

Fisher-led perspectives on crab and lobster management in Northumberland: a regional contribution to the crab and lobster fisheries management plan consultation, July 2023.



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“...It would be better if we were more involved in designing the solutions not just DEFRA coming and saying ‘we have this, do you agree or not’ ”

(Northumbrian fisherman, 2023).

90% of Northumbrian fishermen agree or strongly agree with the statement

“I feel worried about my livelihood most or all of the time”



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Executive summary

In Spring 2023, 52 interviews were conducted, predominantly with commercial fishers (60% of active commercial shellfish permit holders) in the Northumberland IFCA district, to elicit their views on fisheries management, with a particular focus on crab and lobster, the main inshore fishery in Northumberland. The aim of the research was to contribute a regional inclusive response to the national crab and lobster Fisheries Management Plan (FMP) consultation, which launched on July 17th 2023. The National FMP draft for crab and lobster presents new opportunities “to pilot finer scale management regimes... through consultation and discussion with stakeholders”¹. The FMP draft advocates management in line with the ‘3S approach’, which focuses on managing effort by limiting harvest by ‘size, sex and season’, such as “more effective application of minimum landing sizes (MLS) and harmonisation as appropriate, restrictions based on the sex of shellfish to sustain spawning stock, and exploration of area specific seasonal closures” (ibid:p.55). Whilst there are some areas of convergence from fishers in Northumberland that speak to this 3S vision for management, there are areas of divergence too, which warrant consideration.

The research highlights **several areas of general agreement amongst interviewees**, summarised below, which could form **the foundations of a regionally focussed crab and lobster management plan, to inform the co-production of recommendations through the NIFCA membership and established processes**. Following the executive summary, the report introduces the research and its rationale in more detail, and outlines the methods used to achieve ‘inclusive engagement’, an approach geared to reach fishers who don’t usually engage via established platforms. The report then details fisher perceptions on what’s working and what isn’t working in fisheries management, priorities for change, reactions to a proposed increase in MLS for lobster (to achieve national harmonisation at 90mm, as suggested in the draft FMP), fisher engagement, and perceived contributions of fisheries to local economy and culture. Overall, the report clearly evidences the value of 1-2-1 engagement with fishers who, when given adequate time and space to offer their ideas and reflections, can contribute significantly as co-designers of fisheries management and welcome the opportunity to do so. This report will be presented directly to DEFRA through the FMP consultation engagement workshops and as a written submission to the online consultation.

Key finding

When asked about the **single biggest change** that fishers would most like to make regarding how the fishery is managed, the most frequent response given was i) **reducing effort/ the amount of gear** (pots) in the sea, closely followed by ii) **better enforcement of existing legislation** (including stricter penalties) and iii) to simply **‘be left alone’** reflecting the cumulative burden of rapid change and legislation on the inshore fleet.

Areas of general agreement across interviewees – supporting existing and exploring potential new management measures.

1. Improve existing, rather than introducing further, management measures.

Fishers generally perceive that existing management is sufficient for the region and that current landings (of lobster in particular) are good (albeit there is recognition of declining crab catches in recent years). This is supported by the NIFCA Lobster and Crab 2023 Status Reports (available on the NIFCA website) but

¹ Proposed Fisheries Management Plan for Crab and Lobster in English Waters July 2023

Version: public consultation. Available online [Proposed Crab & Lobster Fisheries Management Plan \(defra.gov.uk\)](https://www.defra.gov.uk/consultations/proposed-crab-and-lobster-fisheries-management-plan)

rather contrary to the findings of the national FMP draft (in consultation), which states that crab and lobster stock sizes for Northumberland are considered ‘well below MSY’ and their exploitation rates are ‘very high’ being close to or above the maximum reference point limit. Consequently, the Northumberland and Durham Crab and Lobster Fisheries Unit is proposed in the FMP draft to be considered for “**priority management action**” refined through consultation and discussion with stakeholders. **Evidence underpinning this prioritisation will need to be carefully presented and reasoned with stakeholders in the region.** Rather than bringing in additional measures, many fishers felt that a focus on **improved enforcement of existing measures would be more beneficial** to the fishery.

2. Differential enforceability of different management measures is important.

Fishers generally agree on, and highlight the significance of, **differential enforceability of different management measures**. For example, the prohibition of landing berried hens (female lobsters with eggs) is difficult to detect, and this ambiguity can frustrate relationships between IFCA officers and fishers, and between fishers, when non-compliant boats engage in the scrubbing of eggs. This frustration is **particularly acute in the Anglo-Scottish border region since landing of berried hens remains legal in Scotland**, a concern originally highlighted by the NIFCA in their response to the 2017 consultation on nationalising a berried hen prohibition (which NIFCA did not support). There is some support amongst fishers for the berried hen ban, but this is largely based on an understanding of the **rationale for the protection of eggs** and breeding stock; when asked the question of **whether the berried hen ban is effective, 86% of fishers who responded said no**. This is a more nuanced insight that somewhat counters the national FMP draft statement that “[berried hen] Bans are largely supported by stakeholders”. It should be noted that scrubbing of berried lobsters is not specific to Northumberland but presents a significant problem throughout England (often reported in media outlets such as Fishing News²) and globally³.

The former practice of v-notching (prior to the establishment of the berried hen ban in 2017) retains widespread support among fishers since a v-notched lobster is easily detectable and therefore enforceable, and fishers are generally in support of a re-introduction of this scheme, although there is some uncertainty as to whether this could be done alongside the existing berried hen prohibition⁴. Any reintroduction of v-notching would benefit from i) greater communication of the design of lobster v-notching where a proportion of lobsters are bought (by the NIFCA), v-notched, and then returned to the sea, theoretically ‘removing’ them from the fishery, hence enabling v-notching to be accommodatable alongside the berried hen ban; and ii) increased enforcement and checks for v-notched lobsters in wholesaler tanks (not just on boats and at point of landing). Voluntary v-notching of lobsters is also a common practice, especially amongst fishers in the north of the NIFCA district. To an extent, this is motivated to counteract Scottish boats picking up berried hens in the NIFCA district (illegally) and landing them in Scotland (legally), although voluntary v-notching occurs in other parts of England, and internationally⁵, and seems embedded within fishing culture as ‘good practice’ and a more effective means of protecting berried hens⁶.

² <https://fishingnews.co.uk/news/berried-lobster-landings-cost-cornish-firm-26k/>

³ Acheson, J.M. and Steneck, R.S., 1997. Bust and then boom in the Maine lobster industry: perspectives of fishers and biologists. *North American Journal of Fisheries Management*, 17(4), pp.826-847.

⁴ Note, v-notching schemes in other parts of the UK exist, for example Shetland had external grant funding also run by the Shetland Shellfish Management Organisation (paid for berried lobsters and kept all large males and females (£10 per kilo in 2014)); in Ireland maximum landing size for lobster of 127mm was introduced, As part of the measure, the initial first two years of operation saw fishermen get paid up to 75% of the market price for V-notching lobsters over 127mm and returning them live to sea, this was to offset potential losses during the transition to the new measure.

⁵ Acheson, J. and Gardner, R., 2011. The evolution of the Maine lobster V-notch practice: cooperation in a prisoner’s dilemma game. *Ecology and Society*, 16(1).

Highlighting the significance of differential enforceability of management measures is important because it stresses the **ambiguity of detection as being a root problem**. The national FMP draft points to complexity of different rules as being problematic and uses this argument to progress **national harmonisation**, for example lobster minimum landing size; **“This level of complexity makes it more difficult for fishers to abide by regulations and for regulators to effectively enforce regulations”**. Evidence presented in this report suggests that the **ambiguity of detection may be a bigger factor that shapes effective enforcement**. Complexity is simply (perhaps) the necessary outcome of management that is appropriately tailored to suit regionally specific needs and realities. The IFCA, as sole owners of their byelaw-making process from design through to enforcement, are rather uniquely placed to implement and monitor the management over which they have control.

3. Minimum landing size is an enforceable (and therefore effective) measure but increasing it may have significant economic impacts on smaller boats.

The current minimum landing size of 87mm for lobster was deemed sufficient by most fishers as a management measure. There is support for **greater enforcement of the existing MLS** and successful prosecutions by the NIFCA are generally widely celebrated by the fishing community. There was a **lack of perceived necessity for an increase in MLS for lobster** (expressed by 80% of respondents), alongside concerns regarding the **impact of an increased MLS on economic viability** (55% of respondents) especially among smaller boats in the south of the NIFCA district where lobsters are generally smaller. IFCA data on the proportion of catch between 87-90mm, and how this translates into earnings, corroborate some of these concerns. Since 2012, NIFCA has collected biometric data as part of ongoing monitoring of local lobster populations; between 2012 and 2022, 33,949 lobsters have been measured, with 12,628 of these being above the minimum size of 87mm. Using individual length/weight estimates NIFCA estimate the impact of the proposed change to a 90mm MLS would **reduce the total landed catch by an average of 23% with a value of £1.16 million in the first year post implementation. Estimates of impacts to individual vessels vary significantly, up to a loss of £99,000, with a mean loss per active vessel in the NIFCA district of £15,000**. However, after the first year, the impacts are less certain.

