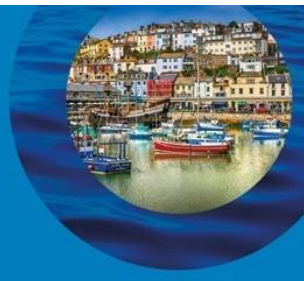




Marine  
Management  
Organisation

# Crawfish (*Palinurus spp*) seasonal closure consultation 2024-2025

July 2024



...ambitious for our seas and coasts

# Crawfish (*Palinurus spp*) seasonal closure consultation 24-25

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## 1. Introduction

The aim of this consultation is to seek views on a seasonal closure to retaining and landing crawfish (*Palinurus spp*) 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, in the crawfish fishery.

The purpose of the closure is to:

- provide further protection and spawning potential by decreasing the number of crawfish 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 crawfish 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.

There are 3 options being consulted on for a seasonal closure. These are:

- No closure
- Closure from 1 November 2024 to 31 May 2025
- Closure from 1 December 2024 to 31 May 2025

Whilst these are the three closure options that MMO is consulting upon, decisions in future years will be made using best available evidence, with input from a cross section of the shellfish industry.

### 1.1. Structure of this document

**Section 2** sets out the consultation, outlining specific questions on the seasonal closure and your views on any potential future management measures.

**Section 3** contains information on how you can respond to the consultation and the information MMO would like you to include with your response.

**Section 4** provides information on MMO's next steps after consultation.

**Annex 1** provides a background to the fishery.

**Annex 2** contains supporting information such as landings data, fishing fleet composition, principal gear types and value of the fishery. It also provides the rationale behind the potential seasonal closures, including environmental and economic considerations.

**Annex 3** contains a maps of ICES area 7.

## 2. Consultation

MMO would like to seek your views on a seasonal prohibition of retaining and landing crawfish for 2024 to 2025.

Please find the questions for the consultation in section 2.1 below.

### 2.1. Consultation questions

#### Seasonal closure

- 1) 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

- 2) Would you support a seasonal closure for 2024/2025 rolling over as the management for 2025/2026, without further consultation?
- 3) 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?
- 4) How would the proposed prohibition of retaining and landing crawfish in ICES sub area 7 in English waters impact you and your business?

- 5) If you are a vessel owner, agent or skipper: are you currently actively fishing?
- 6) 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?

### **Additional views**

- 7) Do you have any further suggestions as to future management measures?

## **3. How to respond**

Please respond to the consultation by midnight on **18 August 2024**.

You can email your response to [sustainablefisheries@marinemanagement.org.uk](mailto:sustainablefisheries@marinemanagement.org.uk)

or provide a written response to: Effort Management  
MMO Lancaster House  
Hampshire Court  
Newcastle upon Tyne  
NE4 7YH

In your response, please state whether you are replying as an individual or on behalf of an organisation and if you wish for your response to remain confidential.

If you are replying on behalf of an organisation, then please include the following in your response:

- which organisation?
- what is your name and position?
- what is your email address?

We may need to contact you about your submission for further details. If you are happy for us to do this, please let us know in your submission, setting out the best method (for example, by email, telephone or post) and time to do this. We will not be able to contact you unless you provide permission.

## **4. Next Steps**

Once the consultation has closed, MMO will publish a summary of the responses and a decision on any changes proposed related to the crawfish fishery in ICES area 7. MMO will detail when, where and which vessels will be affected. Any changes to the fishery will be enacted by a licence variation in the first instance.

## **Annex 1 Background to the fishery**

Over the last five years crawfish landings have increased rapidly, particularly during 2023 where landings almost doubled from the previous year, the fishing season has

extended, and the fleet profile has changed, with an increase in the number of larger vessels in the fishery and a change in gear type.

A [co-design workshop](#) took place on 3 October 2023 with local fishers and government to discuss the current issues with the southwest crawfish fishery. The workshop proposed options for crawfish management in English waters of ICES area 7, it included discussions for an increase in the MCRS from 95 mm to 110 mm and a seasonal closure of the fishery during the off-peak fishing period.

