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Consultation on Proposed Sites to Host Inshore Fisheries Pilots 2017

marinescotland

Introduction

On 25 May 2017, the Cabinet Secretary for the Rural Economy and Connectivity, Fergus Ewing MSP, announced the Inshore Fisheries Pilots initiative¹. The aim of this initiative is to explore alternative approaches to managing inshore fisheries, in order to ensure our coastal communities are making the most of our waters.

The pilots will investigate two different methods of fisheries management:

- A localised approach to fisheries management, where fishing interests are involved in developing distinct local arrangements

And

- The impact of separating different methods of fishing, such as creeling and trawling, within specified areas.

The commercial fishing industry was invited to submit proposals for sites that should be considered for the initiative and following an assessment by Marine Scotland, five different proposals have been brought forward for public consultation. The intention is that, following this consultation, new management arrangements will be introduced at two sites for a two year period.

The closing date for responses is 22 February 2018.

¹ <https://news.gov.scot/news/strengthening-inshore-fisheries>

Background to the consultation

At the core of the Inshore Fisheries Strategy 2015², is a commitment to improve the evidence base on which fisheries management decisions are made, streamline fisheries governance, and promote stakeholder participation. The Inshore Fisheries Pilots initiative will help us achieve these aims.

In conducting these pilots, Marine Scotland acknowledges that there are long-standing differences in views regarding management and access to our inshore waters. However, we should ensure that resources are managed in a way that maximises sustainable returns to our fishing communities.

Proposals were invited from the fishing sector and there was active engagement with the Scottish Fishermen's Federation, Scottish Creel Fishermen's Federation and many fishing associations around the coast. We thank those who took the time and effort to submit proposals but regret that some in the commercial sector with a keen interest in the inshore zone did not use this opportunity to suggest alternative forms of management.

The process so far

On 26 July 2017, Marine Scotland invited proposals from the commercial fishing sector for areas to be considered under the Inshore Fisheries Pilots initiative. A deadline of 30 September 2017 was given for proposals along with guidance outlining the basis on which proposals would be considered. As a result of that process, seven applications were received (to see all seven proposals please go to: <http://www.gov.scot/Topics/marine/Sea-Fisheries/InshoreFisheries/InshoreFisheriesPilots>).

Following a review of the proposals and further discussions with the applicants, Marine Scotland identified the following proposals for further public consultation, due to their practical application and being in line with the stated aims of the initiative.

These proposals cover:

- The Inner Sound of Skye
- Mull
- The Orkney Isles
- The Outer Hebrides

A fifth proposal (Arbroath and Montrose) was not considered as being sufficiently developed for further public consultation. However, we are seeking views on one aspect of the proposal, which has the potential to be innovative and informative, in order to establish whether it merits further investigation.

² <http://www.gov.scot/Topics/marine/Sea-Fisheries/InshoreFisheries/InshoreFisheriesStrategy>

Reason for consultation

In this consultation we want to hear your views on which of the proposals should be introduced as pilots by Marine Scotland. As far as possible we have sought to bring you the proposals as submitted to Marine Scotland, to ensure that stakeholder views are sought at an early stage of development.

In each case, given the information in the submitted proposals and the additional analysis carried out by Marine Scotland we want to know:

- In general what is your view of the proposal?
- Your specific views on the potential impacts of the proposal, both positive and negative.

We particularly wish to hear from those likely to be directly or indirectly impacted by any of the proposals.

Format of the consultation

Each of the proposals will be explored in turn. For the proposals originating from the Inner Sound of Skye, Mull, Orkney Isles and the Outer Hebrides, the following will be outlined, based on information from the proposal form:

- Who has put forward the proposal
- The area to which the proposal would apply
- What changes the proposals would wish to see introduced
- The expected benefits defined in the proposal
- How changes will be monitored

We would strongly recommend that in completing your response you refer to the original proposal forms, which are available to view at:

<http://www.gov.scot/Topics/marine/Sea-Fisheries/InshoreFisheries/InshoreFisheriesPilots>.

We have also sought to give an indication of current fishing activity within each proposed area, particularly in relation to fisheries that may be negatively impacted. This has been done using data collated by Marine Scotland Compliance from sales notes and EU logbooks and utilises records from the iFISH database and VMS data from vessels to give additional information on fishing activity.

In some instances there will be variations between the originally-submitted proposal and the information presented in this consultation document. This comes either as a result of subsequent discussions between Marine Scotland and the applicant, or

consideration by Marine Scotland over what measures can realistically be introduced.

Further reading

We would also recommend that you consider the stock assessment information published annually by Marine Scotland Science for background information on stock health. However, it should be noted that stock assessments, where available, are carried out on a larger scale than the areas being proposed for pilots. The 2017 edition of this publication is available at <http://www.gov.scot/Topics/marine/Publications/publicationslatest/farmedfish/fishandshellfishstocks/2017>.

The closing date for consultation responses to be received is 22 February 2018.

Proposal 1 – The Inner Sound of Skye

A brief summary of the proposal. Please see the proposal form for more detail (<http://www.gov.scot/Resource/0052/00525812.pdf>)

Who has put forward the proposal

North West Responsible Fishing Association, Torridon and Applecross Fishermen's Association and the Scottish Scallop Divers Association. The Scottish Creel Fisherman's Federation (SCFF) has also informed the proposal.

The area to which the proposal would apply

The Southern Inner Sound area, where a six month prohibition on the use of mobile gear is currently in place. As set out in The Inshore Fishing (Prohibition of Fishing and Fishing Methods) (Scotland) Order 2015 (<https://www.legislation.gov.uk/ssi/2015/435/made>).

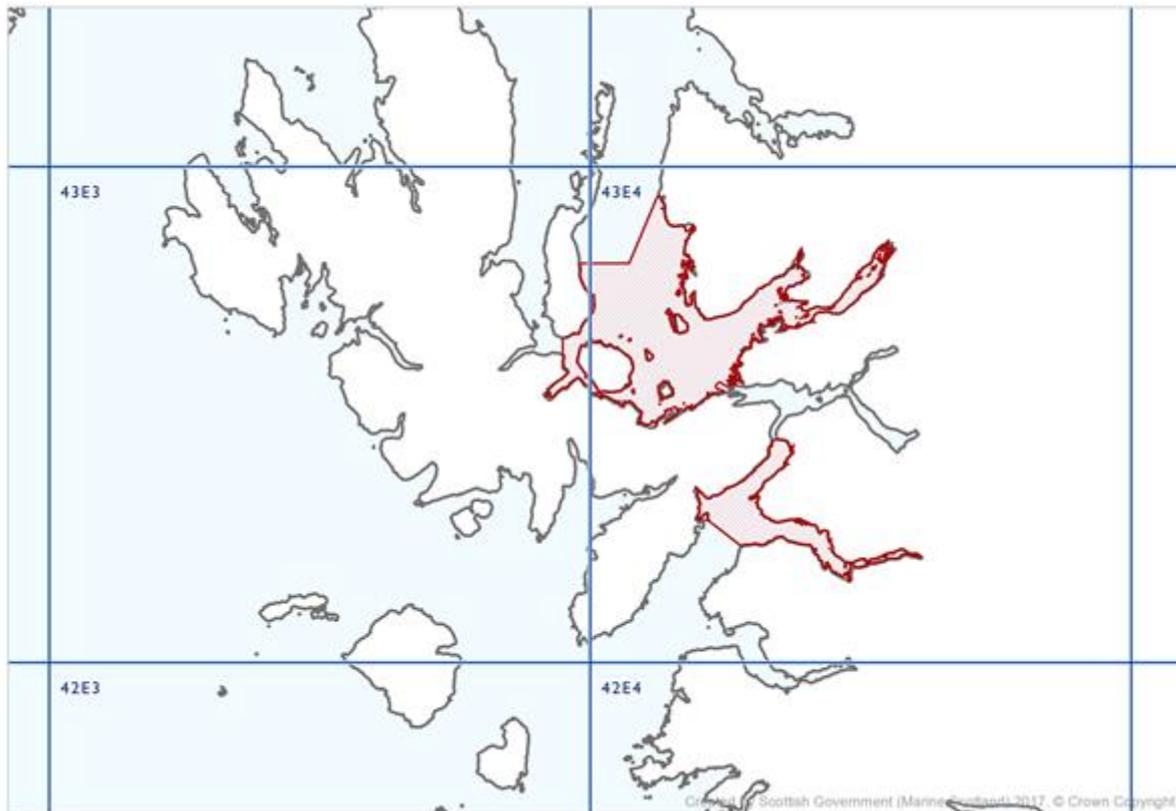


Figure 1 – Location of proposed Inner Sound pilot area.

What changes will be brought into effect

The key aim of the proposed pilot is to trial the separation of mobile and static gears.

Management measure on which we are seeking views

Extend the present six month closure of the Inner Sound to mobile gear (October to April) to a full year-round closure. Under existing measures, mobile gear vessels are able to fish, subject to restrictions, between 1 April and 30 September. This proposal would see mobile gear vessels prohibited all year round for the duration of the pilot.

Changes from original proposal

The original submitted proposal contained potential management measures that have not been included by Marine Scotland in this consultation document. These measures were to be considered at a future point and included:

- Controls on the number of vessels permitted to fish.
- Controls on the number of permitted creels within the area.
- New controls on the minimum landing size of Nephrops from the area.
- Consideration of additional restrictions in adjacent areas to the proposed site.

It is envisaged that a local group, made up of fishing interests in the area, will monitor the pilot and consider these measures further.

What are the expected benefits

The overall aim is to develop a more prosperous and low-impact local fishery, reduce gear conflict and inform understanding of approaches to inshore fisheries management.

The proposers believe that the pilot will demonstrate:

- An increase in revenues generated from the fishery in this area.
- A decrease in gear conflict in the area, which they state has had a significant impact since the removal of the three mile limit in 1984.
- A potential increase in employment.
- Environmental benefits, including a decrease in benthic disturbance, by-catch and discard of non-target species.
- Potentially reduce the pressure on adjacent MPAs from creel vessels displaced annually when the area is open to the mobile sector.

How changes will be monitored

It is proposed by the originators of the proposal that oversight and ultimate responsibility for the project and evaluation of its outcomes should rest with Marine Scotland.

A local group will be established for the duration of the pilot to which will oversee the pilot and consider future management measures.

The West Coast RIFG would be kept informed of progress and be entitled to offer advice and assistance when required. Other appropriate organisations may be required to evaluate various components of the pilot, such as environmental and science related aspects.

In order to measure the effectiveness/success of the pilot, the proposers suggest that a monitoring programme could be established which would assess: the changes in revenues and employment generated; changes in conflict patterns; environmental changes on the seabed (e.g. benthic biodiversity and habitat structure); and prevalence of *Nephrops*, fish species, and priority marine features sensitive to benthic disturbance.

In order to monitor and assess the pilot, those vessels working both inside and outside of the pilot area may be required to log which elements of their catch derive from within and out with the pilot area.

Marine Scotland Estimation of Fishing Activity in the Area

The proposal would have the greatest impact on those 12 metre and under registered length vessels that target *Nephrops*, when permitted, during 1 April and 30 September each year and, to a lesser extent, vessels targeting scallops by dredge during the same period when fishing of this type is permitted.

Estimated Value of catch of *Nephrops* by Demersal Single Trawl

Figure 2 shows that the closed area covers two ICES statistical rectangles 43E3 and 43E4 – with the majority of the area within 43E4.

Also shown, is the indicative area of fishing activity by trawl vessels under 12 metres in length with Vessel Monitoring Systems (VMS). It indicates that important *Nephrops* trawling grounds in 43E4 are located within the closed area site. It also indicates that, where voyages had VMS-indicative effort in 43E4 and landed into Kyle or Portree, 90% had fishing activity exclusively within the proposed area.