Evidencing and communicating the most likely economic impact of an MLS increase across different parts of the NIFCA region should be a priority since increased MLS is a highly enforceable management measure likely to enhance stock⁷. There was some recognition and buy in from fishers (20% of respondents) regarding the value and necessity of an increased MLS, but this was usually accompanied the need for **more evidence regarding the duration of time before which stock benefits would be realised**, and the need to implement an increase over a longer time period (one fisherman suggested an increase of 1mm every two years). Overall however, only 5% of respondents felt a phased implementation would aid accommodability of an increased MLS. Of note, several fishers in Northumberland recalled a previous feasibility study (led by Seafish in the 2000s), which similarly proposed an increased MLS for the lobster MLS to 90mm but which was subsequently scrapped due to calculations between 30-40% of the catch being affected. Some fishers also raised concerns over an increase in MLS fuelling the black market for undersized lobster since the value of a lobster between 87-90mm is considerably higher.

Importantly for the NIFCA region, an increased MLS to 90mm for lobster in England without a parallel increase in MLS in Scotland (currently 87mm) **will cause considerable conflict in the border region**, exacerbating existing high tensions regarding differential laws (such as a lack of berried hen prohibition in

⁶ Gustavsson, M., 2018. Examining the ‘cultural sustainability’ of two different ways of governing fishing practices. *Marine Policy*, 97, pp.262-269.

⁷ Bannister, R.C.A. and Addison, J.T., 1998. Enhancing lobster stocks: a review of recent European methods, results, and future prospects. *Bulletin of Marine Science*, 62(2), pp.369-387.

Scotland). Threats of gear conflict (cutting gear loose at sea) and lack of compliance (commencement of scrubbing of eggs) have already been aired as a potential response to an increased MLS in England. Fishers often lament the difficulty of enforcing different legislation across a border, which again can frustrate relations. Overall, these findings could directly inform the national FMP and call for “Analysis of the level and likely impact on industry of decreases of catch compared to potential long-term benefits to the stock... including exploring whether phased MLS increases over a set number of years could reduce impacts on the industry”.

4. Pot limitation and the desire to manage effort beyond 6 nautical miles.

Pot limitation was seen by many fishers as an important management tool to have in place, but with some acknowledgement that this too can be difficult to enforce and that various means of rule breaking exist, including additional/illegal tags and untagged pots. When asked whether the current pot limitation measure is working well, **70% of respondents felt it was not** (often lamenting that the 800 limit is set too high), but often also expressing gratitude that **at least some effort limitation exists**. There is widespread concern about **lack of pot limitation beyond 6nm** and unregulated fishing in this area. When asked what would be the single biggest change that fishers would like to make to how the fishery is managed, reducing the number of pots in the water (especially offshore) was the most frequently cited. **The only area of significant disagreement amongst fishers revolves around the design of pot limitation**, and whether this should be **limitation of no. of pots per person, or per boat**. The former allows larger vessels with multiple crew and greater capacity to thrive bringing in higher economic and employment benefits, the latter limits capacity for boats to thrive, but retains a ‘good’ level of income without being ‘greedy’.

Within the NIFCA district there is growing conflict between boats who fish beyond 6nm (with more than 800 pots) and the smaller boats who retain 800 pots and fish within 6nm. Because pot limitation only has ‘medium enforceability’ status, this frustrates relations between NIFCA and fishers since fishers blame lack of enforcement of pot limitation inshore, and lack of management of number of pots offshore. The polarised view regarding the ‘fair’ design of pot limitation between ‘living within your means of 800 pots per boat’ and ‘being able to economically develop’ with 800 pots per person, represents a schism in the inshore fishing community, frustrating relations between fishers around accusations of envy, greed, and blame for overfishing. At least two fishers suggested a **reduced pot limitation within 3 miles to 500 pots per boat**, with the argument that those fishers with pots outside the 6nm don’t economically need to fish more than 500 pots within 3nm and this could contribute to overall sustainability whilst keeping the smaller boats in business. Most fishers seem to share an inherent common value on retaining and protecting smaller boats in a fishery; many originated from using a smaller boat themselves and recall the practices of their ancestors. This could constitute an important shared value upon which to build consensus for management that seeks to protect the under 10 boats.

5. Seasonal closures of grounds in the NIFCA district

When asked whether respondents would ‘potentially support seasonal closures of certain fishery grounds *if it were likely to help protect stocks*’, 48% said they would, 52% said they would not (n=25). This is an interesting split given recent events around the campaign against designation of a highly protected marine area in the NIFCA district at Lindisfarne. However, emphasis in the question was given to ‘protection of stocks’ rather than ‘protection of biodiversity’ (these are not automatically perceived by fishers to be the same thing). There is some recognition amongst fishers regarding the value of historical seasonal ‘rest periods’ when fishers would have traditionally removed their pots from the sea (often over winter) to avoid storm damage and to enable repairs; at which point many would have turned to netting (for salmon and sea trout) as an alternative income. High numbers of modern steel creels mean that gear is now usually left in the sea all year around, also to avoid displacement from fishing grounds by other fishers. Loss of netting in the region, and the high number of grey seals (a 4 fold increase in the population over the last 20 years), make netting an unattractive

alternative; loss of diversification of fishing options is recognized as a significant challenge for management. One fisherman suggested a trial 4-week closed season for lobster from 15th June to 15th July, when the lobsters are soft (low in price), but plentiful in number. Recognition of this historical rest period could lay the foundations for future discussion of closed seasons or areas, and also speaks to the 'season' part of the 3S approach outlined in the Seafish FMP draft; as such, this is an area of potential, worth further exploration with fishers. Tentative conversations with fishers about potential closure of fishing grounds/ no take zones to potentially help bolster stocks through spill over benefits⁸⁹, highlighted that a major challenge to fisher buy in is lack of trust in each other to comply with a no-take zone, given the potential lucrative grounds that a protected area might provide. Getting fisher buy in for closed areas is not a straightforward case of good engagement and making a persuasive argument regarding the benefits – suspicion and high competition between fishers creates significant challenges and highlights the importance of effective enforcement.

1. Introduction. The importance of inclusive and substantive engagement in fisheries management.

The post-Brexit era provides the UK fishing industry with new opportunities to shape the nature of fisheries management, framed by national Fisheries Management Plans, which are committed to delivering management based on greater collaboration with industry (Joint Fisheries Statement 2022¹⁰). Whilst platforms for industry engagement in management decision making exist, these remain largely consultative in nature, often requesting fisher inputs on management options via online public consultation. This is limited for two reasons, first, it misses the potential deeper contribution of fishers acting as co-designers of a shared problem, rather than commentators on a pre-designed solution. Second, it is dependent upon good levels of inclusive engagement in the process to avoid domination by those who are both willing and able to engage more, risking a side-lining of more marginal voices (the problem of elite capture¹¹). There is growing recognition and concern about the lack of inclusivity of industry engagement and participation of fishers in management debates, particularly the small-scale / inshore sector, which constitutes much of the Northumberland fleet (see box 1).

Inclusive and substantive engagement is important for several reasons. It supports *procedural justice*, where people can have a meaningful say in policies that affect their lives; it motivates *procedural legitimacy* of management through buy-in and a sense of ownership over management design, which can increase compliance^{12,13} and, as is demonstrated clearly in this research, it enables a space where the design of management itself can be improved by the *diverse and creative contributions that fishers can deliver*, given the opportunity. Whilst fisheries science can inform management design from a perspective of stock assessment, ecological health, and economic rationality, engaging with fishers provides further insight into the feasibility and enforceability of different management techniques. Fishers themselves are best placed to

⁸ Russi, D., Pantzar, M., Kettunen, M., Gitti, G., Mutafoglu, K., Kotulak, M. and ten Brink, P., 2016. Socio-economic benefits of the EU marine protected areas. Report prepared by the Institute for European Environmental Policy (IEEP) for DG Environment, p.92.

⁹ Stewart, B.D., Howarth, L.M., Wood, H., Whiteside, K., Carney, W., Crimmins, É., O'Leary, B.C., Hawkins, J.P. and Roberts, C.M., 2020. Marine conservation begins at home: how a local community and protection of a small bay sent waves of change around the UK and beyond. *Frontiers in Marine Science*, 7, p.76.