Following this workshop MMO implemented an increase in the MCRS from 95 mm to 110 mm which came into force on the 1 January 2024 enacted through a licence condition. MMO then held a consultation with industry on a seasonal closure for the crawfish fishery, the consultation ran from 13 to 27 November 2023. Further information on the consultation and decision of the outcome is available [here](#). The consultation resulted in the current closure from 5 February to 30 April 2024.

On 13 February 2024 MMO held a crawfish management workshop in Newlyn. The attendees included local fishers, fishing associations, charities, and representation from local and national government. The aim of the meeting was to discuss current issues and propose further options for crawfish management including a seasonal closure for 2024 to 2025. In the workshop there was strong support for a further seasonal closure over a period that offers the most protection to the species.

Further information on discussions and outcome of the workshop is available [here](#). Any future seasonal closures during the off-peak period would follow the same rationale.

Other current national management measures in the fishery include:

- shellfish entitlement limiting the number of vessels that can fish for an unlimited number of shellfish.
- vessels without a shellfish entitlement are limited to no more than 5 lobster/crawfish and 25 crabs a day.
- all vessels are subject to the Lobster and Crawfish order that prohibits the retaining and landing of V- notched, mutilated, and berried lobsters and crawfish.

It is clear that changes in the fishery, alongside its previous history of cycles of “boom and bust”, suggest that further intervention including a repeat to a seasonal closure is necessary to ensure that the fishery is sustainable.

