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Consultation on Proposed Sites to Host Inshore Fisheries Pilots 2017

Outcome Report

marinescotland

CONTENTS

EXECUTIVE SUMMARY

This document provides an analysis of responses and outcome to the 'Consultation on Proposed Sites to Host Inshore Fisheries Pilots 2017'. A copy of the consultation can be found at https://consult.gov.scot/marine-scotland/inshore-fisheries-pilots-2017.

The consultation sought views on which pilots Marine Scotland should introduce in order to explore alternative approaches to managing inshore fisheries.

Summary of responses

There were 122 responses to the consultation. A broad cross-section of stakeholders were represented; from those whose living is dependent on fishing, to environmental groups, local authorities and interested individuals.

Outcome

Following consideration of how consistent the proposals were with the criteria set out in the proposal form guidance and the responses received to the consultation, Marine Scotland will move to put in place the following pilots:

- A seasonal restriction on mobile gear fishing near Mull
- A restriction on creel numbers in the Outer Hebrides
- Zonal fishing management in the waters off Arbroath and Montrose

The proposed pilots in the Inner Sound of Skye and Orkney will not be introduced as a result of this exercise.

INTRODUCTION

This report summarises feedback to questions posed in the consultation and provides Marine Scotland's response to each pilot proposal, taking into account: consistency with the criteria set out in proposal form guidance, consultation feedback and wider considerations.

Marine Scotland issued the Consultation on Proposed Sites to Host Inshore Fisheries Pilots 2017 on 30 November 2017 and the consultation closed on 22 February 2018.

Background to the Consultation

At the core of the Inshore Fisheries Strategy 2015[1], is a commitment to improve the evidence base on which fisheries management decisions are made, streamline fisheries governance and promote stakeholder participation. These pilots will help us to achieve these aims.

In July 2017, Marine Scotland invited proposals from the commercial fishing sector for areas to be considered under the Inshore Fisheries Pilots initiative. As a result of that process, seven proposals were received.

To see these proposals please go to http://www.gov.scot/Topics/marine/Sea-Fisheries/InshoreFisheries/InshoreFisheriesPilots. The proposal form guidance, which includes the criteria against which pilots were to be selected, is also contained on this site.

Following a review of the proposals and further discussions with proposers, Marine Scotland brought forward five different proposals for public consultation due to their practical application and being most in line with the stated aims of the initiative.

These proposals cover:

- The Inner Sound of Skye
- The Isle of Mull
- The Orkney Isles
- The Outer Hebrides
- Arbroath and Montrose

Format of the Consultation

Each of the proposals was explored in turn in the consultation document. For the proposals originating from the Inner Sound of Skye, Mull, Orkney Isles and the Outer Hebrides, the following was outlined **based on information from the proposal forms**:

[1] Inshore Fisheries Strategy 2015 http://www.gov.scot/Topics/marine/Sea-Fisheries/InshoreFisheries/InshoreFisheriesStrategy

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

For Arbroath and Montrose we outlined the aspect of the proposal selected for further investigation.

Respondents to the consultation

There were 122 responses[2] to the consultation. These consisted of 95 private individuals (78%) and 27 organisations (22%). Respondents break down by type as follows:

Respondent Type	Number	%
Private individual	95	78%
Fishermen's association	9	7%
Catcher / Processor	3	2%
Inshore management group	3	2%
Environmental organisation	2	2%
Local Authority	2	2%
Producer Organisation	2	2%
Other	6	5%
Total	**122**	**100%**

Data used in this Outcome Report

This outcome report uses data collated by Marine Scotland Compliance from sales notes and EU logbooks that is held in the Fisheries Information Network (FIN) database. It also uses records from the iFISH database and VMS data from vessels to give additional information on activity. It is important to note that any landings data used for 2017 are provisional.

Format of the Outcome Report

In this report we examine each of the proposals in turn, analysing the responses received and identifying supportive and unsupportive groups (where possible).

Themes in responses are then examined, placing particular emphasis on recurrent themes in answers.

Finally, for each section we state whether the proposal will be introduced as a pilot, having considered how consistent the proposal is with the criteria set out in the proposal process and consultation responses.

[2] Two individuals responded twice. They are only counted once in this number.

ANALYSIS OF CONSULTATION RESPONSES

PROPOSAL 1: THE INNER SOUND OF SKYE

This proposal involves extending the current six month restriction on mobile gear fishing in the southern Inner Sound to a full 12 month closure. The full proposal form can be viewed at http://www.gov.scot/Resource/0052/00525812.pdf and an overview is provided in the consultation document.

The consultation document asked two questions in relation to this proposal (Questions 1 and 2).

Question 1: Do you agree that the pilot proposal for the Inner Sound of Skye should be taken forward by Marine Scotland as described?

There were 85 responses to this question, with 43 respondents (50.5%) expressing support for the proposal and 42 respondents (49.5%) opposing it.

Supportive groups included: representatives of static gear fishermen in the area (the North West Responsible Fishermen's Association and the Scottish Creel Fishermen's Federation), the environmental group Open Seas, a local community council and the Coastal Producer Organisation Limited. There were individual responses from creel and scallop dive fishermen active in the area and individuals with an interest in the area.

Those not supportive included: the Ross, Sutherland, Skye and Lochalsh Fishermen's Association, the West of Scotland Fish Producers Organisation, the Western Isles Fishermen's Association and WWF Scotland. Individuals who responded 'no' to this question tended to be associated with the mobile gear sector of the fishing industry.

Themes from supportive responses

I. Environmental Benefits

Respondents to the consultation placed a clear emphasis on the potential environmental benefits of prohibiting mobile gear fishing in the area for the duration of the trial.

"As a creel fisherman, I believe that trawled Nephrops represent an in-efficient use of the limited stock in inshore fisheries, due to their lower value, and the indiscriminatory nature of trawling which is grossly damaging to the marine ecosystem, especially in inshore waters." [Individual response]

"We have serious concerns about the ongoing environmental damage caused by bottom trawling and dredging in our inshore seas. We therefore aspire to see a better management system in place to protect vulnerable seabed, and avoid fishing patterns that involve high bycatch rates – particularly of rare, threatened and protected species and juveniles… we do consider this proposal to be an appropriate way to pilot the approach and evidence the benefits." [Open Seas]

II. Economic Benefits

Another clear theme from responses was the belief that prohibiting the use of mobile gear in the area would deliver economic benefits both to fishers themselves and the wider community.

"The area around the Inner Sound is composed of many communities which have marginal school rolls, modest employment opportunities and in many cases declining populations, the ability of Nephrops creel fisheries to provide employment at least a 4:1 rate as compared to Nephrops trawl would appear to suggest that employment opportunities would be significantly better if the Inner Sound Nephrops fisheries were exploited exclusively with static gears. We believe that this pilot will demonstrate that is indeed the case." [Scottish Creel Fishermen's Federation]

"This is an opportunity to let the small creel boat operators thrive again. By removing trawlers, prawn stocks can recover creating jobs and retaining economic benefits within small fragile communities." [Individual response]

III. Gear Conflict

A common conclusion from those associated with the static fishing industry was that the pilot would result in a decrease of gear conflict in the area. Responses highlighted the cost to static gear fishermen of gear conflict both in terms of the costs to replace fishing equipment and lost fishing opportunity.

"The fishermen of the Inner Sound have experienced severe gear conflict between mobile and static gear for many years, which has not been resolved despite several efforts at mitigation and conflict resolution. This gear conflict leads to significant financial losses for the creel vessels/skippers when gear is towed away or damaged, often with impunity." [Individual response]

"Accordingly it is our contention that if the Inner Sound were freed from its annual cycle of gear conflict its fishermen would be able to enjoy a level of security that they and most other static gear fishermen have been deprived of for many years." [Scottish Creel Fishermen's Federation]

IV. Other positive benefits

Also highlighted in responses, but to a lesser degree, was the ability of this proposal to inform future management, and to compensate for the reduction in creel fishing grounds arising from the recent extension of the British Underwater Test and Evaluation Centre (BUTEC), which is a military testing facility in the Inner Sound.

Themes from opposing responses

I. Economic impact

The economic impact of prohibiting mobile gear vessels from the Inner Sound of Skye was emphasised by opponents, particularly responses from individuals who claimed to fish in the area.

“As someone who has been brought up in this area and spent ALL my working days fishing out of this area, I think it would be a retrograde step. It would affect my ability to remain viable, my ability to retain my 2 local crewmen and would instead lead to a very exclusive little club.” [Individual response]

“I currently have 4 full time crew and 3 seasonal. In April I employ more crew on a casual basis as once the "closed areas" are open its essential to make up the losses we endure out of season, it's the only way we can make a living. Without the ability to fish the Inner sound my livelihood and that of the crew would cease.” [Individual response]

II. Health and Safety

Another recurrent view in opposing responses was the negative impact that the proposal could have in terms of health and safety of vessels and crews, prohibited from fishing in the sheltered waters as part of the pilot.

“I've been a fisherman for 30 years, 20 years skippering boats. The vast majority of that time has been in the waters local to Skye. The local fleet of under 12m boats rely heavily on these small sheltered pockets of water to safely fish in poor weather. Access in the "open season" is crucial to balance out the closed months when we are stormbound and cannot safely fish elsewhere.” [Individual response]

III. Displacement of Fishing Effort

Displacement was also identified as a negative impact by those opposed. Many stated that fishing effort would be transferred to other grounds and subsequently increase the environmental footprint of fishing in these areas. Aligned to this in many opposing responses was that fishing opportunities had reduced recently in other areas of the west coast (particularly as a result of environmental designations).