¹⁰ <https://www.gov.uk/government/publications/joint-fisheries-statement-jfs>

¹¹ Lund, J.F. and Saito-Jensen, M., 2013. Revisiting the issue of elite capture of participatory initiatives. *World development*, 46, pp.104-112.

¹² Levi, M., Sacks, A., & Tyler, T. (2009). Conceptualizing legitimacy, measuring legitimating beliefs. *American Behavioural Scientist*, 53(3), 354–375.

¹³ Oyanedel, R., Gelcich, S. and Milner-Gulland, E.J., 2020. A synthesis of (non-) compliance theories with applications to small-scale fisheries research and practice. *Fish and Fisheries*, 21(6), pp.1120-1134.

describe the realities of how management impacts their lives and behaviours, illuminating the differential enforceability of management options and how management could be shaped to maximise legitimacy amongst fishers.

The **aim of this study** is to enable an inclusive and substantive contribution, from a representative proportion of commercial fishers in the Northumberland Inshore Fisheries and Conservation Authority (NIFCA) district, as part of wider preparations for a regional response to the national consultation on the Fisheries Management Plan (FMP) for crab and lobster (launched 17th July 2023). The research was funded by the Northumberland IFCA, with additional funding from the Blue Marine Foundation, which enabled further interviews to take place in southern Scotland and subsequent consideration of the significance of the Anglo-Scottish border in the NIFCA district.

Research objectives:

1. To gather perceptions of a representative sample of commercial fishers in the NIFCA district on fisheries management design, in particular (but not exclusively) for crab and lobster, with a view to contribute to national Fisheries Management Plan consultation(s).
2. To explore and evidence the capacity and value of commercial fishers to act as co-designers of fisheries management.
3. To identify areas of convergence and divergence between fisher, and between NIFCA and fisher, perspectives on different management designs.
4. To gauge levels of awareness and engagement in the crab and lobster FMP design process (led by Seafish) of crab and lobster fishers in the NIFCA district.
5. To consider the relevance of the Anglo-Scot border for fisheries management, as perceived by fishers.

Box 1. Drivers of fisher disengagement

- A lack of time (fishers are busy, with diverse working hours and often hold multiple jobs),
- A lack of access - poor communication or capacity to engage with (often complicated) consultation processes
- A lack of confidence - to contribute in open/ public forums,
- A lack of trust (in the process) - many fishers don't think it's worth engaging because past experiences have not evidenced impact of their engagement and fishers are often consulted late in the process, on pre-designed policy, that they may not be able to influence.
- Lack of trust (between fishers) – fishers may not feel comfortable to speak openly in front of other fishers due to the nature of competition in fisheries/ state of relationships.
- Elite capture – industry inputs can be monopolised by a small number of spokespeople who may have differing and unverifiable capacities to speak for everyone.
- Stakeholder fatigue – government policy and academic research often lack coordination and make multiple requests from fishing industry to participate in fisheries management.
- Engagement often is often dominated by 'crisis bias', where fishers only engage at the point of crisis, missing other contributions (including information required to prevent reaching a point of crisis).
- Engagement is often dominated by 'bad news' for fishers e.g. more management, rather than positive opportunities: 'things done to fishers, rather than with them and for them'; this demotivates engagement.

2. Research methods

Interview and survey data were collected over a 3-month period in spring 2023. Interviews consisted of open and closed questions covering a range of topics relating to fisheries management and fishing life more broadly (see Appendix 1). To maximise reach and engagement, an identical set of questions were asked using mixed methods combining in-person interviews (n=43), telephone interviews (n=3) and an online survey (n=7), the latter of which was distributed via email by NIFCA (a total of 52 interviews were captured using these methods). It should be noted that not all interviewees answered all questions, sometimes time constraints, interruptions, or lack of interest in a particular line of questioning, meant that questions had to be dropped. The results section clearly states those sample sizes that were less than 52. All interviews were recorded using a mobile phone and recording transcription app Otter AI.

By far, the most effective means of engaging fishers was in person, with the interviewer spending several days in a harbour to build initial rapport, and then meeting fishers according to their convenience. Most in-person interviews lasted between 1 and 2 hours in length and were conducted in fisher's sheds or a communal place such as a café or harbour office. Participants were also recruited by NIFCA staff who promoted awareness of the project to fishers and details of how to engage. Ethical approval for the research was obtained via the Newcastle University research ethics procedure and deemed low risk. All interviewees gave informed verbal consent prior to interview and retain anonymity in this report; fishers were also given the option to withdraw or skip questions they did not want to answer. All recorded data is kept securely and will be destroyed on completion of this report. Interview data were collected into one master data file using Microsoft Excel. Data visualisations were produced using the 'ggplot2' package in RStudio version 1.3.1093. Qualitative data from responses to open questions were categorised and a thematic analysis was conducted for each open-ended question to distil key themes along with quantification of the frequency of the number of times each theme was mentioned¹⁴.

Overview of interview participants

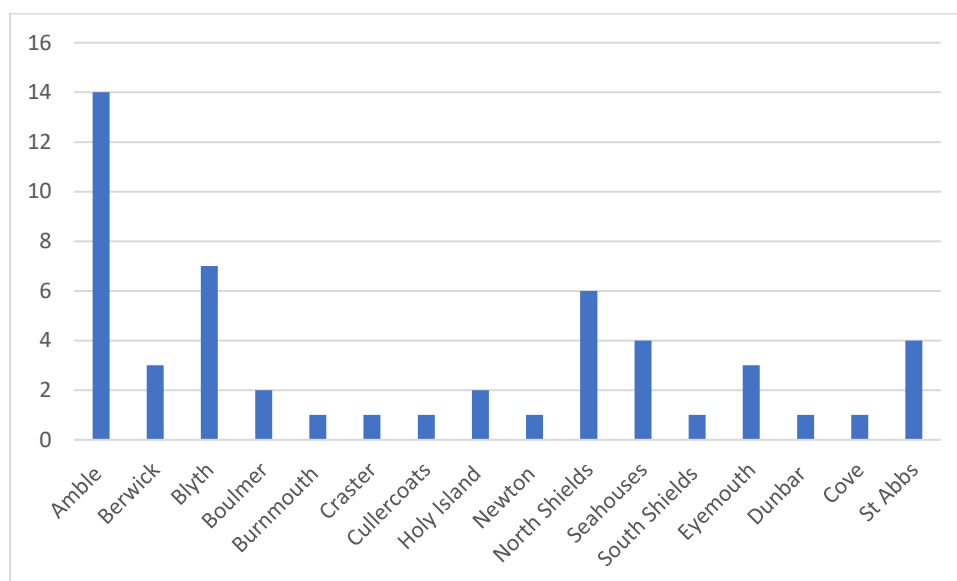
In total, 52 interviews were conducted. 46 interviews took place across 12 sites/harbours in the NIFCA district (see Fig.1.), and a further 6 in Scotland, just north of the NIFCA district (St Abbs to Dunbar). The majority of interviewees (35) were active skippers of their own boats, with 4 crew, 3 retired fishers, and 4 classified as non-commercial fishers (but had a closely associated role such as harbour master or fish market manager). This sample breakdown means that 35 skippers out of a total 58 active vessels/permit holders were interviewed, which constitutes a **representative sample of 60% of NIFCA commercial shellfish permit holders**. All fishers were male (hence we employ the term fishermen from hereon) with the majority working a boat under 10m in length (65%), 20% working a boat 10-12m in length and 4% over 12m in length [11% were unrecorded relating to this question]. The majority of interviewees (80%) were lobster and crab fishermen using creels, with some using additional gears for different species during different seasons. The second most common gear type was 'other' which included T or J net, jigging machine, longline and tangle net. This was followed by rod and line, trawl, handline and gill net.

¹⁴ Note: The frequency of each theme was only recorded once per respondent even if the theme was mentioned more than once within the response. Only themes which had a mention frequency of more than 1 from all respondents were included. Those with a mention frequency of only 1 were noted as additional themes (due to their infrequent mention) and are noted at the end of each given theme section. Additional themes are noted in no particular order.