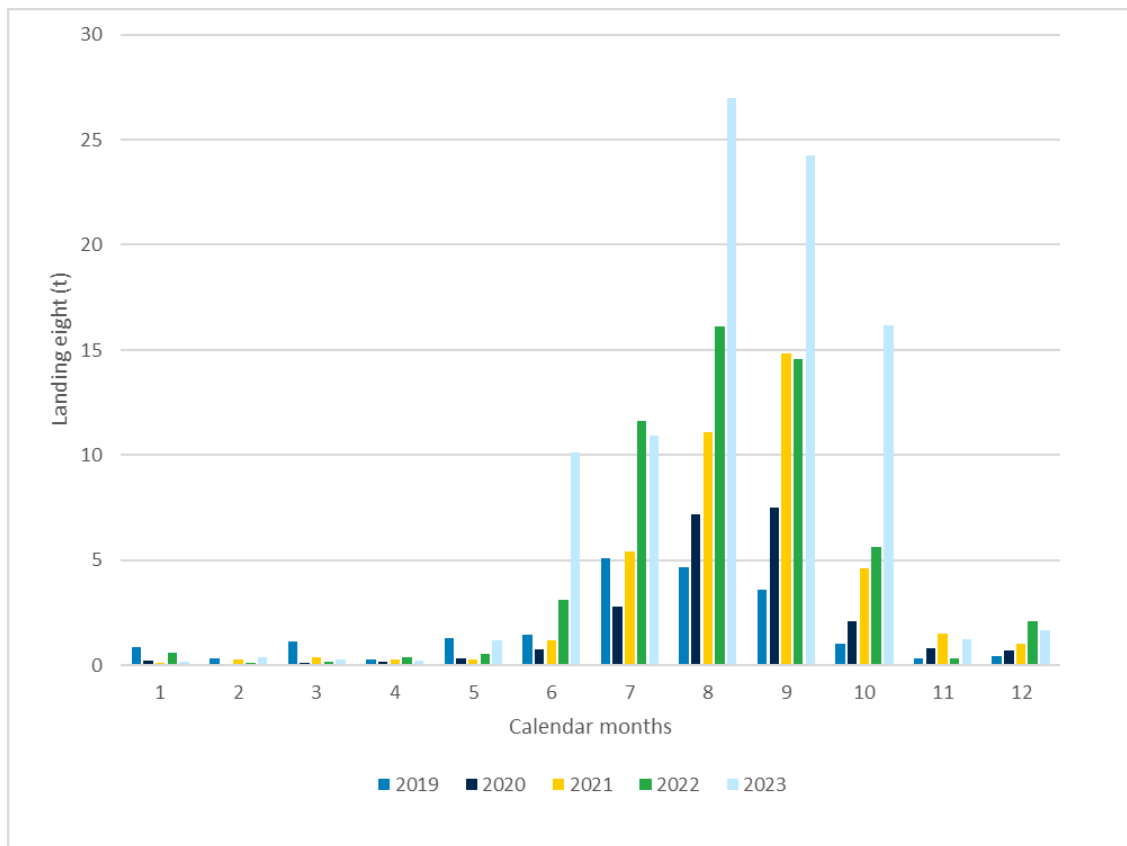
## **Annex 2 Supporting information**

### **Landing data**

The crawfish fishery is concentrated in the southwest with the main focus of activity taking place in inshore waters (0-6 nautical miles ‘nm’), particularly 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 to October. Over the last decade the monthly landings curve has widened, indicating a lengthening of the fishing season. Fishers have started to access the fishery earlier in the year (around May) and continue later into the year (to October or November), some (mostly larger vessels) 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 93 in 2023. To demonstrate the impact of a closure the annual catch in terms of monthly landings since 2019 can be seen in Figure 1.



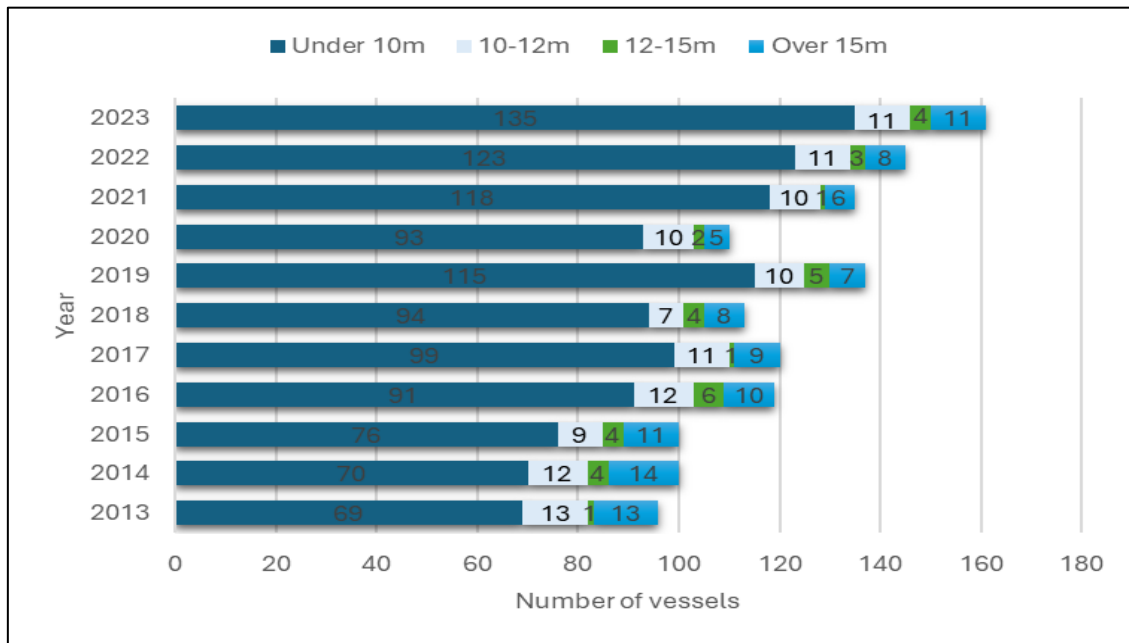
**Figure 1. Crawfish (*Palinurus elephas*) monthly landings in tonnes from ICES area 7 using gear type pots and nets, from 2019 to 2023 into English ports.**

Despite the small percentage of landings during the proposed closure period particularly during the last couple of years, fishers have expressed concerns about a potential increase in winter landings stating that small vessels (for example, under 10 m) cannot safely work the winter, so the fishery closes itself for the small vessels. However, more capable or larger vessels and may be able to work through the winter.

