

## Final Business and Regulatory Impact Assessment

### Title of Proposal

The Orkney Islands (Landing of Crabs and Lobsters) Order 2016

### Purpose and intended effect

- **Background**

The Inshore Fisheries Strategy was first launched by the Cabinet Secretary for Rural Affairs, Food and the Environment in 2012. One of its key objectives was to improve the management of Scotland's inshore fisheries (from 0 to 6 nautical miles) and continued support for Inshore Fisheries Groups (IFGs).

IFGs cover the entire Scottish mainland coast, Orkney and the Outer Hebrides. Their aim is to put commercial fishermen, assisted by government agencies and others with an interest in the marine environment, at the heart of developing initiatives for sustainable and profitable fisheries.

Part of the IFG Remit is the "development and implementation of measures designed to better conserve and sustainably exploit stocks of shellfish and sea fish". IFGs have taken forward a number of projects into the sustainability of their local fisheries and are now approaching Marine Scotland to implement legislative measures to protect these stocks.

Orkney Sustainable Fisheries Ltd (OSF) is recognised by Marine Scotland as the IFG for the Orkney area. OSF was established as a Company Limited by Guarantee in 2006 with the aim of running the Orkney Lobster Hatchery and taking forward various other initiatives relating to the sustainability of the local shellfisheries. OSF has representatives from all local fisheries sectors as members and directors, with directors being recruited through an open and widely-advertised process.

As part of fulfilling its remit, OSF developed new management measures for Orkney's inshore shellfish fisheries. After reaching consensus among its membership and the wider Orkney inshore fishing community, OSF formally requested that Marine Scotland consult on these proposals.

Following a consultation held from 20 February 2015 to 15 May 2015, The Orkney Islands (Landing of Crabs and Lobsters) Order 2016 will now bring these measures into force.

- **Objective**

The objective of the legislation is to introduce management measures that will afford additional protection for Orkney's commercial shellfish stocks, above those already in effect.

A minimum landing size (MLS) is designed to prevent the landing of juvenile individuals of a species, allowing a proportion of them to grow and reproduce before they can be legally caught. The majority of Scotland's commercial fish stocks have a MLS (now referred to as a minimum conservation reference

size) set at an EU level by Council Regulation (EC) No 850/98.

Member States are able to go beyond these measures, or introduce new measures for local stocks not covered by existing EU regulations, for conservation and management purposes. In the UK, the MLS for lobster and velvet crab are set by the Undersized Lobsters Order 2000 and Undersized Velvet Crabs Order 1989 respectively.

Marine Scotland Science performs regular assessments of Scotland's fish stocks. The results of the most recent assessments of Orkney's velvet crab and lobster stocks have shown that both are currently fished at levels close to or above the  $F_{MSY}$  proxy.  $F_{MSY}$  is the fishing mortality consistent with the largest average yield that can continuously be taken from a stock under prevailing environmental conditions.

The current management advice from Marine Scotland Science is that a higher yield and biomass in the long term could potentially be obtained by reducing the level of fishing mortality (effort) on stocks that are fished above  $F_{MSY}$ .

- **Rationale for Government intervention**

Orkney's fishing industry depends on shellfish. In 2013, over 99 per cent of the area's landings were shellfish, valued at almost £7.3 million. The species which were the subject of the consultation – lobster, velvet crab and green crab – account for over a third of this value at £2.5 million.

By introducing management measures that will help to reduce the fishing mortality and increase the long-term average yield from the fishery, the Scottish Government will be supporting local management initiatives which can contribute positively to the management of the stocks and the economic returns from the fishery.

This contributes to the Scottish Government's National Performance Framework objective of valuing and enjoying our built and natural environment and protecting it and enhancing it for future generations.

## Consultation

- **Within Government**

Discussions took place with Marine Scotland Compliance, Marine Scotland Science and the Scottish Government Legal Directorate as part of the internal pre-consultation process.

- **Public Consultation**

A public consultation on the proposed management measures was held from 20 February 2015 to 15 May 2015. A total of 46 responses were received, with each of the proposals receiving majority support.

While the consultation proposed staggering the MLS increase for lobster to 90 mm over three years, a number of respondents argued for a shorter timescale – either immediate or staggered over one year instead. Following further discussion with industry post-consultation, it was agreed to introduce the new MLS through an immediate increase to 88 mm and then a further increase to 90 mm one year thereafter.

