



Marine
Management
Organisation

Southwest crawfish industry workshop: 3 October 2023

Meeting notes and outcomes



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Rationale and purpose of workshop

The fishing industry has shared concerns with government 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 (IFCA) including Cornwall, Isles of Scilly and Devon and Severn 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 observations from fishers and local IFCA officers.

Crawfish are included in the crab and lobster fisheries management plan 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 meeting 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. This meeting was hybrid, held in the Seafood Cornwall Training Hub and online via Microsoft Teams.

Material produced for the meeting is available in the Annex. This includes an agenda, a flyer describing the issues and potential management options, and a slide pack which was shared in the meeting with participants to aid discussions.

The aims of the workshop were as follows:

- Develop a mutual understanding of current key issues in southwest crawfish fishery.
- Explore options for managing the southwest crawfish fishery in short term (i.e. autumn/winter 2023 - spring 2024).
- Maximise consensus on way forward in short term and next steps.

Attendees

Approximately 25 people attended in person with a further 10 online. The workshop was independently facilitated by Wilson Sheriff.

Government representatives attended from MMO, Defra, Seafish, Cornwall IFCA, Isles of Scilly IFCA, Devon and Severn IFCA.

Fisheries representatives attended from Harvey & sons, Waterdance, Rowes Fishing, Silver Dawn Fishing, Cornish Fish Producer Organisation. There were also many individual fishers in attendance.

Output of the discussion sessions

Current key issues in the southwest crawfish fishery

There was general agreement with the issues outlined by MMO (see Annex). Specific comments people mentioned were:

- There is an increase in landings and effort, this is partly due to an increase in abundance of crawfish in recent years.
- People are moving into this fishery as other fishing opportunities are reducing. For example, the wet fish fishery is seal predated and there are huge losses which have increased the number of people in the crawfish fishery.
- Crawfish are slow growing, and there is concern that something needs to happen quickly to avoid a collapse.
- There has been a general decrease over the years in average weight of crawfish individuals landed.
- Crawfish is vital to inshore boats and can be 80 – 90% of landings.
- It is currently an unregulated fishery. Need to introduce new measures such as restricting effort. Measures should be national across UK and inshore/offshore as it is hard to enforce with differing regulations.
- There are too many vessels and there is concern that vessels without shellfish entitlements are landing crawfish illegally.
- More data is needed to fully understand the issues, e.g. are poor years due to climate. A full stock assessment of crawfish is needed.
- There is a desire for the fishery to be sustainable for future generations.
- We can learn from how other countries and how they manage crawfish e.g. French have brought in lots of regulations such as a closed season. Isles of Scilly is also a good fishery and is well regulated.

What are the solutions?

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.
- A seasonal closure of the fishery during the off-peak fishing period. Suggested timeframes included a closure from November 2023 or January 2024 to June 2024.

The purpose of these solutions was to:

- Reduce the likelihood and risk of overfishing by reducing overall fishing effort during the off-peak fishing period. An increase in MCRS would also lead to a slight reduction in landings of smaller crawfish.
- Provide additional protection to spawning potential though both the reduced fishing effort on berried females and increasing the proportion of crawfish that spawn at least once though an increase in the MCRS.
- Simplify the management landscape, improve compliance, and enable effective enforcement.

MCRS

The increase in MCRS from 95 mm to 110 mm received full consensus from the group, with specific comments as follows:

- There is no market for small crawfish. Merchants are looking for larger sizes, so will support the increase.

- The MCRS increase will support the population. Some females will have eggs at 95 mm, but at 110 mm they will have had time for a couple of breeding years.
- There will be a short-term loss, with a potential decrease in overall landings by 10 – 20% but all content with this loss as it will allow the stock to grow in the longer term.
- There was widespread support for a uniform size across all districts which means equality of opportunity for all.
- The MCRS increase can come in quickly as it will not require a change in gear. Fishers can choose to experiment with gear after to reduce catches of juveniles if required.
- Some fishers do not handle crawfish with care, they are easily damaged and there needs to be more education about how to handle and release crawfish without damaging them. A tutorial video may be a useful educational tool.
- There were also some other suggestions related to size such as increasing MCRS to 120 mm or having a maximum landing size. This would need more data on the size and productivity of females across all sizes before full consideration.