### Fishing fleet composition

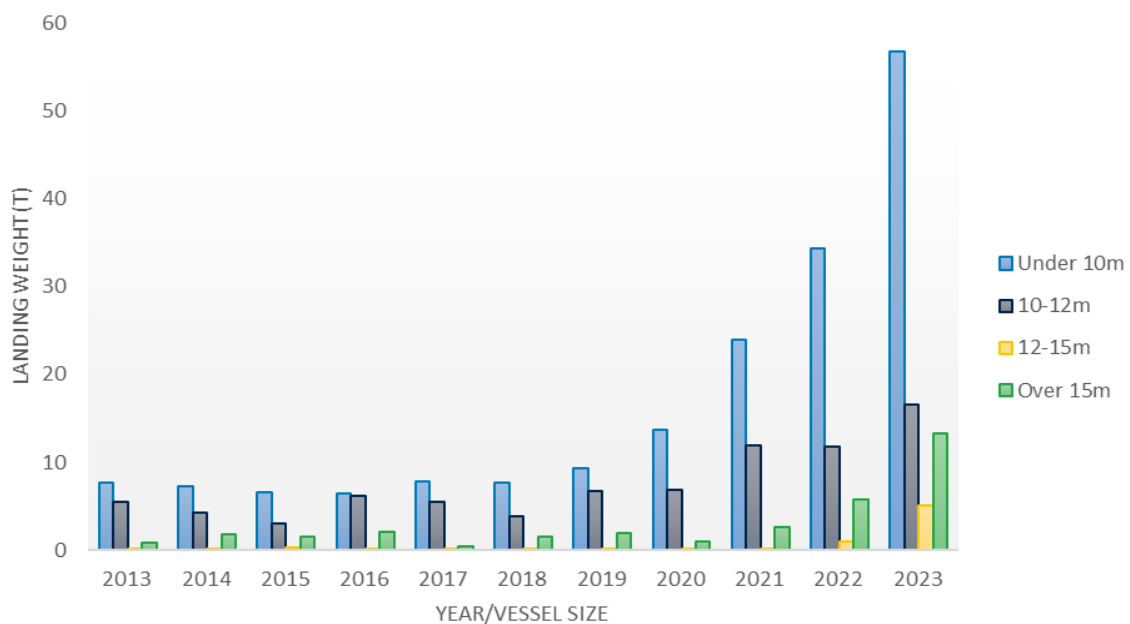
In the early 2000’s the number of vessels accessing the fishery was relatively stable at 10 to 15, from 2005 this number increased with the largest growth in the under 10 m fleet. In the past 10 years there has been a near doubling in the number vessels accessing the fishery as seen in figure 2 with 97 vessels in 2013 rising to 161 vessels in 2023.

The over 12 m fleet has steadily increased albeit at low numbers, however any increase in the number of over 12 m vessels equate to a far greater increase in the fleet's fishing capacity, with over 12 m netters potentially capable of carrying 400 to 1,000 nets, whereas under 12 m netters are limited to less than 100 nets.



**Figure 2. Number of vessels landing Crawfish (*Palinurus elephas*) from ICES area 7 using gear type pots and nets, from 2013 to 2023 by vessel size.**

In line with the increase in the number of vessels accessing the fishery figure 3 below shows that landings are dominated by the under 10 m fleet contributing to a steep increase in landing weight over the past 5 years.