The possibility of a restriction on the carriage of shellfish below MLS was also consulted on but it has been decided that one should not be introduced at this point in time. The option will be kept under review and its implementation explored in the future if deemed necessary

The consultation paper and outcome report are both available on the Scottish Government website.

- **Business**

OSF developed the proposals that were consulted on, and gained a consensus among its membership and the wider Orkney inshore fishing community before approaching Marine Scotland.

OSF's board is representative of the local fisheries sector, including fishermen, merchants and a processor.

## Options

- **Option 1 – Do Nothing**

Maintain the current management arrangements for Orkney's shellfish stocks.

- **Option 2 – Introduce new management measures**

- Increase the minimum landing size (MLS) for velvet crab from 65 mm to 70 mm carapace width
- Increase the MLS for lobster from 87 mm to 88 mm carapace width, then to 90 mm one year thereafter
- Introduce a MLS for green crab of 70 mm carapace width
- Prohibit the landing of berried velvet crab caught in the six nautical miles around Orkney

## **Sectors and groups affected**

Licensed fishermen, fish merchants and fish processors in Orkney will be those most directly affected by the introduction of new management arrangements. Marine Scotland Compliance, who will be responsible for the enforcement of these arrangements, will also be directly affected.

## **Costs and Benefits**

- **Option 1 – Do Nothing**

### Benefits

Orkney fishermen can continue to land lobster, velvet crab and green crab that comply with existing fisheries legislation.

### Costs

- Assessments carried out by Marine Scotland Science show that the velvet crab and male lobster stocks around Orkney are fished above the  $F_{MSY}$  proxy. If these stocks continue to be fished at this level, the yield and the economic returns from the fishery will be less than could be achieved.
- The green crab stock in Orkney will continue to be fished without any form of stock management in place.

- **Option 2 – Introduce new management measures**

### **Velvet crab**

#### Benefits

Stock assessments carried out by Marine Scotland Science show that both male and female velvet crab are fished above  $F_{MSY}$  in Orkney. Increasing the MLS from 65 mm to 70 mm carapace width will allow those newly-undersized individuals – 30% of current annual landings, according to sampling done by Marine Scotland Science – the opportunity to grow and reproduce before being caught, potentially increasing the stock's long term yield and biomass.

As velvet crab of 65-69 mm carapace width can grow on average by 13-16 mm and by 24% in weight per year, those newly-undersized individuals that could no longer be landed in year one would grow large enough to be landed in the subsequent year.

If the 30% of annual landings that are currently under 70 mm were allowed a year to grow by 24% before being caught, this would increase the tonnage of the following year's landings by an estimated 7.2%. As velvet crab over 70 mm can be worth up to £0.50/kg more than the average market price, this would mean additional annual value of over £300,000, based on 2013 prices.

Prohibiting the landing of berried velvet crabs will also provide additional protection to mature individuals and could increase the reproductive potential of the stock.

### Costs

Increasing the MLS from 65 mm to 70 mm carapace width would mean a 30% decrease in tonnage landed in the first year after being introduced. As velvet crab under 70 mm are worth up to £0.50/kg less than the average market price, this would mean a one-off reduction in the value of landings of £329,000, based on 2013 prices.

### **Lobster**

#### Benefits

Stock assessments carried out by Marine Scotland Science show that male lobster is fished above  $F_{MSY}$  and female lobster is fished at  $F_{MSY}$  in Orkney. Increasing the MLS from 87 mm to 90 mm carapace length will allow those newly-undersized individuals – 19% of current annual landings, according to sampling done by Marine Scotland Science – the opportunity to grow and reproduce before being caught, potentially increasing the stock's long term yield and biomass.

As lobster of 87-89 mm carapace length can grow on average by 7.7-9.0 mm and by 11.25% in weight per year, those newly-undersized individuals that could no longer be landed in year one would grow large enough to be landed in the subsequent year.

If the 19% of the annual landings that are currently under 90 mm were allowed a year to grow by 11.25% before being landed, this would increase the tonnage of the following year's landings by an estimated 2.1%. This would mean additional annual value of nearly £24,000, based on 2013 prices.

#### Costs

Increasing the MLS from 87 mm to 90 mm carapace length within one year would mean an immediate 19% decrease in tonnage landed, which would result in a one-off reduction in the value of landings of £210,000, based on 2013 prices.

A staggered introduction (1 mm increase in the first year, followed by a 2 mm increase in the second year) will instead result in reduced tonnage/value of 18.3% / £203,000, spread over a two year period. This is because lobster that cannot be landed in each year of a staggered introduction will grow in size and weight to meet the new MLS and be landed in the subsequent year.