Nephrops trawl fishery by vessels with registered length of under 12m
 95% volume contour of VMS at fishing speeds. April-September, 2013-2016

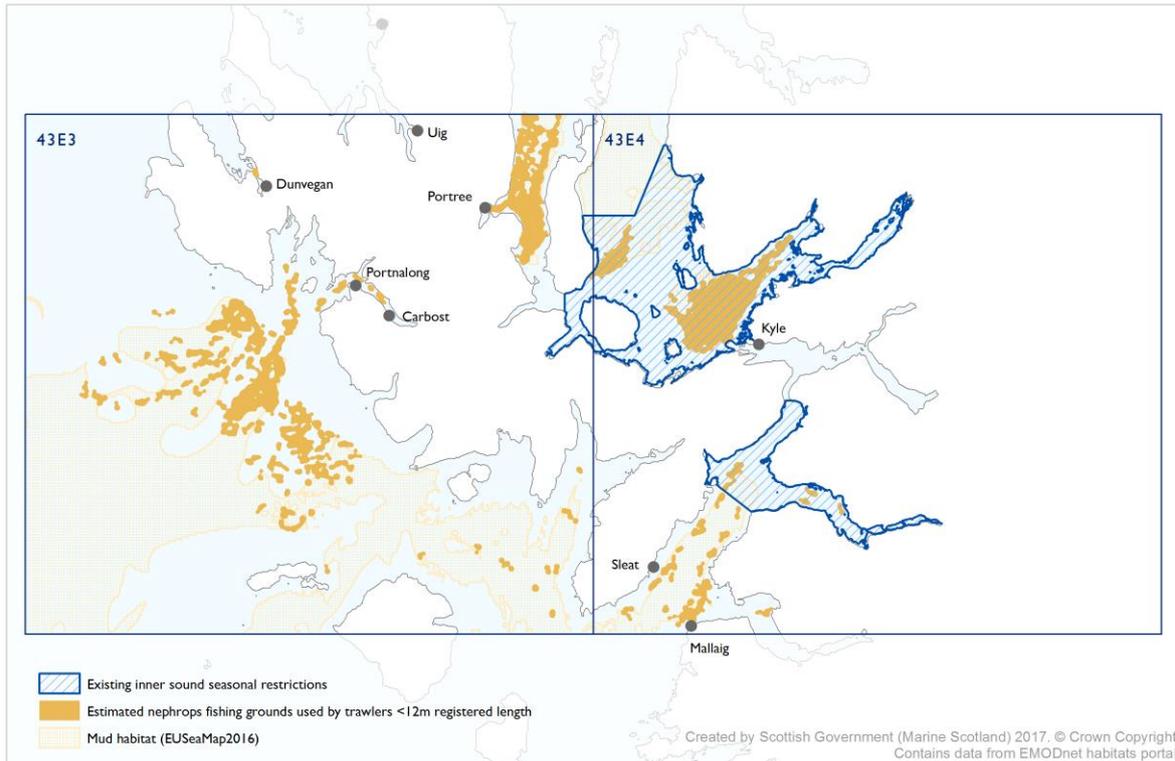


Figure 2 – *Nephrops* trawl fishery activity by vessels with registered length of under 12 metres. Ninety five per cent volume contour of VMS at fishing speeds, April-September 2013-16 .

It is important to note that not all 12 metre and under vessels have VMS fitted. For vessels without VMS we are reliant on recorded landings data as an indicator of the spatial distribution of their fishing activity. Trawl landings by under 12 metre vessels into Kyle and Portree from 43E4 are used as an estimate of the landings by these vessels from the proposed management area. Within the area of the pilot, there were no recorded landings by trawl vessels from 43E4 into other local ports (Broadford, Applecross or Carron) during the relevant period. In addition data held by Marine Scotland indicates that activity within the proposed area by vessels landing into Mallaig was very limited.

In the period 2011-16, **19 vessels** with a registered length of under 12 metre recorded **720 voyages** with demersal trawls in 43E4 during the months of April to September and landed into Kyle and Portree. The tonnage and value is recorded in Figure 3. The tonnage landed varies throughout the period – decreasing between 2011 and 2013 but increasing in subsequent years.

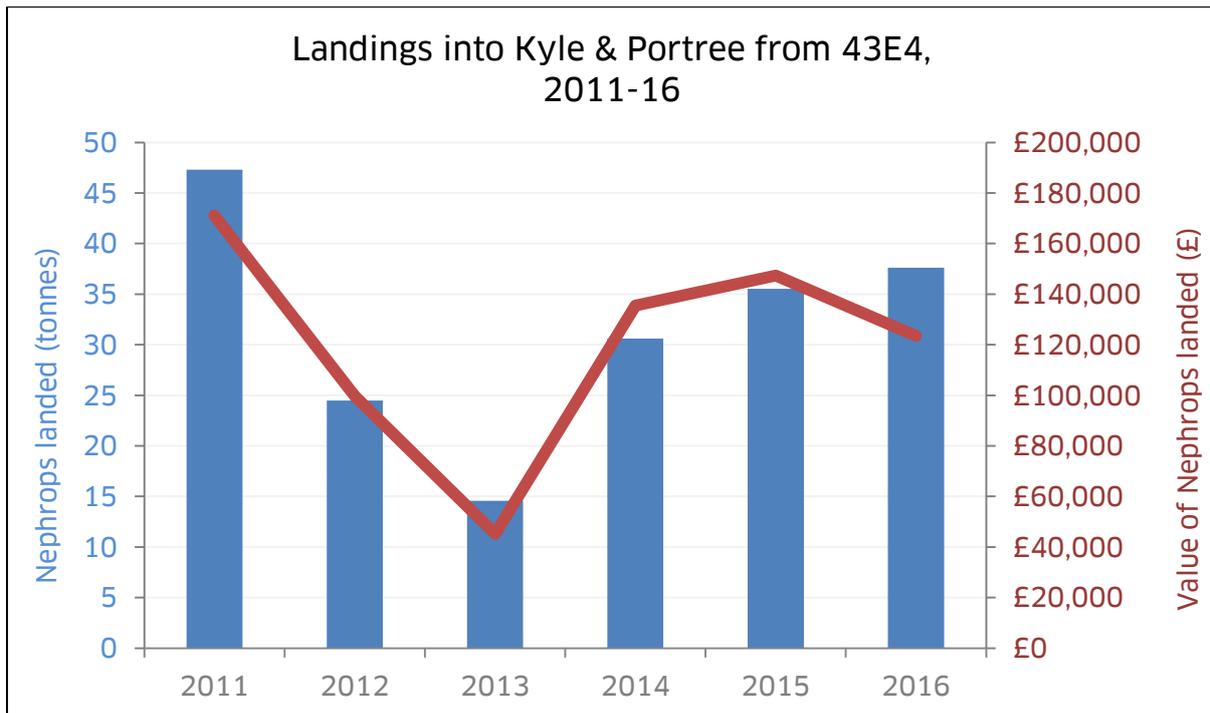


Figure 3 – Estimated tonnage and value of *Nephrops* landed by under 12 metre trawl vessels from 43E4 into Kyle and Portree, 2011-16.

In Figure 4, we compare these landings to the total landings of the same group of 19 vessels taken outside 43E4 during the period 1 April to 30 September each year, to give an indication of the relative importance of the closed area to these vessels. For these vessels, we estimate that 12.5% of their total landings taken during the period when mobile gear fishing is permitted in the Southern Inner Sound, were taken from the Southern Inner Sound.

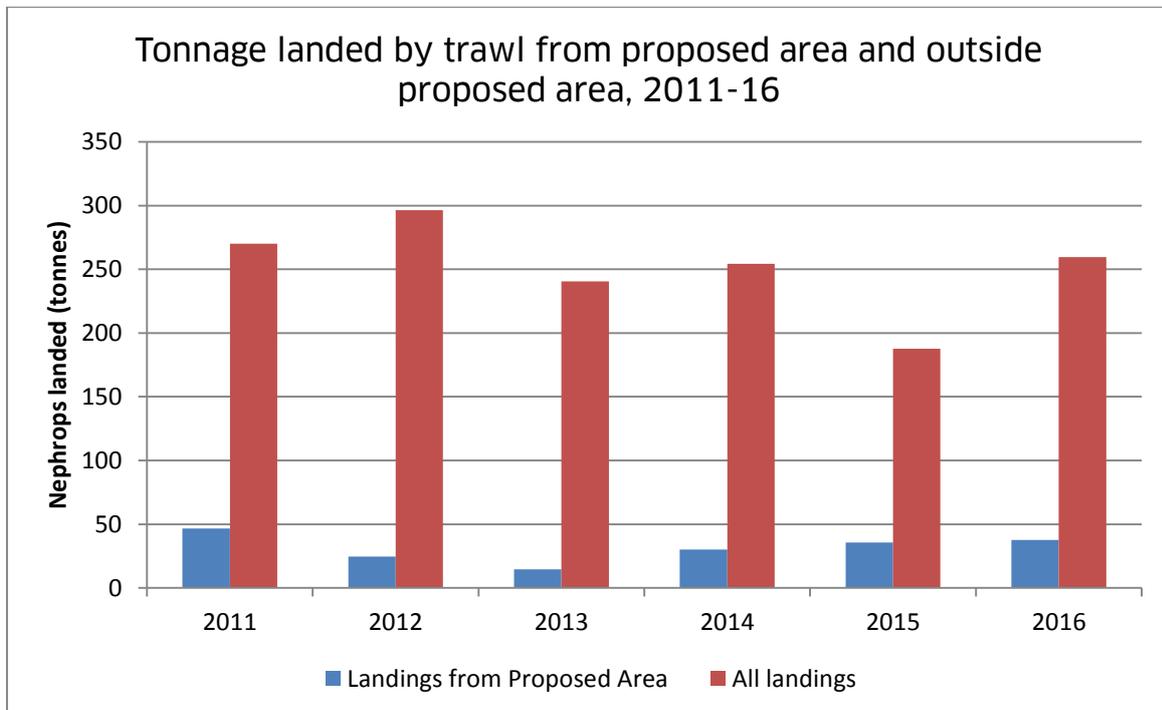


Figure 4 – Estimated tonnage of *Nephrops* landed from 43E4 (into Kyle and Portree) and elsewhere by the under 12 metre trawl vessels that recorded landings from 43E4, 2011-16.

Estimated value of catch by mechanical dredge

In the period 2011-16, 39 vessels recorded 4,175 voyages by dredges with catches in 43E3 or 43E4 during the months of April to September. Ninety two per cent of these vessels are fitted with VMS. The catch was predominantly king scallops.

Based on VMS data linked to logbook data, **15 vessels** conducted **58 voyages** with mechanical dredges in the proposed area during the 2011-16 period. These data can be used to provide an estimate of tonnage and value of scallop landings from the area (shown in Figure 5 below).