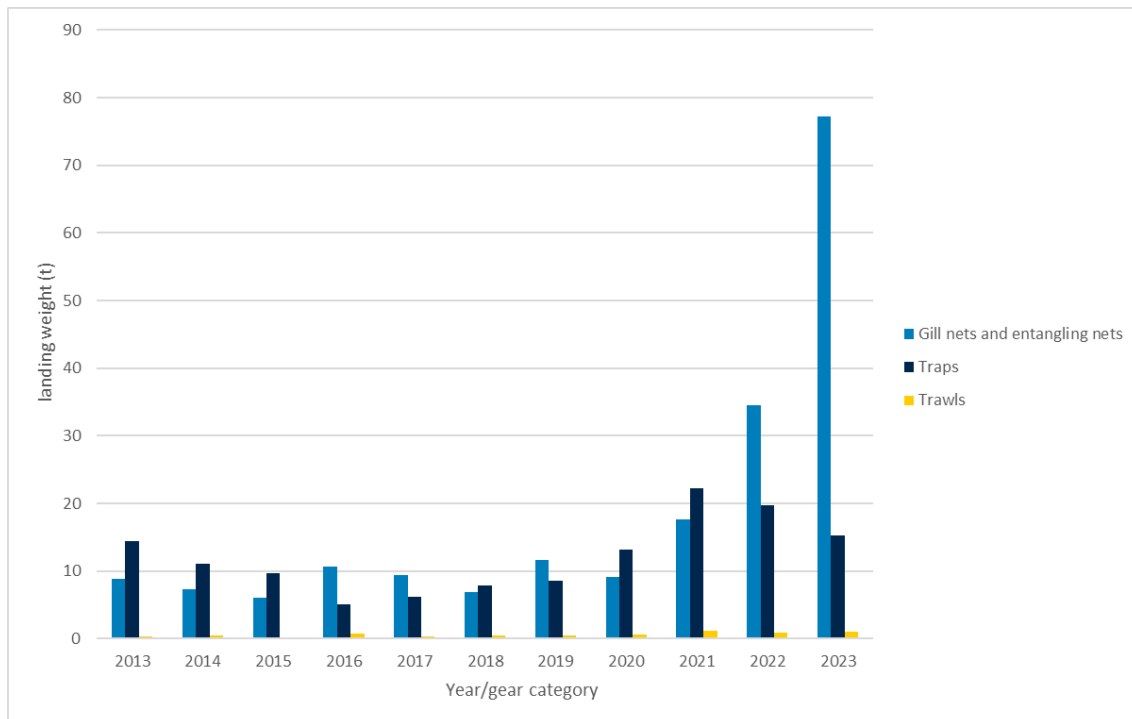
**Figure 3. Crawfish (*Palinurus elephas*) landings in tonnes from ICES area 7, from 2013 to 2023 by vessel size using gear type pots and nets.**



EU vessels working in UK waters have had limited crawfish landings in recent years. In 2022 a total of 1.08t was landed by EU vessels and in 2023 1.3t.

### Principle gear types

Information taken from MMO catch records show that gear used to catch crawfish has changed; in 2012 there were almost equal landings across all fleet sectors from pots and nets, in 2022, over 60% of all landings from all fleet sectors were from nets and 84% in 2023. Figure 4 indicates the landings by gear type since 2013, taken from MMO landing data.



**Figure 4. Crawfish (*Palinurus elephas*) landings in tonnes from ICES area 7, from 2013 to 2023 by gear type.**

Tier length (total length of nets tied together) can range from 300 m to 500 m, and number of tiers can range from three to ten deployed at one time, depending on boat size and capability, this also varies over the season. For example, from MMO CatchApp records taken in 2023 the maximum net length declared by one under 10 m vessel over one trip was 72,000 m. MMO CatchApp records support that the total length of net deployed changes throughout the season, reducing in the winter and that the average net length declared over one trip in 2023 was 3,340 m.

Soak times (the amount of time the net stays in the water) is usually 48 to 72 hours depending on weather and tide.

Nets typically catch more crawfish than pots for a variety of reasons, including for example, different scales of effort by the two gear types and different retention rates. Crawfish catches in nets will also depend on soak time, with individuals attracted to organisms already captured.

There is a concern that the net fishery will lead to higher mortality of juvenile crawfish. This is likely to occur through two mechanisms.