Seasonal Closure

There was a mixed response to a seasonal closure, with some content for the fishery to close for a long period e.g. November – June, whilst others suggested a shorter closure e.g. January – June, and some suggested a closure may not be an effective management tool. Specific comments were as follows:

- The small boats cannot safely work the winter, so the fishery closes itself for the under 10 m vessels. Larger vessels may be able to work through the winter and this is the first year that this is occurring. There is potential for smaller vessels to try and compete with the larger vessels which may be risky.
- There is an incentive to catch crawfish out of season as the price can be three times the amount compared to summer months. Some would want to keep the fishery open in December for the Christmas market. A seasonal closure may not affect the merchants as they can stock up earlier in the year.
- Crawfish are not abundant in the winter, as they become dormant, going into deeper water to shelter. From October to November the females are berried. Until June they are soft from moulting and in poor conditions so are not viable to catch.
- There are concerns that there are limited opportunities for the inshore fleet and there may be displacement into other fisheries which is not sustainable. Isles of Scilly fishery would not support a closure as the inshore vessels may occasionally fish during the winter.
- More data on the species is required before imposing a closure as a closure may become irrelevant if the sea temperature or climate changes.
- Could a bycatch of crawfish during the closure be allowed, as this would allow for the fishers to take advantage of the occasional catching but deter targeting.
- Tangle gears work all year and so may still catch crawfish during the winter.

Other potential solutions

MMO opened the discussion for other suggested solutions in managing the crawfish fishery. Suggestions mainly focused on limiting effort, although there was no clear lead in which method may be best to do this. Some specific comments were as follows:

- Effort should be limited even with a closed season and MCRS increase.
- Implement gear limits e.g. pot limits or net limits. It may be difficult to enforce pot limit or net length limit. For nets there could be gear specifications such as setting twine thickness at 0.75 – 0.9 mm, having a single walled net to minimise damage to crawfish and have a large net mesh size.
- Effort limits such as creating a permit. The permit could be given based on a track record and limit effort to e.g. 2022 landings. The permits should be non-transferable to stop the further monitorisation of licenses.
- Change the shellfish entitlement for specific gears or take out crawfish.
- A catch limit or quota could be an alternative effort limit.
- Revert to a pot fishery, similar to what the Irish fishery is trying to achieve. However, pots are not as effective as nets in catching crawfish, and gear stipulation is not important if there is not an effort cap.
- No targeting of crawfish within 12 nm from vessels larger than 12 m in length.
- Remote Electronic monitoring.
- V notching of hens.
- Evidence gathering is required for stock assessment.

Next Steps

MMO explained the options for to implement voluntary and statutory management measures. This included licence conditions, byelaws and statutory instruments. MMO suggested that any proposed statutory measure which is implemented from this workshop should be via a licence condition as they can be implemented quickly and are flexible.

MCRS

- There was unanimous agreement to implement an MCRS increase to 110 mm.
- MMO will look to implement this through a licence condition within ICES area 7 as soon as possible, dependent on the outcome of the crab and lobster FMP consultation.

Closure

- There was mixed reaction to a seasonal closure. MMO will run a short consultation in autumn 2023 to further investigate potential options for a closure and seek views from the fishing industry.

Other

- MMO will work with the fishing industry to produce a tutorial video on how to handle crawfish in the correct manner to reduce damage and increase the chance of survival if discarded.
- MMO will look to hold another workshop in early 2024 to discuss further potential effort limitations for the crawfish fishery.

Annex

Agenda for 3 October meeting:

Topic	Timing
1. Introductions and aims of the workshop <ul style="list-style-type: none"> • Introduce everyone in person/online & reason for attending. • Aims of the workshop: <ul style="list-style-type: none"> ◦ Develop mutual understanding of current key issues in SW crawfish fishery ◦ Explore options for managing SW crawfish fishery in short term (i.e. autumn/winter 23 - spring 24) ◦ Maximise consensus on way forward in short term and next steps 	13:00 – 13:20
2. What is the issue we are trying to fix <ul style="list-style-type: none"> • MMO introduce available evidence (one pager) and group discussion 	13:20 – 14:10
3. What are the solutions? <ul style="list-style-type: none"> • MMO explore potential management options and group discussion on proposed solutions and consequences of those solutions (intended and unintended) 	14:10 – 15:40
Break	15:40 – 16:00
4. What are the next steps? <ul style="list-style-type: none"> • MMO outline processes for voluntary and statutory management options • Group to determine if they have a preferred solution, next steps in short term and in the longer term if required 	16:00 – 16:40
5. Summary and wrap up	16:40 – 17:00