“Closing the area to all mobile vessels would result in displacement of mobile effort into other areas which could cause additional interaction in other areas of the West Coast.” [Western Isles Fishermen’s Association]

“Mobile gear vessels are already being restricted by the increasing amount of MPAs appearing around our coast, further restrictions are not necessary.” [Individual response]

IV. Environmental Impact

Many responses questioned the proposed environmental benefits of prohibiting mobile gear fishing and called for greater control of creel fishing. An example often given was the Torridon 'creel box' where mobile gear fishing was prohibited, which respondents believed demonstrated a negative impact of creel only fishing.

"I am afraid greed has taken over with the creel men who are intent in destroying their own fishery and future. Just like what they've done to Loch Torridon already where they got their total trawling ban now just a barren wasteland now due to complete unrestricted greed driven creels fishing." [Individual response]

"Creel fishing isn't as sustainable it is made out, due to the non movement of fleets of creels which catches prawns and those fleets are moved a matter of metres before being reshot into the water, I have seen and done this myself on vessels as when creel boats buy more and more creels, they even close off grounds to themselves as they are scared to move a fleet more than they have to in case another vessel moves into grounds recently vacated." [Individual response]

V. Shared access / management

Other responses called for greater communication between the different sectors targeting the fishery or stated that current arrangements worked well.

"Having this area closed to trawlers for 6 months is a Benefit for trawlers and static gear fisherman, proper management does not mean banning fisherman doing their jobs, we agree with management but it's got to be done with the right purpose in mind." [Lochfyne Langoustines Ltd]

Question 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?

Question 2 explicitly asked for views on the impact of the proposed management measure, both positive and negative. There was a strong overlap with responses to Question 1 and the same themes were prevalent.

Positive Impacts

I. Environmental

The main positive impact cited in responses was that of a positive environmental impact accruing from the exclusion of mobile gear fishing for the duration of the trial. This was in terms of the impact on target stock and by-catch species, and a reduction in the disturbance of the seabed associated with mobile gear fishing.

"The environment/fishery will benefit from less discarding, less by-catch and less benthic disturbance and, as creel vessels only require about a quarter of the live-catch weight as a trawler to employ the same amount of people, even the prawns

themselves will be better off for any given amount of employment." [Scottish Creel Fishermen's Federation]

"Closing the ground to vessels using trawl gear should allow better management of stocks and also allow stocks to increase and spread outwards from the closed area, therefore improving sustainability and minimising environmental and ecological damage to the marine environment." [Kyleakin and Kylerhea Community Council]

II. Economic

A number of responses stated that the pilot would result in a positive economic impact. They asserted that there would be a positive impact in terms of individuals already creeling, wider benefits to others who may gain direct employment as a result of the pilot and, at its widest, benefits to the local communities.

"In time, those working single handed myself included) will look at taking on a crew as the fishery slowly recovers. Currently a number of skippers work single handed as it is not economically viable to take on a crew - This in the main, is as a result of the dominance of the trawlers over the grounds, in outer Loch Carron during the summer months at least 80% of which cannot be creeled for fear of gear being towed down the loch." [Individual response]

"Whilst we don't feel we are in a position to be able to accurately predict positive and negative impacts, there is economic research that suggests that closures to trawling can positively affect the overall productivity for fisheries and other economic activity dependent on improved ecosystem health, in turn resulting in socio-economic benefits for connected coastal communities." [Open Seas]

III. Gear Conflict

Many responses, especially those that appeared to be from the active fishing industry, identified a reduction in gear conflict as a clear benefit.

"The most tangible and guaranteed benefits are; no gear conflict will save static gear boats having their fleets hauled and ruined by trawl boats…" [Individual response]

"The most obvious positive impact will be on creel fishing, the morale of those engaged in the fishery with the knowledge that their creels will not be towed away or damaged …" [Individual response]

IV. Inform Management

The potential for this pilot to inform future management was listed a positive impact in a number of responses.

"A proper trial requires that the mobile gear be prohibited therefore the principal benefit will be that Scotland gets it's first significant opportunity to trial and assess

the implications of separating static and mobile gears." [Scottish Creel Fishermen's Federation]

"This trial enables research of local and national interest at a time when environmental and sustainability issues are paramount." [Individual response]

V. Other positive impacts Identified

To a lesser degree, other positive impacts were noted in responses such as:

- A positive impact on health and safety of static gear fishermen involved in the fishery
- Improved market conditions
- Would benefit those who had lost grounds as a result of a recent expansion of the BUTEC testing range in the Inner Sound

Negative Impacts

I. Stock impact / increase in creel effort

The majority of comments on Question 2 against the proposal related to the potential for a negative stock impact and associated increase in static gear fishing effort. This was focused on the impact of the *Nephrops* stock in the area.

"The grounds will get no rest at all. In the six months the mobile boats are fishing it is impossible for them to fish 24/7. If the static boats fish here 12 months of the year. It will be relentless the few hours in the week it takes them to haul a string of creels will be the only hours in the year they won't be fishing." [Individual response]

"I am a creel fisherman and some of my best catches come from the edges of the trawl ground where creels don't normally go. The amount of creels that lie dormant in my area in the winter, due to vessels having 2 or 3 sets of gear makes creel fishing very frustrating, there's not a lot of room to move around. I don't think the trawlers should suffer because of it." [Individual response]

Many cited other creel only zones which, it was alleged, had resulted in a negative impact on the *Nephrops* stock.

"The experience in Torridon has already demonstrated that an all year fishery in a trawl free area has not worked with huge reductions in the catch per unit effort and is another reason that multi-functional methods seem to be productive for the sustainability of the prawn fishery." [Western Isles Fishermen's Association]

II. Economic

The economic impact of the exclusion of mobile gear vessels was also recurrent. This was particularly true from individual respondents who claimed to fish in the Inner Sound area.

“My family and that of my crew rely on fishing, small fishing communities can't exist without it. We cannot sustain our living without the safety and shelter of the Inner Sound. It's that simple. It accounts for 40-50 percent of our yearly grossings.” [Individual response]

It is worth highlighting that many who supported the proposal also identified that there would be a loss of fishing opportunity to mobile gear fishermen. It was felt this would be offset by benefits to the creel sector, and mobile vessels would be able to fish in other areas.

“There is no doubt that there will be a displacement of a small number of Mobile Demersal Vessels but this will be during the summer months and there are undoubtedly sufficient grounds nearby to accommodate this. There is barely any activity within this area involving Scallop Dredgers so the impact in this Fishery would again be very minimal.” [Individual response]

III. Health and Safety Concerns

Many responses made clear that any changes to current provisions would have negative implications for the health and safety of mobile gear fishermen.

“Directly affecting the risk on small vessels having to work more in unsheltered waters which could result in injury or fatalities.” [Individual response]

“From a safety point of view I find it very concerning as it is going to force the small trawlers out into exposed seas, as they can no longer get the same shelter provided by the inner sound. It is forcing them to take further risks to continue to make their businesses viable. Many of them rely on this area of fishing to open at the beginning of April as this is when they have to make their income which carries them through the year.” [Individual response]

IV. Displacement

Many responses that opposed the pilot being introduced highlighted the potential for trawl fishing effort to be displaced elsewhere, and that mobile gear fishing opportunities had been reduced in recent years.

“A further knock-on effect of closing the Inner Sound is displacement of mobile demersal fishing vessels to surrounding areas, potentially increasing the impact on other sensitive habitats or adjacent MPAs.” [WWF Scotland]

V. Other negative impacts

Other negative impacts identified that could arise from the pilot were:

- A negative market impact
- An increase of gear conflict
- A cultural loss

- Loss of opportunity to develop 'new' mobile gear fisheries in the area

Marine Scotland Response

Marine Scotland will not introduce the proposed pilot for the Inner Sound of Skye. This is due to a number of factors, primarily:

- Concerns over the impact on mobile gear vessels that currently fish the area
- The similarity with the Torridon creel only zone
- The purported economic benefits are disputed
- Concerns over the ability to monitor impact of management interventions

We shall explore each of these factors in turn.

Concerns over the impact on mobile gear vessels that currently fish the area

There is a clear concern from the mobile gear sector, particularly the trawled *Nephrops* sector, on the potential negative financial impact of this pilot.

In the impact analysis included in the consultation document, we estimated that 19 mobile gear vessels fished in the relevant area during the permitted period (between 2011 and 2016). Further, we estimate that 12.5% of the total landings by these vessels during this period were taken from the proposed pilot area.

The importance of the area varied for these 19 vessels in terms of (1) the number of years fished and (2) the value taken from the area as a percentage of total fishing landings.

We estimate that eight of the 19 vessels fished in one of the six years analysed. Of the 11 other vessels, the vast majority fished in two or three of the six years. The table below shows the number of mobile gear vessels estimated to have any fishing activity within the relevant area in the years between 2011 and 2016.

