

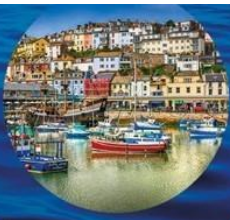


Marine
Management
Organisation

Crawfish (*Palinurus* *spp*) 2024-2025 seasonal closure – response to consultation

October 2024

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Crawfish (*Palinurus spp*) 2024-2025 seasonal closure – response to consultation

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Executive Summary

The Marine Management Organisation (MMO) ran a consultation on a crawfish fishery closure in English waters of ICES (International Council for the Exploration of the Sea) area 7 from 23 July to 18 August 2024. The purpose of the closure is to provide protection to spawning potential; allow settlement of juvenile stock; and reduce risk of gear being lost or left for long soak times during unpredictable winter weather. The consultation asked questions about a closure period, with options for: no closure; a closure length of 1 November to 31 May; a closure length of 1 December to 31 May; or if a different closure period should be considered. The consultation also asked for inputs on other management measures.

31 consultation responses were submitted. In response to the closure length 1 respondent offered no response, 14 of the responses favoured the closure length of 1 November to 31 May, 5 favoured 1 December – 31 May, 1 response preferred no closure, and 10 favoured another closure period. From those 10 responses which suggested another closure period, 8 favoured a closure that coincided with the last neap tide before Christmas.

During port drop-in engagement sessions industry members indicated that the southwest industry is increasingly reliant on the crawfish fishery, with decreasing fishing opportunities and temporal displacement into other fisheries being raised as factors affecting the fishery this year. There was also market instability, with an increase in landings in 2024 causing a price decrease from £24/kilogram (kg) to £18/kg.

The consultation also asked about the perceived impact of the proposed closure options. 50% of respondents were concerned that the longer proposed closure period (November 24 to May 25) would have significant financial impact on their business.

MMO's decision is to have prohibition of catching, storing and landing crawfish from 16 December 2024 to 31 May 2025 in English waters of ICES sub area 7.

In making the decision MMO has considered environmental, social and economic factors along with legislative and policy considerations such as the fisheries objectives outlined in the Fisheries Act and Joint Fisheries Statement. The closure will apply to all UK and EU vessels and will be enacted through a licence condition.

1. Introduction

In 2023 MMO worked with industry to address concerns regarding the crawfish (*Palinurus spp*) fishery in the southwest of England. Following a workshop and consultation the minimum conservation reference size (MCRS) was increased from 95 millimetres (mm) to 110 mm on 1 January 2024, and a fishery closure was introduced from 5 February 2024 to 30 April 2024 inclusive.

A further workshop took place on 13 February 2024 where further seasonal closures were discussed, with support for a repeat of a seasonal closure.

A consultation on a potential seasonal closure was launched on 23 July 2024 and closed on 18 August 2024. The consultation aimed to seek views of stakeholders on a further seasonal closure for the landing and retaining of crawfish in English waters of ICES (International Council for the Exploration of the Seas) area 7 (see Annex) for all UK (United Kingdom) and EU (European Union) vessels with all gear types from winter 2024 to spring 2025. The purpose of the closure is to provide protection and spawning potential; allow settlement of juvenile stock; reduce risk of gear being lost or left for long soak times during unpredictable winter weather.

This document outlines the rationale for MMO's decision; detailing a summary of the consultation responses and MMO's response to the key themes raised during consultation.

1.1 Structure of this document

Section 2 – sets out the consultation rationale; with an overview of the fishery background, the scientific, social and economic, and legislative and regulatory considerations that underpins the decision.

Section 3 – provides information on the consultation, with more detail on the responses received.

Section 4 – outlines MMO's next steps and how the closure will be administered.

Section 5 – gives the conclusion to this document, the consultation and MMO's commitment for fisheries management.

Section 6 – provides contact details for MMO should you wish to contact us with regards to this consultation.

Annexes – provide supplementary information which may be useful to refer to (for example a chart of ICES area 7 and quality assurance process) and further detailed information (for example, economic analysis).