A flyer which was attached to the meeting invite and handed out during the meeting to aid discussions



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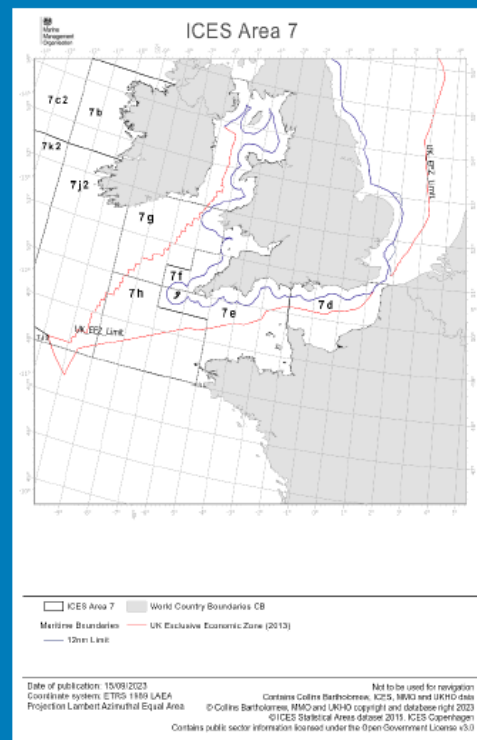
In the workshop the following will be discussed:

What is the issue?

- Increase in crawfish landings.
- Increase in number of vessels in fishery.
- Increase in larger vessels in the fishery.
- Fishing season expanding into winter months.
- Boom and bust fishery in the past.
- Provides vital income to inshore fisheries.
- Limited knowledge of fishery and species.

This has resulted in concern from some of the fishing industry that the fishery is unsustainable at current levels and that immediate action is required.

Crawfish data from ICES area 7			
Targeted landings = +50 kg/year	2012	2022	% change
All annual landings (t)	12.8	53.6	+318
No. of vessels (targeted)	27	55	+103
No. of ≥ 12 m vessels (targeted)	5	8	+60
Nov - May all landings (t)	3.03	3.3	+8
Annual income all < 10 m vessels (£,000)	£118	£848	+618



What are some immediate solutions?

- MMO would like to explore all possible short-term management options to offer a response to the immediate risks.
- The purpose of any short-term measures would be to:
 - Reduce the likelihood and risk of overfishing in the interim period whilst waiting for management measures to be delivered through the Crab and Lobster fisheries management plan (FMP).
 - Provide additional protection to spawning potential.

Next steps

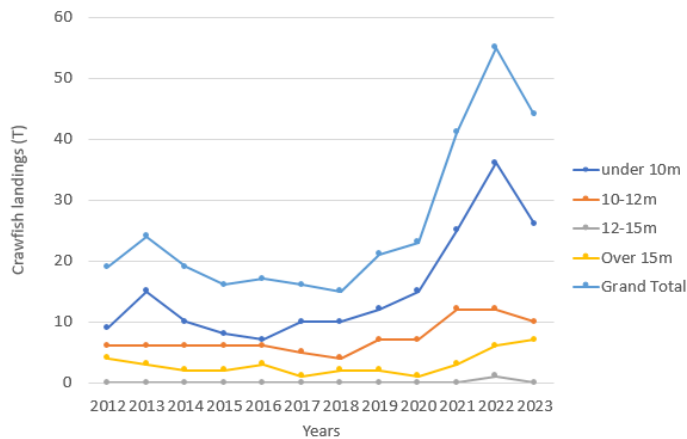
- Statutory measures may be implemented through licence conditions.
- Any management decisions would be made in conjunction with the feedback from Crab and Lobster FMP consultation and support the long-term goals and objectives of the FMP.
- Discussions will also be held on next steps of a short-term management options and on any considerations of management for summer 2024 fishery.

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A slide pack which was handed out during the meeting to aid discussions:

Section 1 – What are the current key issues in SW crawfish fishery

What is the issue?



