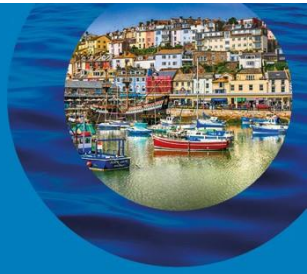
Marine Management Organisation

Scottish Government
Riaghaltas na h-Alba

Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

Llywodraeth Cymru
Welsh Government



Crawfish (*Palinurus spp*) seasonal closure consultation – Response to southwest crawfish industry workshop

November 2023

...ambitious for our seas and coasts

Version control history

Version	Author	Date and comment
1	Sarah Bedingham	Draft completed 12/10/23
2	Sarah Bedingham	Amendments following QA 16/10/23
3	Jessica Duffill Telsnig	Amendments following QA 20/10/23
4	Tim Dixon	Final sign-off 25/10/23

Contents

Summary

The fishing industry has shared with government concerns regarding the recent increase in crawfish (*Palinurus spp*) landings coupled with an observed increase in the size of the fishery. This included the Marine Management Organisation (MMO), the Department of Environment, Food and Rural Affairs (Defra), Seafish and Southwest Inshore Fisheries and Conservation Authorities (IFCAs).

Over the last five years landings have increased rapidly, the fishing season has expanded into the winter months, and the fleet profile has changed, with an increase in the number of larger vessels in the fishery. These changes are apparent from the available data and from anecdotal observations from local IFCA officers and fishers.

There are limited national management measures in the fishery apart from a minimum conservation reference size (MCRS) of 95 mm that is likely below the age that female crawfish reproduce in the North Atlantic, limiting the number of crawfish a fisher can catch daily without holding a shellfish licence entitlement. The recent changes in the fishery, alongside its previous history of cycles of boom and bust, suggest that urgent intervention is required.

Crawfish are included in the crab and lobster fisheries management plan (FMP) and long-term management measures from 2024 will be enacted through this

mechanism. However, it is clear that short-term measures are immediately needed to ensure that the fishery is sustainable in the short and long term.

A co-design workshop was arranged for 3 October 2023 with local fishers and government, to discuss the current issues with the southwest crawfish fishery, and proposed options for management in the short-term. MMO proposed two initial solutions in the workshop. These were:

- An increase in the minimum conservation reference size (MCRS) from 95 mm to 110 mm in English waters of ICES area 7 (map of area available in Annex).
- A seasonal closure of the fishery during the off-peak fishing period in English waters of ICES area 7. Suggested timeframes included a closure from November 2023 or January 2024 to June 2024.

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.

In the workshop there was mixed response to a seasonal closure, with some content for the fishery to close for a long period, for example from November to June, whilst others suggested a shorter closure such as January to June, and some suggested a closure may not be an effective management tool. Further information on discussions and outcome of the workshop is available here.

Following the workshop, MMO has worked with Defra, Seafish and the IFCAs to develop potential closure period options for consideration. These include:

A proposed prohibition of 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.

a) From mid-December 2023 to 31 May 2024: This would provide the greatest protection to crawfish.

b) From 1 January 2024 to 31 May 2024: This would allow fishing for the Christmas market.

c) From 1 January 2024 to 31 March 2024: This would align with the French (Brittany) crawfish closure.

Please note that any potential closure will only apply in 2024, and any decision made will not set a precedent for any potential future closures. Future decisions will be

made using best available scientific evidence, with input from a cross section of the shellfish industry and alongside the development of the Crab and Lobster FMP.

An alignment of the MCRS (Minimum Conservation Reference Size) to 110 mm for English waters in ICES area 7 is also in process and will be administered through the fishing vessel license system for all UK and EU vessels.

Consultation questions

Given the supporting evidence, MMO would like to seek your views on the following. Where possible please provide any evidence you have in support of your answer:

1) A proposed 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:
    a. No closure
    b. From mid December 2023 to 31 May 2024
    c. From 1 January 2024 to 31 May 2024
    d. From 1 January 2024 to 31 March 2024
2) Do you think the proposed prohibition on retaining and landing crawfish is likely to result in displacement of fishing effort from UK and EU vessels?
    a. Do you think there will be spatial (into different areas) and/or temporal (fishing at different times of the year) displacement?
    b. What is the likely impact of any displacement caused by the potential closure?
    c. Should the closure extend to all waters in ICES area 7 or exclude certain areas e.g., inside 6 nm.
3) How would these proposed prohibition of retaining and landing crawfish in ICES area 7 impact you and your business? The proposed closure may have a positive and negative impact.
4) MMO is required to provide at least 45 days notice to the EU prior to a closure coming into effect. This could cause a delay of applying the closure to EU vessels. Would you be happy to proceed with the chosen option should this be the case? Or would you prefer for a closure to occur at a later date for all (UK and EU) vessels?
5) Should there be an allowable bycatch during the closure period? If so, do you have a suggestion of what this should be?
6) If you are a vessel owner/vessel agent or skipper: in which length group is your vessel; 10 m and under, 10.01 m – 12 m, 12.01 m – 15 m and the over 15 m fleet?
7) Do you have any other comments, including any proposal for alternative closure options?

Please email your responses to effort@marinemanagement.org.uk or write to:

Effort Management
MMO Lancaster House
Hampshire Court
Newcastle upon Tyne
NE4 7YH

By midnight on 27 November 2023.

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

If you are replying on behalf of an organisation or organisations:
• Which organisation(s)?
• What is your name and position?
• What is your email address?

We may wish 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 (e.g., email, telephone, post) and time to do this. We will not contact you to follow up on this call for evidence unless you provide permission.