2. Rationale

The rationale behind the closure consultation has been summarised into three aspects: scientific and environmental, social and economic and legislative. These aspects have underpinned the decision-making process and are outlined in the following sub sections.

2.1 Overview of the fishery

The crawfish fishery is concentrated in the southwest with the main activity taking place in inshore waters (0-6 nautical miles 'nm'), within the districts of Cornwall Inshore Fisheries and Conservation Authority (CIFCA) and Isle of Scilly Inshore Fisheries and Conservation Authority (IoSIFCA).

Crawfish is typically a summer fishery, with the fishing season usually starting around June and ending in September or October. Over the last decade the crawfish fishing season has expanded. Fishers have started to access the fishery earlier in the year (around May) and continued later into the year (October or November),

some also fish into December to access the Christmas market. Landings for crawfish have increased from 19 tonnes (t) in 2012 to 55t in 2022 with a steep rise to 93t in 2023.

In the past 10 years there has been a near doubling in the number of vessels accessing the fishery, from 97 vessels in 2013 rising to 161 vessels in 2023. The 10 metre (m) and under fleet dominate the number of vessels landing crawfish; accounting for approximately 80% of the entire fleet. However, there is concern that increased number of larger vessels equate to a far greater increase in the fleet's fishing effort and subsequent capacity.

2.2 Scientific and environmental considerations

High levels of fishing pressure can deplete the spawning stock and impair recruitment, leading to reduced fishery productivity and resilience. There are no current measures in place, nationally or locally, to limit fishing effort on English crawfish stocks, therefore if recruitment drops below threshold levels, the risk of a stock collapse increases.

Current increases in fishing effort are concerning given the absence of a valid stock assessment, which creates vast uncertainties around stock status and how much fishing pressure crawfish stocks can sustain. This creates challenges for long term sustainable management, particularly in the context of a historically 'boom and bust' and data-limited fishery. The potential seasonal closure will directly address this risk.

Crawfish are also a species of conservation importance in marine conservation zones (MCZs) and there is a risk that a decline in crawfish populations in the southwest region (caused by increased fishing pressure) may impact populations within MCZs, preventing MCZ conservation objectives from being met. As this species is relatively mobile, recruitment into populations within MCZs is likely linked to the wider population.

The purpose of the seasonal closure is to:

- provide additional protection and spawning potential by decreasing the number of removals and interactions with fishing activities.
- improve spawning potential by increasing the likelihood that crawfish can spawn and moult before interacting with fishing activity.
- improve the subsequent recruitment of juveniles into the fishery by protecting berried females for a specified period and allowing for settlement of juvenile stock.
- decrease the fishing activity and removals when fish are in a poor condition and more likely to suffer from high rates of mortality.
- reduce the risk of nets being left for long soak times or lost during the unpredictable winter weather.

2.3 Social and economic considerations

The value of the crawfish fishery has risen steeply in recent years from £214,000 in 2012 rising to £2,293,000 in 2023. In 2023, during the main period of landings the average price per kilo has remained constant providing some economic stability. However, the recent summer 2024 landings have seen a fall in the price per kilogram (kg) from £24/kg to £18/kg, indicating market saturation from increased landings in the UK, France and Ireland. December landings have been cited as important to many of the stakeholders, as the value of the fish rises to fulfil the Christmas export market.

In August 2024, MMO engaged directly with fishers to gather the industry experience from the last closure. Port drop in events were held at Newlyn, Cadgwith, Newquay and St Marys.

Many fishers that attended the port drop in events stated that the previous closure 5 February to 30 April 2024, had manageable or no economic impact on their business. Many cited the reason for this was that that closure period was short and fell over the time when they traditionally would be targeting other species and not fishing for crawfish. However, there were concerns that the proposed closure options stated in this closure consultation would have significant financial impact on their business.

