



Consultation on the future management of the crayfish fishery to protect critically endangered species

Purpose of consultation

The purpose of this consultation is to seek the views of those with an interest in the future of the crayfish fishery off the southwest coast of Ireland. The information received during the consultation will inform policy decisions on the future management of this fishery. In particular, the consultation is being carried out to support the development of sustainable conservation measures for the crayfish fishery inside 12nm between Mizen Head and Loop Head (Figure 1). The objective is to identify measures targeted at eliminating the by-catch of endangered species in this crayfish fishery and securing a viable and sustainable future for the fishery itself.

This area has been the subject of work by the Marine Institute, funded under the EMFF (<https://emff.marine.ie/marine-biodiversity/management-and-restoration-crayfish-stocks-phase-2>, <https://emff.marine.ie/marine-biodiversity/management-and-restoration-endangered-skate-stocks-phase-2>, <https://emff.marine.ie/management-and-restoration-endangered-skate-stocks-phase-2>), and it is the intended subject of a follow-on project, again to be led by the Marine Institute. The Marine Institute has published a tender covering a period of four years (2021-2025) to provide data, monitoring and research services in a number of areas relevant to EMFAF objectives and to develop sustainable management of small scale coastal fisheries in the project area. This work is referred to as 'the MI-led project' below.

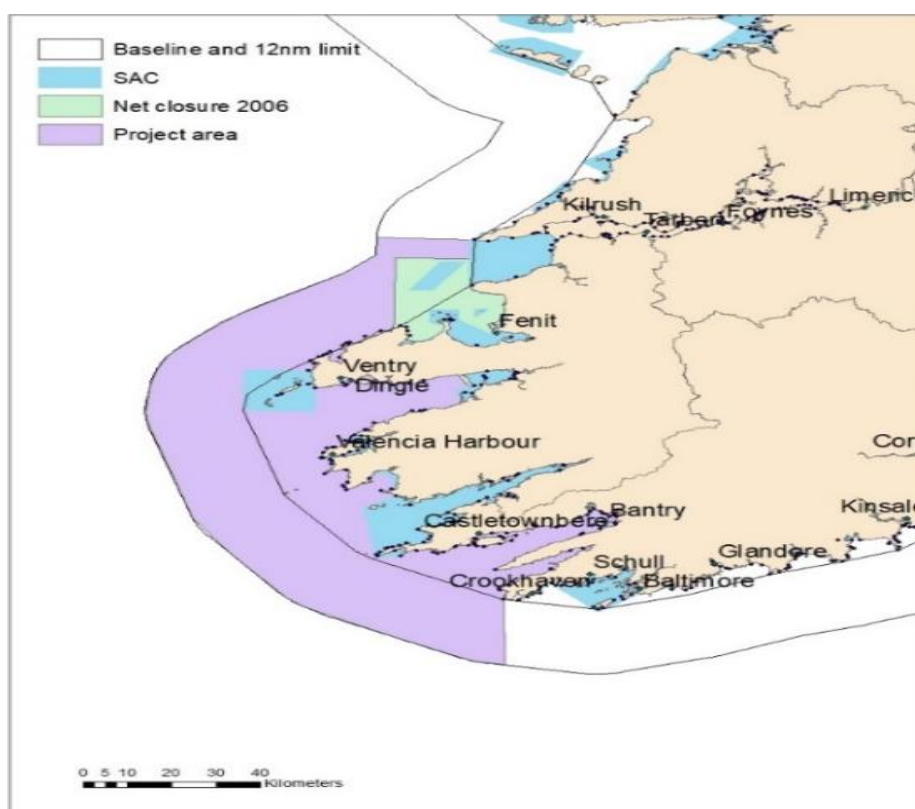


Figure 1. Map of proposed area for MI-led project on crayfish (Source: Marine Institute)



Current conservation measures

The crayfish (*Palinurus elephas*, also known as crawfish) fishery in Ireland is currently regulated by the following statutory instruments:

- [S.I. No. 289/2019 - Crawfish \(Conservation Of Stocks\) Regulations 2019;](#)
- [S.I. No. 232/2006 - Crawfish \(Conservation of Stocks\) Regulations 2006;](#)
- [S.I. No. 233/2006 - Crawfish \(Fisheries Management and Conservation\) Regulations 2006.](#)

Background to the crayfish fishery in Ireland

Crayfish are currently fished primarily using tangle nets on reef or edge of reef habitat off the south-west and west coasts. The crayfish fishery in Ireland evolved gradually from the 1930s, initially as a by-catch in the lobster fishery. From the 1930s to the 1970s there was a gradual increase in the use of French barrel pots, which increasingly targeted crayfish as well as lobster. With the exception of the early 1940s, there was a corresponding increase in landings during this period, peaking during the early 1950s-1970s at an approximate average of 150 tonnes per annum.