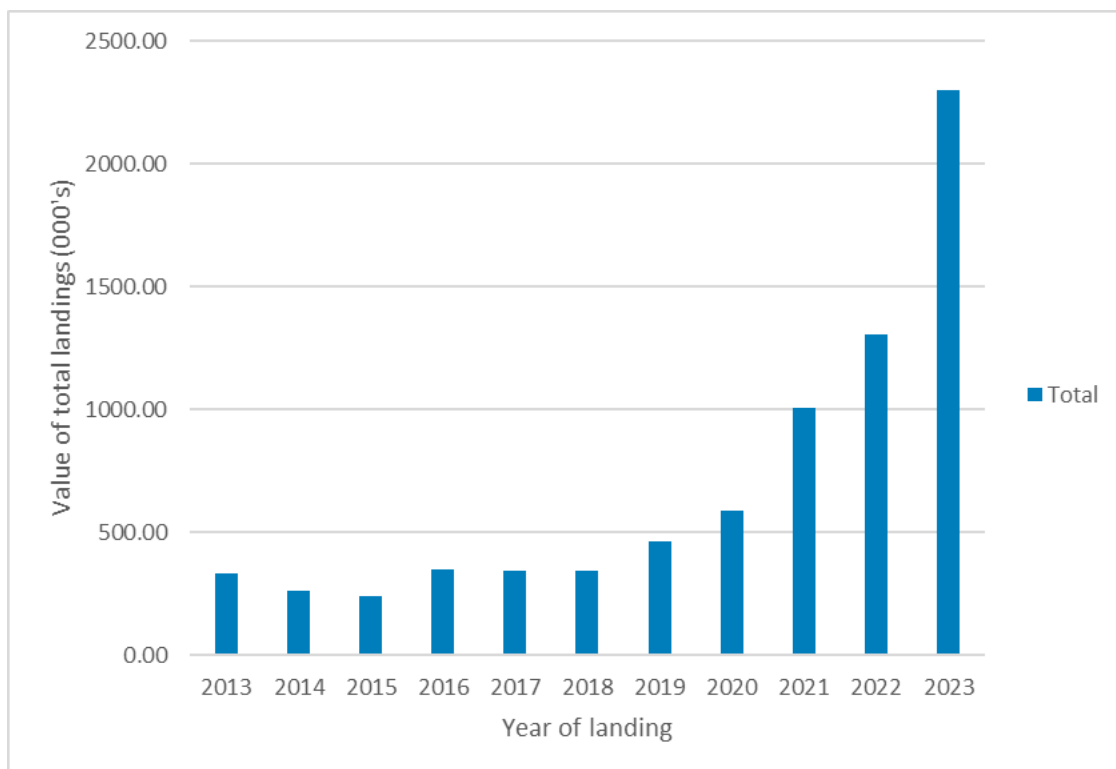


- nets anecdotally retain more juvenile animals.
- those retained animals suffering much higher rate of post-release mortality through damage than that seen in the pot fishery.

Crawfish are also particularly sensitive to excessive/rough handling, therefore vulnerable to damage as nets are processed and therefore consequences for survivability. Despite some studies on discard survivability in Mediterranean crawfish (*P. elephas*) trammel net fisheries, this remains a key evidence gap for UK crawfish fisheries.

### The value of the crawfish fishery

The crawfish fishery is high value, in 2012, £331,000 of crawfish were landed, this has risen steeply in recent years in line with the increase in crawfish landings to £2,299,000 in 2023 as seen in figure 5.



**Figure 5. Crawfish (*Palinurus elephas*) landing value in £000s from ICES area 7, by year from 2013 to 2023.**

The average price per kilo has remained static since 2012 at £22.95 per kilo rising slightly to £24.60 per kilo in 2022. There is little differentiation in price in relation to vessel length with the price per kilo uniform across all fleet sectors. This may be due to the change in gear type and the increase in net fishing across all fleet sectors.

### Rationale behind a potential seasonal closure

#### Environmental considerations

The large landings in the summer months and the lengthening of the fishing season underpins both the fleet composition and the biological behaviours of the species. The 10 m and under fleet contribute the most landings and are more productive in the summer months when crawfish are known to be most active.

Vessels currently working in the fishery are subject to limited management measures:

- a shellfish entitlement on the license allows vessel to land more than 5 Lobster/Crawfish and 25 crabs a day.
- the Lobster and Crawfish order that prohibits all vessels from retaining and landing of V-notched, mutilated, and berried lobsters and crawfish.
- MCRS increase from 95 mm to 110 mm which introduced on 1 January 2024 in ICES sub area 7.
- the crawfish fishery closure in place from February 5 to April 30, 2024, in ICES sub area 7.

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 potential 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.
- the seasonal closure offers protection and opportunity for further recruitment.