It has been seen in other fishery closures that there is a risk that fishers could increase fishing effort (increased number of pots or fishing trips) during the open season to compensate for a loss of income during the closed season. The economic impact of a crawfish seasonal closure may be increased due to the influence of other existing fishery restrictions which reduce the availability and opportunities for diversification.

Landing data analysis has been undertaken for the closure options (see Annex 1 for details). 2022 was used as an example year, as during 2023 the winter fishery did not emerge, most probably due to poor weather offering limited opportunities. From the 2022 analysis the earlier closure scenarios of November and December may have a greater economic impact on the inshore fleet due to less opportunities for diversification and ability to move locations.

During the port visits MMO asked if the previous seasonal closure or the increase in MCRS changed fishing patterns and behaviours (for example through increased fishing trips earlier in the year, a change in the amount or type of gear used to catch the fish). Feedback from fishers during port visits was that behaviours had not changed. For the inshore fleet the MCRS increase had not affected them as they had been previously adhering to the CIFCA and IoSIFCA MCRS which was already at 110 mm. All operators stated that they had seen many undersized and juvenile fish whilst working in 2024.

Larger vessels working further offshore fed back that they had been returning larger proportions of the catch to the sea as they had not met the increased MCRS. Concerns were raised that the larger vessels may have to work closer inshore to be

able to catch crawfish in accordance with the increased MCRS and to ensure economic viability of the trips.

The crawfish buyers and sellers in the southwest also said that the European market was not used to the larger sized crawfish and the optimum price had not been realised.

Since the rapid increased landings of 2022 and 2023, the number of vessels engaged in the fishery has increased. This has been compounded by recent reduced fishing opportunities in the southwest. It was stated that in some ports over 80% of all fishers were now targeting crawfish and for many small operators, crawfish accounted for over 50% of their total annual income.

During the port visits displacement was discussed; the displacement has been temporal with many fisheries that were usually exploited in the summer being moved to the winter and spring. This happened as a response to the reduction in pollack quota, which is felt to have added pressure and economic reliance on the crawfish fishery.

In addition to stock benefits a closure may be considered beneficial in terms of product marketing. If the fishery follows the usual commercial pattern of supply and demand, a seasonal closure should create demand and keep the price stable at a higher level when the fishery is open. This could deliver benefits in terms of maintaining the value and profitability of the crawfish fishery, although it could increase costs for businesses further along the supply chain.

2.4 Legislation and policy considerations

MMO has obligations relating to legislation and policy including, but not limited to:

- Being mindful of the principles of public law which includes requiring measures to be necessary and expedient for the regulation of sea fishing, as well as being proportionate and enforceable.
- Under the [Trade and Cooperation Agreement](#) article 496(3), notifying the EU about new measures which are likely to apply to their vessels. It has been agreed that 45 days' notice should be provided prior to new measures being applied.
- Reviewing the crawfish fishery from an environmental, social and economic perspective, in line with its obligations under the [Fisheries Act 2020](#).
- Delivering policies in line with the fisheries objectives as an obligation under the [Joint Fisheries Statement](#). Those most relevant to crawfish are the sustainable, precautionary, ecosystem and equal access objectives.
- This crawfish seasonal closure proposal aligns with the sustainable objective to ensure the short term social and economic risks have been balanced with long term health of the marine environment. It provides resilience to coastal communities whilst protecting crawfish for future fisheries.

- The crawfish seasonal closure proposal aligns with the precautionary objective because action is required due to the rapid increases in fishing pressure, the fleet profile has changed with an increase in larger vessels in the fishery.
- The crawfish seasonal closure proposal aligns with the ecosystem objective in that any negative impacts on crawfish is minimised.
- The crawfish seasonal closure proposal aligns with the equal access objective in that it ensures fair and equitable access and benefit is not impeded based on any vessels home port and that any decisions are based on the need to protect the stock.
- Having regard to national and international agreements as outlined in the [Joint Fisheries Statement](#). These include the [Marine Strategy Regulations 2010](#), which require fishery bodies in the UK to take action to achieve or maintain Good Environmental Status (GES) in all UK waters and the [UK Marine Strategy](#) which is a key pillar of marine policy in the UK.
- Delivering in line with [MMO strategic goals](#) specifically, goal 6 - Assure the sustainable and transparent management of fishing opportunities to achieve a resilient and increasingly viable fishing sector.
- Complying with our public sector equality duty under the [Equality Act 2010](#). MMO has considered if people with any protected characteristics are likely to have different needs in relation to the decision made within this document or if the decision is likely to present unequal opportunity, result in discrimination or fail to foster good relations between people with different or diverse characteristics. MMO has very limited data on protected characteristics of people who fish in ICES area 7 for crawfish. However, MMO does not consider the decisions made will discriminate or disadvantage people with protected characteristics. MMO would welcome any comments or information on this matter.