Table 1. Overview of interviewees

	Skipper	Crew	Retired Fisher (active)	Recreational Fisher	Other	Region Fished	Total Interviewed
Amble	11	1	2	-	-	NIFCA	14
Berwick	3	-	-	-	-	NIFCA	3
Blyth	4	2	-	-	1	NIFCA	7
Boulmer	2	-	-	-	-	NIFCA	2
Burnmouth	1	-	-	-	-	NIFCA	1
Cove	1	-	-	-	-	Scotland	1
Craster	1	-	-	-	-	NIFCA	1
Cullercoats	1	-	-	-	-	NIFCA	1
Dunbar	1	-	-	-	-	Scotland	1
Eyemouth	3	-	-	-	-	NIFCA	3
Holy Island	2	-	-	-	-	NIFCA	2
Newton	-	-	-	1	-	NIFCA	1
North Shields	5	1	-	-	1	NIFCA	7
Seahouses	2	-	1	-	1	NIFCA	4
St Abbs	4	-	-	-	-	Scotland	4
Total Interviewed	41	4	3	1	3		52

Fig. 1. Distribution of interviews by harbour



3. What's working well and what isn't.

A series of open-ended questions were posed regarding fisheries management in the NIFCA district. The open-ended questions enable respondents to construct their own responses, rather than restricting their response from a pre-determined selection of answers. Interviewees were asked to consider how the fishery they work in is currently managed, and respond to the following two questions:

1. What do you think is working well in terms of fisheries management (and should be maintained)?
2. What is not working well?

Key themes were distilled from the data using thematic analysis (where responses are grouped under similar headings). The results are presented here in frequency charts 1 and 2, showing the number of individual respondents who mentioned a particular theme in response to these questions. The tables 1 and 2 include qualitative data in the form of quotations taken directly from the interview and, where appropriate, a further breakdown of the theme. Some themes appear as a response to the questions ‘working well’ and ‘not working well’, such as enforcement of MLS (minimum landing size) of lobsters, and the berried hen ban, and enforcement of existing legislation in general, which captures the divergent views on these management interventions. Where enforcement was mentioned as something ‘not going well’, it tended to be in relation to a desire for greater penalties (see quotations in Table 2). Less polarised views include a general appreciation of existing levels of good management and too much gear, especially offshore. The v-notching scheme is not currently in operation in the district but was often cited as something that had been working well in the past, and thus is included here.

Chart 1. Fisher perceptions on what is working well and should be maintained.

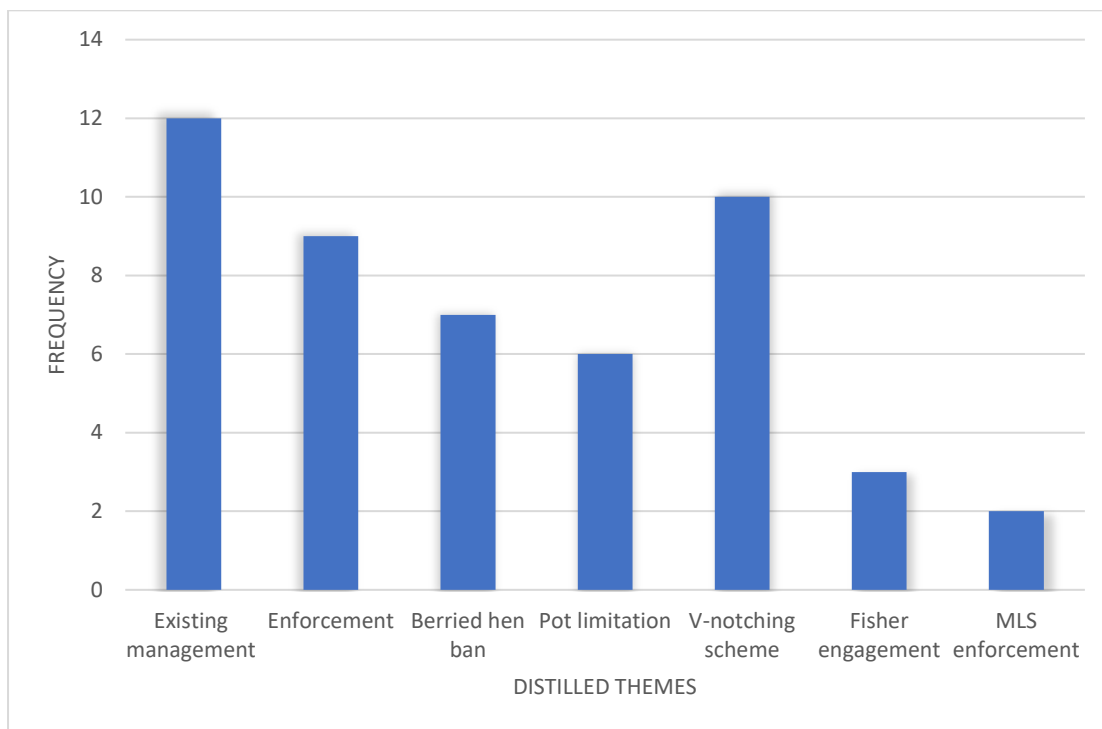


Table 1. What is working well and should be maintained - breakdown of themes and quotations.

Themes	Frequency (no. of respondents who mention this theme in their response).	Relevant quotes from interviews
Satisfaction with the majority of management	12	<p><i>"I think overall the management they've got is pretty good. I acknowledge they cannot police everything but there is enough going on".</i></p> <p><i>"Nothing to change in fisheries management, everything here works okay. NIFCA fishery officers have a good relationship with the fishermen".</i></p> <p><i>"The lobster fishery is better now than in the past"</i> <i>Any change in legislation could be detrimental"</i> <i>"We'd just like to be left alone"</i></p>
Enforcement of legislation	9	<p><i>"It's good that NIFCA are around. If they weren't around there wouldn't be anything left for us to take at all. That would ruin the job. The policing they do is good".</i></p> <p><i>"I think NIFCA are pretty good. You cannot fault them. The way they work are good. The NIFCA wants keeping. The only people who don't like them are people who are doing what they shouldn't".</i></p>
Legislation banning the landing of berried hens (7)	7	<p><i>"(I am) all for the berried hen ban. If you land them you are killing your own future catch. The ban gives them a chance to lay their eggs. I'm pleased that the ban has been brought in".</i></p> <p><i>"I think the berried hen ban is a good thing. There were a lot of complaints at first especially during the quiet season before spring when you don't get much catch but everyone got used to it. I think it's done some good".</i></p>
Pot limitation	6	<p><i>Note: 2 fishers commented 800 was a good limit, 3 fishers commented it should be reduced to 500 pots per boat.</i></p> <p><i>"The limitation has stopped boats expanding under 6NM which would've become unsustainable"; "the fishery would be wrecked without it"</i></p>
V notching scheme (note, no longer in use)	10	<p><i>"It was better when v notching was across the board but still landing berried hens, the lobster stock seems better".</i></p> <p><i>"You cannot land a v notch or scrub a hen with a v notch".</i></p> <p><i>"I prefer v notching over the [berried hen] ban".</i></p> <p><i>"A return of v-notching would be supported by 99% of fishers"</i></p>
Fisher engagement	3	<p><i>"NIFCA fisheries officers have a good relationship with the fishers"</i></p> <p><i>"The NIFCA here is engaged with the fishermen. We know who we are talking to even though we might not always agree".</i></p>

Minimum landing size for crab and lobster	3	
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Chart 2. Fisher perceptions on what is not working well.

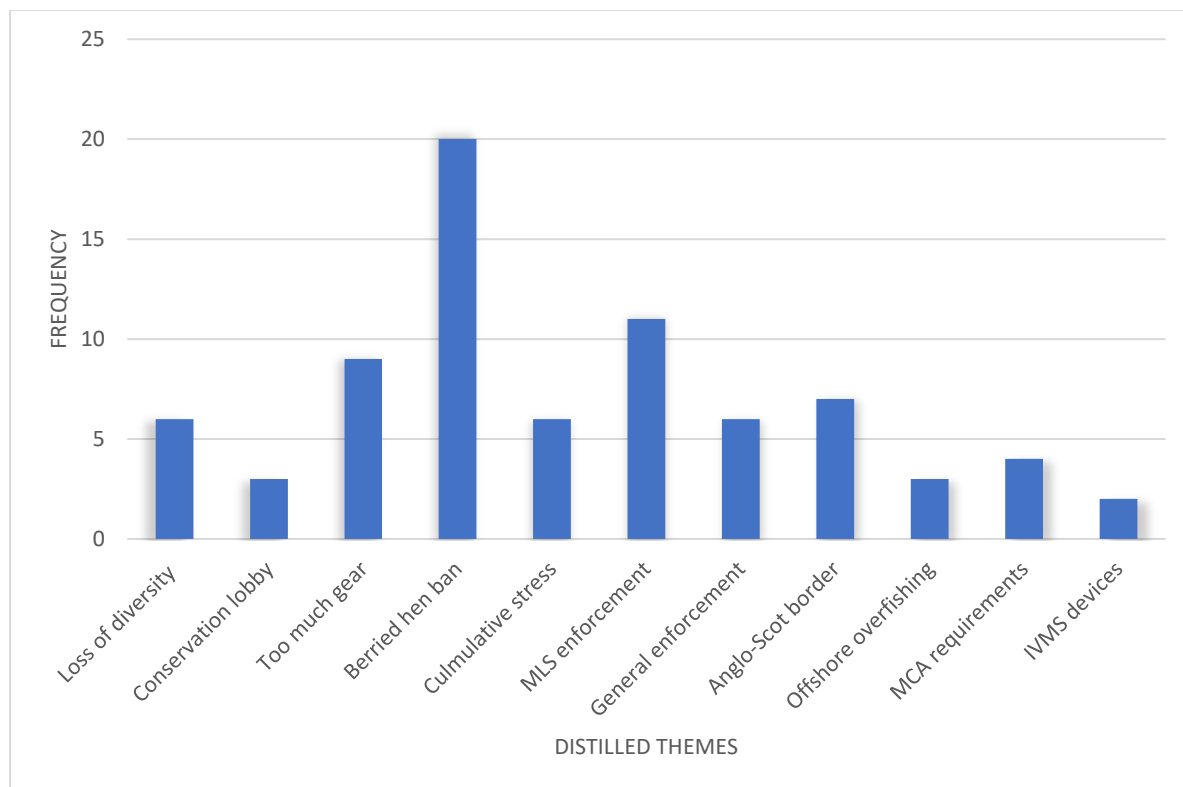


Table 2. What is not working well - breakdown of themes and quotations.