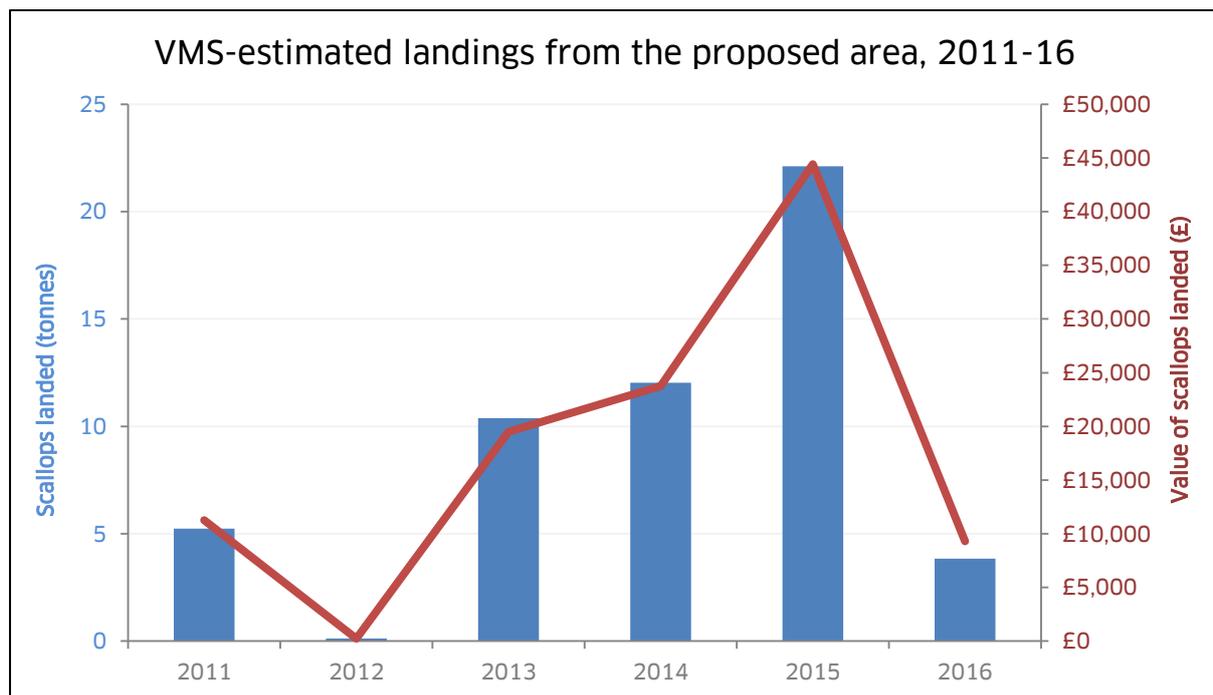


Figure 5 – Estimated tonnage and value of scallops landed by dredge from proposed Inner Sound pilot area, 2011-16.

As can be seen, the value of landings from dredge vessels fluctuates throughout the period – increasing between 2012-15 but then declining significantly in 2016.

To give an indication of the relative importance of landings from the closed area by those 15 vessels that have been active within the area in recent years, the tonnage landed within and out with the proposed area is compared for these vessels. Please note that it covers landings between 1 April and 30 September of each year.

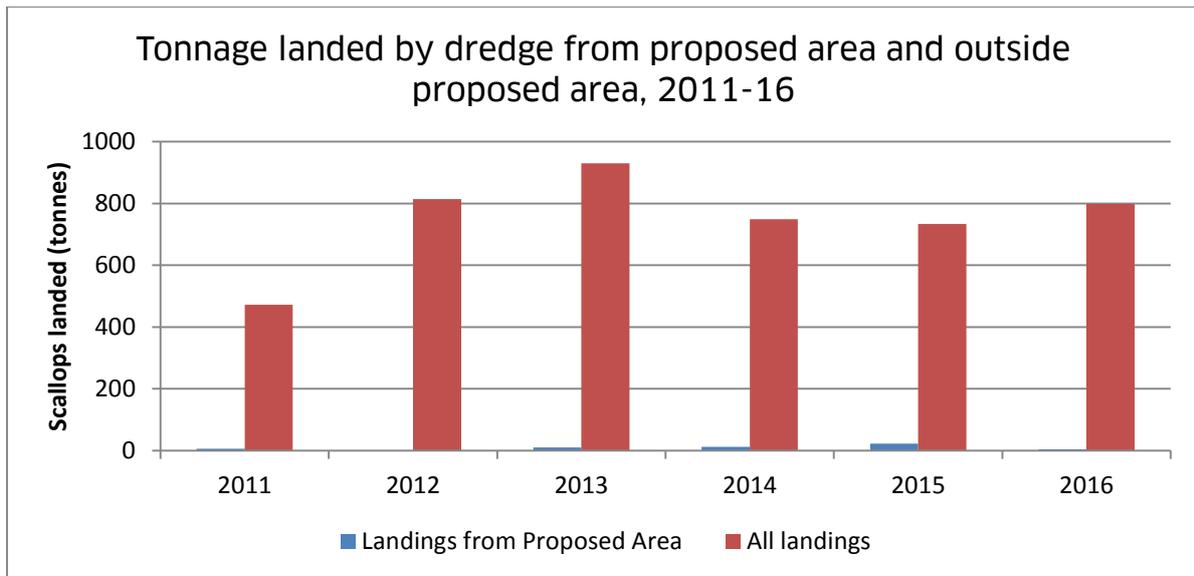


Figure 6 – Estimated tonnage of dredged scallops landed from proposed Inner Sound pilot area and scallops landed elsewhere from vessels that recorded landings from proposed pilot area, 2011-16.

Estimated value of *Nephrops* caught by creel

To estimate the value of creel landings from the relevant area, all landings recorded as being made from 43E4 and landed into harbours within the closed area (Applecross, Broadford, Carron, Kyle) have been included, as have landings recorded into Portree from 43E4 (as above with demersal trawls).

In the period 2011-16, **59 vessels** recorded landings of *Nephrops* by creel in 43E4 during the months of April to September. The tonnage and value are recorded Figure 7 and shows that tonnage and value have increased from 2014

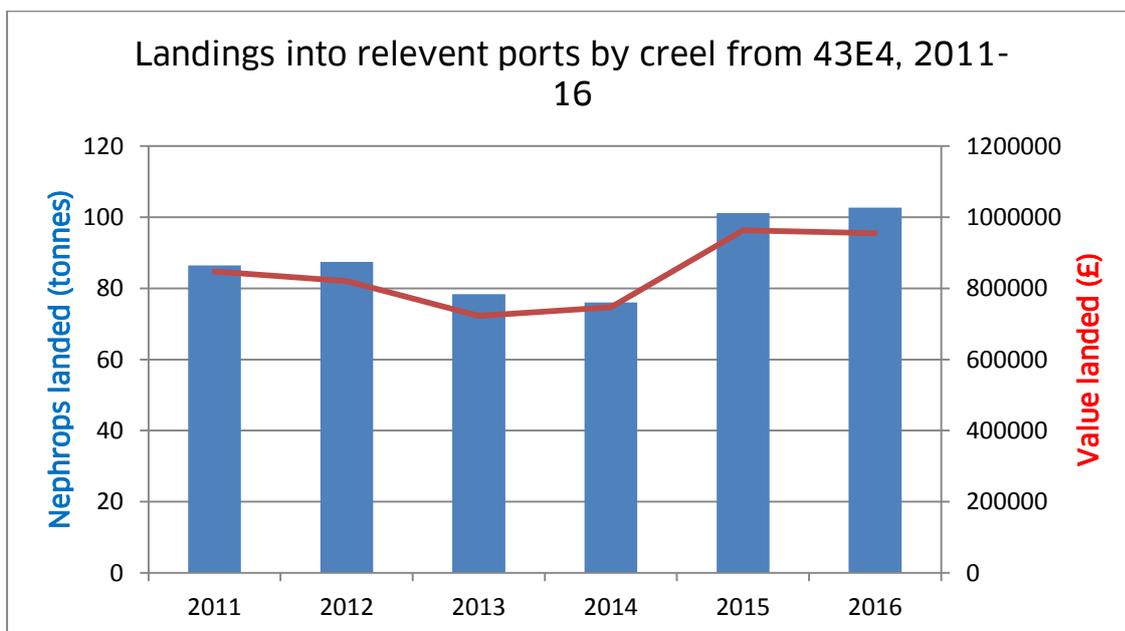


Figure 7 – Estimated tonnage and value of *Nephrops* landed by creel from 43E4 into relevant ports, 2011-16.

Estimated value of scallops caught by hand-fishing

As with creel fishing, landings recorded as being made from 43E4 and landed into harbours within the closed area (Applecross, Broadford, Carron, Kyle), as well as landings from 43E4 into Portree, have been included to estimate the value of the fishery from the associated area.

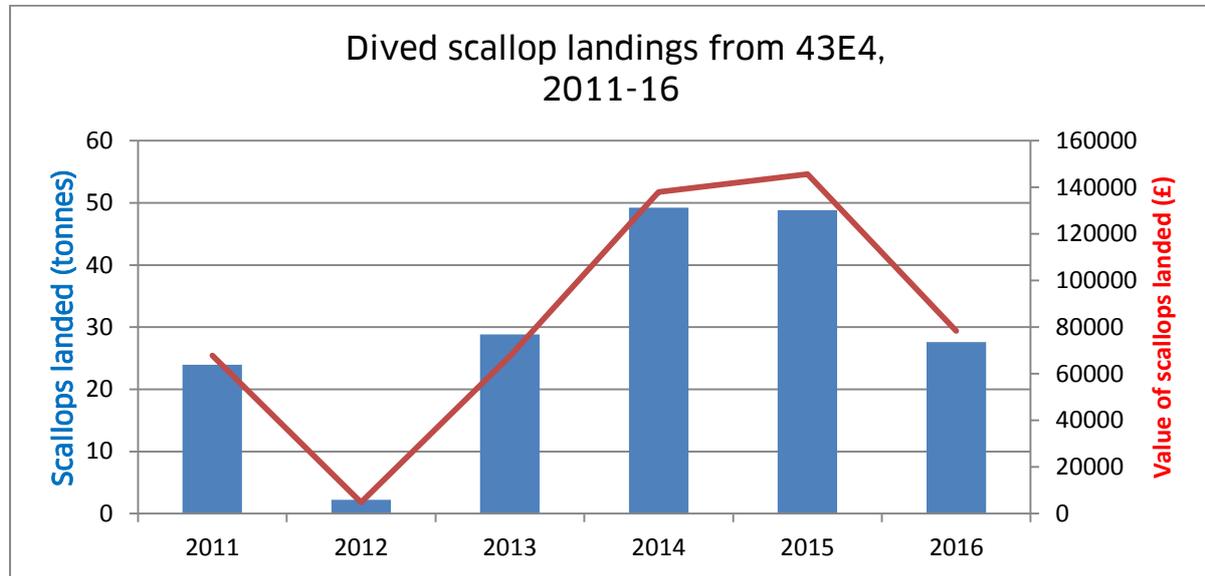


Figure 8 – Estimated tonnage and value of Scallops landed by hand diving from 43E4 into relevant ports, 2011-16.

Nine vessels recorded landings of dived scallops from 43E4 during the period 2011-16 during the period when mobile fishing is permitted between April to October. Figure 8 shows how the tonnage and value of hand-dived scallops fluctuates throughout the period.

Questions

1. Do you agree that the pilot proposal for the Inner Sound of Skye should be taken forward by Marine Scotland as described?
2. What is your view on the possible impact, both positive and negative, of amending the current six month restriction so that all mobile gear fishing is prohibited throughout the duration of the pilot?

Proposal 2 – West Coast RIFG – Mull Crabbing Box

A brief summary of the proposal. Please see the proposal form for more details (<http://www.gov.scot/Resource/0052/00525813.pdf>)

Who has put forward the proposal

West Coast Regional Inshore Fisheries Group – Mull Project Work Group (Management Group).