Year	2011	2012	2013	2014	2015	2016
Vessels	4	6	4	7	7	10

Table 1: Estimated number of mobile vessels targeting *Nephrops* in Inner Sound

The majority of mobile gear vessels targeted *Nephrops* in the Inner Sound did not do so year in, year out but instead had a pattern of returning to the area on an episodic basis. As can also be seen from the table above, there has been an increase in the number of mobile gear vessels landing *Nephrops* from the area.

Trends in importance of *Nephrops* from the Inner Sound to mobile gear vessels

For the 19 relevant vessels, we estimate that 12.5% of their catch value comes from the proposed pilot area during the period 2011 to 2016. The importance to individual vessels varies substantially, with many instances of vessels recording less than 10% of their landing value from the Inner Sound area when active in any season.

Figure 1 shows the number of *Nephrops* mobile gear vessels active in the proposed pilot area each year. For each vessel, we show the percentage of catch value of *Nephrops* taken from the area as a percentage of their total catch value during the period that mobile gear fishing is permitted.

For example, in 2011, we estimate that four vessels reported landings from the area. For one of these vessels, the area accounts for between 0-10% of its total catch value, another between 10-20%, and for two vessels it accounts for between 80-90% of catch value.

Figure 1 demonstrates that, from 2013 onwards, there is a trend of increasing numbers of mobile vessels targeting *Nephrops* in the area, and a growth in the value of *Nephrops* caught in the Inner Sound as a percentage of overall catch value.

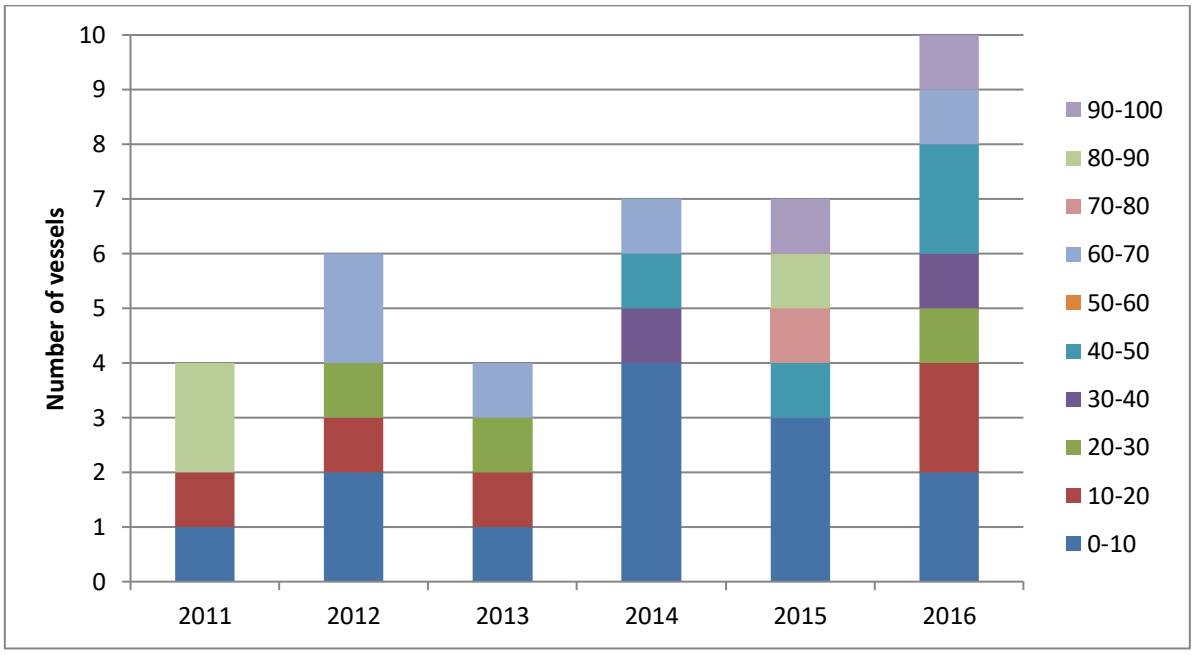

Figure 1: Number of vessels with percentage Inner Sound *Nephrops* landings value as % of total landings value) by year.

Landings data therefore demonstrates that a small (but growing) number of vessels fish in the Inner Sound for *Nephrops* by mobile gear when permitted. The dependence of vessels on the area for total catch varies from vessel-to-vessel and from year-to-year. However, for a small number of vessels the area contributes to a significant proportion of their catch value and this pilot proposal would impact on them, though the significance of that impact varies.

<u>The similarity to the Torridon creel only zone</u>

A number of responses opposing the Inner Sound proposal stated that the creation of a creel only zone would have a negative impact on the *Nephrops* stock. Many cited the creel only zone in Loch Torridon as a precedent where this had been the outcome.

As with the Inner Sound of Skye proposal, the background to the introduction of the creel only zone in Loch Torridon was conflict between the mobile and creel sectors

targeting *Nephrops* in the area. As a result, legislation[3] was introduced which saw the creation of specified zones within Loch Torridon – one which only allows for fishing for *Nephrops* by creel and another where only trawling is permitted.

At the same time that this legislation was introduced, local creel fishermen established the Torridon Nephrops Management Group which developed and implemented a voluntary code of practice for the fishery. This code included a number of provisions to protect the fishery, such as:

- A limit on the number of creels
- Days at sea limit
- Ban on landing berried females
- Escape panels in creels

The Torridon *Nephrops* creel fishery gained Marine Stewardship Council (MSC) certification in 2003. However, the fishery was withdrawn from the MSC programme in 2011 following an increase in effort, in part through an increase in 'new' creel vessels being drawn to the fishery.

What this highlights is that a creel only zone similar to the one set out in the consultation document for the Inner Sound has been established and further, its impact on stock in Loch Torridon assessed[4].

The Inner Sound proposal, if introduced, could face similar issues around controlling static gear effort as encountered in the Loch Torridon creel only zone. The Inner Sound proposal identifies increased creel effort in the area as a potential risk of introducing the pilot but does not effectively present a mechanism for limiting additional creel effort.

Section 10 of the proposal form requested that proposers "clearly set out the management controls you would wish to see for the pilot and the rationale for each control proposed". Included in that section, the proposal stated *"Possibly restrict the numbers of creel vessels / gear deployable in the area"*, and in the relevant sections the rationale/possible positive consequences are identified alongside possible negative consequences. However, there is limited consideration of the mechanisms required to put in place the suggested restrictions on effort.

<u>The claimed economic benefits are disputed</u>

A central argument behind the Inner Sound proposal is that a greater economic return could be delivered to coastal communities though creel fishing for *Nephrops* as opposed to trawling, and this was cited in numerous supportive responses from individual fishermen, fishing associations, a local community council and the environmental group Open Seas.

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[3] The Inshore Fishing (Prohibition of Fishing and Fishing Methods) (Scotland) Amendment Order 2001 http://www.legislation.gov.uk/ssi/2001/174/contents/made

[4] An Assessment of the Effects of the Creel and Trawl Fishing Zones on *Nephrops* Stocks in the Loch Torridon Area http://www.gov.scot/Uploads/Documents/IR1608.pdf

This is in line with recent research commissioned by the Scottish Creel Fishermen's Federation which argues that creeling delivers more jobs per tonne caught and is economically more efficient[5]. A recent New Economics Foundation study also recommends allocating preferential access to the creel fleet in inshore waters to "*provide a necessary lifeline for highly dependent rural communities, especially on the West Coast of Scotland."*[6]

However, these conclusions have been challenged by research commissioned by the Scottish Fishermen's Federation and Scottish Fishermen's Organisation. Their report concludes that current management arrangements across Scotland's *Nephrops* fishing segment are well balanced and calls for them to be maintained.[7]

These arguments were mirrored in responses in the consultation. It should be noted that some onshore businesses, which are a step removed from the fishing fleet, also highlighted negative economic consequences in their responses and emphasised their dependence on mobile fishing in the Inner Sound region.

Questions over monitoring of impacts and baseline data

The submitted pilot proposal set out the potential benefits of prohibiting mobile gear fishing, but included only very limited proposals for monitoring these (stock/environmental) impacts.

With the exception of monitoring the impact on landings from individual vessels quantifying substantive changes as a consequence of the proposal would appear to be challenging. For example, there is little data on stock status at the required spatial resolution, and the frequency of gear conflict in the area. The collection of data required to inform such assessments could prove costly and time consuming, and require substantial additional resources.

However, qualitative data could be obtained in the form of interviews with fishers during the pilot period to capture views on the success or otherwise of the management intervention and any perceived changes in gear conflict.

It should also be noted that the relevant and surrounding area has also been subject to a number of management interventions in recent years (establishment of the Loch Duich, Long and Alsh MPA; Loch Carron designation; extension of the BUTEC testing facility) and establishing which management intervention was responsible for any changes could be challenging.

[5] Correcting the Misallocation of Nephrops Stocks in Scottish Inshore Waters: Untapping a Vast Economic (and Environmental) Potential http://scottishcreelfishermensfederation.co.uk/report.htm
[6] The Scottish Nephrops fishery: Applying social, Economic, and environmental criteria http://neweconomics.org/wp-content/uploads/2017/02/Griffin-Nephrops-latest.pdf
[7] Analysis of Nephrops industry in Scotland http://www.sff.co.uk/wp-content/uploads/2017/10/AS-nephrops-FINAL-report-171017-ISSUED.pdf

Conclusion

Though an interesting and thought provoking proposal, we will not be piloting a prohibition on mobile gear fishing in the Inner Sound area.