Tangle nets were introduced into the fishery, quickly replacing top entrance pots, in the early 1970s. Landings declined between 1974 and 1988. Over 200 tonnes were landed in 1989, but landings declined thereafter and remain low up to the present day (Figure 2) at about 20-30 tonnes per annum. The lost production is significant given the high market value for this species. Restoration of stocks would potentially lead to improved fishing, employment and export opportunities for inshore fishermen on the south west and west coasts.

Biodiversity Considerations

A number of species are caught as by-catch in the tangle net fishery targeting crayfish. These include a number of endangered and globally critically endangered species, such as angel shark, white skate, blue skate, flapper skate and protected species such as grey seal and harbour porpoise. The north of the crayfish fishery area is a biodiversity 'hotspot' for skates and rays and the last remaining refuge for angel shark and for white skate in the Atlantic (as well as one of the last remaining refuges for these species globally). Because these species are now so depleted, they cannot sustain any additional mortality that results from accidental by-catch in the tangle net fishery. In addition, crayfish is listed as vulnerable and decreasing by the International Union for Conservation of Nature (IUCN) and is included in the UK Biodiversity Action Plan (UK BAP) for species that are regarded as being most threatened and requiring conservation.

MI-led project

The objective of the MI-led project is to develop management proposals for the fishing of crayfish that would see the elimination of by-catch of endangered species and restore crayfish stocks. It envisages that the people who have recently been involved in the fishery would be an integral part of the work of the project. As such, the project is a collaboration between State agencies and industry that aims to enable the fleet to transition to a low-impact, sustainable fishery over a period of time. This strategy is consistent with and reflective of the EU Biodiversity Strategy for 2030 to eliminate (fishery) by-catch of species threatened with extinction and to introduce fishery management measures to enable recovery. The proposed work would contribute to Ireland's



National Biodiversity Action Plan 2017-2021 and the implementation of the Birds and Habitats Directives.

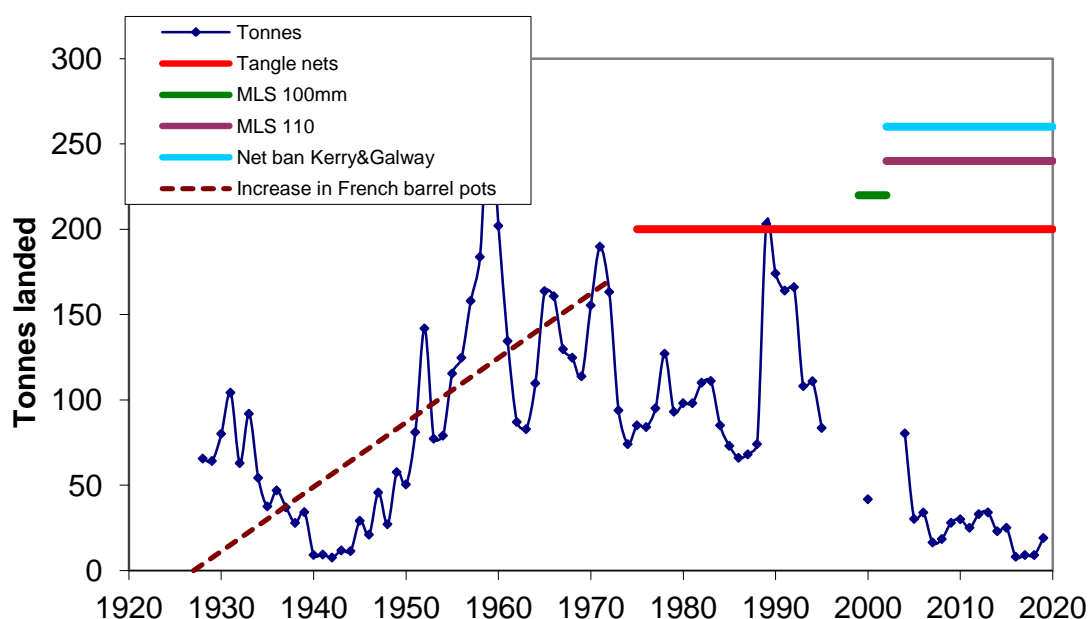


Figure 2. Evolution of landings, fishing methods and management measures for crayfish in Ireland from the 1930s to 2019 (Source: Marine Institute)

Consultation Document

This Consultation Document requires a response from you to the questions provided. This is your opportunity to ensure the issues which are important to you are included in the future policy for this fishery.

The Consultation Document has two parts. These are:

- Part 1 - Tell us about you;
- Part 2 - Give us your views.