The area to which the proposal would apply

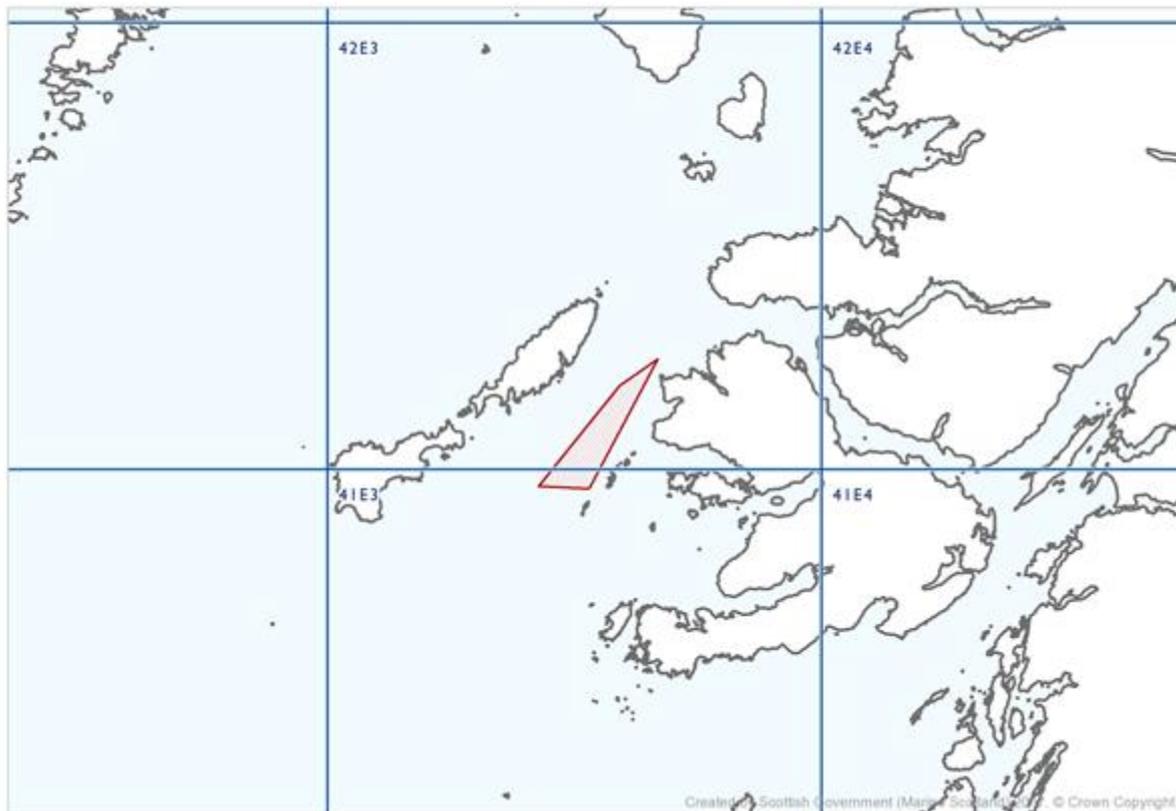


Figure 9 – Location of proposed Mull crabbing box pilot area.

	Degrees Decimal Minutes (WGS84)	Decimal degrees (WGS84)	XY (OSGB)
NE corner	56 37.46N 6 19.83W	56.624 -6.331	134444 756408
NW corner	56 35.62N 6 24.50W	56.594 -6.408	129510 753374
SE corner	56 28.68N 6 28.17W	56.478 -6.470	124866 740724
SW corner	56 28.85N 6 34.33W	56.481 -6.572	118613 741471

Figure 10 – Co-ordinates of proposed Mull crabbing box pilot area.

What changes would be brought into effect

The aim of this proposal is to trial the seasonal separation of mobile and static gear, along with a limit on static gear effort.

The area identified is a locally-important brown crab fishery ground, especially during the winter season (1 October to 31 January). The proposers wish to prohibit mobile fishing and limit creel effort during this period in order to protect the fishery, those dependent on it and maximise economic return.

The management measures we seek views on are:

- No mobile gear activity between 1 October and 31 January each year.
- Limiting creel numbers to a maximum of 300 per vessel in the area.

Changes from original proposal

The original submitted proposal contained an additional management measure that has not been included in this consultation document. This related to a restriction on the number of vessels permitted to target the fishery by creel. This has been removed on the basis that it did not provide any details as to how entry would be restricted (over what timeframe, what level of activity), and difficulty in verifying which vessels have been active in the area in the past.

The expected benefits

The proposal identifies a local, seasonally-important brown crab fishing area and seeks to manage the area when it is most important to those fishermen who target it.

The proposers believe that the above measures would:

- Offer protection to the local economy. The proposers state that this seasonal brown crab fishery is a vital income source for a small number of locally-based vessels.
- Offer protection to the brown crab stock. Those dependent on the fishery fear that mobile fishing activity currently carried out during the winter period is harming the brown crab fishery – even though mobile vessels are not targeting brown crab.
- Reduce gear conflict. The proposers believe that gear conflict has been increasing due to growing mobile gear activity during the winter period, which in coming years could impact on the viability of the local creel vessels.
- The proposed restrictions would help to sustainably manage and conserve the species by preventing gear saturation.
- Improve health & safety.

- Inform inshore fisheries management.
- Improve understanding of the brown crab stock. The proposers advocate a crab tagging scheme to get a greater understanding of the stock dynamic.

How changes will be monitored

The West Coast RIFG Working Group, which developed the proposal, would oversee the pilot. The group would meet under the chairmanship of the West Coast RIFG to review progress, monitoring and assessment. They would also wish for Marine Scotland, Scottish Natural Heritage and the local authority to be represented on the group.

Detailed records of crab catches by the static gear fishermen involved in the pilot will be required as a means of monitoring. The proposal offers the opportunity to capture information in relation to the crabs such as size, sex, numbers etc.

The proposer states that the assessment of data acquired from the crabbing area will help to inform current and future management of the site, as well as indicating if the fishing effort imposed during the pilot is indeed sustainable.

Crab tagging to determine where the crabs migrate to when they move from the zone during summer will also be undertaken.

Marine Scotland Estimation of Fishing Activity in the Area

As seen in Figure 9, the proposed Mull crabbing zone covers two ICES statistical rectangles – 41E3 and 42E3 – with the majority of the zone lying inside 42E3.

Analysis of VMS data linked to landings from logbooks suggest that fishing for scallops by dredge also takes place in the area. The proposal would therefore have the greatest impact on those vessels that have fished for scallops by dredge, who would be prohibited from doing so between 1 October and 31 January during the period of the pilot.

Based on these data, **seven vessels** have recorded voyages with mechanical dredges which indicate fishing activity in the zone during the proposed prohibition period from 2011-16. Please note, that only vessels larger than 12 metres in length are required to have VMS systems on-board in Scottish waters.

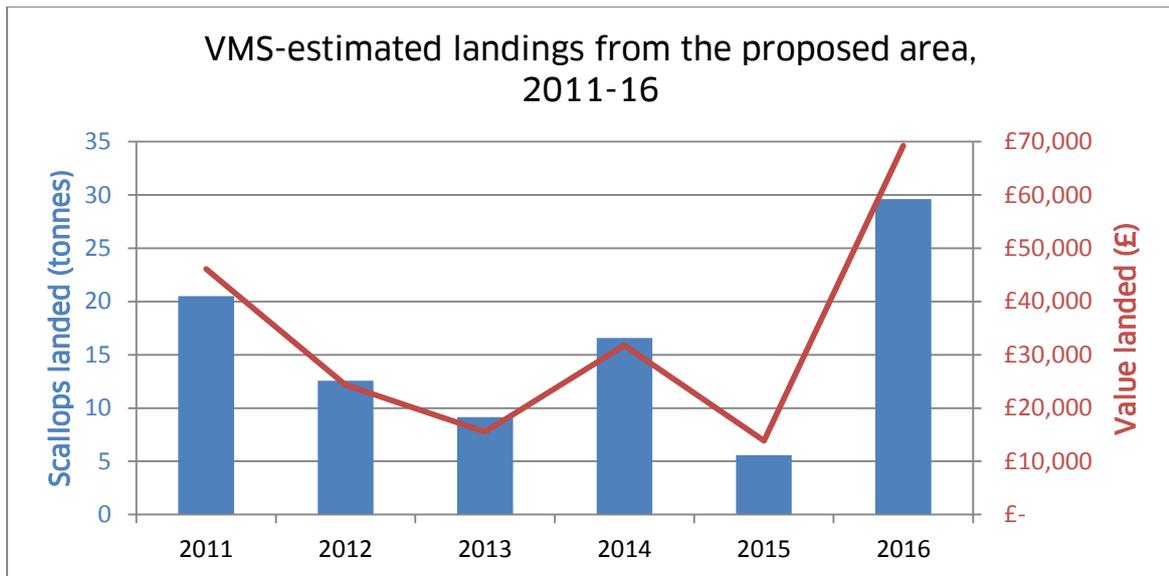


Figure 11 – Estimated tonnage and value of scallops caught in proposed Mull area, 2011-16.

As can be seen, landings from the proposed area fluctuate throughout the period, generally declining from 2011-15 but with marked increases in 2014 and then again in 2016.

To give an indication of the relative importance of catches from the area by those seven vessels, the graph below shows the tonnage landed by these vessels within and out with the area. Please note that landings are from the period 1 October to 31 January.

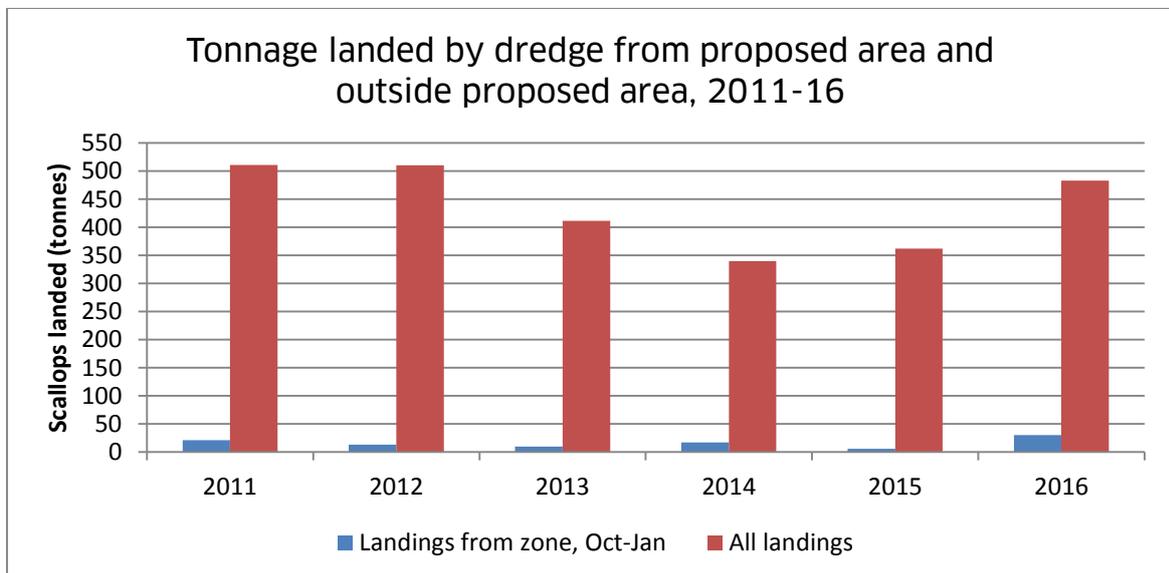


Figure 12 – Estimated tonnage of scallops landed from proposed area and scallops landed elsewhere from vessels, 2011-16.

Estimated value of brown crab caught by creel

Estimating the importance of the proposed area to creel vessels is more challenging given that fewer vessels of this type are obliged to carry on-board Vessel Monitoring Systems.

In this case, the proposed area is a relatively small area of ground that covers two ICES rectangles (see Figure 9). In the analysis below, we give a summary of landings associated with the relevant ICES rectangles during the period 1 October to 31 January between 2011 and 2016.

Brown crab is the primary creel fishery in 41E3 and 42E3, with landings far outstripping those of lobster and velvet crab in both tonnage and value.