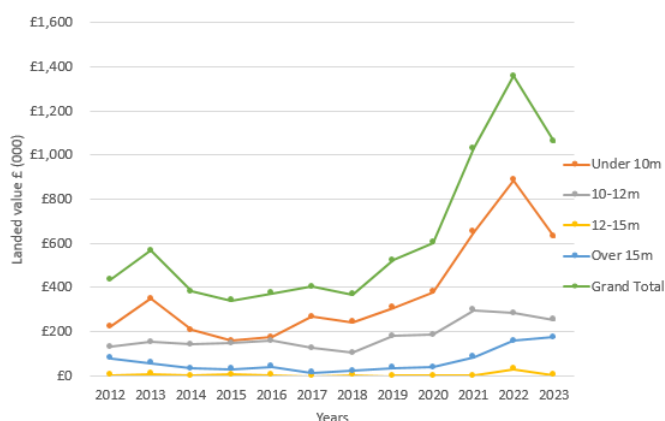
Crawfish landings (T) by vessel length group, please note 2023 is up to August 31.

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• Landings

- Annual landings of crawfish have risen from 19 tons in 2012 to 55 tons in 2022.
- The fishery is most exploited by the under 10 m fleet
- From 2018 there has been a large increase in landings and the change in the fleet dynamic
- 2023 is up to August

What is the issue?



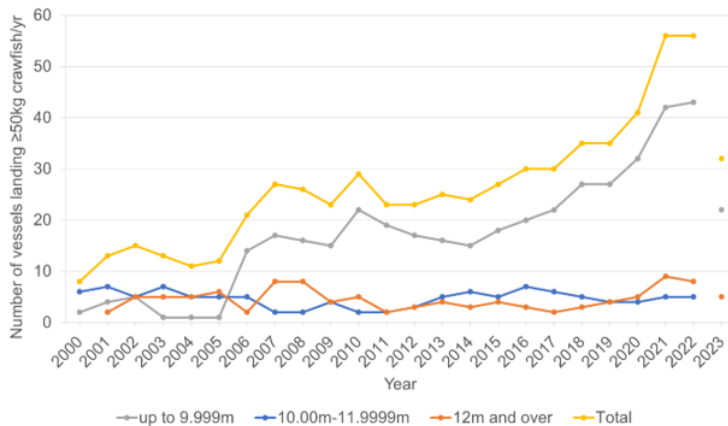
The landed value of the Crawfish fishery from 2012-2023

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Value

- High value in 2012, £436,000 risen £1,358,000 in 2022.
- The average price per kilo has remained fairly static since 2012.
- In 2012 the average price per kilo was £22.95, the under 10m fleet commanded the highest price averaged at £25.80 per kilo.
- In 2022 there is little differentiation in price over the vessel length sectors.

What is the issue?



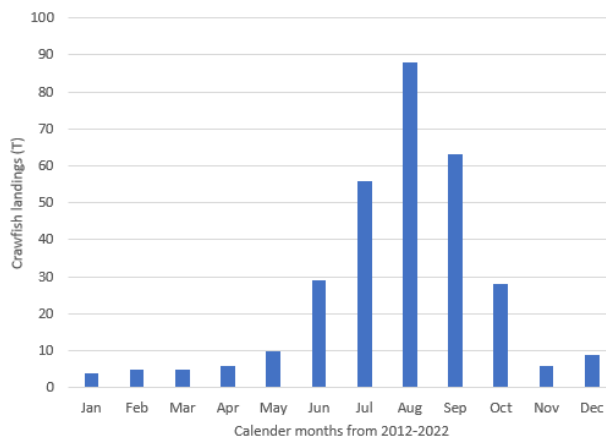
Vessel Numbers

- In the early 2000s, there were 10 – 15 vessels landing over 50kg/yr.
- From 2005 number of vessels increased, exceeding 50 vessels in 2021.
- The largest growth was the under 10m fleet,
- In recent years there has also been a doubling in the larger fleet sectors

Number of vessels landing ≥50kg/yr of crawfish into English ports between 2000 and 2023.

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What is the issue?



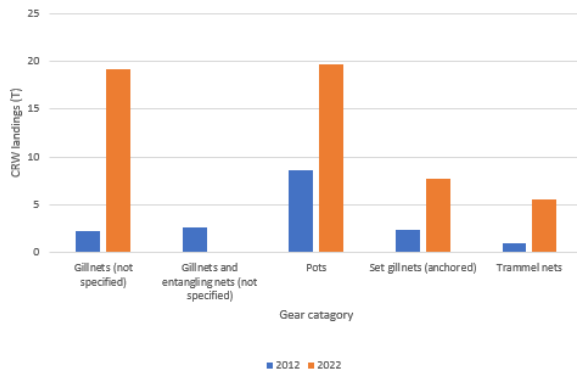
Landings through year

- The fishery landings are greatest in the summer months,
- Reflection of the fleet dynamic and the biology of the species
- The uplift in December reflects the increased landings for the Christmas market.