Next Steps

Once the consultation has closed, MMO will publish a summary of the responses and a decision on any changes proposed related to a closure of 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.

Supporting information

Background of the crawfish fishery

Landings for crawfish have increased from 19 tonnes in 2012 to 55 tonnes in 2022. The number of vessels that are targeting the species (landing over 50kg/year) has risen from 10 -15 vessels in the early 2000s, to exceeding 50 vessels in 2021.

The fishery is dominated by the under 10m fleet, averaging 58% of all landings from 2012 to 2022.

In recent years there has also been a near doubling in the number of ≥ 12 m vessels exploiting the fishery, from three to five vessels between 2010-2020 to eight to nine vessels in 2021-2022. Any increase in the number of ≥12 m vessels equate to a far greater increase in the fleet's fishing capacity, with ≥ 12 m netters capable of carrying 400-1000 nets, whereas >12m netters are limited to <100 nets.

The 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.

EU vessels working in UK waters have had nominal crawfish landings over the last 3 years.

Further information on the background of the fishery and landings data please see the annex.

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 exploit 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 exploit the Christmas market.

There are limited national measures for crawfish, with most measures being implemented locally through IFCAs. There are also currently no measures in place, nationally or locally, to limit fishing effort on English crawfish stocks. Further information on legislation and current management measures affecting crawfish are available in the annex.

Rationale behind a potential seasonal closure

Environmental considerations

High levels of fishing pressure can deplete the spawning stock and impair recruitment, leading to reduced fishery productivity and resilience. 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 (i.e., caused by increased fishing pressure) may impact populations within MCZs, preventing MCZ conservation objectives from being met.[1] As this species is relatively mobile, recruitment into populations within MCZs is likely linked to the wider population[2].

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.

[1] Crawfish population size within MCZs needs to recover in order for conservation objectives to be met, which partly depends on continued successful recruitment.
[2] NE and JNCC advice to Defra, 2012.

- Reduce the risk of nets being left for long soak times or lost during the unpredictable winter weather.

Data from an observer programme where fish lengths have been recorded supports the anecdotal evidence that the fishery has seen large amounts of juvenile fish in recent years (Figure 1). However, the increase in juvenile crawfish seen in 2018 and 2019 has not been replicated in more recent surveys. The seasonal closure offers protection and opportunity for further recruitment.