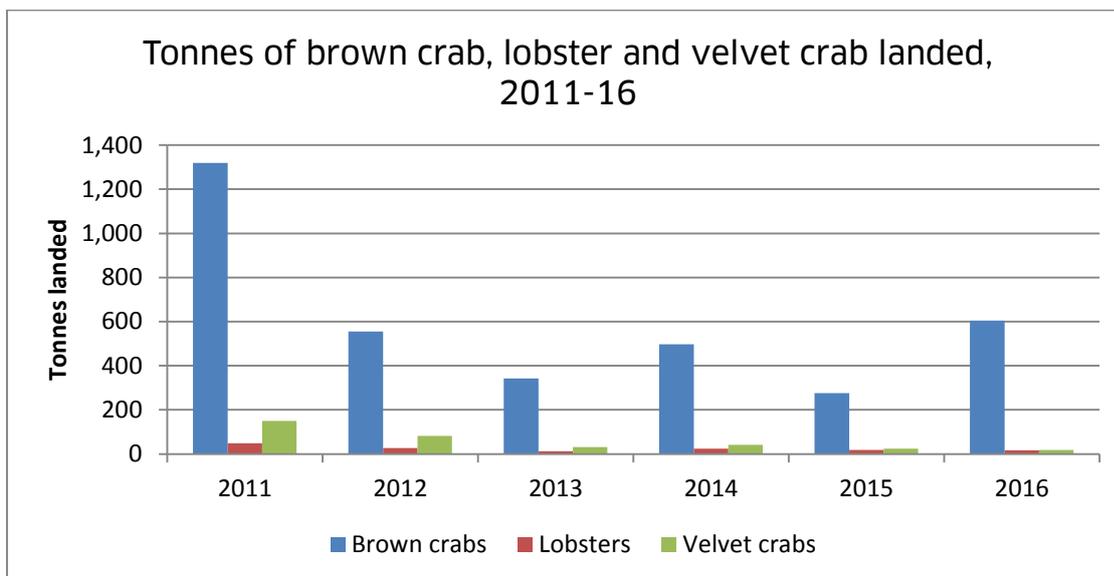


Figure 13 – Tonnage of brown crabs, lobsters and velvet crabs landed by creel vessels from 41E3 and 42E3, 2011-16.

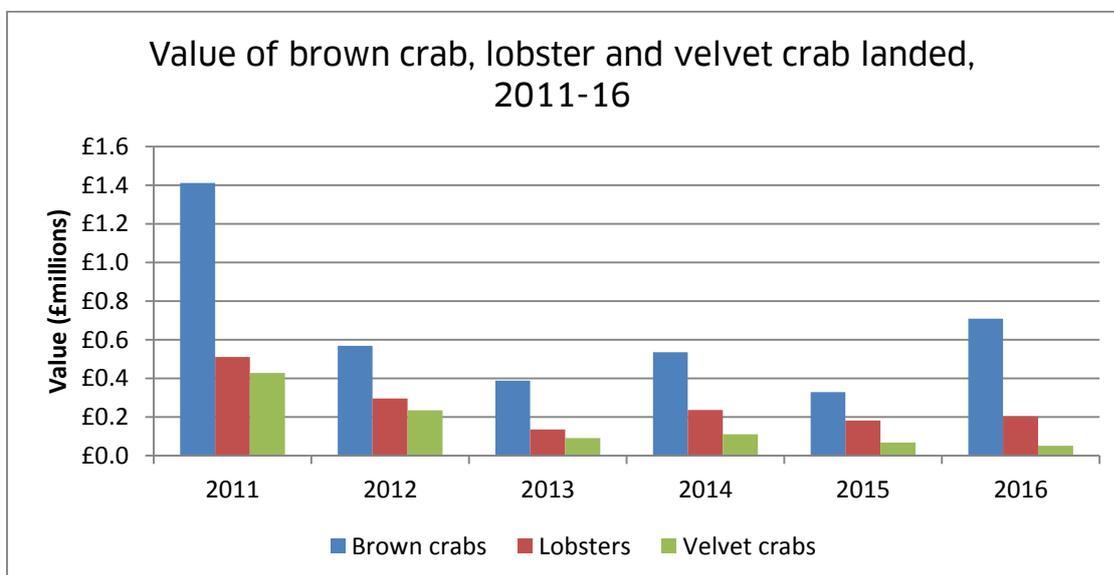


Figure 14 – Value of brown crabs, lobsters and velvet crabs landed by creel vessels from 41E3 and 42E3, 2011-16.

Brown crab landings from 41E3 and 42E3 during the proposed closed period of October to January make up a significant proportion of total landings each year, ranging from 37% to 50% during 2011-16.

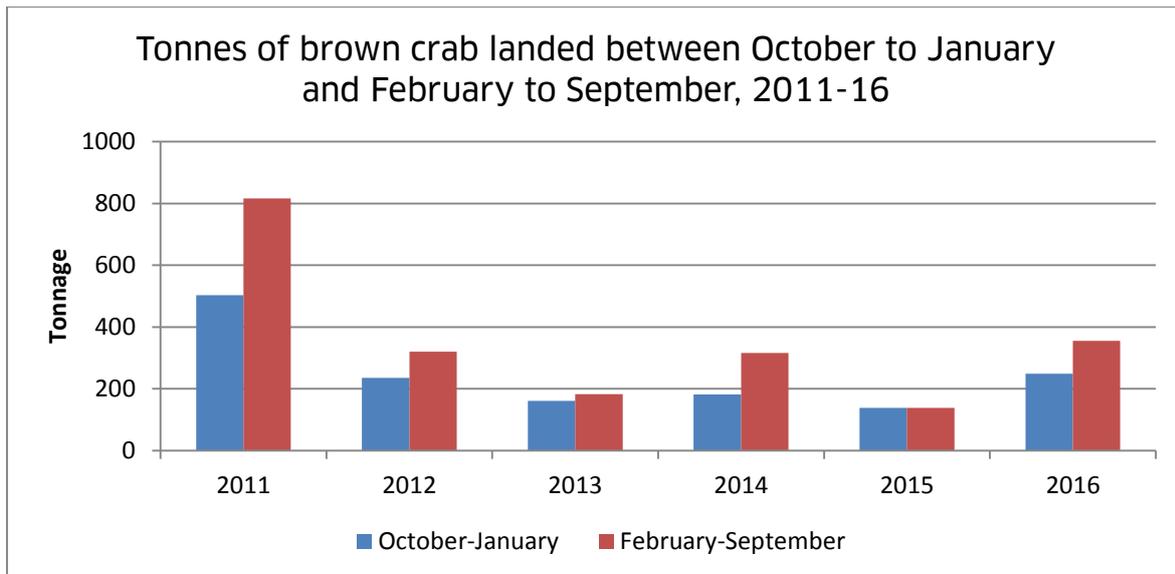


Figure 15 – Comparison of tonnage of brown crabs landed from 41E3 and 42E3 between October-January and February-September, 2011-16.

Questions

3. Do you agree that the pilot proposal for the Mull Crabbing Box should be taken forward by Marine Scotland as described?
4. What is your view on the possible impact, both positive and negative, of the introduction of a seasonal restriction on mobile gear activity in the area for the duration of the pilot?
5. What is your view on the possible impact, both positive and negative, of whether a seasonal restriction on the number of creels in the relevant area should be put in place for the duration of the pilot?

Proposal 3 – Orkney Scallop Fishery

A brief summary of the proposal. Please see the proposal form for more detail (<http://www.gov.scot/Resource/0052/00525816.pdf>)

Who has put forward the proposal

Orkney Fisheries Association (OFA).

The area to which the proposal would apply

The Orkney RIFG area (as indicated in the diagram below).

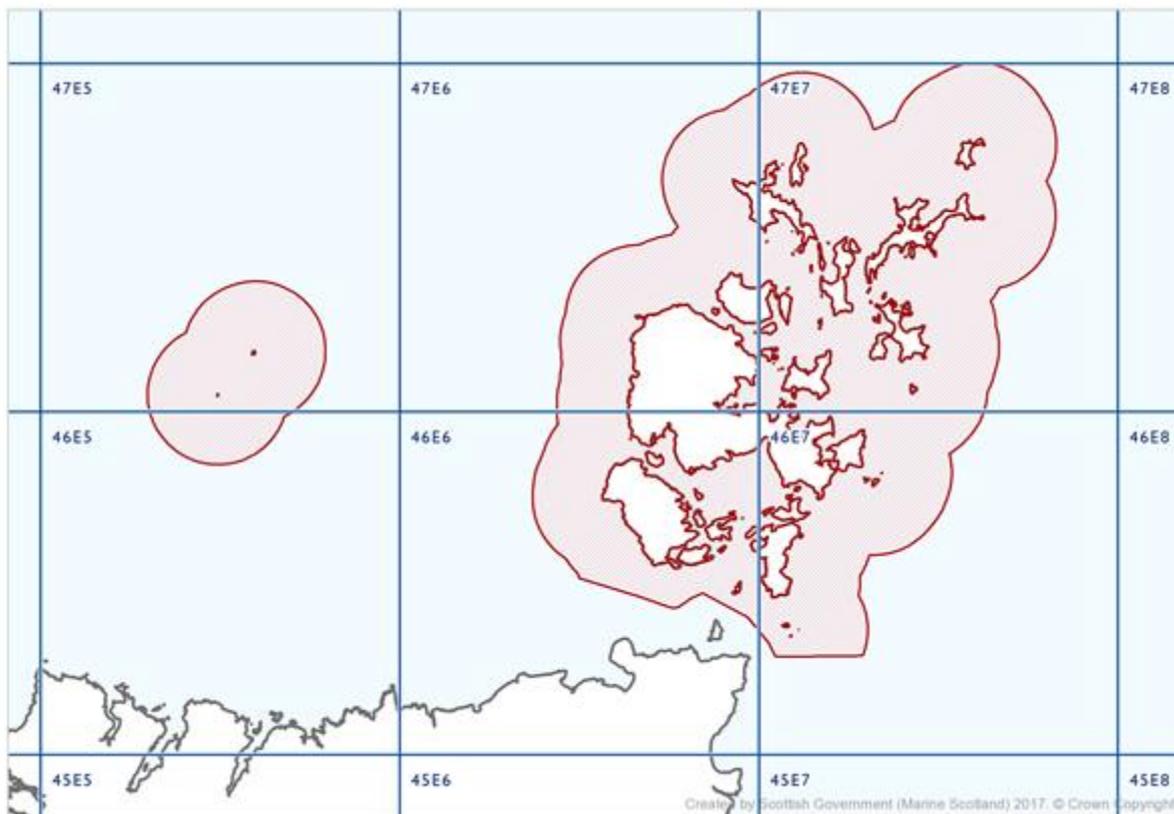


Figure 16 – Location of Orkney scallop management zone.

What changes would be brought into effect

The aim of the proposed pilot is to trial local management arrangements for scallops within 6 nautical miles (nm) of the Orkney Isles.

The management measures we seek views on are:

- A minimum landing size of 110 mm for king scallops landed into the Orkney Isles.
- Vessels fishing within 6 nm of the Orkney Isles cannot use more than a total of 10 dredges.

- Vessels of a length of 17 metres or more will not be permitted within 6 nm of the Orkney Isles.
- No vessel which is to be used to dredge for scallops may use or carry aboard more than two tow bars with a combined overall length – or a single tow bar or beam with an overall length including axles – of more than 6.20 metres, or more than a total of 10 scallop dredges or 2 x 4.4 metre beams within 6 nm of the Orkney Isles.
- A minimum landing size of 64 mm for queen scallops (*Aequipecten opercularis*) landed into the Orkney Isles.
- Vessels over 12 metres, with AIS or other electronic systems, must have their systems switched on at all times while within 8 nm of the Orkney Isles.