Submissions will be accepted:

- online at the following link : <https://ec.europa.eu/eusurvey/runner/ConsultationCrayfishFishery>
Please note: - The survey will not operate correctly using Internet Explorer. To participate in the survey you should use a different browser.
- by email to: inshore@agriculture.gov.ie (with the subject line "Crayfish Consultation"), or
- by post to:

Crayfish Consultation
Marine Programmes Division
Department of Agriculture, Food and the Marine
National Seafood Centre
Clonakilty, Co. Cork P85 TX47

The closing date for responses is: close of business on Thursday, 16 September 2021.



Freedom of Information

All submissions and comments submitted to the Department of Agriculture, Food and the Marine for this purpose are subject to release under the Freedom of Information (FOI) Act 2014 and the European Communities (Access to Information on the Environment) Regulations 2007-2014. Submissions are also subject to Data Protection legislation. Personal, confidential or commercially sensitive information should not be included in your submission and it will be presumed that all information contained in your submission is releasable under the Freedom of Information Act 2014.

Data Protection

The Department of Agriculture, Food and the Marine is collecting these data for the consultation on the future management of the crayfish fishery off the southwest coast of Ireland. These data will be processed in accordance with the EU General Data Protection Regulation (GDPR EU 2016/679), the Data Protection Acts 1988-2018, the Freedom of Information Act 2014 and the DPER Consultation Principles and Guidance. Any additional personal data received as part of your submission will not be processed, shared, or retained and will be destroyed upon receipt. Publication to the Department's website of personal data associated with submissions will only take place where permission is received to do this.

Further information on Data Protection can be found on the Department's website:
<https://www.gov.ie/en/organisation-information/ef9f6-data-protection>

Privacy Statement

The Department of Agriculture, Food and the Marine is committed to protecting and respecting your privacy and employs appropriate technical and organisational measures to protect your information from unauthorised access. The Department will not process your personal data for any purpose other than that for which they were collected. Personal data may be exchanged with other Government Departments, local authorities, agencies under the aegis of the Department, or other public bodies, in certain circumstances where this is provided for by law.

The Department will only retain your personal data for as long as it is necessary for the purposes for which they were collected and subsequently processed. When the business need to retain this information has expired, it will be examined with a view to destroying the personal data as soon as possible, and in line with Department policy.



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Part 1 – Tell us about you

1. I am making this submission:

<input type="radio"/> On my own behalf	<input checked="" type="radio"/> On behalf of an organisation/group
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2. I am a:

<input type="radio"/> Fisherman	<input type="radio"/> Political representative
<input type="radio"/> Representative of fishermen association	<input checked="" type="radio"/> Representative of an environmental NGO
<input type="radio"/> Representative of state body	<input type="radio"/> Representative of trade association
<input type="radio"/> Scientist / technical expert	<input type="radio"/> Other (please specify)
<input type="radio"/> Member of general public	

3. My contact information is:

Name	Regina Classen		
Address	Irish Wildlife Trust, 8 Cabra Road, Dublin 7, D07T1W2		
Phone number (optional)		Email address (optional)	r.classen@iwt.ie

4. If you are a fisherman:

Sea-fishing boat name	
Sea-fishing boat registration	
Home port	
How many years have you been fishing with tangle nets?	
What other fisheries are you involved with?	

5. Do you operate in the area proposed for the MI-led crayfish project? (See map at Figure 1, page 1)

☐ Yes ☐ No



Part 2 – Give us your views

On the following pages of this document:

- Where requested, please provide your responses to the questions set out.
- Please use the text boxes provided to explain the responses you make and/or to insert any additional comments or information – including supporting data or research – you may wish to share.



1. In your experience, does a by-catch of endangered (angel shark, skates) and protected (seals, porpoise, dolphin) species occur in the tangle net fishery for crayfish within the area proposed for the MI-led project ("project area")? (See map at Figure 1, page 1)

☒ Yes ☐ No

Please provide details to support your answer.

The project area includes some of the last remaining hotspots of critically endangered shark, ray and skate species. Tralee Bay is home and in some cases nursery area for Angel Shark, Common Skate, White Skate, Flapper Skate, Undulate Skate, Common Stingray, Blonde Skate, Small-eyed Ray and possibly others. The vulnerability of these species to bycatch in static net fisheries is well documented (see: Clarke, M., Farrell, E.D., Roche, W., Murray, T.E., Foster, S. and Marnell, F. (2016) Ireland Red List No. 11: Cartilaginous fish [sharks, skates, rays and chimaeras]. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. Dublin, Ireland.)

2. What conservation measures could be used to eliminate by-catch in this crayfish tangle net fishery (for example, removing large mesh nets, closing some areas to netting, etc.)?