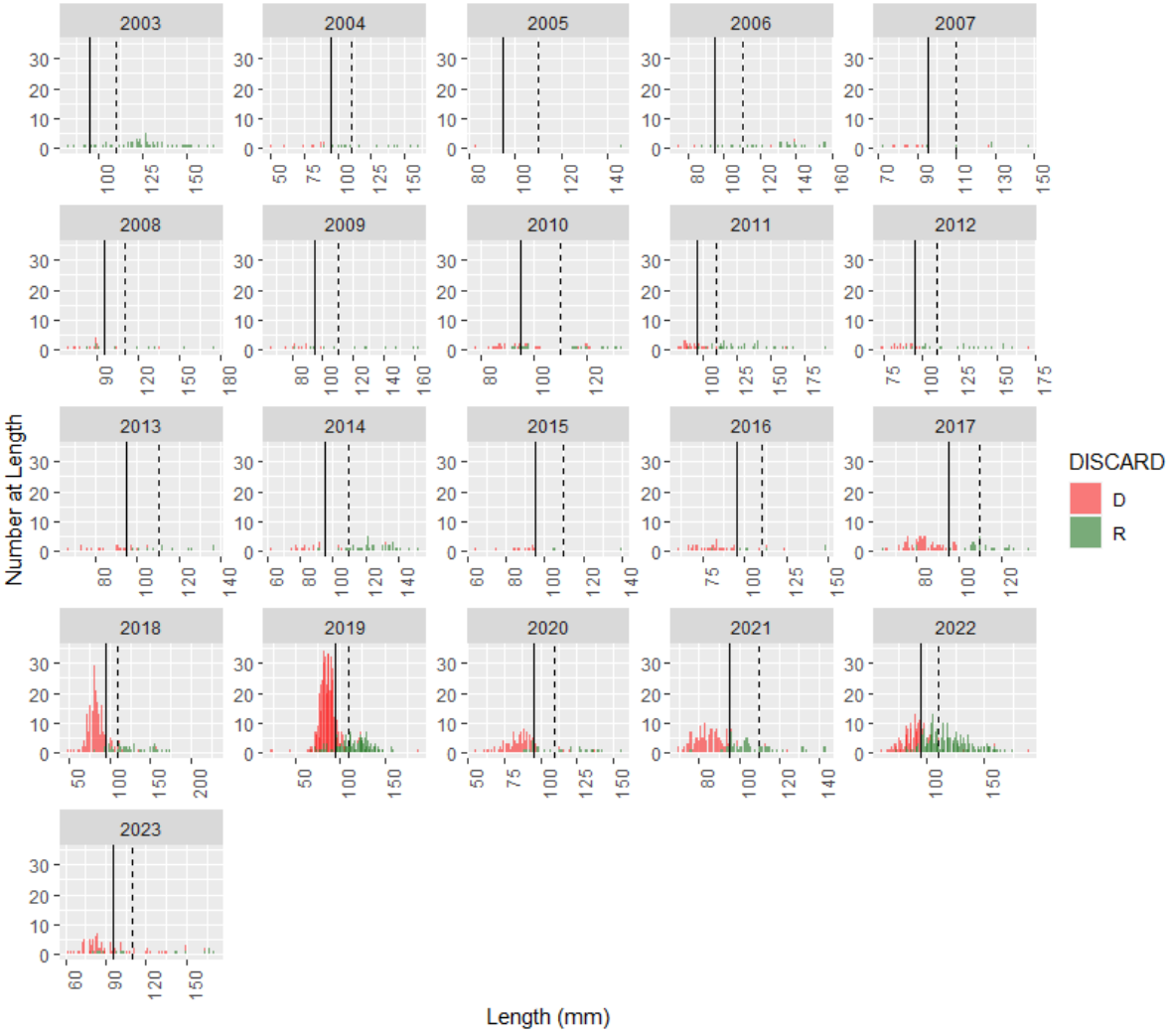


Figure 1. Length distribution of sampled trips that caught crawfish (note this is not raised to the full population, only to the trip so it sums up to the number of crawfish caught on sampled trips). Solid line is 95mm, dash line 110mm. D = discarded portion of the catch below the current MCRS (95mm), R = retained portion of the catch above the current MCRS.

Figure 2 illustrates the landings from ICES area 7 over the 10 years from 2012 to 2022, during the three potential closure periods. This shows as expected that the longer the duration of the closure the higher the landings are within that period. As crawfish landings across the year are relatively low (e.g., 50 t per year), the influence of a small change in the fishery has a profound effect on the overall figures. It is apparent from the landing data the influence of the Christmas market, with the addition of December landings data having an average increase of 0.4 t compared to January – May landings.

The larger quantity of landings in 2019 were due to a small number of under 10 m vessels that are no longer in the fishery. The decreased landings in 2020 and 2021 may be due to external factors such as poor weather or COVID-19 pandemic.

To further investigate the impact of a possible closure the proportion of the annual catch in terms of overall percentage of the annual landings have been expressed in Figure 3.

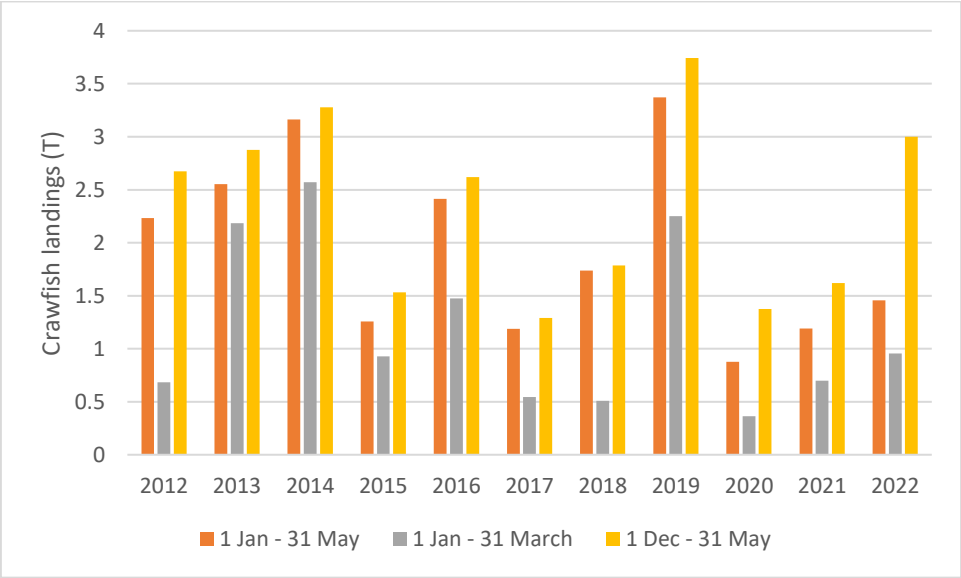


Figure 2. Crawfish (*Palinurus elephas*) landings in tonnes from ICES area VII, from 2012- 2022, into English ports during the potential closure periods: Option 1: 1 Jan to 31 May; Option 2: 1 Jan to 31 March and Option 3: 1 Dec to 31 May.

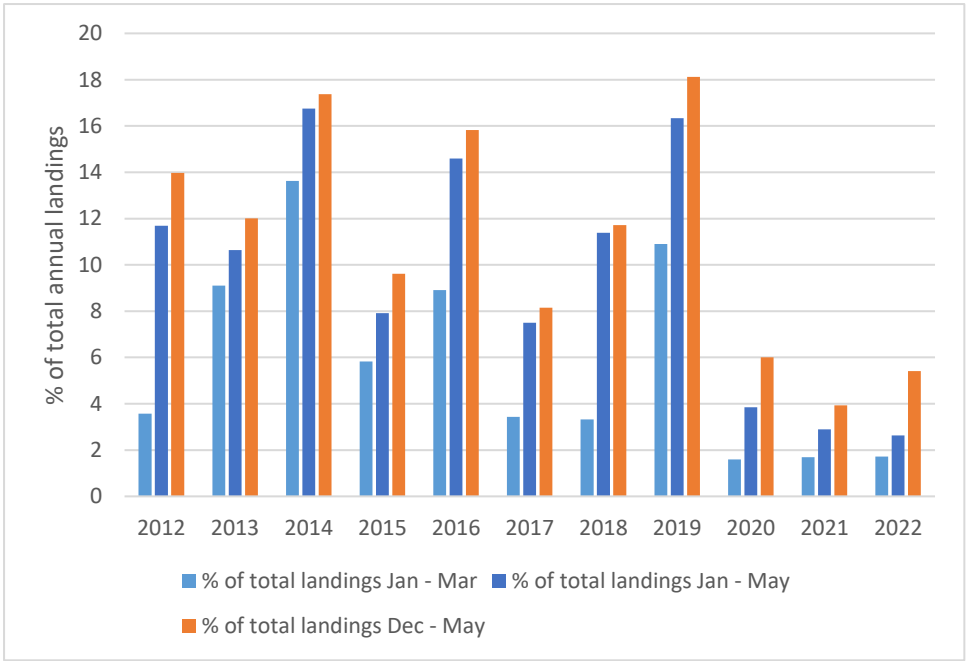


Figure 3. The percentage of total annual crawfish (*Palinurus elephas*) landings over ten years from 2012 to 2022 in the three potential closures periods.