Changes from original proposal

Marine Scotland has amended some of the proposed management measures as set out in the Orkney Fisheries Association proposal form.

Firstly, a proposal that:

- *Vessels of a size normally rigged to carry more than 8 dredges per side and of a length of 17m or more will not be permitted inside 6nm of Orkney*

Has been amended to a simple restriction on vessels over 17 metres in length, following discussions with the proposers. We believe this change provides greater clarity over eligibility whilst still achieving the proposers aim of restricting vessels over 17 metres.

Similarly, a provision that

- *Vessels of a size and normally rigged for 8 dredges per side will be allowed to fish inside the management area but will be required to reduce their dredge numbers to 10 in total inside the management area.*

Has been removed as this duplicates a proposal that

- Vessels fishing within 6 nm of the Orkney Isles cannot use more than a total of 10 dredges.

Where restrictions are proposed on the size of scallops that vessels can carry aboard this has been amended to landing size provisions.

- Vessels fishing inside 6 nm of Orkney will not carry aboard any Scallops less than 110 mm in size

- No vessel trawling for queen scallops inside Orkney waters will carry aboard queen scallops of less than 64 mm in size.

This is to make the proposals both consistent with current arrangements elsewhere in Scotland, and consistent with other parts of the proposal form which refer to restrictions based on landing size.

The expected benefits

The proposers believe that the above measures would:

- Relieving fishing pressure – less gear weight on the benthic environment – less intensity of fishing.
- Informing future management considerations of inshore fishing – continued data gathering benefits and costs of measures and practicalities of implementation.
- Increasing the protection of the environment or fish stocks.
- Give evidence of the economic or market benefits of managing fisheries in a different way – build evidence and management resilience for Marine Stewardship Council (MSC) certification.

How changes will be monitored

The proposal suggests that:

- A monitoring group would be formed, comprising of representatives from participants in the pilot. This would include MS Compliance, MS Science, Orkney Sustainable Fisheries Ltd, and representatives of non-Orkney based fishing interests.
- A dedicated individual would monitor and record the progress of the pilot, taking information from all participants and reporting to the monitoring group.

Marine Scotland Estimation of Fishing Activity in the Area

Value of King Scallops Landed into Orkney

Figure 16 shows the total tonnage and value of king scallops landed into Orkney between 2011-16 (both dredged and dive caught). It shows higher values in 2015 and 2016, in terms of both tonnage and value landed, compared to 2011. Value has increased from under £800,000 in 2011 to nearly £1.2 million in 2016. During the period, 33 individual vessels recorded landings of king scallops into the area.

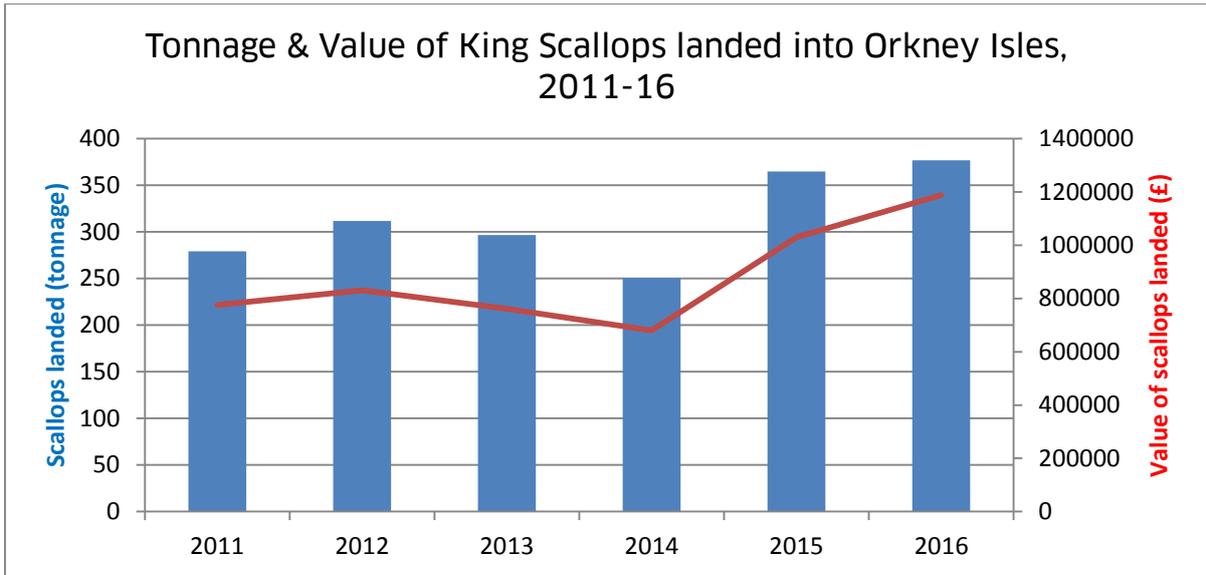


Figure 17 – Value & tonnage of king scallops landed into Orkney, 2011-16.

Value of scallops caught by vessels over 17 metres in length

Those most directly impacted by the proposal are those vessels over 17 metres in length that currently fish within 6 nm of the Orkney Isles. Using VMS data linked to landings from logbooks, it is possible to estimate the tonnage and value of landings from these vessels over recent years.

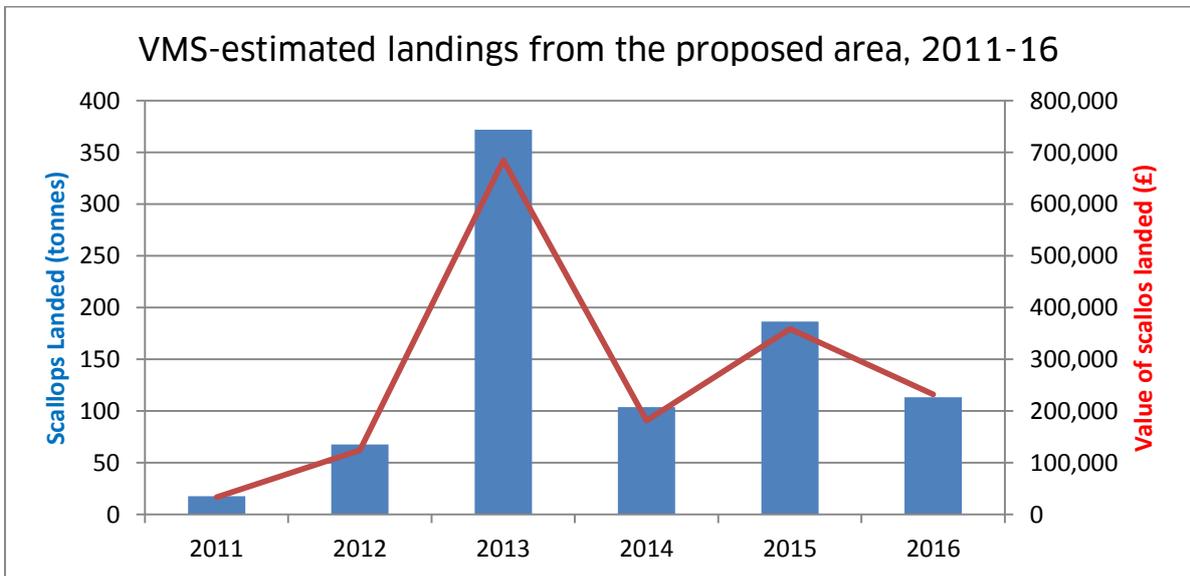
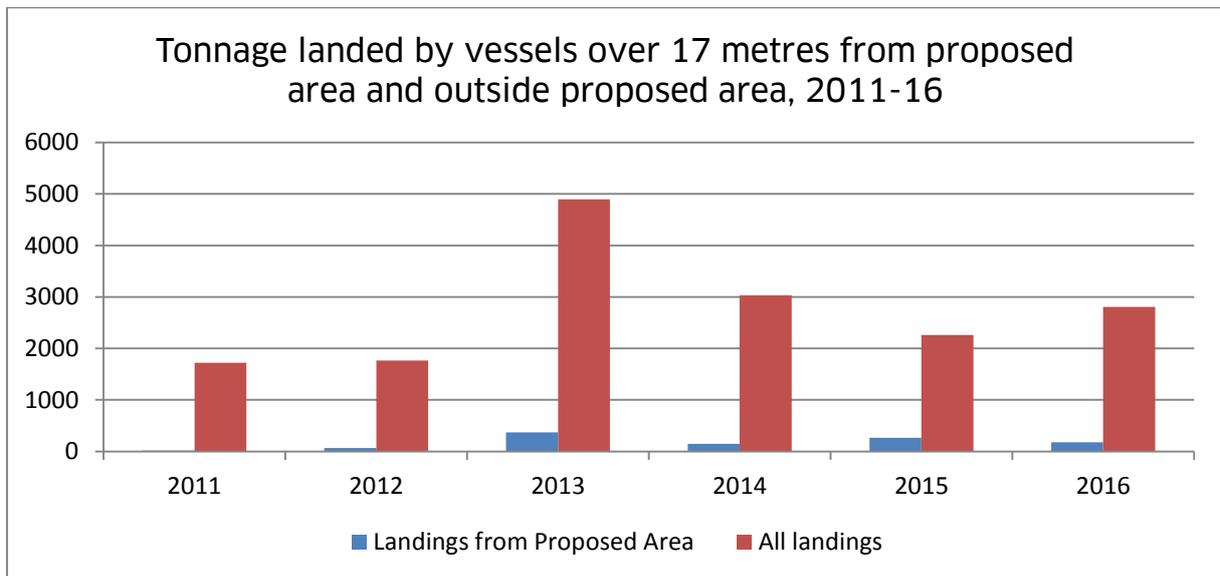


Figure 18 – Estimated value & tonnage caught by vessels over 17 metres in length within 6 nautical miles of Orkney, 2011-16.

Nineteen individual vessels over 17 metres in length recorded landings from within 6 nm of Orkney during the period 2011-16. The tonnage and value landed by these vessels fluctuates without trend as shown in Figure 18, from a low of 17.5 tonnes in 2011 to over 370 tonnes (and a value of £700,000) in 2013.

To give an indication of the relative importance of catches from the area by these 19 vessels, the graph below shows the tonnage landed by these vessels within and out with the proposed area.



Figures 19 – Estimated tonnage of scallops landed from proposed area and scallops landed elsewhere from vessels over 17 metres in length estimated to have had activity within the area, 2011-16.

Value of Queen Scallops Landed into Orkney

Figure 20 shows the tonnage and value of queen scallops landed into Orkney from 2011-16. It can be seen that the tonnage and value of queen scallops landed into the Orkney Isles is considerably lower than king scallops. The tonnage caught increases from one tonne at the start of the period up to 40 tonnes in 2016.