Some features of the proposal were strong. It had been developed by local fishermen in the area and had a key central premise – that greater benefits could return to the community by only allowing static gear fishing within the Inner sound.

However, there was considerable opposition to the proposal from the mobile gear sector. Individuals targeting *Nephrops* by mobile gear claimed that the proposal would have a significant impact in terms of continued economic viability. Concerns were also expressed over the impact of displacement both in terms of health and safety implications and increasing fishing effort in other areas. The proposed benefits accruing from the pilot were also challenged and there are questions over monitoring the impact of the proposal.

Questions do remain over whether current management arrangements for the *Nephrops* fishery are making best use of the available resource**.** Therefore, Marine Scotland has recently commissioned economic modelling of Scotland's *Nephrops* fishing grounds. This will establish a baseline of the *Nephrops* sector in Scotland, and develop an analytical model to test what an optimal *Nephrops* sector would look like under selected policy objectives. This work will report at the end of 2018.

PROPOSAL 2: MULL CRABBING BOX

This proposal involves introducing a prohibition on mobile gear fishing and a limit on creel fishing effort in order to protect a brown crab fishery of local importance to Mull fishermen in the period 1 October to 31 January. The full proposal form can be viewed at http://www.gov.scot/Resource/0052/00525813.pdf and an overview is provided in the consultation document.

The consultation asked three questions in relation to this proposal (Questions 3 to 5).

Question 3: Do you agree that the pilot proposal for the Mull Crabbing Box should be taken forward by Marine Scotland as described?

There were 45 responses to this question, with 40 respondents (89%) expressing support for the proposal and 5 respondents (11%) opposing it.

The proposal received strong support from local organisations. This included the main local fishing association (Mull Fishermen's Association), as well as Mull Community Council, Mull and Iona Community Trust, South West Mull and Iona Development, Tobermory Harbour Authority and Argyll and Bute Council.

The proposal also received support from organisations in the wider fishing industry and environmental sector. Individual respondents in favour of the proposal included fishermen from both the static and mobile sectors with an active interest in the fishery, as well as others with a general interest in inshore fisheries management.

Those opposed to the proposal were all individual respondents, many of whom appeared to be mobile gear fishermen.

Themes from supportive responses

I. Economic Benefit

The main theme in comments, particularly from local organisations and individuals, was the belief that the crabbing box could contribute positively toward the socio-economic growth of the Mull area.

"We strongly believe that the measures proposed will improve the sustainability of both the mobile and static fishing sectors based on Mull. This will strengthen the economy of the Isle of Mull and contribute positively to efforts to reverse population decline." [Mull and Iona Community Trust]

"The local boats are very important to the island economy and they need to be encouraged. To date compromise between sectors has not been successful." [Individual response]

II. Gear conflict

Many cited the potential for the pilot to reduce gear conflict between mobile and static sectors.

"It would allow some local small boats to fish crab without worrying about visiting mobile gear boats towing their gear away." [Individual response]

III. Test ability for locally led management

Several responses from the fishing industry cited the proposal as a good example of locally led management, in particular highlighting the cooperation between the mobile and static sectors in agreeing the details of the crabbing box.

"There is local Island support from both sectors for this crab box which is also an achievement." [Organisation response]

IV. Other positive impacts

A range of other benefits that could accrue from the proposal were identified by respondents, including improving the sustainability of the crab stock / local marine environment.

"I believe the health of the wider marine environment - and, consequently the sustainability of fisheries - is dependent on severely restricting fishing activities in certain areas. Moreover the local fishing community is best placed to monitor those activities." [Individual response]

Themes from opposing responses

Those who did not support the proposal expressed a general opposition to the closing of grounds to mobile vessels, citing safety concerns and that many existing restrictions on mobile fishing were already in place. Their preference for improving management in the area was better communication between the different fishing sectors.

"Scallop dredgers are under severe restrictions now, especially in the winter season, on where they can fish. This is an area that could be managed more realistically with good cooperation instead of closures. Suggest setting up a steering group and points of contact to avoid gear interaction." [Individual response]

"No grounds should be closed to any sector of fishing, a properly managed fishery with good communication allows all sectors to work together, closing grounds creates unsafe fishing practices to be made when sheltered areas are closed. West coast boats tend to be open decked vessels where crewmen are out on a deck in rough weather with no protection." [Individual response]

Question 4: What is you 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?

Positive impacts

I. Economic benefit

The potential benefits to the static gear sector and wider fishing communities in the surrounding area were highlighted.

"This is all about the long term sustainability of stocks and for the harbour this will result in more local boats and more local employment. We… hope to invest in new Phase 6 infrastructure for the fishing sector at Tobermory and we welcome long term sustainability." [Individual response]

"[This gives] the static gear sector real security during the period when traditionally the crab are in this box area. This is a real positive during a period when demand / prices are high and crab is traditionally on this ground." [Organisation response]

II. Stock / environmental impact

Potential benefits to both the brown crab and to a lesser extent the scallop fishery were highlighted in responses.

"…will protect both the intended species i.e. brown crab but also other species in the area as well as the habitat as mobile gear can be very destructive." [Individual response]

"Limiting or banning mobile fishing gear in an area will only serve to improve the productivity of that area for sustainable fishing practises (creels, diving for scallops) and allow non-targeted species to survive and flourish." [Individual response]

III. Other positive impacts

Other responses highlighted a reduction of gear conflict, the potential to test local management, and the impact for testing the impact of seasonal gear separation for the duration of the trial.

Negative impacts

I. Loss of fishing opportunity / negative financial impact

The most frequently cited negative impact was the loss of fishing opportunity / economic impact on those mobile vessels that currently fish in the area during the proposed prohibition period. However, many respondents believed any impact would be relatively small, and would be mitigated due to the area being open to mobile fishing for the remainder of the year.

"…if the current trend of areas of sea being closed off to dredging continues then it will force people out of this sector of the industry as many of the small individual operators don't have the ability to travel all round the British Isles to fish like large company owned vessels that fish 24hrs a day. These smaller inshore boats depend on areas such as this to work the year viably." [Individual response]

"Mobile fishers are able to work round seasons it is the nature of the job that they keep moving to areas where fishing is good the area proposed is tiny compared to vast areas wide open to them." [Individual response]

II. Displacement of effort

Mobile fishing effort being displaced was also cited in several responses, from different perspectives. Some were concerned about the impact on stocks outside the pilot area, while others were concerned that conflict could increase outside of the crabbing box.

"Could cause overfishing by scallopers surrounding the box through diverted effort." [Individual response]

"The mobile boats will trawl elsewhere, potentially increasing conflict there." [Individual response]

III. Does not go far enough to protect stocks

Conversely, some respondents commented that the prohibition would not offer enough protection to the area due to only being seasonal in nature.

"This proposal does not go far enough in my view in that it still allows the seabed to be seasonally trawled so has limited value in protecting the habitat and fostering regeneration." [Individual response]

Question 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?

Positive impacts

The primary benefit would be a control on the level of fishing effort in the proposed pilot area.

"By limiting the number of creels there will be a "control" over the fishing effort. The Mull creel fishermen have all agreed that this is essential so that no one boat can take excessive advantage within this very limited "crab box area". Not having a limitation opens up the scenario of 1 creel boat "flooding" the area with gear, thus not allowing the rest of the fleet access to the crab box." [Organisation response]

Additionally, a number of respondents also believed that a creel limitation could be of benefit to the health and sustainability of the crab stock.

“A reduction on the number of creels will hopefully strengthen stocks and help make the activity more sustainable.” [Mull and Iona Community Trust]

Negative impacts

I. Difficulties in enforcement

A number of respondents cited the difficulty of enforcing a creel limitation during the closure period.

“This requirement could be unnecessarily onerous to implement and police and could possibly not be required at all in such a short duration pilot. It may be possible to implement a voluntary arrangement for the duration of the trial.” [Scottish Creel Fishermen’s Federation]

II. Displacement of effort

Others also suggested that limiting creel numbers within the proposed area could result fishing effort being displaced outside the area.

"WWF Scotland is somewhat concerned about the potential displacement of creeling into surrounding areas, and in particular the adjacent Loch Sunart to the Sound of Jura ncMPA, where creeling is not currently restricted. Given that the economic needs of local creel fishers will still need to be met through the winter months, consideration must be given to potential increase in creel activity in adjacent areas and the impact that may have on Priority Marine Features (PMFs).” [WWF Scotland]

Marine Scotland Response

Marine Scotland will introduce the Mull proposal as a pilot.

This was a considered proposal with a number of strengths:

- It has a clear and specific management objective: to introduce a time limited prohibition on mobile gear fishing activity within a defined area, to protect the locally important brown crab fishery.

- The proposal has been developed by an RIFG-led working group with a broad range of interests – including representatives of the static and mobile gear sectors, the Local Authority, and government bodies.

- The proposal has been subject to a lengthy period of discussion to achieve consensus on the management measures, involving a series of RIFG-facilitated stakeholder meetings and workshops.

- The proposal makes strong arguments for why the crabbing box was necessary, in that it would:
    - Protect the local economy and creel fishermen who benefit from the seasonal brown crab fishery
    - Protect the brown crab stock
    - Reduce gear conflict between static and mobile sectors
    - Improve the management of creel effort during the seasonal fishery

- There was a clear rationale presented for the individual management measures being proposed, with the possible positive / negative consequences on existing fishing activities in the local area being well considered.