Moulting typically takes place at depth between June and October, with mating typically occurring two weeks after females moult, and egg laying two weeks after mating. This means that Atlantic females are typically berried from mid-autumn to late spring. After around nine months of egg bearing, eggs hatch between March and June.

Therefore, a closure could provide protection during a large proportion of the time when females are berried, with the longest closure duration providing the best protection. This could increase the likelihood that crawfish can spawn and moult before interacting with fishing activity. If there is a reduction in fishing activity during the closure this could also lead to improved settlement of juvenile stock if it does not interact with fishing gear.

In addition to a reduction in removals of crawfish during the potential closure there may be additional benefits to the stock. This assumes that there will be a reduction in targeted fishing activity during the closure, although some fishing activity may still take place. For example, in the workshop fishers suggested that tangle gears work all year and so may still catch crawfish during the winter and that mesh size increases may be appropriate. A closure from 1 November 2024 to 31 May 2025, was widely supported in addition to consideration of a permanent annual closure subject to regular reviews.

Fishers stated that until June crawfish are soft from moulting and in poor condition. Therefore, supported a decrease in fishing activity when the crawfish are in a poor condition and more likely to suffer from high rates of mortality.

A reduction in fishing activity during a closure may also result in a reduction in the risk of nets being left for long soak times or lost during the unpredictable winter weather.

The potential impacts of any closures are uncertain. A closure would be expected to materialise as an increase in the average level of future recruitments. However, it would be to separate management benefits from natural variability for a single event. The additional benefits of a longer closure compared with a shorter closure is also unknown.

### **Economic considerations**

The value of the crawfish fishery has risen steeply in recent years from £331,000 in 2012 rising to £2,299,000 in 2023 with the average price per kilo has remained constant providing some economic stability to the fishery.

During the winter period and particularly during the Christmas market the price for crawfish may increase, however due to the poorer condition of crawfish during the proposed closure period they may not realise high prices.

In the workshop a closure from 1 November to 31 May was widely supported with some fishers suggesting they would want to keep the fishery open in December to enable access to the Christmas market.

There is also a potential concern that displacement into different fisheries for the inshore fleet could lead to further fishing pressure on other stocks as there are a small number of winter fishery opportunities available to the inshore fleet.

There is a risk that fishers could increase fishing effort during the open season (for example, number of pots, soak time) to compensate from loss of income from no longer being able to land crawfish during the closed season. The economic impact of a crawfish fishery closure may be increased due to the influence of other fishery restrictions reducing the availability of fishing opportunities and diversification.