3. Consultation

On 23 July 2024, MMO launched a consultation on possible options for a seasonal closure to the crawfish fishery in English waters of ICES sub area 7. The consultation ran until 18 August 2024.

MMO would like to thank everyone who responded to the consultation. During the consultation we received 31 responses, and your responses have allowed us to make the most informed management decision.

MMO have grouped the responses received by each question asked in the consultation. To provide transparency MMO has included the number of respondents who chose a specific option. However, it should be noted that decisions are made with consideration to many factors (such as environmental, economic, social and legislative) and not simply by the number of received responses. The consultation responses and MMO's response to these are outlined in section 3.1 below.

3.1 Summary of responses

This section provides the responses grouped by the questions asked during the consultation. These include the seasonal closure options, support for a repeat closure, other options to be considered, respondent information and future management feedback.

3.1.1 Seasonal closure options

We asked:

'A prohibition of retaining and landing crawfish (*Palinurus spp*) in English waters of ICES area 7 for all UK and EU vessels using all gear types during the following: Tell us which option and why.

- option 1: no closure
- option 2: closure from 1 November 2024 to 31 May 2025
- option 3: closure from 1 December 2024 to 31 May 2025'

You said:

Closure options	Responses
No closure	1
From 1 November 2024 to 31 May 2025	14
From 1 December 2024 to 31 May 2025	5
Other closure length	10
No answer	1
Total number of responses	31

30 respondents were supportive of a closure, with 14 in favour of a closure from November to May, 5 in favour of a December to May closure and 10 stated they preferred a different closure period.

Of those that wanted the November to May closure 2 responses indicated the need to protect stocks with the longer closure; 2 responses stated that they only fish during the summer months and 1 cited that the closure period would not align with the biological rationale, and is a period when effort is already at its lowest.

Those that had chosen the 1 December 2024 closure stated that they needed to retain Christmas market opportunities whilst providing equitable access to all vessels, particularly during winter months when access to the fishery by smaller vessels may be limited.

Of the "other closure period" responses, 8 wanted to delay the closure further to take advantage of the last neap tide in December (which is 16 December 2024 in Newlyn) and maximise the opportunity to fulfil the Christmas market. The 2 other responses were for an extended closure, either extending the closure at the beginning or end of the suggested closure period.

During port visits in Newlyn and St Marys, it was acknowledged that a closure based on an administrative date (for example, the first of the month) is not as pertinent as a closure based on the tides, and the subsequent influence that has on fishing opportunity.

A response to the no closure option suggested a high probability of negative implications including loss of income, citing the lack of credible evidence or case studies that would support the introduction of a closure. Conversely another response stated that a vibrant summer season of 5 months is ample time to harvest crawfish rather than having an overfished and unsustainable fishery with no long-term gains.

MMO response:

MMO welcomes the support for the proposed closure. MMO decided that a closure from 16 December 2024 (the last neap tide of December) until 31 May 2025 (inclusive) will provide increased stock protection and allow monitoring of social and economic impacts to inform future management.

With regards to the length of the closure, MMO has considered consultation responses and socio-economic considerations (outlined in section 2.3). In 2024, the impact of the previous crawfish closure was minimal, but there were fears over the proposed closure period.