However, from Marine Scotland's perspective there are also weaknesses to the proposal, which include:

- While consideration was given to who would monitor the pilot – through the established RIFG working group – little detail was provided as to what this monitoring would entail and how it would measure the pilot's effectiveness.

- While consideration was given to controlling effort in the proposed crabbing box – by limiting creel numbers and vessels permitted to fish in the area – little detail was provided on how this would be implemented.

<u>Conclusion</u>

One of the key aims of the Inshore Fisheries Pilots initiative is to investigate the impact of separating different methods of fishing within a specified area. The Mull Crabbing Box proposal is well placed to assess the benefits of a temporal, spatial management approach, through introducing a prohibition on mobile gear fishing during a seasonally important time for local creel fishermen targeting brown crab.

The proposal was written with a clearly defined management objective, reached by the group through inclusive stakeholder engagement with both fishing sectors prior to consultation. It also achieved a broad level of support at the consultation stage, especially from local community organisations and fishing organisations.

Due to the overall strengths of the proposal and the positive response from consultees, Marine Scotland will proceed to introduce the Mull Crabbing Box as an inshore fisheries pilot. However, Marine Scotland does not intend to make creel limits mandatory for the first year of the pilot, to establish if local, voluntary controls on creel numbers can work effectively.

PROPOSAL 3: ORKNEY SCALLOP MANAGEMENT

This proposal involves introducing distinct scallop management measures in the six nautical miles around the Orkney isles. The full proposal form can be viewed at http://www.gov.scot/Resource/0052/00525816.pdf and an overview is provided in the consultation document.

The consultation document asked seven questions in relation to the proposal (Questions 6 to 12).

Question 6: Do you agree that the proposal for the management of scallops around the Orkney Isles should be taken forward by Marine Scotland as described?

There were 43 responses to this proposal, with 29 (67%) supporting it and 14 (33%) opposed to it.

There was strong support for the proposal from fishermen and other individuals based in Orkney. The environmental group Open Seas also supported this proposal.

Those who did not think that the Orkney proposal should be taken forward as a pilot included both the Scottish Creel Fishermen's Federation and WWF Scotland. A number of unsupportive responses also appeared to be from individuals associated with the dredged scallop fishery in the area, whose fishing activity would be impacted.

Themes from supportive responses

I. Reduce fishing pressure by larger vessels

Many responses to this question, particularly those that appeared to originate from respondents within the islands, highlighted that the proposed measures would limit effort by larger vessels in the area to the benefit of smaller vessels.

"More areas around our coast need to be protected from the massive catching ability of the largest of vessels that prosecute this fishery. It is only sensible to manage and protect an area locally like this for everyone's benefit. Small vessels don't have the ability to fish 24/7 and it's is each person's right to decide what level of business they plan to run…" [Individual response]

II. Inform Future Management

Responses also highlighted the potential of the proposal to inform future management.

"Clearly this is a proactive approach to address increasing F [fishing mortality] in this fishery, something we support…we would recommend that the pilot must be accompanied by a coherent and robust approach to assessing stock health such that the effectiveness of the proposed approach in addressing F may be recorded." [Open Seas]

Themes from opposing responses

I. Limited effectiveness of the proposed measures

A number of respondents expressed concern regarding the effectiveness of the proposed management measures.

"We sympathise with the community of Orkney being subject to the vagaries of the boom and bust nature of dredge scallop fisheries and we are acutely aware of the impacts of local fisheries management being hampered by nomadic vessels. However we do not believe that the applicants proposed fisheries management measures go any where near far enough to achieve the desired outcome of securing a sustainable scallop fishery in the Orkney inshore waters." [Scottish Creel Fishermen's Federation]

II. Impact on larger vessels

Some respondents also felt the objective of the measures was to preclude or restrict activity by larger vessels based outside Orkney to the benefit of the local Orkney fleet. This was often associated with the potential health and safety implications of larger vessels having to fish outside the Orkney six nautical mile boundary.

"Forcing boats into open waters in poorer weather to continue to make a living." [Individual response]

III. Opposed scallop dredging in inshore waters

A third group of responses recorded their opposition to dredge scallop fishing in Scottish inshore waters due to its impact on the marine environment. It is important to point out that many of those who took this view repeatedly stated their objection in response to each question posed in relation to this proposal. Two examples of typical responses are given below:

"This proposal seems to be an attempt to hoodwink the reader into thinking this is a reasonable proposal. It is not in any way reasonable. There appears to be little attempt to reduce the impact of dredging. The proposal will do little more than stall and prolong the use of this extremely destructive method of fishing to the detriment of the environment and perception of the fishing industry in general." [Individual response]

"There should be no dredging anywhere near the inshore with its important habitats and associated species. Whilst highly selective and sustainable alternatives exist (diving) there is no need for dredging." [Individual Response]

Question 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?

Positive Impacts

I. Stock

The most commonly cited impact was the potential for a positive stock impact.

"Returned scallops will have time to breed producing greater numbers and a boost to the species." [Individual response]

II. Market Benefits/Economic Benefits

A positive market impact was also mentioned in a number of responses and very often linked to the positive stock impact.

"Larger scallop landing size can only encourage a better market and increased numbers of spawning juvenile scallops." [Individual response]

"As a former scallop diver I fully endorse the increasing of minimum landing sizes across many species as a way of increasing the overall efficiency of the use of any stock and allowing younger specimens more time to breed while getting better prices at market for larger specimens." [Individual response]

Negative Impact

I. Economic Impact

Responses commented that increasing the minimum landing size of king scallops may result in a negative economic impact, with some calling for data on the impact of such a measure. However, many commented that any initial reduction would be offset by longer term benefits.

"In short term it will be difficult but the long term benefits of increased spat from leaving maturer scallops on the seabed will be worth it." [Individual response]

II. Difficulty in ensuring compliance

Two responses raised compliance concerns related to having different minimum landing sizes in operation in neighbouring areas and one questioned the fairness of having different landing sizes around the Scottish coast.

"The SCFF fully support the idea of raising MLS to 110 mm, however we note that any national disparity in legal Scallop size could lead to some operators having advantageous access to markets and it may be hard to regulate the different catches once on board a vessel which fishes both within and without the proposed pilot area." [*Scottish Creel Fishermen's Federation*]

III. Will not reduce fishing effort

A number of responses took the opportunity to state that increasing the MLS of king scallops would not reduce the environmental impact of the fishery and or questioned the survivability of scallops returned to the sea after dredging.

"This will do very little to reduce the impact of dredging. The simple act of destructively ploughing the seabed with steel teeth leaves little undamaged and it is likely that many small scallops returned to the sea will be damaged or their habitat sufficiently damaged to leave them open to predation." [Individual response]

Question 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?

Positive Impacts

Three clear positive impacts of limiting dredge numbers emerged from responses:

I. Benefits to scallop stock / wider marine environment

Positive benefits to the scallop stock or wider marine environment were most often highlighted in responses.

"…less dredge area should mean it is easier for the sea bed to recover as more towing is required to cover the same area and therefore more missed areas will arise between the narrower dredged areas." [Individual response]

II. Benefit to smaller vessels

Many responses distinguished between larger dredged vessels capable of towing a greater number of dredges and which tend to have greater facility to travel further afield to target king scallops, and smaller vessels restricted to a greater degree by the distance they can travel and weather conditions.

"The fishing effort on these relatively sheltered inshore waters by these large highly efficient 24/7 boats would be greatly reduced leading to a more stable and sustainable fishery for the smaller inshore day boats." [Individual response]

III. Take pressure off other fisheries

A few responses, which seemed mainly to originate from the Orkney area, stated that a positive impact of the proposed restriction would be additional fishing opportunities for Orkney's inshore vessels currently fishing for other species. Presumably vessels currently fishing for species other than king scallops could target the fishery as a result of the reduction in effort by larger vessels.

Negative Impacts

I. Disproportionate impact on large vessels

The loss of fishing opportunity to vessels routinely fishing more than 10 dredges per side was the negative impact most frequently cited by respondents. Some went further and stated that the measure was discriminatory / protectionist in nature, as it put vessels based in Orkney at an advantage.

"Restricting the amount of dredges seems more like protectionism from large visiting vessels of smaller dredgers as opposed to protection of the scallop grounds." [Individual response]

"Unfair rule which discriminates on men that have invested in larger vessels to provide a safer work platform for their crew." [Individual response]

Others, though noting the impact on larger vessels, suggested that any impact would be offset by fishing opportunities available to these vessels elsewhere.

"Larger vessels may not be happy but they can go to places I can't go to with my smaller vessel and I only use a total of 5 dredges." [Individual response]

II. Questionable / Negligible Environmental Impact

Many respondents used the opportunity to highlight the environmental impact of mechanical dredging, questioning whether any environmental benefit would arise, with some warning that restricting the activity of larger vessels may not result in a reduction of dredging effort.

"We support any measure which reduces the damage from dredge fisheries within inshore waters and in principle support the aims of the applicants. We are however sceptical as to whether reducing the amount of dredges per vessel will indeed result in less dredging in any given area." [Scottish Creel Fishermen's Federation]

III. Other positive impacts

Other negatives highlighted included: health and safety concerns; the impact on other fishing grounds; and the cost to fishermen of having to purchase new equipment, such as tow bars.