The landings both in tonnage and expressed as a proportion of the annual catch show that the landings over the winter have reduced as a proportion of the annual

catch over the last few years. For example, the average landings from 2012 – 2019 for January to May and December to May are 2.23 t and 2.48 t respectively, compared to average landings across 2020 – 2022 of 1.18 t and 2 t respectively. To note for Figure 3 the annual landings for 2020 – 2022 also began increase noticeably, with an increase in landings from 23 t in 2020 to 55 t in 2022. Prior to 2020 annual landings were relatively stable ranging from 15 t to 24 t (see annex for further details).

Despite the small percentage of landings during the potential closure particularly during the last couple of years, there was concern from fishers expressed in the workshop about a potential increase in winter landings. Fishers stated that small vessels (e.g., under 10 m) cannot safely work the winter, so the fishery closes itself for the small vessels. However, larger vessels may be able to work through the winter and they are witnessing this as the first year that this is occurring.

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.

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.

During the co-design workshop fishers stated that until June crawfish are soft from moulting and in poor condition. Therefore, there may be a benefit if there is 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 difficult 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.

Socio-economic considerations

The average price per kilo for crawfish has remained fairly static since 2012 and was an average of £24.60 per kilo in 2022 (see annex for further details). Using this average, it could be assumed that in 2022 the value of landings over the potential

closure period was approximately £23,500 for 1 January – 31 March, £35,800 for 1 January – 31 May and £73,800 for 1 December – 31 May.

However, during the winter period and particularly during the Christmas season the price for crawfish may increase, with fishers in the workshop stating that there is an incentive to catch crawfish out of season as the price can be three times the amount compared to summer months. On the other hand, fishers also stated that the crawfish were in poor condition until June and therefore may not fetch as high as price if of a poor quality.

In the workshop there was mixed responses to a closure, with some fishers suggesting they would want to keep the fishery open in December for the Christmas market. Others suggested that if a closure was brought in for December it may not affect the merchants as they can stock up earlier in the year.

In 2022, both under 10 m and 10 – 12 m vessels mainly exploited the fishery during summer, with the majority of landings made between June and October, and peak landings in August. Peak landings for larger over 12 m vessels occurred slightly later (in September) and this group is responsible for the majority of December landings. This implies that the longer closure would have a greater impact on larger vessels which may be more likely be able to diversify more easily into other fisheries to offset any loss of income.

This is also corroborated by fishers' views in the workshop. They suggested that small vessels cannot safely work in the winter, so the fishery closes itself for the under 10 m vessels. Larger vessels may be able to work through the winter and they suggested this is the first year that this is occurring. Concerns were raised with the potential for smaller vessels to try and compete with the larger vessels which may cause a safety risk.

There is also a potential concern that displacement into different fisheries for the inshore fleet could lead to further fishing pressure as there are a small number of winter fishery opportunities available to the inshore fleet. However, if as suggested above it is traditional that the inshore fleet stops fishing in the winter this may be less of a risk.

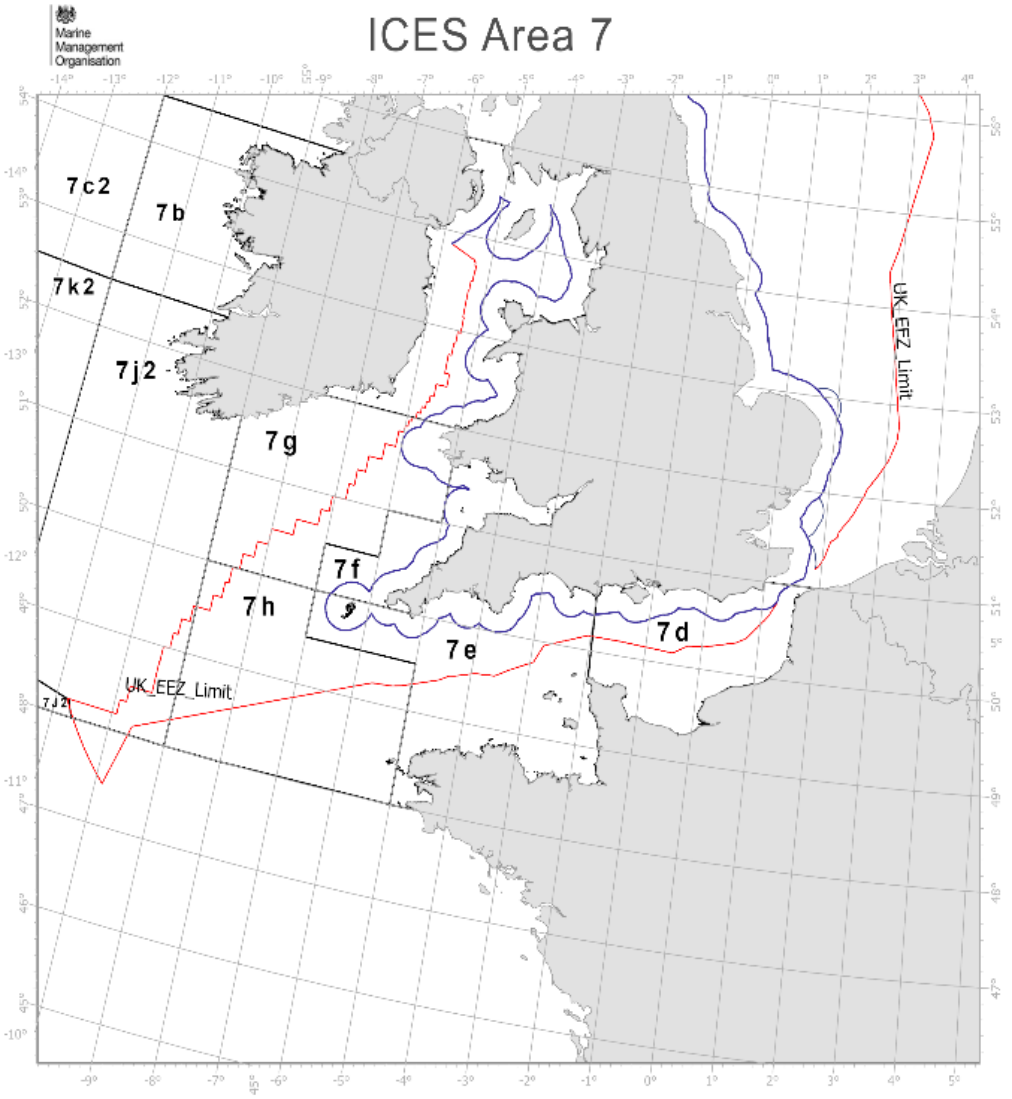
MMO are also working with the Welsh Government and IFCAs to understand the potential risk of displacement into Welsh waters and IFCA jurisdictions and if the closure should extend to all of ICES area 7, including Welsh waters and from zero nm (nautical mile) to the six nm limit in English waters. There is concern regarding displacement into waters that are not included in this closure and vessels that have access to the inshore waters through "grandfather" rights. Access to the fishery from larger vessels to the inshore waters would be a risk to the closure goals.

