures in April and the first half of May were the highest recorded during those months since monitoring began 45 years ago.

Scientists at the National Oceanography Centre and the Met Office said the marine heatwave is most intense off the west coast of Ireland, as well as areas off the coasts of Cornwall and Devon.

Waters off the west coast of the UK are now about 2.5°C

above average, and a large portion of Scottish waters are 2°C to 3°C warmer than usual for the time of year.

In one location, just off the Tyne and Tees, temperatures are 5°C higher than average, according to Cefas.

Dr Zoe Jacobs, who is based at the National Oceanography Centre, said she first noticed the unusual marine temperatures a few weeks ago. She found that pockets of the UK had been coming in and out of a mild heatwave since late 2024. That heat intensified and spread in March, and has now surged.

A marine heatwave is defined

as sea temperatures that exceed the seasonal threshold for more than five consecutive days. In the UK, the marine heatwave threshold for May is 11.3°C. On 19 May, the average sea surface temperature reached 12.69°C.

Dr Ségolène Berthou at the Met Office said the heatwave had started in the North Sea and the Celtic Sea. The North Sea had cooled down a bit, but the west of Ireland was 'extremely hot',

Scientists say one of the warmest springs on record is driving the surge, as high temperatures and weak winds warm the top layer of the ocean.