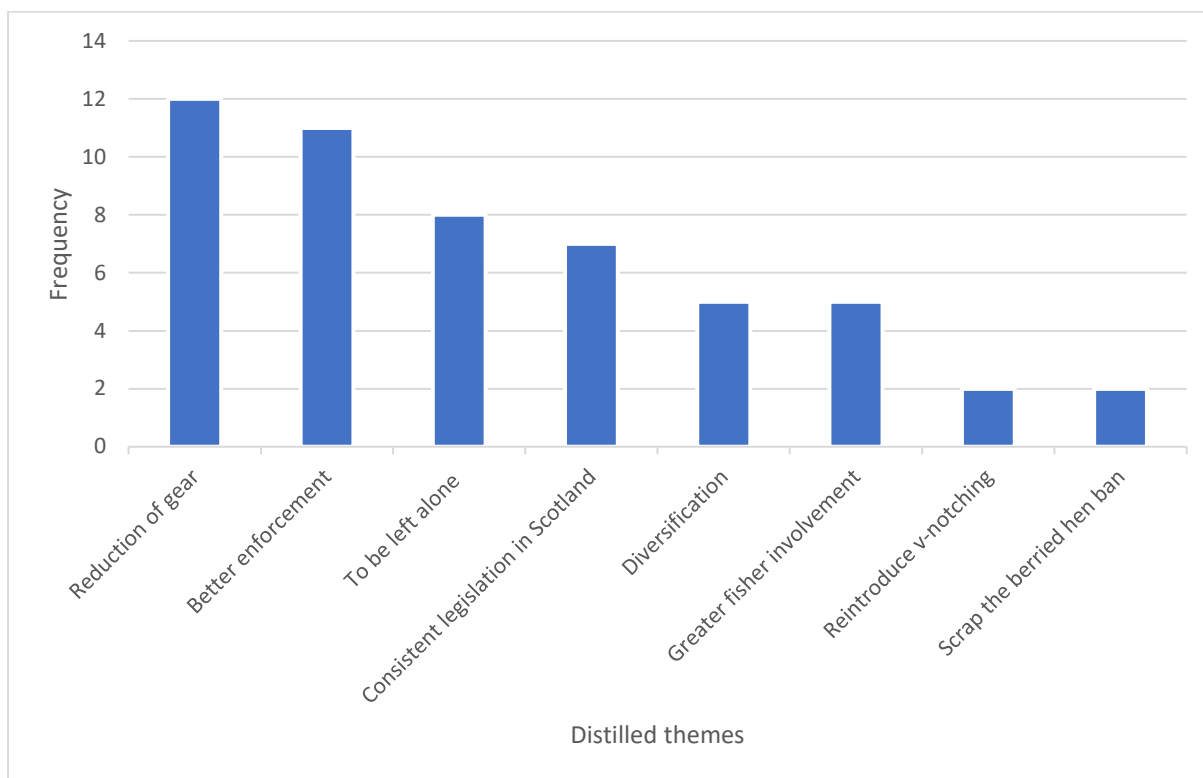
Themes	Frequency (no. of respondents who mention this theme in their response).	Relevant quotes from interviews
<p>Lack of diversity/seasonality/rest period in the fishery</p> <p>This includes reference to gear modernisation enabling pots to remain in the sea all year around; regulations have increased inshore which has resulted in loss of fishery diversity; loss of species diversification (such as sea trout netting).</p>	6	<p><i>“When we were at the salmon we fished eight fleets of 25 wooden pots with two of us on the boat so you had plenty of time and you were never rushed. Now I haul 400 steel ones by myself so when that's done you've had enough. They've ruined a good job. The truth of our job is the more stuff you land the less price you get so we could all make a better living if we fished less gear, but that is never going to happen because they're not going to do it”.</i></p> <p><i>“We can't make a living with just pots”.</i></p> <p><i>“We have to go at the pots all year. We used to fish for salmon May, June, July and August and put pots in end of August for the winter when the lobsters were starting to come out. Since the salmon has finished we can't do that anymore. We'd like to give the lobsters a rest in the summer but we cannot do anything else”.</i></p> <p><i>“Years ago Craster boats fished off Craster, Amble boats off amble, Boulmer boats off Boulmer. Now days everyone fishes everywhere, there is no traditional fishing grounds anymore”.</i></p> <p><i>“We used to fish salmon and sea trout from the second week in May to the end of August and it gave the lobster grounds a rest. Nothing is getting a rest now. Everything is getting battered”.</i></p>
<p>Too much power to conservation/green lobbies (funding and influence)</p>	3	<p><i>“There's been a shift in public perception of fishermen from providers of food to destroyers of the sea”</i></p> <p><i>“conservation groups are negatively influencing public opinion against fishers”,</i></p>
<p>Too much gear/ pots in the water all year around.</p>	<p>Too much gear (total 9)</p> <p>(breakdown: inshore (1), both inshore and offshore (4), offshore (4).</p>	<p><i>“Some bigger boats wipe the place out in a couple of weeks”.</i></p> <p><i>“I struggle to shoot out in the summer as there is no space”.</i></p> <p><i>“The lobsters come out in July ish and they are hammered by the end of August meaning you only have access for 2-3 weeks. They don't crawl anymore as they don't have a chance”.</i></p> <p><i>“Half a dozen boats equals 5-6 thousand pots. I don't think the fishery is viable as it is”.</i></p>

		<p><i>"The current pot limit is too high. It is an insult to mother nature. I have only have 200 pots and I make a good living".</i></p> <p><i>"They should reduce the pot limit to 300-400. I currently work 220 pots. Bigger boats could manage with 400 for 2 men. If they can't afford this than just get a smaller boat. It's just being greedy".</i></p> <p><i>"A lot of trawlers switched to potting boats and they brought a big boat mentality into potting. We only used to work 400 pots, then the IFCA brought the limit in of 800 and big potters had 400 in Amble and 400 in Boulmer. So then we upped our pots to 800 inside 6 mile and 400 out. Either you catch it yourself or you leave it to somebody else to catch. It's dog eat dog now where as it used to be a lot more sustainably fished than what it is now...the pot limitation didn't cut gear down, it increased the gear on the ground".</i></p> <p><i>"It was done unfairly. It's 800 pots per boat. Some boats have 4 men on, and some have 1 man on. Would be better to have a limit per size of the boat or kilowatts of the boat... NIFCA have implemented it with the best intentions but the only people that are getting penalised are the ones who have invested the most money. If they brought restrictions in to reduce my potting I would have to let some of my men go.</i></p> <p><i>"Some big boats I know work 11,000 pots. I used to have a lot less pots when I started but slowly year by year I have increased the number of fleets. I currently have 6 sets of gear in per boat (I have three boats). It's hard to go back now. If a pot limitation was brought in overnight I would have to get rid of 2 guys."</i></p> <p><i>"There's just tens of thousands of pots out there. We all strongly suspect that they'll be a real downturn in a few years because this is a recent thing this big offshore fishing here, it was never really done. It has got to have an impact on the breeders. That ground there has never been touched before. It'll be wiped out. They're working like 60/70 miles off' .</i></p>
<p>Berried hen prohibition</p>	<p>20</p> <p>Breakdown: General (7) Scrubbing (4) Impossible to police effectively (7)</p> <p>No visible improvement to stocks (2)</p>	<p><i>"Bringing in the berried hen ban was the worst thing ever. We should've been able to keep landing them but have to give NIFCA so many a year to be v notched depending on the size of your boat. Better to bring back v notching over the ban".</i></p>