There is a risk that fishers could increase fishing effort during the open season (e.g., number of pots, soak time) to compensate from loss of income from no longer being able to land crawfish during the closed season.

However, in addition to stock benefits a closure may be considered beneficial in terms of product marketing, as 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.

Annex

Map of ICES Area 7



Crawfish landings data

Background into the crawfish fishery

The crawfish fishery is concentrated in the Southwest, the focus of activity occurs in inshore waters (0-6nm), particularly within the districts of Cornwall Inshore Fisheries and Conservation Authority (CIFCA) and Isle of Scilly Inshore Fisheries and Conservation Authority (IoSIFCA).

Over the last five years landings have increased rapidly, the fishing season has expanded into the winter months, and the fleet profile has changed, with an increase in the number of larger vessels in the fishery. The changes in the fleet dynamic are apparent from the available data and anecdotal observations.

The fishery landings are greatest in the summer months, which reflects the fishing patterns of the smaller fishing vessels and the behaviours of the species. Figure 4 clearly show the dominance of the landings in the summer months.

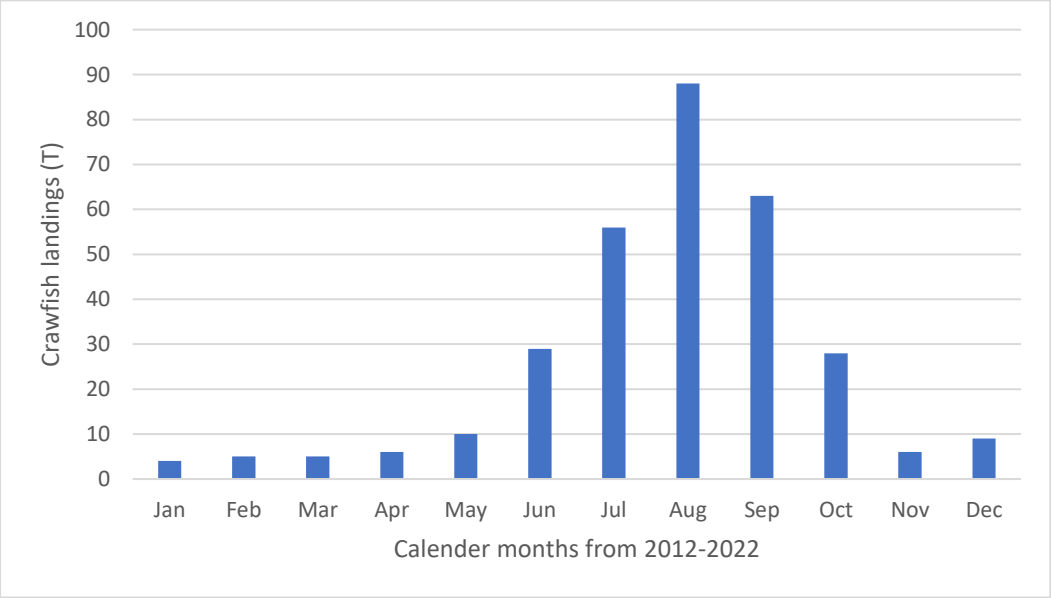


Figure 4. Crawfish landing data, monthly summed data from 2012 -2022 for all UK waters, expressed in monthly totals.

The large landings in the summer months underpins both the fleet composition and behaviour and the biological behaviours of the species. The 10m and under fleet contribute the most landings and are more active in the summer months and the crawfish are known to be most active during the warmer months. The uplift in December reflects the increased landings for the Christmas market.

Fishing fleet composition

Figure 5 shows the detail of the fleet composition and growth in the fishery since 2000.