Further landings data analysis was carried out with a comparison of the different closure scenarios, indicating the economic impact for the smaller fleet. Despite the uncertainty of the weather in the winter months, delaying the closure may give the opportunity to fish and take advantage of the increased prices prior to the Christmas market. The inshore fleet have limited capability and opportunity, and the majority are geographically tied to the southwest. These factors are compounded by market instability in 2024, and a reduction of fisheries opportunities in other areas such as pollack.

This closure is a measure to assure operational viability for the fishery and to monitor impact of a longer closure period.

3.1.2 Annual seasonal closure

We asked:

‘Would you support a seasonal closure for 2024/2025 rolling over as the management for 2025/2026, without further consultation?’

You said:

Rolling the closure decision for 2025/2026	Responses
No response	14
Yes	7
No	4
Yes, but with conditions/unsure	6

MMO response:

MMO are mindful of the administrative burden placed on stakeholders and partner regulatory bodies during annual consultations, and that there is an increasing ask of support for management making decisions. However, as the decision on the closure length was unknown and it is still a relatively new management measure it is understandable that it was felt there was insufficient knowledge to answer this question agreeing to a rolling closure for 2025 and 2026. MMO will continue to engage with industry to discuss any future seasonal closure options.

3.1.3 Annual seasonal closure variation

We asked:

‘Do you consider there should be a different closure period which has not been included as an option, and can evidence be provided to support this?’

You said:

Propose an alternative closure period	Responses
No response	10
No	6
A different closure	15
Alternate closure suggestions	Responses
A longer closure, Oct – May, Nov – end of June	3
A shorter closure mid/end Dec/Jan – end of Apr/May/Jun	8
A shorter closure Nov – beginning of May	1
A split closure based on vessel size, longer closure for large vessels and shorter for the smaller vessels	2
A summer closure to offer protection through moulting and mating	1

Please note some respondents gave more than one answer to the alternate closure suggestions in the table above.

MMO response:

MMO have considered social and economic, scientific and environmental factors alongside the objectives of the Joint Fisheries Statement and the Fisheries Management Plan when making the decision. MMO are grateful for the contribution that stakeholders have made in this consultation. Future closure consultations may consider the options given.

3.1.4 Seasonal closure impacts

We asked:

‘How would the proposed prohibition of retaining and landing crawfish in ICES sub area 7 in English waters impact you and your business?’

You said:

Closure impacts on business	Responses
No response	13
No impact/small manageable impact	4
Significant impact	9
Other answers including other management measures/future strategies	5

Feedback from fishers at the port visits and in the consultation responses noted that the reduced diversification opportunities and access to other fisheries has had a profound effect on the perceived risks associated with the closure. The deflated and unstable prices in 2024 have put further pressure on the fishery. Despite this fishers asked for management measures and access to the Christmas market.

Other answers mentioned the accredited Cornish Good Food Guide and Marine Conservation accreditation and whether a section of the fishery, such as the potting fishery could improve standards and the value of the fishery by working toward those standards.

MMO response:

MMO recognises the economic impact that any closure will have on the fishing industry. In the last year there has been changes in the crawfish market and fishing opportunities in the southwest that have contributed to uncertainty. Landings data has been reviewed in the consultation document. Whilst we appreciate that this closure will have an economic impact, based on landings data from 2012 to 2023 this is thought to be minimal and proportionate with the current threat to the stock, and the long-term benefit of protecting this stock to the future fishery.

3.1.5 Respondents

We asked:

'If you are a vessel owner, agent or skipper: are you currently actively fishing?'

And

'If yes, in which length group is your vessel; 10 metre (m) and under, 10.01 m – 12 m, 12.01 m – 15 m or the over 15 m fleet, and which is your main port of landing?'

You said:

Vessel Group	number
Under 10m	19
10.01 m – 12 m	1
12.01 m – 15 m	5
Over 15m	2

Government organisation	3
Processor/Buyer	4
Non-Government Organisation	2
Fishing Association	1

Although there were 31 responses to the consultation, the number of vessels represented in the consultation is larger than the total number of responses due to individuals representing more than one vessel in their consultation response. Most of the respondents were individuals working in the inshore sector, this would be expected as it represents the demographic of the fishery.