Question 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?

Positive Impacts

Two clear positives were identified by respondents: a benefit to inshore / local vessels, and stock / environmental benefits.

I. Benefit to inshore / local vessels

"The largest of this type of vessel are really destructive to the stock. They are rarely stopped by weather and have the ability to fish when they want." [Individual response]

II. Stock / environmental benefits

"I see this as a logical step in the evolution of our fisheries, getting away from larger boats to increase the efficiency and selectiveness of fishing methods utilising smaller vessels with lower impact and better spread of the wealth from the stocks to benefit the fragile coastal communities." [Individual response]

Negative Impacts

I. Impact on vessels over 17 metres in length

Responses highlighted the loss of fishing opportunity / economic impact on vessels over 17 metres in length, with some stating that the management measure was protectionist. Displacement of fishing effort and health and safety implications were also cited.

"This element of the proposal appears more like protectionism (from visiting vessels) than an attempt to make the local vessels more sustainable." [Individual response]

II. May not necessarily reduce effort

Again a number of responses took the opportunity to state that there may be no potential benefit accruing from the proposal, as there may be no reduction in dredged effort or even that scallop effort may increase.

"Furthermore there is no suggestion of a method of controlling effort so the likely outcome would be more smaller boats exploiting the same or more effort with no positive environmental benefits." [Individual response]

Question 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?

Limiting the permitted bar length is a technical restriction often used in scallop fisheries to aid compliance with dredge number restrictions. Given the technical nature of the question the range of answers to this question was more limited. There was also a great deal of similarity to the comments provided in response to questions eight and nine. A number of respondents did highlight the potential compliance benefits arising from a tow bar length restriction.

Enforcement benefits

"Fishermen often cheat and will take off dredges when they see a cruiser coming, even when they are hauling, so everything needs to be done to make the rules tight and not easy to get round. Rules need to be full proof." [Individual response]

"It will make enforcement of the new regulations easier and more effective." [Individual response]

Question 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?

Positive Impact

I. Environmental Impact

Respondents commented on the positive impact that increasing the minimum landing size could have on the stock. As with other fisheries, a minimum landing size is set to allow for individuals to have the opportunity to mature; increasing minimum landing size should allow for a greater number of animals the opportunity to reproduce before being commercially harvestable.

"A minimum landing size will allow stocks to recover which can only be a positive thing." [Individual response]

II. Market Benefits

Others highlighted the potential market benefits of such a move (bigger animal; greater meat yield).

"Should be that size everywhere, give stocks more time to reproduce and bigger size should have better market value." [Individual response]

Negative Impact

I. Economic impact

Several responses raised the cost to fishermen of an increase. One response requested an impact assessment be carried out before any such increase was introduced but others offset an initial reduction in queen scallops caught against longer term benefits to the fishery.

II. Questions over survivability of discarded queen scallops

Comments were also raised as to whether queen scallops under the minimum landing size would survive having been fished and then discarded overboard.

"It is inherent in any proposal that founds upon minimum landing size as a mechanism to promote sustainability that the catching and returning process has

suitably low mortality to effect the objectives. There appears to be no evidence of this supplied." [Individual response]

Question 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?

Positive comments

The overwhelming majority of comments in relation to the impact of AIS monitoring were supportive. Most supportive comments highlighted the advantages in terms of ensuring compliance and monitoring of dredge activity but also in terms of health and safety and as an aid to identifying interactions with other marine resource users.

I. Aid for monitoring / compliance

"This should be a must to allow the proper tracking of vessels fishing grounds." [Individual response]

II. Health and Safety benefits

"All vessels of all sizes and methods of fishing should carry AIS for safety issues." [Individual response]

III. Aid interaction with other marine users / fishermen

"Yes good idea. Makes it obvious what boats are causing problems with static gear and cables." [Individual response]

IV. Vessel tracking should be extended

"We welcome this and consider that similar approaches should be standard for all vessels capable of towing dredges within 12 miles of Scotland's coast." [Open Seas]

Negative Impact

Negative comments were more limited in terms of number of the responses and the range of issues presented. A small number of active fishermen were concerned that other fishers would be able to monitor their activity, and two responses raised difficulties in policing without outlining their concern in great detail.

"Very negative effect as every scallop skipper in the UK with access to the internet will see a possible good fishing taking place around Orkney and before you know it your stupid laws will have caused overfishing." [Individual response]

Marine Scotland Response

Marine Scotland will not introduce the proposed pilot for the management of scallop fishing around the Orkney Isles. The primary reasons being:

- A lack of clarity over the aims of the project.
- Issues around why particular management measures were proposed.
- Questions over monitoring of proposals and how any changes would be demonstrated.

We shall explore each of these in turn.

A lack of clarity over the aims of the project

In the pilot proposal form, the guidance clearly states that the proposals will be considered on "*The clarity of the objectives – does the proposal clearly identify issues and the means of addressing them?"* However, relative to other proposals submitted, the objective(s) of the pilot were not clearly set out.

In response to Question 3 ("*Please summarise your proposal, including other options that you have considered"*), the desired management measures are outlined along with a brief account of previous attempts to introduce a Regulatory Order and voluntary agreement around scallop management. However, at no point is a clear objective set out (though elsewhere in the form, concerns over the fishery dating back to the 1990s are briefly outlined). The response to Question 13 ("*Please outline what you believe the direct and indirect benefits of your proposal will be?"*) briefly outlines the perceived benefits from the proposal which can be summarised as:

- Relieving fishing pressure
- Improve market conditions
- Regulate the supply of scallops to processors

This lack of clear aims and objectives was picked up on in opposing responses with two distinct opposing views expressed. Firstly, those in the fishing industry challenged that the underlying aim of the proposal was to remove non-Orkney based vessels from the fishery and secondly, those whose responses focused on the environmental impact of scallop fishing stated that the specific management measures selected may not reduce the impact of scallop fishing effort in the area.

Issues around why particular management measures were proposed

Following on from a lack of clarity for the overall aims of the Orkney pilot proposal are issues surrounding why the proposed management measures were brought forward, and what other measures were considered but rejected.

With the exception of the landing size restriction, the management measures focus on limiting the size and dredge number capacity of vessels permitted to fish in the

area. Opponents took issue with the proposed management measures on the basis that:

1. They alleged the vessel size and dredge capacity restrictions seemed to disproportionately impact on vessels based outside the Orkney Isles.
2. Fishing pressure might not necessarily reduce but transfer from large fishing vessels to smaller fishing vessels.

In response to the suggestion that non-Orkney vessels would be disproportionately impacted, an analysis of fishing data indicates that the proposed dredge and vessel restrictions would indeed significantly impact on non-Orkney based vessels with a history of activity in the area.

Questions over monitoring of proposals and how any changes would be demonstrated

There is limited consideration over how any changes would be monitored. The proposal does state that a monitoring group with a range of representatives would be set up and that a dedicated individual would be needed to record the progress of the pilot but neither of proposals are set out in any depth.

Outside of the impact on the landings by individual vessels, quantifying substantive changes as a consequence of the proposal would appear to be significant. There is limited baseline data on stock status and collecting any such data could prove costly and time consuming.

Conclusion

The Orkney proposal had some strong points. It clearly identified the geographic area to which it applied and it received strong local support. However, there were areas which could have benefitted from further consideration, such as a clear explanation as to the underlying objective and aims of the proposal and a clearer background to the development of the proposal.

Marine Scotland is also concerned at how potential benefits would be demonstrated given a lack of baseline data.

For these reasons we will not be introducing the Orkney pilot proposal.

Proposal 4: Outer Hebrides

This proposal involves limiting the number of creels that fishing vessels may operate in a specific area of the Outer Hebrides' inshore waters. The full proposal form can be viewed at http://www.gov.scot/Resource/0052/00525817.pdf and an overview is provided in the consultation document. The proposal was developed by the Outer Hebrides RIFG.

The consultation asked four questions in relation to this proposal (Questions 13 to 16).

Question 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?

There were 54 responses to this question, with 45 respondents (83%) expressing support for the proposal and 9 respondents (17%) opposing it.

The proposal received strong support from locally based organisations, including the main fishing association (Western Isles Fishermen's Association), fish processors (Kallin Shellfish and Kilbride Shellfish), and the Local Authority (Comhairle nan Eilean Siar).

The proposal also received wider support: from elsewhere in the fishing sector and from environmental organisations such as WWF Scotland and Open Seas.

Organisations who were opposed to the proposal included the Scottish Creel Fishermen's Federation, the North West Responsible Fisherman's Association and Kyleakin and Kylerhea Community Council.

Individual respondents who opposed the proposal appeared predominantly to be active fishermen based outside of the area.

Themes in supportive responses

I. Improve catch returns / improve stock

Many who supported the proposal believed that introducing controls on creel fishing effort would reduce the quantity of gear in fishing grounds helping to improve the health of the local fish stocks and marine environment.

"This area has seen a huge increase in the amount of creels deployed over the past 20 years. Catch per unit effort has decreased along the same period so something needs to change as the rural communities of the Outer Hebrides are very dependent upon there being a viable fishery in the Minches.