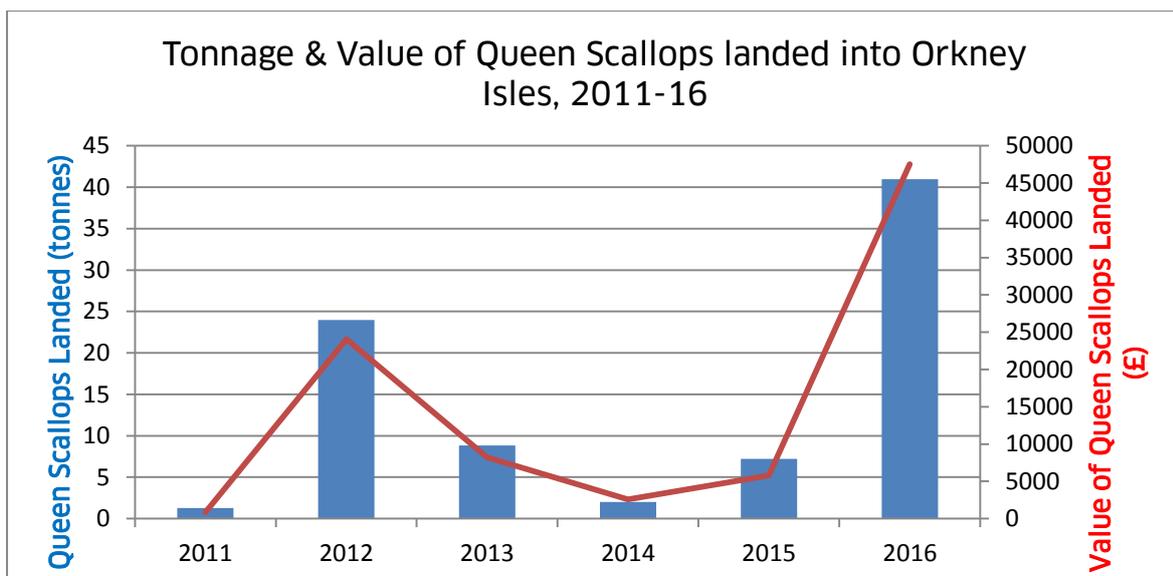


Figure 20 – Value & tonnage of queen scallops landed into Orkney, 2011-16.

Impact of Dredge Restrictions

Records held by Marine Scotland on the number of dredges used by vessels are incomplete, especially in relation to smaller inshore vessels. However, where records are held, they indicate that all vessels that have fished within the proposed area in the period 2011-16 with more than 10 dredges are over 17 metres in length and would therefore be ineligible to fish on the basis of vessel length.

Impact of increasing the Minimum Landing Size of King Scallops

Following a public consultation³, Marine Scotland increased the minimum landing size of king scallops to 105 mm in those areas of the sea where the landing size had previously been 100 mm (with the exception of the Shetland Isles). This size increase came into force from 1 June 2017.

Some of the RIFGs, including Orkney, have requested that a larger landing size of 110 mm be introduced for their area. Marine Scotland has committed to reviewing the 105 mm increase two years after introduction, in order to assess its impact and whether a further increase to 110 mm be introduced. Should this inshore fisheries pilot be implemented, the minimum landing size of scallops for Orkney would be increased to 110 mm to coincide with the commencement of the pilot.

In terms of the impact of increasing the minimum landing size to 110 mm, an estimate based on Marine Scotland Science market sampling data calculates that around 4% of landings into Orkney are below 110 mm⁴.

Due to a lack of data, we are unable to estimate the impact of increasing the minimum landing size of queen scallop from the current legal minimum size of 45 mm to 64 mm.

Questions

6. Do you agree that the pilot proposal for the management of scallops around the Orkney Isles should be taken forward by Marine Scotland as described?
7. What is your view on the possible impact, both positive and negative, of the introduction of a minimum landing size of 110 mm for king scallops landed into the Orkney Isles?
8. What is your view on the possible impact, both positive and negative, of restricting vessels to no more than 10 dredges in total when fishing for scallops within 6 nautical miles of the Orkney Isles?

³ Consultation on New Controls in the Scottish King Scallop Fishery 2014 - Outcome Report, <http://www.gov.scot/Publications/2015/07/4226>

⁴ A Review of the Scottish Scallop Fishery, Poseidon Consultants, <http://www.gov.scot/Resource/0045/00450683.pdf>

9. What is your view on the possible impact, both positive and negative, of prohibiting vessels of more than 17 metres from fishing within 6 nautical miles of the Orkney Isles?
10. What is your view on the possible impact, both positive and negative, of prohibiting vessels from using or carrying on-board more than two tow bars with a combined overall length, or a single tow bar or beam with an overall length of more than 6.20 metres, or more than a total of 10 scallop dredges or 2 x 4.4 metre beams within 6 nautical miles of the Orkney Isles?
11. What is your view on the possible impact, both positive and negative, of the introduction of a minimum landing size of 64 mm for queen scallops landed into the Orkney Isles?
12. What is your view on the possible impact, both positive and negative, of requiring that vessels over 12 metres in length, with AIS or other electronic systems, must have their systems switched on at all times while within 8 nautical miles of the Orkney Isles?

Proposal 4 – Outer Hebrides

A brief summary of the proposal. Please see the proposal form for more details (<http://www.gov.scot/Resource/0052/00525817.pdf>)

Who has put forward the proposal

Outer Hebrides Regional Inshore Fisheries Group.

The area to which the proposal would apply

The proposed area includes the waters stretching from Stornoway shore at latitude 58 11.00N south to Barra at latitude 56° 43.870N.

The Eastern boundary is the line, in the middle of the Minches, which separates the Outer Hebrides RIFG from the West Coast RIFG.

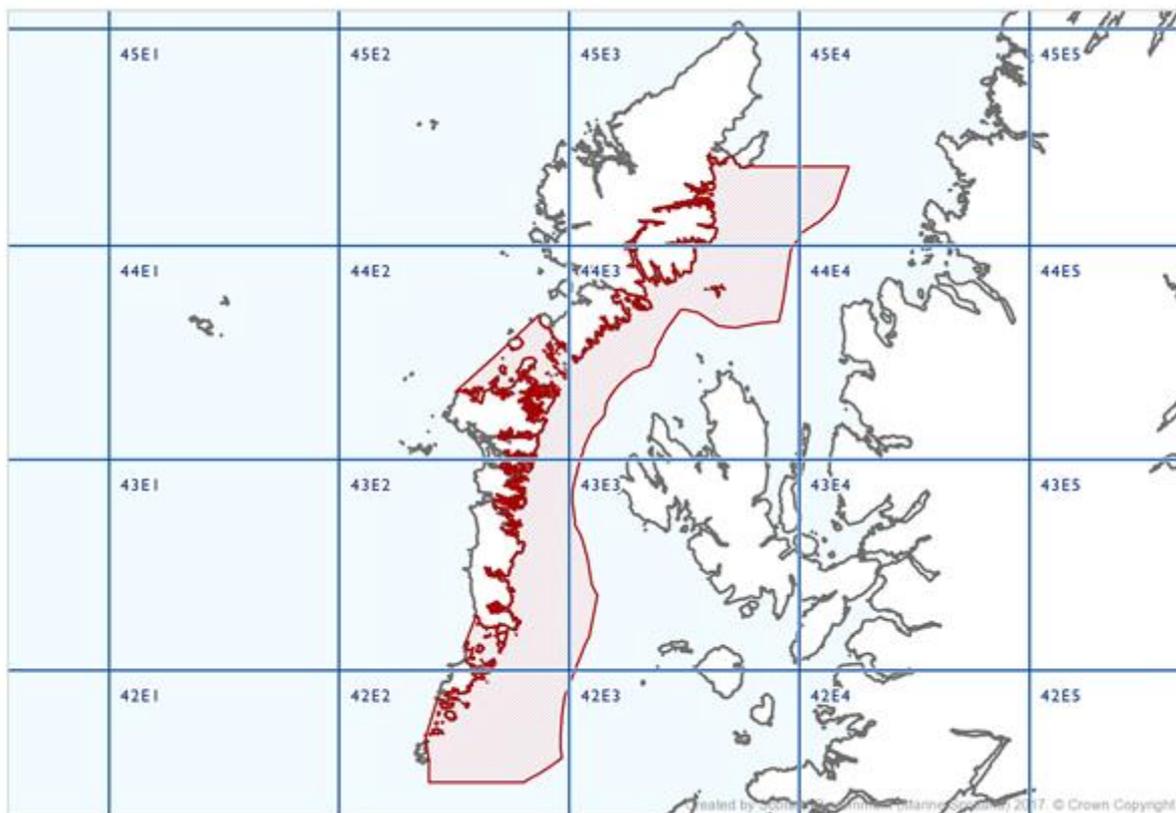


Figure 21 – Map of proposed Outer Hebrides Creel Limitation Area.

What changes would be brought into effect

A proposal to limit the number of creels that vessels may operate in the area identified above.

The management measures we seek views on are:

- All creels/pots set in the specified area must have an identification tag which will be unique to each vessel.

- All marker buoys set must have the vessel's name and registration number on each marker buoy.
- No vessel may haul another vessel's creels without firstly obtaining clearance from Marine Scotland Compliance.
- Creel limits to be set as per vessel size banding specified in the approved Fisheries Management Plan for the Outer Hebrides RIFG area. This is as follows:

Vessel Size	Maximum Number of creels permitted
Under 8 metres	800
Between 8 and 10 metres	1,200
Between 10 and 12 metres	1,500
Over 12 metres in length	1,800

Changes from original proposal:

Management Measure Proposed	Reason for Removal
Additional restriction on number of creels operated by unlicensed fishermen	Currently unable to limit the number of creels operated by unlicensed fishermen.
Restrictions on number of shellfish that unlicensed fishermen can retain on board and in storage.	New provisions covering catch restrictions for unlicensed fishermen introduced earlier this year
Additional limitation on permitted creel numbers based on crew number	Difficulties in verifying crew numbers.

The expected benefits

The proposers believe that the number of creels set in the inshore waters of the Outer Hebrides has been increasing year on year for the last 20 years. The proposed creel limitation area is from the east of Lewis south to Barra and is the most heavily fished static gear area in the Outer Hebrides RIFG area.

Specifically, the Outer Hebrides RIFG believe that the proposal would:

- Help reverse decreasing catch per unit effort rates. They believe that catch rates for the creel fisheries in the area have been declining and resulted in fishers setting more creels in order to maintain total catches.
- Help reduce gear conflict, which they believe is increasing. There would be less gear conflict between static gear and mobile gear vessels.
- Prevent gear being placed on the ground to stop others from fishing. It is believed that in some instances several thousand creels are being placed on the ground and hauled irregularly.

- Help improve health and safety. Concerns are expressed about the welfare of crews on creel vessels, especially the prolonged working hours of those on some vessels.
- Encourage the fishing industry to take a more responsible role in the management of the marine environment by taking an active role in the policing of creel restrictions.

How changes will be monitored

The Outer Hebrides RIFG suggests that the current logbook system be amended to ensure that accurate feedback is gained on the catch per unit effort used within the pilot area.

Marine Scotland Estimation of Fishing Activity in the Area

The creel sector is very important to the economy of the Outer Hebrides, providing employment throughout the island chain. In 2016, landings of creel-caught *Nephrops*, lobsters, brown crabs and velvet crabs into the Outer Hebrides were worth £5.5 million. The analysis below investigates the importance of these creel-caught species.

Value of Creel-caught *Nephrops* Fishery

Figure 22 shows the tonnage and value of creel-caught *Nephrops* landed into the Outer Hebrides between 2011-16. As can be seen, there is an increase in landings up until 2013, followed by a decrease from 2014 onward, but with the tonnage and value stabilising between 2015 and 2016.