In the early 2000s, the number of vessels exploiting the fishery (landing ≥50kg) was relatively stable, around 10-15 vessels between 2000-2005. From 2005 this number increased, exceeding 50 vessels in 2021. The largest growth was the under 10 m fleet, which grew from less than five vessels to over 40 vessels (approximately an eight-fold increase from 2005-2022).

In recent years there has also been a near doubling in the number of ≥ 12 m vessels exploiting the fishery, from three to five vessels between 2010-2020 to eight to nine vessels in 2021-2022 (Figure 5). Any increase in the number of ≥12 m vessels equate to a far greater increase in the fleet's fishing capacity, with ≥ 12 m netters capable of carrying 400-1000 nets, whereas >12m netters are limited to <100 nets.

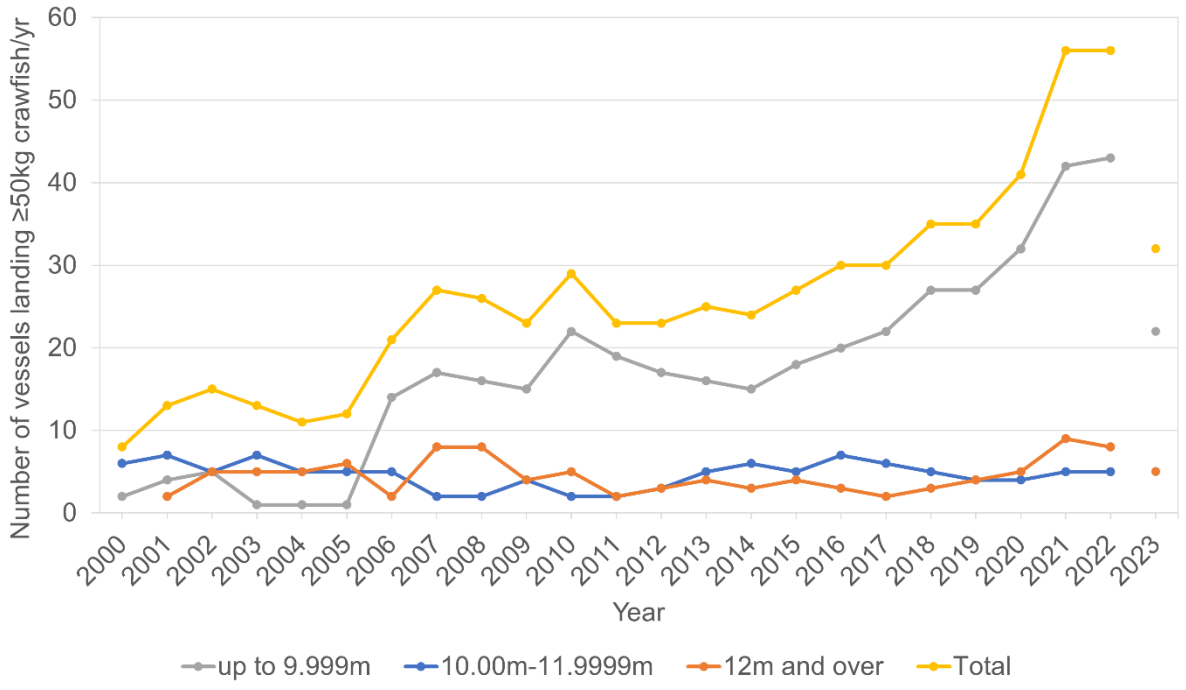


Figure 5. Number of vessels landing ≥50kg (live weight, tonnes) of crawfish (*Palinurus elephas*) into English ports between 2000 and 2023. Please note that data for 2023 is provisional at this stage, and available only for the months of January-June.