<p>Uncertainty of legislation change and cumulative stress</p>	<p>6</p>	<p><i>"There's a lack of direction and forward planning as management such as quotas can change"</i></p> <p><i>"There's no science behind legislation"</i></p> <p><i>"There are more and more rules but no scientific evidence to backup new rules and no accountability when the measures fail to make any difference; they [government] are always trying to limit people's business instead of trying to develop it"</i></p> <p><i>"Fishermen are penalised for external factors (global warming)"</i></p> <p><i>"management wants to stop fishers going to sea"</i></p> <p><i>"Complying with MCA regulations is too difficult"</i></p> <p><i>"It's blow after blow...they (government) want every fisherman out of the sea...it's never going to stop, they want every one of us gone",</i></p> <p><i>"I worry about all the legislation always coming in. It's just never ending. We've just got rid of the HMPA then bang there is something else".</i></p> <p><i>" It would be better if management could be adaptive, to be held responsible for measures which fail and give opportunities back instead of just restricted forever"</i></p>
<p>Undersized lobster enforcement:</p>	<p>11</p>	<p><i>"There are inconsistencies in measuring lobsters for landing, some stretch them out then can be illegal to land or the lobsters are 'on the hair' (undersized but covered slightly by hair).</i></p> <p><i>"people are catching undersized lobsters, it's a minority of people keeping what they shouldn't"</i></p> <p><i>"The same perpetrators 'rogue fishermen' are landing undersized lobster"</i></p> <p><i>"recreational potters (without licences) are catching significant proportions of undersized"</i></p> <p><i>"I think there will always be a lobster fishery as long as some of the small are thrown back".</i></p> <p><i>"A fisher can land undersized lobsters and hide them from the NIFCA if they come to board the boat."</i></p> <p><i>"Buyers are taking undersized lobsters. Enforcement should go to the buyers and check their tanks and that could stop people catching undersized ones".</i></p>
<p>General enforcement</p>	<p>6</p>	<p><i>"The fines for offensives aren't sufficient, there's no deterrent for those that aren't following the rules"</i></p> <p><i>"There's a lot of support for greater penalties"</i></p>

<p>The Anglo-Scot border and enforcement in Scotland</p>	<p>7</p>	<p><i>“If Scotland and England worked together it wouldn't be a bad thing if the MLS for lobster increased. All the MLS across countries should be the same”.</i></p> <p><i>“There are not enough enforcement officers in Scotland so whatever laws they bring in aren't going to work”</i></p> <p><i>“There are only 2 fishery officers in Scotland. Now that everything is getting overfished the good times are getting shorter and the bad times are getting longer”</i></p> <p><i>“The problem is inconsistent legislation between England and Scotland, Scottish fishers catch berried hens in England and land them in Scotland”</i></p> <p><i>“Scottish boats never get boarded but English boats do”</i></p>
<p>Offshore fishing pressure</p>	<p>3</p>	<p><i>“Offshore fishing is especially threatening the crab fishery with pressures on the seabed around Hartlepool from scallop dredgers”</i></p> <p><i>“fishers along the Northumberland coast campaigned for scalloping to be banned inside the 6nm”</i></p> <p><i>“Putting in a pot limitation from NEIFCA is too late as there has always been too much gear down there. There are little boats working 1200 pots....it has been proven crabs move from South to North. Crabs are being taken from the south before they even have chance to move north. The crab fishery here is getting worse each year”.</i></p>
<p>Enforcement of MCA medicals.</p>	<p>4</p>	
<p>IVMS devices that had to be fitted and don't work properly</p>	<p>2</p>	
<p>Due to their low mention frequency (mentioned by 1 fisher only), these themes have not been included within the main themes overview. In no particular order these additional themes included: (1) Lack of recruitment of fishers, crew attraction/retention (2) lack of engagement with fishers, (3) catch depredation by seals; (4) Uncertainty around windfarm impacts; (5) lobster MLS increase; fuelling a black market of a more valuable produce (heavier lobster), (6) Paperwork and additional reporting of catches; (daily) to MMO; (7) effectiveness of escape gaps; larger lobsters can squeeze out, (8) lack of infrastructure.</p>		

Chart 3. The single biggest change fishers would like to see in how the fishery is managed.



Asking respondents to name the “single biggest change” they’d like to see in how the fishery is managed, gives a useful sense of how fishers prioritise issues according to what matters most. A **reduction in gear/ pots** was mentioned in particular with reference to offshore fishing pressures, but also with some suggesting a further reduction in pot limitations within the immediate shoreline within 1nm of the shore. At the same time, it was recognised that some of the larger vessels would struggle to accept a reduction in pots due to debt and dependency of crew. **Better enforcement** was generally mentioned in terms of existing legislation, specifically of bylaws and advocating stricter penalties, such as the **removal of permits for repeat offenders and funding for more enforcement officers** (one per port). **To be left alone** / make no change was accompanied by fishers arguing that the fishery is already well managed and further regulations are unwarranted. One fisherman commented that given growing uncertainties of climate change, a period of transition is needed for observation on what the fishery might become and that the inclination to introduce new rules and regulations should be avoided. **Consistent legislation between Scotland and England** refers to the desire for a parallel berried hen ban in Scotland and the need for consistent MLS on both sides of the border (for crab and lobster). Enabling greater **diversification of fishing options** includes less legislation and restriction on quota and licencing, and management that can better reflect the seasonality of fisheries, such as a return to gillnetting. In reference to netting, **the high population of seals** in Northumberland is a significant barrier to diversification, albeit one fisher suggested that a change in mesh size would encourage fishers to target other species. Greater fisher engagement largely was mentioned in relation to cumulative consultation requirements, where people can feel “disposable and not valued”; there is a keenness to be more involved in **designing the solutions** rather than commenting on pre-designed options. **Reintroduction of v-notching** (in addition to the berried hen ban) was mentioned by two fishers (also as an alternative to the proposed increased MLS) with compulsory donation of berried hens to NIFCA (mentioned by one fisher).

4. Fisher responses to a proposed increase in lobster minimum landing size to 90mm

In March (mid-fieldwork), a draft of the Seafish led Fisheries Management Plan for crab and lobster was made publicly available, which included a suggested increase in MLS for lobster from 87mm to 90mm. The following question was subsequently included in the interviews and responded to by 36 participants.

We now know that the FMP that is going to public consultation in Summer, which will be national policy, includes the following management proposal: To harmonise (nationally) minimum landing size MLS from 87cm to 90cm.

i. Do you think an increase in lobster MLS from 87mm to 90mm is required in this region?

ii. What impact would this change have on your current fishing practices?

iii. What impact would a gradual change (such as 1mm per year increase) have on your current fishing practices?

iv. Do you think there would be difficulties if MLS remained at 87mm in Scotland but increased to 90mm in England?

Of the 36 respondents, 80% (n=29) felt an increase isn't required, followed by those who have mixed opinions (11%, n=4) and those who felt it is required (9%, N=3). Mixed responses were designated when the respondent was unsure about the necessity of an increased MLS, but could weigh up the arguments for and against.

Key quotes: "If the size goes up I cannot see how people are going to manage. People are going to have to retire. An increase in (lobster) minimum landing size is my biggest worry at the moment. Today I got 41 lobsters and 3 of them were 90mm. I think the lobster fishing here is good".

"It'll be a big hit for what I'll get in wages...If it goes to 90mm (lobster minimum landing size) it'll make a massive difference to my catch for the next 2 or 3 years. I'm going to sea to make a living. I'm more or less chucking away half of my catch at the moment because of current regulations. I am going to sea to catch things not throw things back ... It'd be 2 or 3 years before I am able to catch those lobsters again".

"Short term financial implications are going to be extremely hard on the industry possibly even detrimental to a large number of fishers".

"I did a study with Seafish 10-15 years ago. They proposed an increase to 90mm but calculated 30-40% of the catch would've been lost so they scrapped it."

"(An increase in lobster minimum landing size would) probably bring forward my decision to leave the fishing quicker".

"It would finish me. I would have to sell up. It wouldn't be viable. I'd have to get rid of my crew. I don't want to go out alone because of safety concerns ... lobster fishing in Amble would be finished with an increase to 90mm".

Out of the 36 respondents, 20 (55%) feared a **significant and long term financial impact** citing 'bankruptcy', especially for smaller boats who would be 'taking the biggest hit', making fishing non-profitable. Only 2 respondents (5%) stated that an incremental increase over several years would help accommodability of the increase. 15 respondents (42%) specifically stated that an increased MLS to 90mm would likely affect between

40% to 90% of their current catch. 2 respondents (5%) expressed concern that an increased MLS would increase landing of undersized lobsters due to a more valuable black market product, and a further 2 fishers (5%) expressed concern about lack of marketability since 87mm is a 'good restaurant/ plate size'.