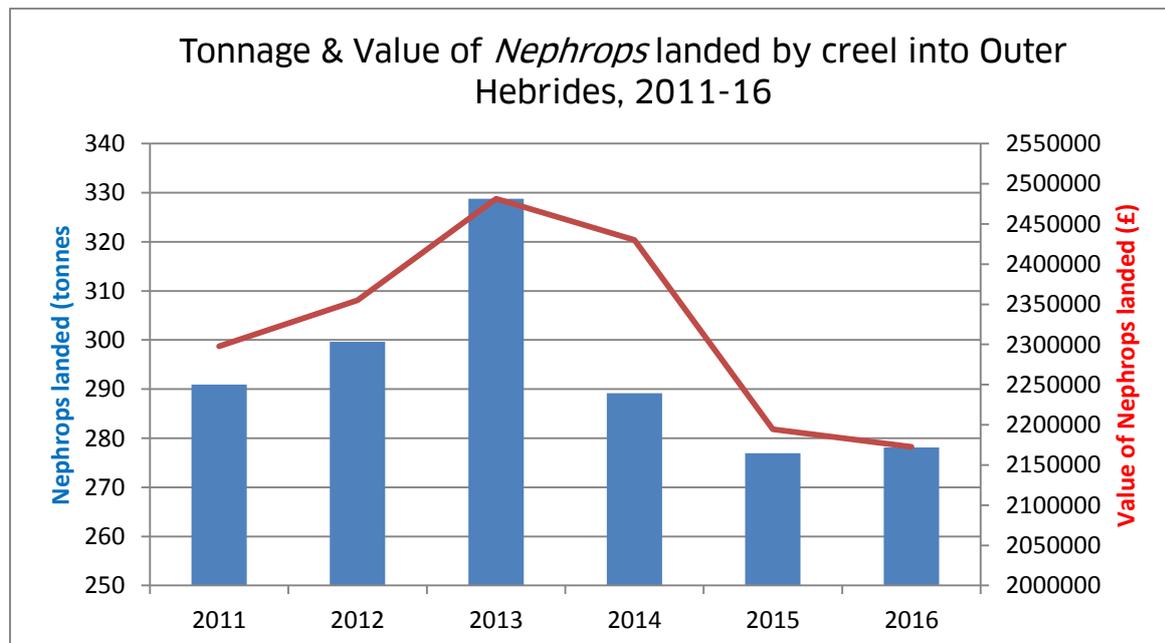


Figure 22 – Tonnage and Value of *Nephrops* landed by creel into the Outer Hebrides, 2011-16.

Value of Creel-caught Brown Crab Fishery

The tonnage and value of brown crab landed into the Outer Hebrides is broadly consistent throughout the period but with a marked increase between 2015 and 2016 in terms of tonnage and value.

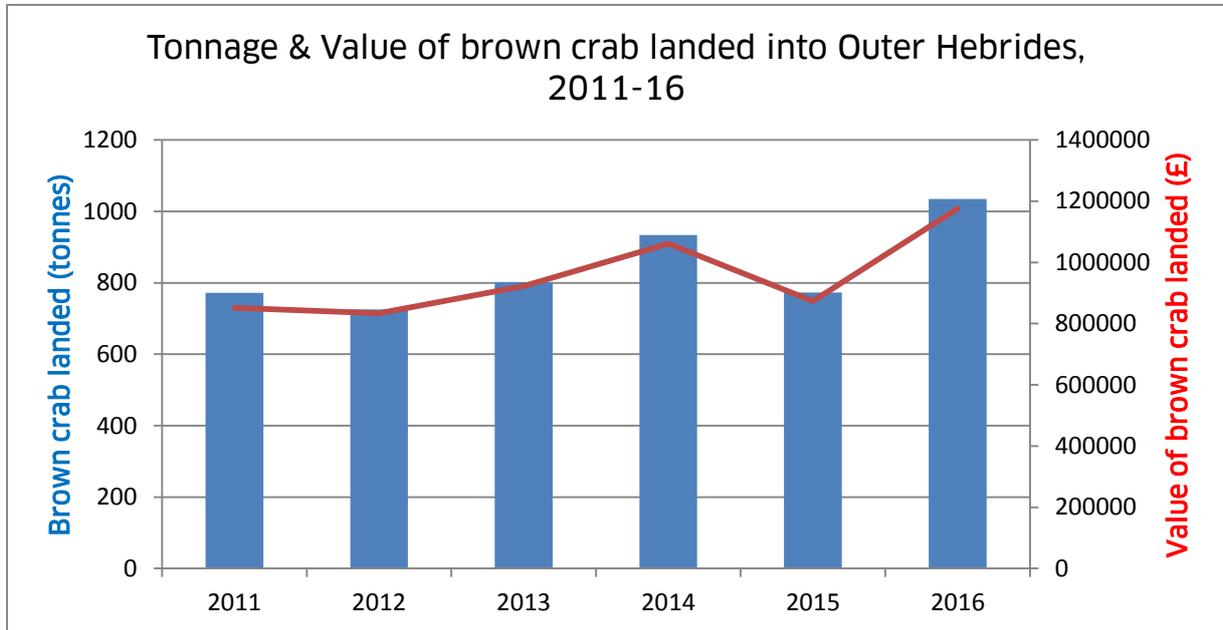


Figure 23 – Tonnage and Value of brown crab landed by creel into the Outer Hebrides, 2011-16.

Value of Creel-caught Velvet Crab Fishery

As with the brown crab fishery, the tonnage and value of velvet crab landed into the Outer Hebrides is relatively consistent throughout the period. While there is a small increase in the tonnage landed in 2016 relative to 2015, there is a greater increase in the value of the 2016 landings.

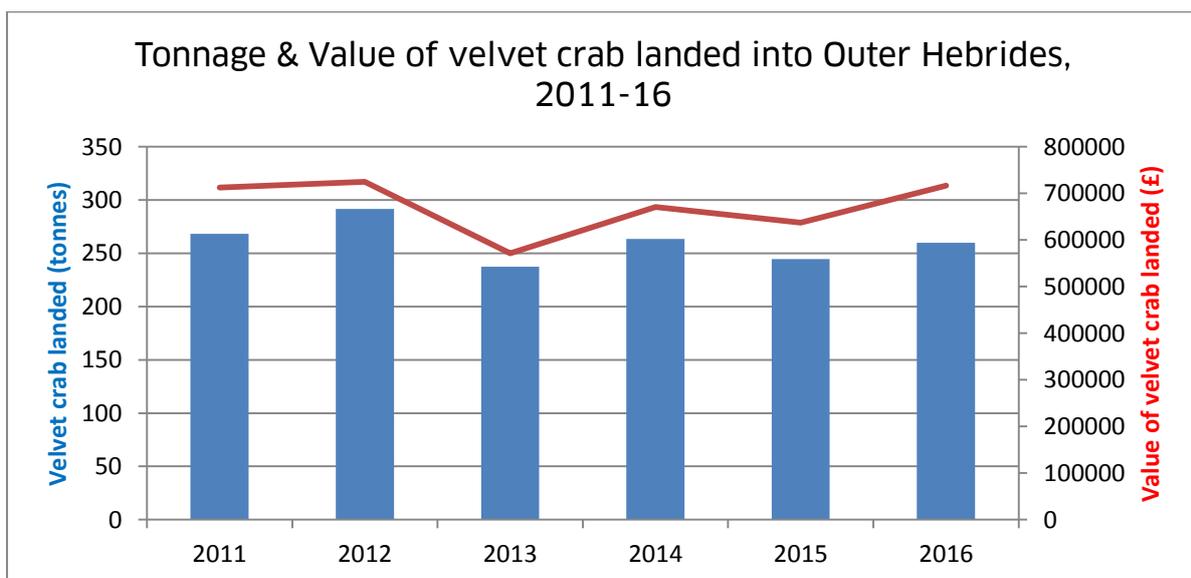


Figure 24 – Tonnage and Value of velvet crab landed by creel into the Outer Hebrides, 2011-16.

Value of Creel-caught Lobster Fishery

There is a greater fluctuation in the tonnage and value of lobster landed into the Outer Hebrides than for brown crab or velvet crab over the period, as shown in Figure 25.

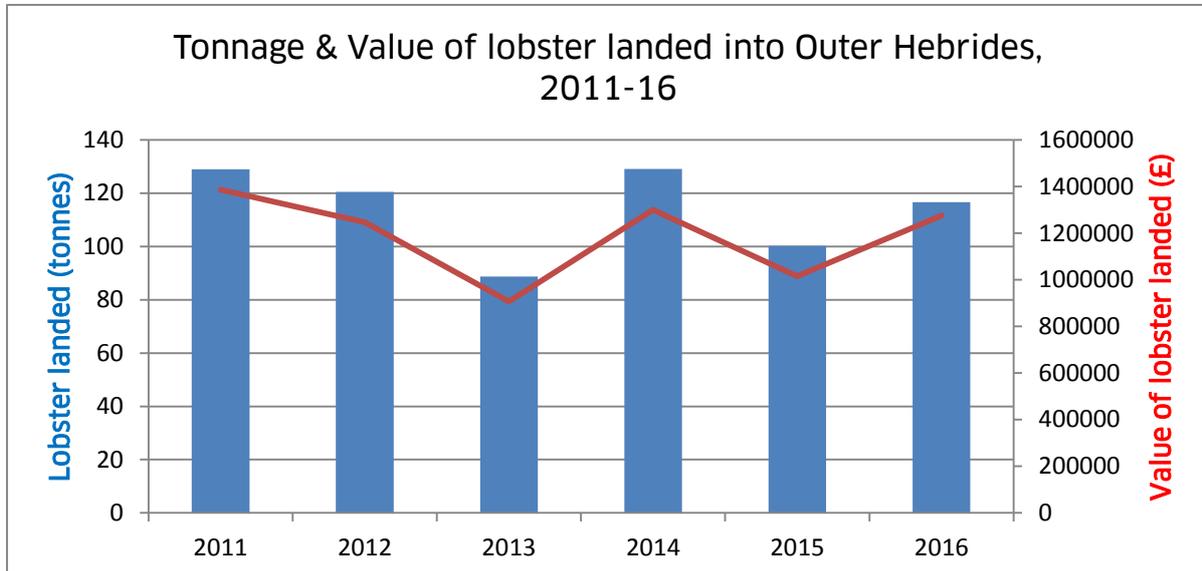


Figure 25 – Tonnage and Value of lobster landed by creel into the Outer Hebrides, 2011-16.

Questions

13. Do you agree that the pilot proposal for the management of creel numbers around the Outer Hebrides should be taken forward by Marine Scotland as described?
14. What is your view on the possible impact, both positive and negative, of limiting permitted creel numbers based on vessel size?
15. What is your view on the possible impact, both positive and negative, of requiring that all marker buoys set must clearly display the vessel's name and registration number?
16. What is your view on the possible impact, both positive and negative, of requiring that no vessel may haul another vessel's creels without first obtaining clearance from Marine Scotland Compliance?

Proposal 5 – Zonal Boxes

The Arbroath and Montrose Static Gear Association submitted a proposal for consideration that was aimed at protecting a locally-important creel fishery.

The proposal, as originally submitted, did not meet the criteria for inclusion in the consultation. However, after receiving further clarification on the details of the proposal, an interesting and innovative concept emerged which Marine Scotland believes warrants further investigation.

This concept involves the establishing of ‘zonal boxes’. These would be areas/zones of the sea where either static or mobile gear fishing activity would be permitted for a limited period of time, in reaction to local events.

For example, a seasonally-important squid fishery on the east coast can result in conflict between mobile and static gear fishermen (and similarly for vessels targeting scallops by dredge and creel fishermen in the area). This is due to the two sectors operating in the same area at the same time, but fishing for different species. It is envisaged that under the zonal box concept, access arrangements to portions of a particular area for each sector could be discussed and decided upon by fishermen through a local management group, for example a RIFG working group, and brought into effect. The restrictions would be time-limited and put in place as and where necessary.

Marine Scotland seeks views on selecting a location where the zonal box concept could be tested, either in the area of the sea identified by the Arbroath and Montrose Static Gear Association (see diagram below) or, indeed, elsewhere around the coast.



Figure 26 – Proposed site of the Arbroath and Montrose Static Gear Association zonal box area.

Questions

17. Do you support Marine Scotland exploring the concept of zonal boxes, where either static or mobile gear fishing activity would be permitted for a limited period of time?
18. Should this concept be explored in the Arbroath area as described?
19. Is there any other area of the coast you would recommend for exploring zonal arrangements?



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