MMO response:

MMO are mindful of the administrative and time burden placed on stakeholders and partner regulatory bodies due to annual consultations, and that there is an increasing ask of support for management making decisions. MMO thank the individuals for answering this question as it helps understand the reach of the consultation and assists future communication strategies.

3.1.6 Future management measures

We asked:

'Do you have any further suggestions as to future management measures?'

You said:

Other management measures	Responses
No response	10
No	1
Restrictions on the amount of net used	7
Effort restrictions, including days at sea limits and the introduction of permits to fish	10
Vessel size restrictions including excluding large vessels from inshore waters	3
Prohibition on catching hen crawfish	2
Restriction on soak times	1
Catch limits	4
Bycatch for the closure period	1

Net mesh and twine thickness restrictions	2
Remote Electronic Monitoring (REM) introduced	1
Split the closure, giving small vessels more opportunity to fish	2
Move the closure to the summer months to offer greater protection and increase recruitment	1
Increase data around the fishery and the environment	1
Increase support when fisheries are closed	1
Measures and protection should be matched from EU countries with crawfish fisheries	1

Effort control was one of the main alternative management measures that were suggested by respondents. Effort control manages the amount of work that is allowed into a fishery. This can include a restriction on the number of vessels allowed to fish, or the number of days a vessel can work in a fishery. Effort control can be most effective when used with additional management measures such as catch limits and/or fishing gear restrictions.

MMO response:

MMO would like to thank all respondents for their continued engagement and investment in the crawfish consultation and recognises the weight of concern around fishing effort and the use of gear. We will continue to monitor economic, landings data and effort throughout the year to understand the extent of the closure impacts.

We will consider your suggestions and make sure these are shared with Defra. Please be assured that any new management measures will be subject to further engagement with industry.

The closure prohibition is applied via a licence condition and therefore not applicable to non-powered vessels, recreational fishers and divers.

3.2 Consultation outcome

MMO will implement a closure of the crawfish fishery from 16 December 2024 to 31 May 2025, inclusive, in English waters of ICES area 7. The closure will apply to all UK and EU vessels. The closure will be implemented via a licence condition and will prevent the fishing, retaining on board, storing or landing of crawfish with no bycatch allowance.

This closure length is an extension of the previous closure in 2024 and offers enhanced protection for the stock. The closure will reduce the risks of high mortality from removals when fish are in poor condition and reduce the risk of gear lost and ghost fishing due to poor weather. It can also increase the probability of juvenile

settlement. These environmental and sustainable objectives have been balanced with socio-economic considerations, whilst giving time to fulfil EU notification obligations and allow the shellfish industry time to adapt business processes.

In making this decision MMO has considered national policy such as relevant marine plans and the Joint Fisheries Statement to ensure the short term social and economic risks have been considered alongside the long term health of the marine environment. This decision provides resilience to coastal communities whilst also protecting crawfish for the future.

This decision does not set a precedent for any potential future management proposals. Future decisions and restrictions will be made using the best available scientific evidence and with input from a cross section of the crawfish industry and other stakeholders, alongside the implementation of the crab and lobster fisheries management plan (FMP).

4. Next steps

There has been great support for the introduction of a closure to protect the crawfish fishery. Following the consultation MMO will implement a closure of the crawfish fishery from 16 December 2024 to 31 May 2025 (inclusive) in English waters of ICES area 7 for all UK and EU vessels.

The closure will be applied through a licence variation. The wording for the licence condition is:

“This licence does not authorise fishing for; retaining on board; storing; or landing crawfish (Palinurus spp) caught in English waters of ICES subarea 7 between 00:01 hours on 16 December 2024 to 23:59 hours on 31 May 2025.”

Any fisher who is the nominated contact on the domestic fishing vessel licence system will be informed via an email notification when the variation is enacted. All respondents to the consultation will be informed of the decision by email.