"As a fishing vessel owner who fishes for prawns using trawls from May to September and creels from October to April we are totally reliant upon a successful winter fishery to make our business viable. For years we have voiced concerns about the increasing effort or number of creels being deployed to return

the same or often less catch, we desperately need some form of control on effort for the good of the fishery and the generations coming after us." [Individual response]

II. Fairer access to grounds

It was also felt this would help counteract people from 'ring-fencing' areas by leaving creels to soak in an area for long periods of time in order to hold that ground for themselves.

"Larger vessels have left thousands of creels/pots on fishing grounds for months on end whilst they move with additional gear to other areas, this prevents smaller boats from being able to access these areas, additionally when smaller boats are setting gear they are unable to determine what direction the larger vessels gear left has been set as the fleets are so long you cannot identify the other end, this brings gear into conflict." [Individual response]

III. Establish effectiveness of creel limits

There was also support for implementing the proposal as it would test whether limiting static gear fishing effort can improve the sustainability of the creel fisheries.

"It is my firm belief that if the aim of crab/lobster fisheries management is to protect stocks whilst also protecting the interests of the artisanal community based fleets then gear limitation is the best tool to use. ... I'd sooner make a living fishing 300 creels than the same living off 3000! Even better if 150 would do. I am confident that this proposal would produce data which would make my belief less anecdotal and more likely to be taken seriously." [Individual response]

Themes in opposing responses

I. Only impacting on static gear fishermen

The main criticism from those opposed to the proposal was that it discriminated against creel fishing. Some felt the proposal did not take account of mobile trawl fishing's contribution to the overall level of fishing effort for the *Nephrops* fishery.

"As far as Nephrops are concerned there is no mention of trawl effort whatsoever here. All the blame for lower CPUE is being placed on the creels which is ridiculous. It should be obvious that a successful management plan for a shared fishery must include a proportional reduction in all effort, not just creels." [Individual response]

II. Creel effort may increase

Some responses commented that, without limiting the number of vessels permitted to fish in the area, additional creel vessels could be drawn to the area – so there may not be any reduction or even an increase in fishing effort.

“There is a real danger that reducing creel numbers without capping the number of vessels will only result in more boats in any given area, which will result in more creels being hauled each day.” [Individual response]

III. Displacement of effort

There were also concerns that limiting creel numbers in the Outer Hebrides’ inshore waters could displace fishing effort outside the area.

"We are not sure what is going to happen to all the creels they are proposing will be removed from the pilot area. We are concerned that there may be significant displacement of creels to outside the pilot area and that could directly affect our membership both by causing more gear conflict and by putting extra pressure on already limited creel fishing areas." [Organisation response]

Question 14: What is your view on the possible impact, both positive and negative, of limiting permitted creel numbers based on vessel size?

Positive impacts

I. Improve catch returns

The main positive suggested by respondents was that a creel limitation scheme could lead to a reduction in the overall level of creel fishing effort in the Outer Hebrides. It was hoped that this could ease fishing pressure on stocks and grounds, allowing them to recover and become more productive, which in the longer term could increase the overall catch per unit effort (CPUE).

“Creel fishing is a very efficient method for catching shellfish, so much so that it can be detrimental to the stock in an area with a heavy concentration of gear. We have seen first-hand how quickly an area can become very productive again after being relieved of effort, this has given me so much encouragement and is a main reason as to why I feel so passionately that a creel limit would benefit us all in the long term.” [Individual response]

“The most positive impact will be that catch per unit effort will improve when gear can be moved to fresh ground, allowing overfished ground to be rested. This will reduce the amount of gear that needs to be hauled to achieve the same grossing.” [Individual response]

II. Fair allocation method

Other respondents commented in favour of the allocation method, believing it was the fairest option as it took into account the differing operating costs of smaller and larger vessels.

“A larger vessel tends to have more crew and more general overhead. It seems fair to recognise this by allowing them to fish more gear.” [Individual response]

III. Reduce gear conflict

A number of respondents stated that with fewer creels on the seabed gear conflict should reduce.

"It will have a positive impact as there should be less gear on the ground which will mean there should be less gear conflict as it won't be so tight on space." [Individual response]

IV. Other positive impacts

Other positive comments received included: improved economic returns for vessels; improved health and safety; and reduced ghost fishing (where creels no longer used for fishing, but still in the sea, catch seafish which are subsequently unable to escape).

Negative impacts

I. Favours larger vessels

A number of issues were highlighted regarding the allocation method, primarily that the proposal favoured larger vessels and could incentivise fishers to switch to larger vessels.

"It is our understanding that most vessels regardless of size are only fitted with one pot hauler and therefore can only haul creels one at a time. It is appreciated that larger vessels can often stay at sea longer and work worse weathers, however we find the disparity of creel allocations between the various sizes of vessels is in excess of what may be accounted for in this regard." [Scottish Creel Fishermen's Federation]

"It should be a blanket number per vessel, not size, to allow the fisheries to become better again, less creel caught species will be offset with a rise in prices for a superior product." [Individual response]

II. Limited impact on fishing effort

Some commented that the suggested limits should be set at a lower level, in order to reduce the overall level of fishing effort and the impact on fish stocks and the marine environment.

"The proposal states that the creel limits have been set in line with the number of creels usually hauled daily per vessel, therefore it can be assumed there will be no impacts either positive or negative on the current situation. WWF Scotland suggests that the creel limits should be reduced further to see positive impacts on both the benthic environment and Catch Per Unit Effort." [WWF Scotland]

III. Does not take into consideration range of creel fisheries

From a technical standpoint, some highlighted that the allocation method did not take into account the differences between the different types of creel used to target seafish.

"The proposed numbers don't seem to differentiate between different types of creels or target species which makes the numbers being proposed arbitrary in nature. Prawn vessels generally work smaller creels and haul in more numerous amounts for any given days fishing and some crab and lobster pots are often worked in smaller amounts for any given days hauling" [Individual response]

IV. Other negative impacts

Other possible negatives raised by respondents included the economic impact the limits could have on any vessels that received an allocation less than the number of creels they currently deployed. There were concerns that this could lead to unemployment, or to vessels fishing harder to make up for any decrease.

Question 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?

Positive impacts

I. Aid enforcement

Most respondents believed that this requirement would be effective at helping to enforce the scheme, making it easier to identify the owner of any deployed creels.

"Clear marking of gear allows vessels to work out where other operators gear is and which boats are operating in an area. The requirement to mark gear also means that untagged creels are not going to be shot on fleets which have ends marked with the vessels name as if that gear is checked there is no defence. Similarly any gear which is not marked will be more likely to be reported to Marine Scotland for investigation by operators who are abiding by the rules. I can see no negative impact of a requirement to clearly mark gear." [Individual response]

II. Other comments

Respondents also thought the requirement could be taken further, suggesting that each end of a fleet of creels should have an identifier, in order to aid navigation and possibly reduce conflict / entanglement.

"Adding individual fleet numbers to each fleet marked at both ends would also assist in mitigating gear conflict as such a practice would facilitate identifying both ends of a fleet and accordingly identify the approximate location of the fleet on the seabed." [Individual response]

Negative impacts

I. Financial cost

Respondents' primary concern was the cost, in terms of both time and money, to update marker buoys to ensure they were compliant with this requirement.

"The only concern i would have is the cost that may be required to replace markers, having to either purchase new in order to remove existing or time involved in removing each fleet to shore to allow markers to painted." [Individual response]

II. Concerns over privacy

There was also a concern that being able to readily identify the owner of deployed creels could lead to instances of targeted gear vandalism.

"However, there have been occasions where creel fleets have been deliberately targeted by trawlers when made highly visible and there is currently absolutely no practical method of establishing which vessel either cut the ends or towed the thousands of pounds worth of gear away to be dumped in the shallows. This has happened locally where I am aware of local fishermen using dhan buoys to mark ends." [Individual response]

Question 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?

Positive impacts

Respondents believed that this requirement would also help to enforce the creel limit scheme by preventing a vessel from using another's tags to deploy more creels than it was permitted to do so.

"The positive impact of not being allowed to haul another vessels gear is that owners cannot use donor vessels to obtain additional tags. I own two vessels one which we use for prawn the other for lobster and velvet crab. In theory without this requirement I could tag prawn gear with tags from the small boat and lift it along with the big boats gear even though the small boat is incapable of fishing prawn in deep water. I could also take tags issued to my father's boat and do the same thing giving me over 2500 creels to lift. I cannot see a significant negative effect of requiring Marine Scotland compliance to approve the lifting of another boats gear." [Individual response]

Respondents also tended to agree with the requirement that from a point of principle – a vessel shouldn't haul another's creels.

“I agree with this. Also no one should haul another`s gear without permission of the owner, I cannot see under what circumstances a skipper would need to haul someone else`s gear.” [Individual response]

Negative impacts

The main negative suggested by respondents was whether the requirement took into account exceptions that could require a vessel to move another’s creels without first seeking formal approval. Respondents outlined a number of scenarios, including gear being towed accidentally, adverse weather conditions, and mechanical issues.

"If this is simply for the purpose of preventing vessels from sharing gear? Then it would need to be considered in some depth as vessels may require assistance from others at times where gear is at risk from weather, time exposure due to vessel mechanical issues, relocation to protect from trawl and any other reasons, where the gear owner is unable to attend to it or is uncontactable.” [Individual response]

There were also concerns regarding the capability of Marine Scotland to adequately administer this requirement, in terms of the ease of submitting a request and the turnaround time to receive clearance.