### **Green crab**

#### Benefits

There is currently no MLS for green crab. Landings in Orkney are not routinely sampled and green crab achieves the same market price irrespective of size. OSF estimates that 30% of green crab landed is under 70 mm. Introducing a MLS for green crab would afford new protection to the spawning stock, along with an increase in weight, and could help to ensure a consistent market price in subsequent years.

### Costs

An estimated decrease in green crab landings of 30% in the first year following the introduction of a 70 mm MLS would result in a one-off reduction in the value of landings of £26,000, based on 2013 prices.

### **Scottish Firms Impact Test**

The management measures originated from within the Orkney fishing industry by Orkney Sustainable Fisheries Ltd, who act in the capacity of Inshore Fisheries Group for the area. OSF developed the proposals that were consulted on with the intention of improving the sustainability of key local shellfish stocks.

OSF's board is representative of the local fisheries sector, including fishermen, merchants and a processor. OSF first reached consensus on the proposals among its membership and the wider Orkney inshore fishing community before approaching Marine Scotland to consult on their behalf.

### **Competition Assessment**

The management measures are not expected to result in any negative impact on competition. The measures will apply to all Scottish and other British fishing boats landing into the Orkney Islands.

### **Test run of business forms**

No new business forms will be introduced.

### **Legal Aid Impact Test**

The proposed new management measures have been discussed with the Scottish Government Access to Justice Team, who have agreed that they should have no impact on the legal aid fund.

### **Enforcement, sanctions and monitoring**

Marine Scotland Compliance is responsible for the monitoring and enforcement of marine and fishing laws. Fishery Officers have the power to perform inspections of fishing vessels at sea or in ports, fish markets and processing factories, in order to ensure compliance with legislation. Where a breach of fisheries regulations has been detected, it will be reported as appropriate to the prosecuting authorities. This can result in a fine of up to £50,000.

### Implementation and delivery plan

The management measures will be introduced through new secondary legislation, using the powers conferred by the Sea Fish (Conservation) Act 1967. The Orkney Islands (Landing of Crabs and Lobsters) Order 2016 will come into force from 7 March 2016.

- **Post-implementation review**

Marine Scotland will monitor the impact of new management arrangements on the Orkney fishing industry, and consider any practical or unforeseen consequences should they arise. Any areas of concern are likely to become quickly apparent through representations made by local fishing interests (either individually or through OSF), the Inshore Fisheries Management and Conservation (IFMAC) group, or Marine Scotland Compliance.

### Summary and recommendation

Marine Scotland recommends Option 2. Introducing new management measures for Orkney's lobster, velvet crab and green crab stocks will help to reduce the fishing mortality and potentially increase the long term average yield and recruitment to the fishery. These are conservative measures that can contribute positively to management of the stocks and economic returns from the fishery.

- **Summary costs and benefits table**

<b>Option 1 – Do Nothing</b>	
Total benefit per annum: - economic, environmental, social	Total cost per annum: - economic, environmental, social - policy and administrative
Maintaining the current management arrangements for lobster, velvet crab and green crab would allow fishing to continue as before.	No additional policy or administrative costs are associated with maintaining the status quo. Continued fishing at a rate above $F_{MSY}$ implies less than maximal yield and income from the fishery in the long term, and associated environmental and social costs.
<b>Option 2 – Introduce new management measures</b>	
Total benefit per annum: - economic, environmental, social	Total cost per annum: - economic, environmental, social - policy and administrative
Increasing MLS for lobster & velvet crab and introducing a MLS for green crab will afford those newly-undersized individuals further opportunity to grow and reproduce before being harvested, potentially reducing fishing mortality and increasing long term yield from the stocks.  The growth rates (size and weight) for lobster and velvet crab mean the proposed MLS increases could add an additional total	Introducing new management measures for lobster, velvet crab and green crab will lead to a one-off decrease in the tonnage of each species that could be landed, estimated as follows:  <ul style="list-style-type: none"> <li>– 18.3% for lobster over a two year period</li> <li>– 30% for velvet crab over a one year period</li> <li>– 30% for green crab over a one year period</li> </ul>

tonnage of 2.1% and 7.2% to their respective fisheries in the longer term.

Prohibiting the landing of berried velvet crabs will provide additional protection to mature individuals and increase the reproductive potential of the stock.

**Declaration and publication**

I have read the Business and Regulatory Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

**Signed:**

**Date:**

**Richard Lochhead**  
**Cabinet Secretary for Rural Affairs, Food and the Environment**

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