The conservation measure should be to stop fishing using nets, e.g. tangle nets, especially within Special Areas of Conservation (SACs) and surrounding areas. Tralee Bay is protected for the Annex 1 habitat 'Large shallow inlet and bay'. Critically endangered shark species form an integral part of bay and estuarine ecosystems and are therefore indirectly protected under the Habitats Directive, where Large shallow inlets and bays or Estuaries are part of the SAC's protected feature list. The EU Commission has already referred Ireland to the CJEU for lack of conservation measures, so action is not only necessary to protect critically endangered species but is also a legal obligation under the Habitats Directive. At this critical point in the extinction crisis of sharks and rays, no level of bycatch is acceptable. Therefore a closure of the net fishery is urgent.



3. What other fisheries would be affected by the conservation measures mentioned in your response to question 2?

Other fisheries with high levels of bycatch should also be excluded from shark hotspots, especially inside SACs and the surrounding areas. These include mixed trawl fisheries and fisheries using gill nets.

4. Do you have experience of the tangle net fishery for crayfish in the 1970s-1990s?

☐ Yes ☒ No

If yes, please provide details of your experience and how it compares to today's fishery.



5. Has the crayfish catch in tangle nets declined within the project area over the last 20 years?

☒ Yes ☐ No

Please provide details to support your answer.

According to the figures provided in the consultation document, yes. There have been very low catches since the early 2000s while tangle nets have been in use.

6. A. Is fishing for crayfish with tangle nets profitable today?

☐ Yes ☐ No

B. Is it likely to be profitable in the future?

☐ Yes ☐ No

Please provide details to support your answers.



7. Do you think that fishing for crayfish with tangle nets should be prohibited within the project area (or within a smaller area inside the project area)?

☒ Yes ☐ No

Please provide details to support your answer.

The introduction to this consultation document states clearly that a steep decline in crayfish catches occurred after the introduction of tangle nets in the early 1970s and catches have remained low since (with the exception of a peak in 1988). It is possible that crayfish were already overfished prior to the introduction of tangle nets due to a steady increase in French barrel pots. However, the stark decline in crayfish landings after 2000 and the fact that populations are not recovering shows that the method of fishing is not sustainable, especially given the bycatch of endangered species. Similar to lobster and crab, crayfish are an important component of reef habitats and the conservation of these species is therefore necessary inside SACs designated for reefs. In order to protect the structure and function of reef habitat as well as endangered sharks, skates and rays, fishing with tangle nets should therefore be banned inside SACs at the very least, but ideally everywhere.

8. Do you think the use of tangle nets should be prohibited in Irish fisheries outside the project area?

☒ Yes ☐ No

Please give details to support your answer.

See above.



9. Do you think the crayfish fishery should be closed within the project area for a period (e.g., three years) to re-build the stock?

☒ Yes ☐ No

Please give details to support your answer.

Given the low population of crayfish currently, the fishery should be closed to allow the crayfish population as well as the proper functioning of reef habitats to recover. We suggest that areas of reef habitat be closed to all fishing, to avoid bycatch of crayfish and to rebuild the reef ecosystem. The closure period should not be time-bound. The re-opening of the fishery should be based on scientific monitoring and only opened when crayfish populations are at healthy levels. No-fishing zones should be established permanently to allow overspill of lobster, crab, crayfish and other commercially fished species into nearby fishing grounds.

10. Crayfish were once caught using pots. Do you think potting could be a viable fishing method in the future if the stock was re-built and if appropriate research and trials are completed with different types of pots?

☒ Yes ☐ No

Please give details to support your answer.

Potting is a low-impact method of catching crustaceans and should be viable again once crayfish populations have recovered. However, the sustainability of fishing with pots depends on the level of fishing pressure. Current fishing pressure on lobster and crab, for example, is too high and must be regulated to ensure healthy population structure and proper functioning of reef ecosystems. Any future fishery using pots should be carefully managed with quotas and no-fishing zones to ensure reef ecosystems can function properly.



11. Do you think it is possible to develop a management plan for crayfish that would provide better incomes for fishermen active in this fishery and protect critically endangered species?

☒ Yes ☐ No

Please give details to support your answer.

The crayfish landings prior to 1970 show that a fishery using pots is viable when the crayfish population is healthy. After an initial closure, the fishery could open under a management plan that applies the ecosystem-based approach and the precautionary approach, uses only pots and has an appropriate crayfish quota that takes account of the importance of crayfish to the ecosystem. We suggest that the entire project area be designated as a marine protected area and that any management plan includes all fisheries in the area, as well as other pressures that may be impacting the local ecosystems. Well-managed pot fisheries would be compatible with the objectives of the MPA and benefit fishing communities and endangered species alike.

12. Do you have any further comments you would like to make in relation to the crayfish fishery?