5. Fisher perspectives on the quality of their engagement in fisheries management.

Respondents were asked a series of questions on the quality of their engagement in management issues which concern them. These included:

- i) Do you feel sufficiently informed about fisheries management that affects you as a fisher in this region? Yes/No
- ii) Do you feel that your opinions influence fisheries management that affects this area? Yes/No
- iii) What improvements could be made to increase fisher involvement in fisheries management?
- iv) Prior to this survey, had you heard about the development of Fisheries Management Plans?
- v) What is your preferred method of engagement
- vi) How do you keep informed about fisheries management which affects you?

Distinguishing between 'feeling informed about' management and 'having influence over' management decisions, captures an important indicator relevant to the achievement of co-management and working in partnership. Fishers may be kept up to date and 'feel informed' about management which affects their lives, but ultimately feel powerless in their capacity to influence debate and actually shape management decisions.

Whilst high levels of fishers felt sufficiently informed (69%, n=29), this rapidly declines when it comes to feeling influential (28%, n=29). This difference (which we might call the 'engagement gap') can be a useful indicator by which to track progress of co-management, by monitoring change in the proportion of fishers who feel their views have an impact on decisions made. This is where substantive, or more meaningful, engagement has a role to play, engaging fishers as co-designers of solutions, rather than commentators of pre-established options. As one fisher articulates well:

"....It would be better if we were more involved in designing the solutions not just DEFRA coming and saying 'we have this, do you agree or not'".

Chart 4. How fishers currently keep informed about fisheries management.

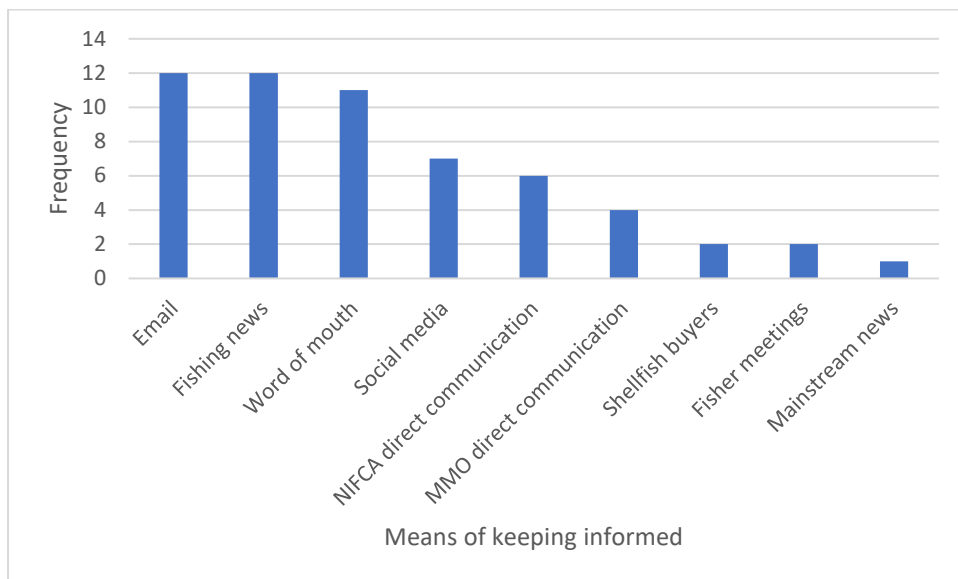
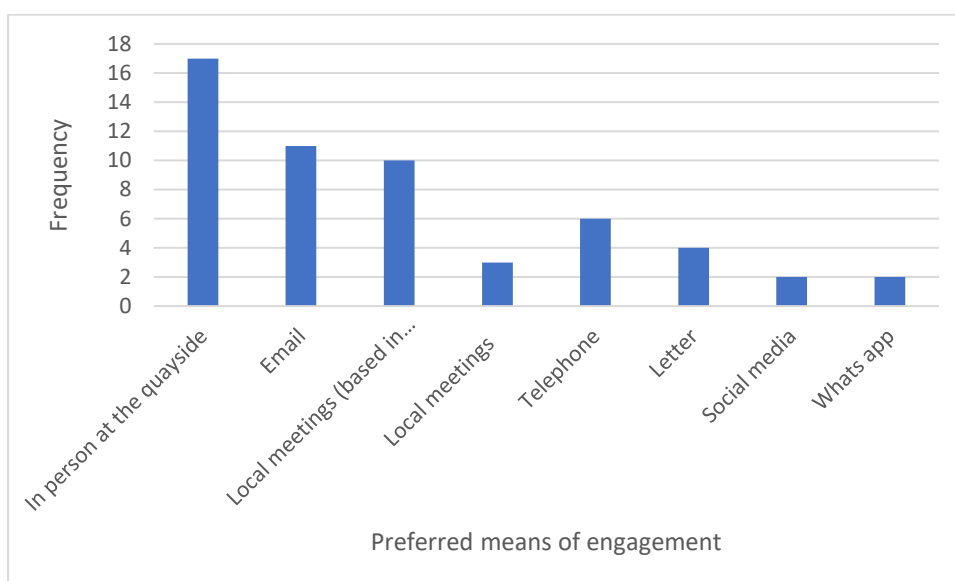


Chart 5. Fisher preferred method of engagement.



Charts 4 and 5 show a clear difference between the main mechanisms by which fishers currently keep informed about fisheries management (via email, Fishing News and word of mouth) and how they'd prefer to be engaged with (in person at the quayside) which perhaps highlights a need for more quayside in person engagement where capacities allow.

Encouragingly, 59% of fishers interviewed (n=27) had heard of the development of Fisheries Management Plans, whilst 41% had not.

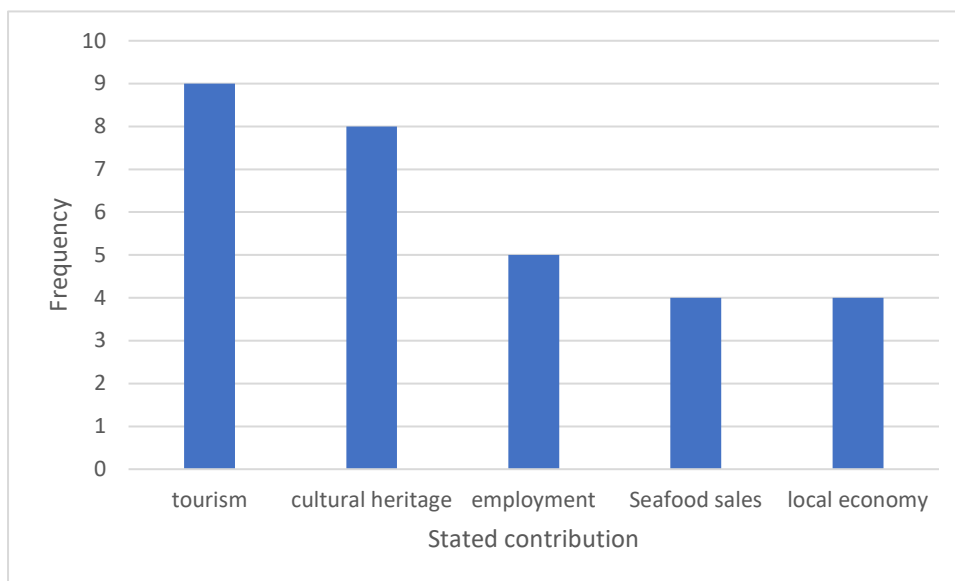
6. Fisher perspectives on the contributions of the fishery to the wider economy and culture of the area

“Fishing matters for, and because of, coastal communities. Catching fish contributes less than 0.05% to UK GDP... yet it is hugely totemic...This is because fishing is a local, not a national, story, disproportionately important culturally and economically to the UK's fishing towns and villages – many of which are among the UK's least prosperous areas”¹⁵

Given this, a series of questions were asked to ascertain the views of fishers about how their fishery contributes to the regional economy and culture of the area, what might be done to enhance this contribution, and whether fishers feel their contributions are valued by the public.