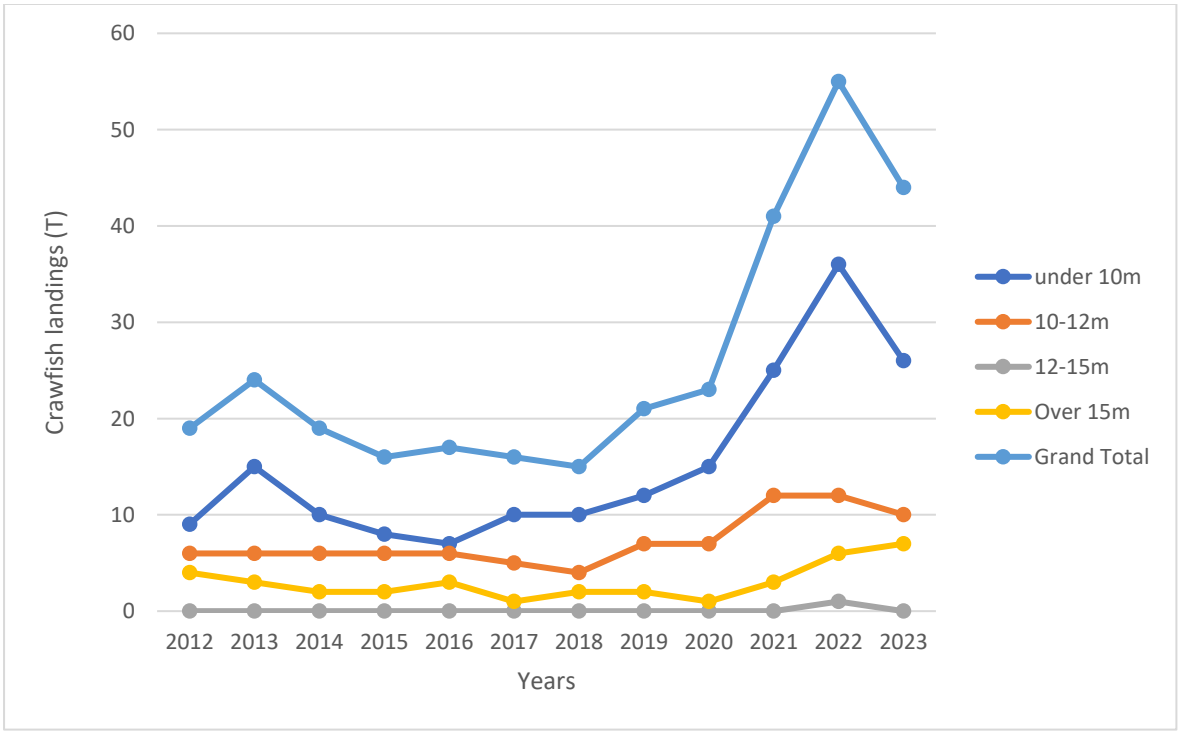


Figure 6. The crawfish (*Palinurus elephas*) landings (T) by vessel length group, please note 2023 is up to August 31.

Fishing vessel sector landings

Annual landings of crawfish have risen from 19 tons in 2012 to 55 tons in 2022.

Figure 6 shows the detailed crawfish landings by vessel length group from 2012 to 2023. The fishery is most exploited by the under 10 m fleet (58.9% of landings in 2022). The 10-12 m and ≥ 12m vessels are responsible for a sizeable proportion of landings (respectively 27.3% and 13.8% of landings in 2022).

Figure 6 clearly shows a large increase in landings from 2018 and the change in the fleet dynamic since 2020, with a marked increase in landings from the over 15m sector.

The value of the crawfish fishery

The crawfish fishery is high value, in 2012, £436,000 of crawfish were landed, this has risen in line with the increased landing quantities to £1,358,000 in 2022 (Figure 7). The average price per kilo has remained fairly static since 2012.

In 2012 the average price per kilo was £22.95, the under 10 m fleet commanded the highest price averaged at £25.80 per kilo. In 2022 the average price per kilo was £24.60. There is little differentiation in price over the vessel length sectors.

On further investigation into the figures in 2012 the highest price/kilo was commanded by the under 10m fleet, now the price per kilo is more uniform across all fleet sectors. This may be due to the proliferation of net fishing across all fleet sectors.

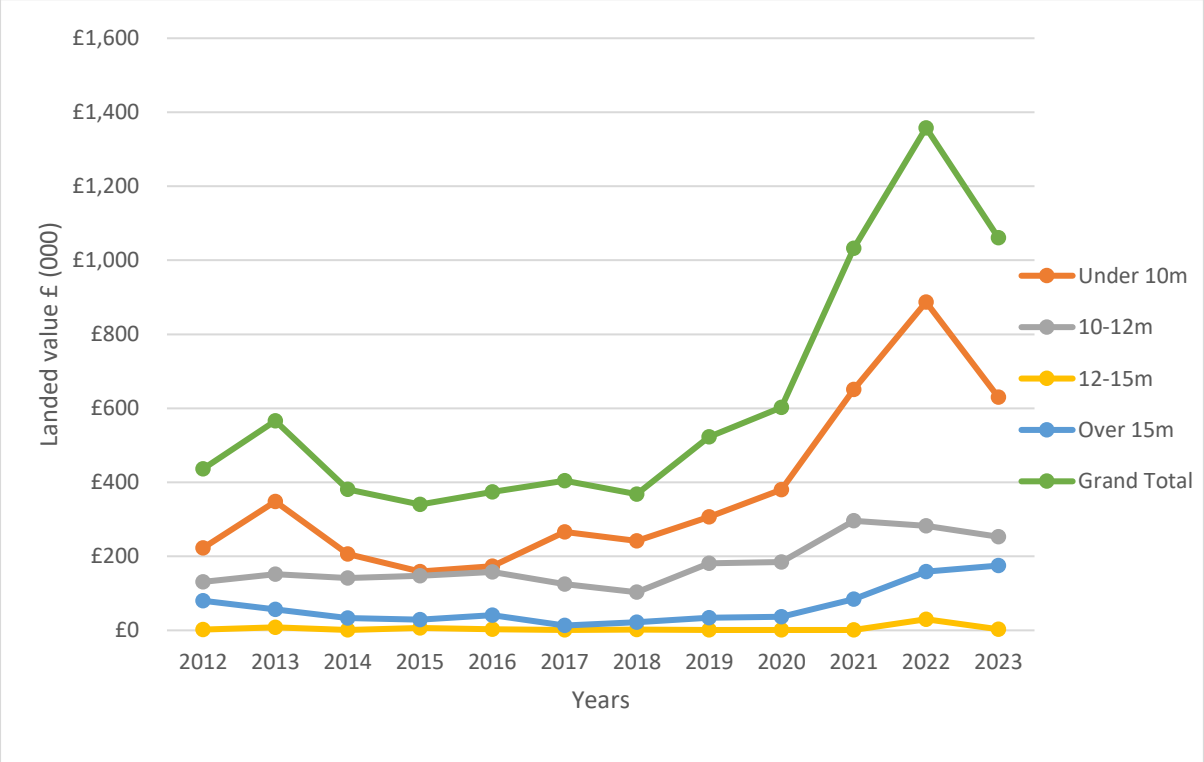


Figure 7. The landed value of the Crawfish fishery from 2012-2023

EU vessels crawfish landing data.

EU vessels working in UK waters have had nominal crawfish landings over the last 3 years.