Crawfish landing data from 2012 -2022 expressed in monthly totals.

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What is the issue?



Crawfish landing data from 2012 and 2022 expressed by gear used.

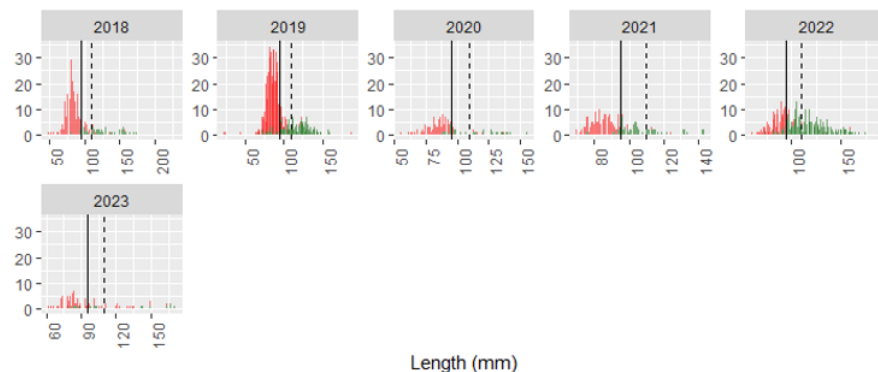
• Fishing Gear

- The fishery dynamic has changed considerably over the 10 years from 2012- 2022.
- In 2012 pot and trap fishing methods account for nearly 50% of all landings.
- In 2022 the fishery has moved to a netting and potting fishery

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Section 2 – What are some immediate solutions?

MCRS increase



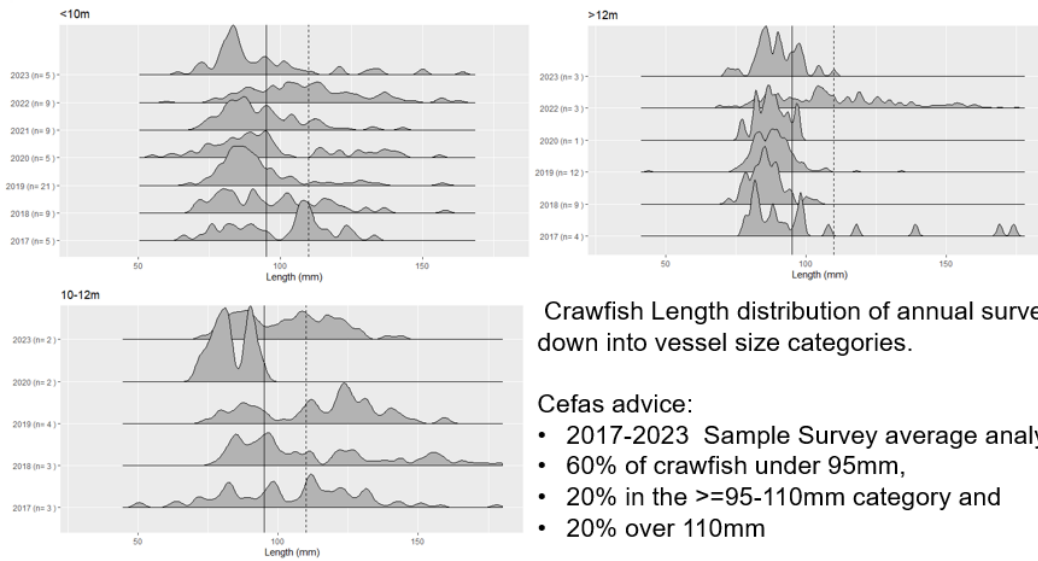
Cefas advice:

Graphs are survey outputs - Length distribution against 95mm and 110mm measure

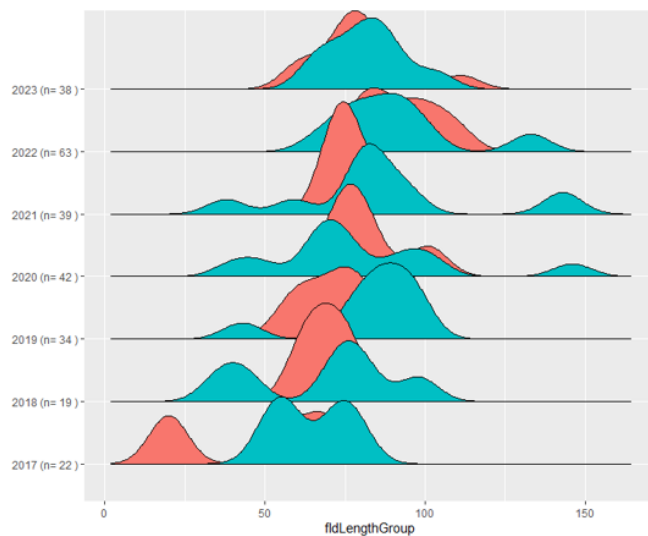
- Current MCRS of 95 mm poses a risk for the females as fishing pressure increases and 110mm may offer reasonable protection at high fishing pressure.
- The CEFAS observer programme has seen a significant discard/undersize component most years, particularly in 2018-2019, and with a shift to more retained in 2022.

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MCRS increase



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MCRS increase

Thoughts/questions for discussion:

- Intended and unintended consequences?
- Survivability due to discarding?
- Voluntary code of conduct when discarding ? e.g. placing whole animals back in the sea
- Should this apply in English waters of ICES area 7?
- Lead time required before a licence condition would be enforced?

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Seasonal closure

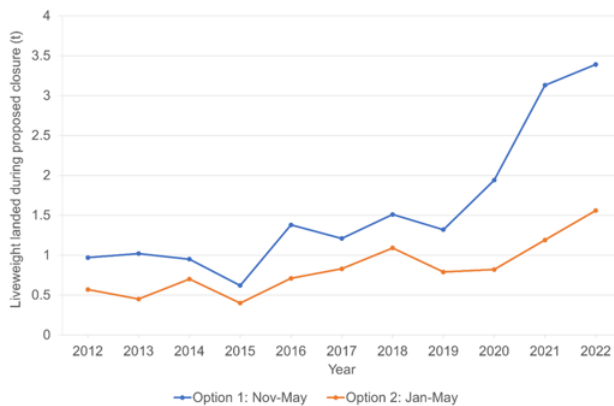


Figure 7: Crawfish landings (liveweight, tonnes) into English ports during the proposed closure periods (Option 1: 1 Nov to 31 May; and Option 2: 1 Jan to 31 May) over the last decade, between 2012 and 2023.

- A seasonal closure during the off-peak fishery period.
- Two options are proposed here as an example:
 - Option 1: 1 Nov to 31 May
 - Option 2: 1 Jan to 31 May
- Figure 5 shows the landed quantities in the 2 proposed closure periods
- Please note the winter months landings follow the general trend of increased annual landings.

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Seasonal closure

YEAR	2018 % of total	2019 % of total	2020 % of total	2021 % of total	2022 % of total
Option 1: Nov to May	12.5	9	10	8	7
Option 2: Jan to May	9	6	1	3	3

Table 1: represents the % of total annual crawfish in the proposed closures periods.

- The landed quantities are also expressed as a percentage of the total annual catch in both closure scenarios in Table 1.
- Table 2 displays crawfish landings across different sectors. The 15 m and over sector catches the highest percentage of crawfish (38 and 30%) over the two closure scenarios.

Sector	2012 – 2023* total landings (t)	Nov – May period 2012 – 2013 landings (t)	Nov – May landings as % of total landings	Jan – May period 2012 – 2013 landings (t)	Jan – May landings as % of total landings
10 m and under	182	25	13.7	16	8.8
10 -15 m	90	7	7.7	4	4.4
15 m and over	37	14	37.8	11	29.7

Table 2: Crawfish landings over the last decade, between 2012 and 2023 across different vessel sectors. The amount of landings across the two proposed closure periods is displayed in tonnes and as a percentage of total landings across the decade.

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Seasonal closure

Thoughts/questions for discussion:

- Intended and unintended consequences?
- Include all English waters in ICES area 7? Or just offshore (+6 nm)?
- Include all English and EU vessels?
- Concern with displacement into IFCA or Welsh waters?
- Concern with displacement into other fisheries?
- Prohibit retaining and landing crawfish – survivability of discards?
- Loss of livelihoods particularly for inshore fishers?

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Section 3: Next steps



Next steps

Licence conditions

- Flexible, don't require statutory consultation
- If include EU vessels should give + 45 days notice

MCRS

- National measure proposed in crab and lobster FMP.
- FMP consultation closed 1 October. Defra to review consultation responses and aim to publish FMP by end of 2023.

Seasonal closure/other proposed measures

- Consultation needed

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