“There are the occasions where a mobile vessel genuinely does not see a static fleet of creels and inadvertently tows an end and needs to disentangle them instead of cutting them off and dumping them which they may do if Marine Scotland contact is 'too much hassle'. Or what happens if Marine Scotland is not contactable for clearance?" [Individual response]

Marine Scotland Response

Following consideration, Marine Scotland will pilot creel limits in the Outer Hebrides RIFG area.

To summarise, the key strengths of the proposal is that it:

- Has a defined objective (to limit the number of creels individual vessels are permitted to use in the relevant area).
- Demonstrates why creel limits are felt necessary.
- Is led by the local RIFG and demonstrates a good understanding of the fisheries in the area.
- Has been considered and refined following consideration with local stakeholders and visit to an area with creel limits in operation.

However, there are some weaknesses in the proposal:

- The rationale and possible positive and negative consequences of individual management measures are not explored in any real detail in the appropriate section of the proposal form.

- The practicalities and cost of putting in place creel limits in mixed fisheries are touched upon but not explored in any depth.
- Little consideration is given to monitoring the impact of the measures.

Conclusion

Marine Scotland believes that the Outer Hebrides proposal aligns well with the aims of the Inshore Fisheries Pilots initiative and offers the opportunity for exploring the potential for creel limits to control effort in Scotland's key creel fisheries.

This pilot, with a strong group behind it, gives a good opportunity to establish the practical benefits, or otherwise, of creel limits. Marine Scotland will work with the Outer Hebrides RIFG to put a creel limitation scheme in place.

Proposal 5: Zonal Boxes

In the fifth pilot we sought views on the establishment of 'zonal boxes'. These would be specified areas / zones of the sea where either static or mobile gear fishing activity would be permitted for a limited period of time. Separation would be determined by stakeholders in reaction to local fishing pressures.

For example, a seasonally important squid fishery can result in conflict between mobile and static gear fishermen (and similarly between vessels targeting scallops by dredge and creel fishermen). This is due to the sectors operating in the same area at the same time but fishing with different gears and for different species.

The concept was developed by Marine Scotland, building upon a proposal from the Arbroath and Montrose Static Gear Association, which was initially aimed at improving the management of the creel fishery in their area.

An overview of the proposal as developed by Marine Scotland is provided in the consultation document. The original proposal form as submitted is available at http://www.gov.scot/Resource/0052/00525811.pdf.

The consultation asked three questions in relation to this proposal (Questions 17 to 19).

Question 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?

There were 37 responses to this question, with 29 respondents (78%) expressing support for the proposal and 8 respondents (22%) opposing it.

The proposal received support from a number of fishing organisations, including the Scottish Creel Fishermen's Federation. Individual respondents included creel and mobile fishermen active in the Arbroath area, as well as others from around the coast with an interest in the zonal box concept.

There was one organisation opposed to the proposal (North East Creel & Line Association), along with another seven individuals respondents opposing.

Supportive responses

I. Reduce gear conflict

The most common view from those in support of the proposal was that the zonal box concept could help to reduce conflict between the static and mobile sectors.

"It seems an obvious way to reduce gear conflict. Gear conflict is potentially dangerous and costly for all involved and is best avoided." [Individual response]

II. Inform fisheries management

Several responses also saw the concept as a flexible approach to fisheries management, which would offer a fair and equal opportunity to both sectors in areas where they fished the same grounds.

"A mobile fishing vessel will always win the fight with a static gear boat which is not right because neither should have preference, zonal boxes will set out clear boundaries for all. A static gear vessel must not set its gear outside of a zonal box and a mobile vessel must not enter a zonal box, suitable penalties should be imposed on either gear type that breaches the agreement. Zonal boxes must be rotational, for example a box that was static gear only should be made available to mobile vessels every quarter or monthly or whichever agreeable cycle suits an area and likewise a mobile area becomes available for statics but areas must not be zoned off indefinitely for one gear type or the other. I feel that this approach is the future of inshore fisheries management around the coast of Scotland." [Individual response]

However, others cautioned that for the concept to work effectively, it must have the support and co-operation of both sectors in the chosen area.

Opposing responses

The principal concern by those opposed to the proposal was that implementing a zonal box in an area could lead to it becoming saturated with fishing effort, which could have subsequent impacts on the local fish stocks and marine environment.

"This idea of zonal boxes creates a 'honey pot' situation where styles and modes of fishing become over concentrated." [Individual response]

"In any zonal projects I have witnessed it becomes a huge feast or famine problem and it's only the stock that suffers long term and bad for the seabed Arbroath." [Individual response]

Question 18: Should this concept be explored in the Arbroath area as outlined above?

There were 31 responses to this question, with 21 respondents (68%) expressing support for Arbroath and 10 respondents (32%) opposing it.

Views were generally along the same lines as for Question 17. A small number of respondents who supported the general concept were opposed to it being trialled in the Arbroath area, as discussed further below.

Supportive responses

The main emphasis from those supportive was that the proposal could reduce gear conflict and make for overall safer fishing conditions in the Arbroath area.

"To reduce gear conflict and financial losses and encourage good working practice for all. Also to improve health and safety at work as the dangers for a potting vessel trying to retrieve lost gear are great. Also creating a level playing field for both types of vessel." [Individual response]

Opposing responses

A clear specific criticism was a lack of consultation with the mobile sector, and that a full discussion on the details of trialling a zonal box in the Arbroath area would be required between the static and mobile sectors.

Another criticism was that the zonal box concept did not match the proposal that had been submitted by Arbroath fishermen, and so did not meet their stated needs for improving fisheries management in the area.

Question 19: Is there any other area of the coast you would recommend for exploring zonal arrangements?

The majority of responses did not suggest a specific area, but instead generally recommended any area where local fishermen thought it was required, for reasons of resolving gear conflict between static and mobile sectors, or otherwise.

"Yes an area in which the local fishers have asked for help in managing gear conflict between diverse gears and different fishing methods." [Individual response]

A number of responses also used this question as an opportunity to call for spatial separation around the entire Scottish coast, with some in particular referring to the 'three mile limit'.

"The 3 mile limit should be reinstated as soon as possible to keep mobile gear away from the sensitive habitats of the inshore. The 3 mile limit worked. Its reinstatement would allow for better management of the creel fishery, and would allow recovery of habitats that have long been degraded and chipped away at by the mobile sector. At the moment little blobs of important habitat are protected, with the mobile sector disturbing the ground around these areas, this arrangement might protect small isolated areas, but it gives them no chance to recover or expand." [Individual response]

Specific areas around the coast were suggested by some respondents, which included:

- East of Orkney
- Firth of Lorn
- Inner Sound.
- Mull of Kintyre to the Sound of Jura
- Outer Hebrides (Shiant Islands to the Butt of Lewis)
- West Coast Sea Lochs (Loch Duich, Loch Alsh, Loch Carron)

Marine Scotland Response

There was strong support for the concept of zonal boxes from respondents; however, this was tempered with requests for further clarification around what the proposal would involve.

Those supportive of the proposal saw it as a means of reducing gear conflict and better managing access to the fisheries resource.

Having considered the responses, Marine Scotland will work with those who fish in the Arbroath area to establish zonal arrangements and test a new approach to fisheries management.

This pilot will allow us to assess the potential for local management of the fisheries resource in reaction to local fishing pressures and the impact of gear separation.

ANNEX A: CONSULTATION RESPONDENTS

Organisations

- Argyll and Bute Council
- Comhairle nan Eilean Siar
- Coastal Producer Organisation Limited
- Island Divers
- Kallin Shellfish Ltd
- Kilbride Shellfish Limited
- Kyleakin and Kylerhea Community Council
- Lochfyne Langoustines Ltd
- Mallaig and North West Fishermen's Association
- Mull and Iona Community Trust
- Mull Community Council
- Mull Fishermen's Association
- North West Responsible Fisherman's Association
- North East Creel & Line Association
- Open Seas
- Orkney Fisheries Association
- Orkney Fishermen's Society Ltd and Orkney Sustainable Fisheries Ltd
- Outer Hebrides Regional Inshore Fisheries Group
- Ross Sutherland Skye and Lochalsh Fishermen's Association
- Scottish Creel Fishermen's Federation
- Scottish White Fish Producers Association Ltd
- South West Mull and Iona Development
- Sustainable Inshore Fisheries Trust
- Tobermory Harbour Authority
- Western Isles Fishermen's Association
- West of Scotland Fish Producers Organisation Ltd
- WWF Scotland

Individuals*

- Alasdair Hughson
- Andrew Whiston
- Audrey Lamond
- Bruce, Andrew and Mark McLean
- Chris Rickard
- Colin McAndrew
- Daniel Brolly
- David Gordon
- Dawn Watson
- Donald MacKenzie
- Donald Matheson
- Douglas Chirnside
- Douglas Wilson
- Fred Brown
- Heather Brolly
- Ian Spence
- James Robertson
- James William Clouston
- John Geddes
- John Hay
- John Matheson
- Katie Mackay
- Kyle MacDonald
- Liam Newsome
- Magnus Spence
- Mhairi Matheson
- Rod Gillanders
- Simon Davies
- Stephen Morrison
- Steven MacAlpine
- Thomas Bryan-Brown
- Wilf Tanser

*Who gave permission for their names to be published

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