In 2021 a total of 10 kg was landed by EU vessel working in UK waters in August and December 2021. In 2022 a total of 73 kg was landed by EU vessels working in UK waters in December. In 2023 there have been no landings declared by EU vessel working in UK waters.

Principle gear types

Crawfish are predominantly caught using either fixed nets (e.g., tangle nets) or pots/traps in the inshore waters off Cornwall and the Scilly Isles. The proportion of landings originating from pot or net fisheries has fluctuated across the last decade – in 2022 fixed nets accounted for 64.2% of crawfish landings and pots/traps accounted for 33.9%, however in some years the split is more even.

Tier length (total length of nets tied together) ranges from 300m to 500m, and number of tiers ranges from three to ten deployed at one time, depending on boat size and capability, this also varies over the season.

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

Nets typically catch more crawfish than pots for a variety of reasons, including for example, different spatial 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.

(i) Nets anecdotally retain more juvenile animals.
(ii) 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. This will have 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.

Legislation and current management measures

National Management measures

- Crawfish are included in the named species that are included in the shellfish flag on the fishing vessel license system.
- All vessels are permitted through license conditions to land up to five lobsters/crawfish and 25 crabs per day.
- Vessel with a shellfish entitlement attached to the license are allowed to catch an unlimited number of lobster, crawfish and crab.
- Vessel 15m and over are part of the Western Water effort and subject to a limited number of Days at Sea (DAS), currently set at 220.

- Under the 2020 UK-EU Trade and Cooperation Agreement (TCA), a single tonnage of 33,023 tonnes has been set for EU vessels fishing for non-quota species inside UK waters. A single tonnage limit of 12,365 tonnes has been set for UK vessels fishing for non-quota limits in EU waters. Crawfish can be caught as part of these tonnage limits.
- The UK national current MCRS is 95 mm.
- The MCRS in EU waters is 95 mm (there are some local MCRS that exceed the 95mm set out in EU regulation).
- Fishing for or landing individuals which are mutilated or bear a V notch is prohibited. Landing berried females is also prohibited.

Additional Welsh management measures

- The MCRS in Welsh water is 110mm. Commercial fishers are prohibited from landing berried, v notched or mutilated lobsters and crawfish.
- Recreational fishers in Welsh waters are restricted to the condition of Byelaws 30 and 31. There is a recreational permit in place that restricts an individual to; a maximum of five pots, one Crawfish per day, prohibition on landing berried crawfish. A recreational fisher is obliged to record the amount landed on an annual catch and effort return form.

Additional Channel Island measures

- MCRS in Jersey waters is 110mm and there is a closed season from I January to 31 May where a bycatch of 1 crawfish per day is allowed. There is also a prohibition on landing berried females.
- MCRS in Guernsey water is 230mm, measured from the tip of the head to the extent of the tail and netting for crawfish is prohibited.

French (Brittany, Finisterre) fishery

Experience from the French (Brittany, Finisterre) *P. elephas* fishery has shown that this particular combination of management measures can be highly successful in improving stock status. In 2010 the Brittany fishery was at risk of stock collapse, with annual landings below 10 tonnes. New management measures were implemented between 2010-2015; MCRS increased from 95 mm to 110 mm CL, fishing was prohibited between 1 January and 31 May (principally to limit effort within the fishery, but broadly aligns with the period during which females are berried), and landing berried females was banned. There was also a strong focus on potting over netting, as potting is seen as a more sustainable capture method. Indicators of stock recovery have since been observed, including increased juveniles and a steady increase in catch rates (>100t in 2022).[3,4] These improvements are attributed to a management regime in which closures and a robust MCRS work in combination.

[3] C. Roche. 2020. Documentary “Littoral, la langouste rouge, histoire d'un sauvetage”. Uploaded 30.04.2020.
[4] Comité Départemental des Peches et des Elevages Marins du Finistère. 2023. Lobster internship offer. Available at: Lobster internship offer: Analysis & data acquisition on red lobster - News - CDPMEM 29 - [Departmental Fisheries Committee - Finistère] (comitedespeches-finistere.fr). [Accessed 21.07.2023].

Local Management measures

The inshore areas (0 – 6 nautical miles) are also subject to the Inshore Fisheries and Conversation Authorities (IFCA) regulation and control measures. Table 1 is a summary of the IFCA byelaws and management measures that restrict the crawfish fishery.

Table 1: Crawfish measures in ICES area 7 exacted through IFCA byelaws

IFCA	District extent 0-6nm	ICES areas	Management measures
Isle of Scilly	Around the Isles of Scilly	7e and 7f	110 mm MCRS Permit for recreational pot limit = 6 Vessel size restriction, only vessels 11m and under and/or under 10t gross T allowed in district
Cornwall	Cornwall county, the River Tamar to Marsland Mouth	7e and 7f	110 mm MCRS Non permit limit 2/day With permit monthly landing submission Prohibition on removal from MCZ with designated features
Devon and Severn	Marsland Mouth to Gloucester weir and River Tamar to Lyme Regis	7e and 7f	110 mm MCRS Prohibition on removal from MCZ with designated features Non permit limit 2/person Prohibition on landing parts of/berried/soft shell
Southern	Lyme Regis to Chichester Harbour	7e and 7d	110 mm MCRS Prohibition on landing mutilated, v notched and berried
Sussex	Chichester Harbour to Rye	7d	95 mm MCRS
Kent and Essex	Rye to Harwich	7d and 4c	95 mm MCRS Prohibition of landing mutilated, and v notched

Crab and lobster fisheries management plan

Crawfish are one of the key species included in the current crab and lobster fisheries management plan (FMP). This proposal supports the FMP process, and the management measures are within the short and long term aims and goals of the FMP.