5. Conclusion

MMO would like to thank everyone involved in the consultation, in particular the fisheries stakeholders and the fishers themselves who have dedicated the time to working with MMO.

MMO is committed to developing a collaborative approach to fisheries management and to ensure the crawfish fishery is managed in the most environmentally, socially and sustainable way possible.

MMO are committed to ensuring fisheries are managed to a level where stocks are healthy and fished sustainably, environmental damage is minimised, and economic return is maximised whilst ensuring sustainable exploitation.

6. Contact us

If you have any questions or queries, then please email or call our helpline using the details provided below:

Email: sustainablefisheries@marinemanagement.org.uk

MMO helpline: 0300 123 1032

Annex 1. Further landing data analysis of the closure regime

Table 1 demonstrates the economic impact of a crawfish fishery closure across three closure options. The data provided only demonstrates the impacts at the start of the closure period across three options:

- 1 November start to the closure showing impacts during November and December 2022
- 1 December start to the closure showing impacts during December 2022
- 16 December start to the closure showing impacts during December from 15 December 2022

The reference period for the comparison is based 2022 MMO landing data. 2022 was chosen as a reference period as it is the best example of natural behaviour and was not impacted by crawfish management measures or significant weather events.

Table 1. Landing weight, value and the number of vessels, including the percentage of the overall fleet affected by each closure option broken down into the four fleet sizes.

Impacts															
2022 totals				November closure (2022 Landing weight and value impacts during November and December closure)				December closure (2022 Landing weight and value impacts during November and December closure)				16 December closure (2022 Landing weight and value impacts from 15 December closure)			
Fleet size	Landing weight (t)	Value (000s)	No of vessels	Landing weight (t)	Value (000s)	No of vessels	No of vessels %	Landing weight (t)	Value (000s)	No of vessels	No of vessels %	Landing weight (t)	Value (000s)	No of vessels	No of vessels %
Under 10	34.6	847.5	164	0.8	28.9	43	19	0.65	23.7	27	12	0.1	4.1	6	3
10m-12m	11	265	21	0.04	1.12	7	3	0.01	0.33	3	1	0.002	0.10	2	1
12m-15m	1.2	30.1	15	0.02	0.7	4	2	0.02	0.7	4	2	0.006	0.25	3	2
over 15	6.4	158.6	27	0.89	32.9	12	5	0.8	31.3	7	3	0.1	6.5	4	2
Totals	53.2	1301.9	226	1.75	63.62	66	29	1.48	56.03	41	18	0.21	10.95	15	7

Table 1 demonstrates the importance of the fishery to the under 10 m fleet which contributes the greatest number of vessels (164) across all fleet sectors and suffers the greatest impact in terms of vessel numbers.

A closure starting on 1 November impacts 29% of the total fleet during November and December, 19% being the under 10 m fleet.

The impact reduces incrementally as the closure start date shortened. A start to the closure on the 15 December allowing for an additional fishing trip on the neap tide and access to the Christmas market impacts only 7% of the total fleet size and almost equal impacts in terms of vessel numbers across all fleet sectors.