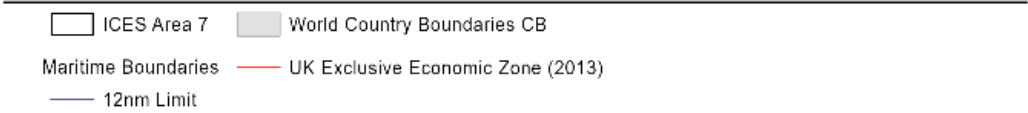
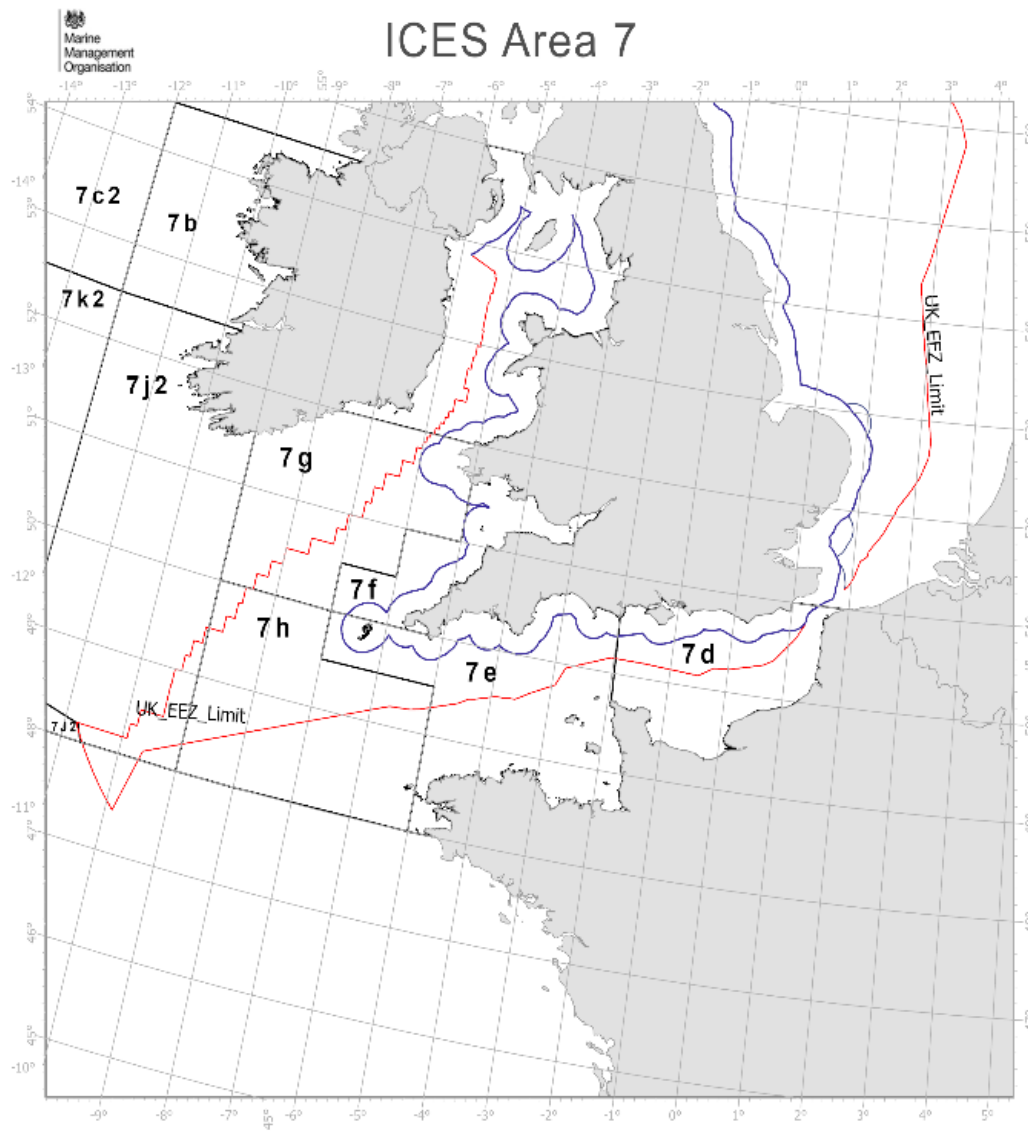
In addition to stock benefits a closure may be considered beneficial in terms of product marketing, a seasonal closure creates demand and keeps the price stable at a higher level when the fishery is open. This could deliver benefits in terms of maintaining the value and profitability of the crawfish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

Some fishers suggested the inclusion of a bycatch allowance during the closure period indicating that this would provide a small amount of financial resilience during the closure period. The consequence of a bycatch allowance is that it could quickly become a fishing target and therefore frustrate the purpose of the closure. It may encourage cross booking or miss recording of catches and risk undermining the breeding success that the closure is designed to protect.

Current crawfish management in the IoSIFCA district is through a MCRS of 110 mm and the return of berried females. The IFCA also restricts vessels which can fish in the area, as vessels must be 11 m or under in length or have less than 10 tonnage weight, this is managed through [Fishing Gear Permit Byelaw](#). The current IoSIFCA management measures offer protection both inside and outside of the related MCZ with a monitoring and control plan currently being introduced.

MMO landing data for 2023 shows 14 vessels fishing in the IoSIFCA district. Landings recorded for 2022 were 7.2t valued at £178,509 rising to 13.8t in 2023 with a value of £302,522. Landings in 2022/2023 during the proposed closure period (1 November to 31 May) was 470 kg with a value of £16,031.

### Annex 3 Map of ICES Area 7



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 6. Map showing ICES Area 7.**