¹⁵ <https://neweconomics.org/uploads/files/1804-A-Fair-and-Sustainable-Fisheries-Bill-NEF1.pdf>

Chart 6. Fisher perceptions on the contributions of their fishery to the wider economy and culture of the area



Fisheries plays a central role in tourism in across the district, in particular Amble where many of the interviews took place. Fishers recognise the attraction of an ‘active fishing fleet’ to tourists. Fishers felt that potting in particular is a traditional fishing technique in the area and should be preserved, whilst some lamented that the culture of fishing has been lost. Fishing is still perceived to be a relevant, if reduced, employer in the region, and sales of produce to local fish shops and eateries are important. Fishers and their families contribute to local economy and schools, albeit the relatively low economic contribution to GDP at national level is also recognised. Fishers suggested that the contribution of fisheries to wider economy and culture could be achieved by **increasing the local sale of shellfish** (rather than solely export), **education of the public on how to prepare and purchase local shellfish**, advertising to boost tourism and positive **public marketing** to portray the fishing industry, especially in light of growing public concern about the health and conservation of the marine environment. As one fisherman lamented;

‘Fishermen used to be seen as providers of food, now we’re just seen as destroyers of the sea’

39% of fishers felt valued by the local public, 35% felt unvalued, with 26% remaining unsure (n=23)

7. Concluding remarks

This research demonstrates the value of in-depth 1-2-1- engagement that provides a suitable space and time for fishers to meaningfully contribute to the design of fisheries management. It also evidences the desire for fair and effective management among fishers, who clearly express collective concern about the condition of their fishery. Perhaps also of note is the fact that, of all fishers interviewed, not one advocated 'no management' or a removal of restrictions to enable more fishing. The berried hen prohibition was one example of an unpopular management measure, but conversations around its possible redundancy were inspired by difficulties of detecting scrubbing and widespread preference for v-notching as a more visible and enforceable means of protecting breeding females, a measure which was ultimately replaced in Northumberland with the 2017 national berried hen prohibition. This speaks clearly to an important and wide-reaching ethos for sustainable fisheries amongst inshore fishers in Northumberland. However, fishers also feel on the margins of sustainable fisheries management. Whilst fishers are well informed from the NIFCA about management that is relevant to them, they lack influence over its design and decision-making. This lack of feeling influential is relevant to IFCA given that commercial inshore fishers are explicitly represented in IFCA membership, which makes decisions on regional bylaws. Future research to explore this 'engagement gap' between 'feeling informed' and 'feeling influential' should perhaps distinguish between having influence over regional (IFCA) bylaw decision-making and national decision-making. This distinction was not made in this research but could illuminate whether the disconnect fishers feel relates to their IFCA or national / centralised decision-making processes.

This research has also highlighted the significant levels of stress and uncertainty felt by many fishers in this region, a scenario that is replicated globally¹⁶. Wanting to be 'left alone' is a clear indication that fishers can feel overwhelmed by waves of new and ever-restrictive legislation, particularly problematic if the perceived necessity for further management is not evidenced from the fisher's perspective. Feeling undervalued by the general public and the growing influence/public value attributed to (sometimes opposing) marine conservation agendas, is a significant cause of stress too, which needs to be addressed. This could be done by IFCA through their work within the realm of public engagement/ awareness raising regarding the differential impacts of different fishing activities and the conservation/ sustainability ethos that can be inherent to many fishers; bridging sustainable fishing and conservation agendas is after all the IFCA *raison d'être*. Warning signs from other parts of the world (such as Australia) where tensions between public/marine conservation interests and commercial fishing have generated conflicted and even abusive relationships (such as physical attacks on fishers¹⁷) should be heeded. Last, but not least, is the finding that 90% of Northumbrian fishermen agreed or strongly agreed with the statement "I feel worried about my livelihood most or all of the time". This is too high. Fishing is already one of the most dangerous occupations in the world and seems to also be turning into one of the most uncertain and stress-related occupations too. This is something that good management through an IFCA can counter with empathy, communication and well-evidenced and reasoned regional management.

¹⁶ King, T.J., Turner, R., Versace, V., Abernethy, K., Kilpatrick, S. and Brumby, S., 2021. Mental health in the commercial fishing industry: Modern uncertainties and traditional risks. *Fish and Fisheries*, 22(5), pp.1136-1149.

¹⁷ Fabinyi, M. and Barclay, K., 2022. *Asia-Pacific fishing livelihoods* (p. 112). Springer Nature.

Appendix 1: Interview questions:

Background information

Home port: Are there other landing ports that you use? Yes / No If yes, please name them:

Boat size [<10m] [10-12m] [Over 12m]

Age range [16-25] [26-50] [51-65] [66+] [Retired (active)] [Retired (inactive)]

Gender [Male] [Female] [Non-binary] [Prefer not to say]

Stakeholder Type [Skipper] [Crew] [Recreational Fisher] [Other]

No. of years working as a fisher:

Full time, part time or recreational:

Gear type(s) used (please circle) (Towed gear) Trawl Dredge (Static gear) Pots Gill Nets T, J
and Drift Nets Longline

Target species (please circle) Lobster Crab Nephrops Cod Mackerel Sea trout Flat
fish Prawns

In the past, did you fish using a different gear/ or for a different species? Please give details).

If yes, when did you make this switch [YEAR.....] and what were your reasons for doing so?

Do you fish within 6NM? [<6NM] [>6NM] [Both]

Which region do you fish in? [NIFCA] [NEIFCA] [Scotland] [NIFCA + NEIFCA] [NIFCA +
Scotland]

Are you a member of any fishing organisations? If so please state which.....

Section 1: Fisheries Management Plans (general questions)

1. Consider how the fishery you work in is currently managed. What do you think is working well in terms of fisheries management (and should be maintained)?
2. What is not working well?
3. What is the single biggest change you'd like to see in how this fishery is managed? Please detail here:
4. Have you adopted any additional conservation measures in your fishing beyond the legal requirements? (for example, fitting escape gaps to pots, voluntary V notching.)

If so, please give details as to what these include and your motivations for doing this.

Section 4: FMP specifics for NIFCA district (if not already mentioned above – prompt on the following).

5. **Pot limitation:** Do you think the current pot limitation measure is working well?

5b. How could it be improved?
6. **Berried lobsters:** Do you think the current ban on landing berried hens is effective, if not why?

6b. How do you think it could be improved?

7. We now know that the FMP that is going to public consultation in Summer, which will be national policy, includes the following management proposals:

To harmonise (nationally) minimum landing size MLS from 87cm to 90cm. This will be an increase of 3mm in the NIFCA district.

- Do you think an increase in lobster MLS from 87mm to 90mm is required in this region?
- What impact would this change have on your current fishing practices?
- What impact would a gradual change (such as 1mm per year increase) have on your current fishing practices?
- Do you think there would be difficulties if MLS remained at 87mm in Scotland but increased to 90mm in England?

8. Market access: Are you satisfied with the options you currently have for marketing your catch? If not, what type of opportunities/ changes would you welcome?

9. Borders impacts: How does the near presence of the Anglo-Scottish border (or, for southern areas, the NEIFCA border) impact your fishing?

9b. What type of border considerations would you like to see in a national FMP?

10. Do you feel that the inshore fleet (in this region) are in any way affected by larger, offshore vessels, such as viver potters, or larger trawl vessels?

If yes, in what ways? And what could be done to balance things out?

11. Do you currently experience any gear conflicts with other fishers?

11.b. If yes, how often do conflicts occur: Rare (once or twice a year) Occasional (several times a year)
Frequent (every month)

11.c. If yes, what is the nature of that conflict? Does this occur during specific seasons each year?

11.d. What impact does the conflict have on you?

11.e. Has this level of conflict increased/decreased/stayed the same/don't know from the previous years. Do you have any thoughts about why this is?

11.f. If not, did you experience gear conflict in the past?

If yes, how was this reduced/ resolved?

11.g Do you have any suggestions for management measures which could help reduce gear conflict in this region?

12. Do you feel **sufficiently informed** about fisheries management that affects you as a fisher in this region?
Yes/No

13. Do you feel that your opinions **influence** fisheries management that affects this area? Yes/No

14. What improvements could be made to increase fisher involvement in fisheries management?

15. Prior to this survey, had you heard about the development of Fisheries Management Plans?

If yes, how did you hear about them?

16. Have you engaged in FMP process - Yes /No -

If yes, please tell us in what forum and how you found the process.

17. What is your preferred method of engagement (you can tick more than 1)

Social Media

Whats app

Email

Telephone

In person discussion at the quayside

Local meetings in your harbour

Meetings outside your harbour.

Other:

18. How do you keep informed about fisheries management which affects you? (you can tick more than 1)

Fishing news

Email

Word of mouth

IFCA meetings or online news

Regional Fisheries Groups meetings

Fish buyers

Other

19. In what ways do think this fishery contributes to the regional economy and culture of this area?

20. Is there anything that could be done to enhance this contribution?

21. Do you feel that your fishing contributions are valued by the local public?

22. To what extent do you agree with the following statement:

"I feel worried about the future of my fishing livelihood most or all of the time". 4

1 = strongly agree

2 = agree

3 = neither agree nor disagree

4= disagree

5 = strongly disagree

Can you explain your score/ what are the main things that worry you?

23. Is there anything else you would like to be considered?