Annex 2 Quality assurance

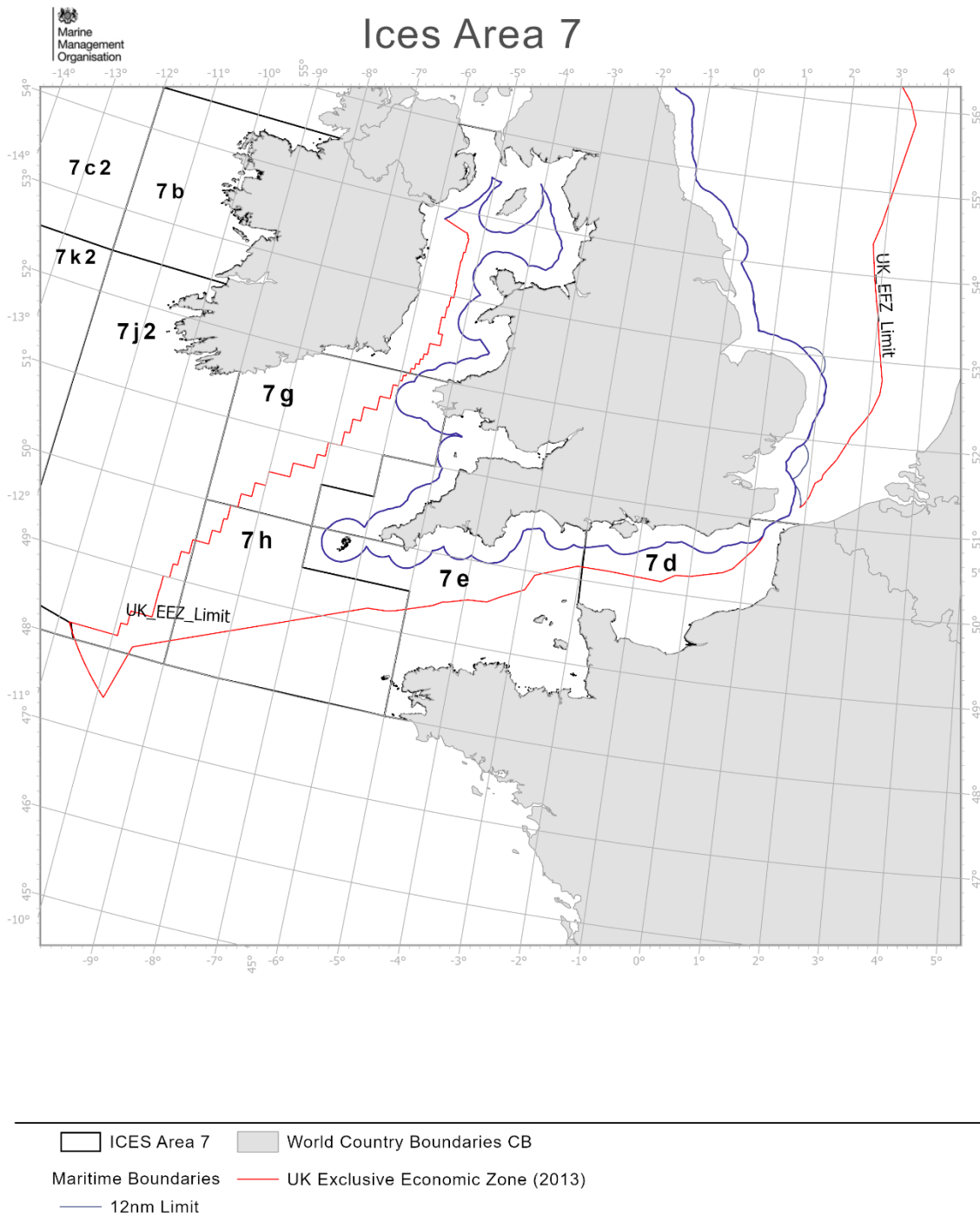
MMO seek to use the best available evidence to inform management decisions. This consultation provided an opportunity for stakeholders to provide additional evidence to inform the decision on a crawfish seasonal closure in ICES area 7 for English waters and development of crawfish management measures.

Knowledge and data are an important part of understanding fisheries. Evidence sources, including information from the fishing industry and local experts, help strengthen our analysis considering management options for a seasonal closure.

It is important to understand the strengths and limitations of any evidence to understand how it can contribute to decision making. Any additional information that was provided at the consultation has been analysed and verified through the MMO evidence quality assurance process – [Process for evidence quality assurance \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

Where appropriate and depending on the quality of the evidence submitted compared with that already used, new evidence can be used to inform proposed management measures.

Annex 3



Date of publication: 15/09/2023
 Coordinate system: ETRS 1989 LAEA
 Projection Lambert Azimuthal Equal Area

Not to be used for navigation
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Figure 1. A map of UK and ICES area 7.