



Managing Salmon Fisheries in England and on the Border Esk

Summary of initial consultation responses

We are the Environment Agency. We protect and improve the environment.

We help people and wildlife adapt to climate change and reduce its impacts, including flooding, drought, sea level rise and coastal erosion.

We improve the quality of our water, land and air by tackling pollution. We work with businesses to help them comply with environmental regulations. A healthy and diverse environment enhances people's lives and contributes to economic growth.

We can't do this alone. We work as part of the Defra group (Department for Environment, Food & Rural Affairs), with the rest of government, local councils, businesses, civil society groups and local communities to create a better place for people and wildlife.

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Foreword

This document summarises the responses to the initial consultation we ran last year, from August to October 2017, on our salmon and sea trout fisheries in England and the Border Esk. We received 1,110 responses from every part of the country, from organisations, fishermen and anglers. Thank you all for taking the time to tell us what you think.

Summarising these response has taken time and reflects the wide range of views from yourselves and the advice from our scientists both within the Environment Agency and in other institutions, including; Universities, Cefas and colleagues in other parts of Europe and North America. Thank you for your patience whilst we have produced this document.



There were a range of opinions from a variety of professionals, specialists, anglers and netsmen. It is therefore clear that we are not able to satisfy everyone in how we proceed with measures to protect salmon. However, almost all of those who responded agreed that salmon were in danger, and more needed to be done to protect them.

We have set out all the responses to each of the questions in the initial consultation and the main points that were raised (Section 2). In Section 3 we have provided answers to commonly raised questions. The more technical questions will form part of the scientific case. This case is currently being finalised to form part of the package of proposed measures that include a set of proposed byelaws for the fishing of salmon and sea trout. It will be available on 7 March 2018, when we advertise the proposed byelaws.

We are confident that the catch of salmon by net or rod is not the main cause for the decline in salmon. However, managing and regulating exploitation must form part of the solution to ensure that numbers remain at levels that will allow populations to recover. The bigger issue is to improve marine survival, though this is unlikely to be straightforward. Work is ongoing with NASCO (North Atlantic Salmon Conservation Organisation), other European countries and partners, such as the Atlantic Salmon Trust, to help us understand why fewer salmon are returning from the marine part of their lifecycle. We hope that this will help us manage our coastal development and marine fishing pressures to further improve returning numbers of salmon.

Improving water quality and river flows is also an important part of the Salmon Five Point Approach to improve the survival of salmon. This work is happening as part of wider water quality improvements from the Water Framework Directive legislative priorities. It is also part of water company improvements, and better regulatory legislation on contaminated land and waste. The recent launch of the Government's 25 year plan, and Defra's commitment to regulate farming to ensure greater environmental protection, particularly with respect to soil management, will also help to improve water quality and river flows.

This year also sees the introduction of the new Farming Rules for Water. These will provide a clearer, outcome based, regulatory system for farmers to abide to, and should enable more straightforward prosecution action where needed once they are established.

While progress has not been as fast as we have wanted, and some of the most important areas will still need further legislation, we are confident that the Salmon Five Point Approach has helped identify the key areas that need more attention. These areas are now also much more clearly understood and recognised by our partners and by Government, and there are programmes of work in place to drive improvements forward. There is no short term fix to improve salmon

populations, but that is not a reason for inaction. We will continue to deliver improvements and increase our understanding of this most iconic species of fish.

Thank you



Heidi Stone
Salmon Programme Manager

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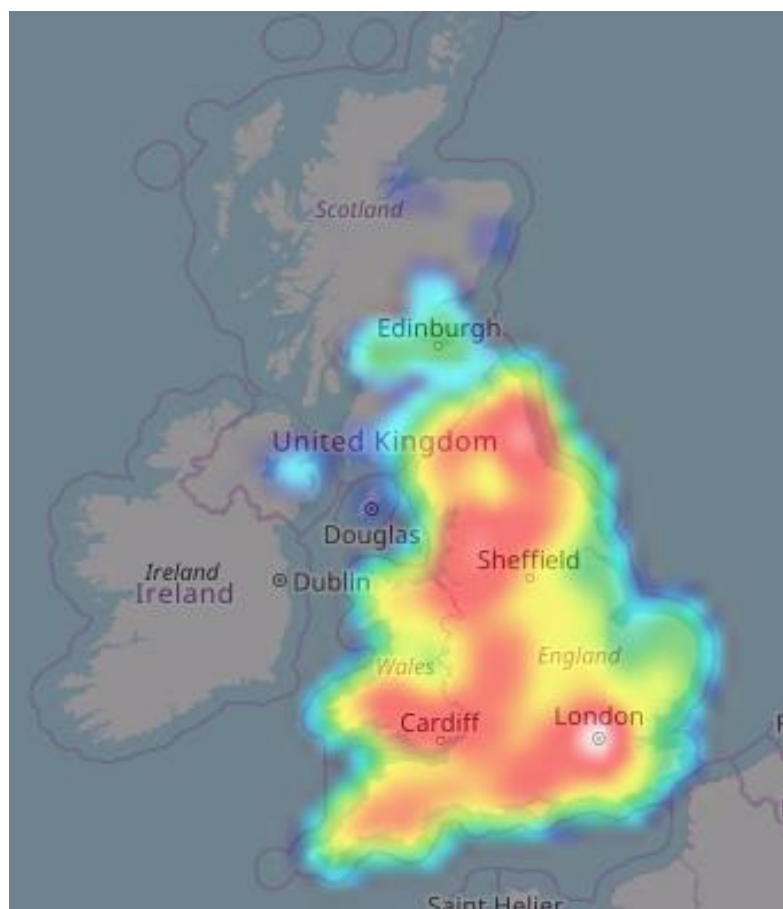
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1. Introduction

- 1.1 From 24 August 2017 to 9 October 2017, the Environment Agency ran an initial consultation to seek views on a new national approach to managing salmon net and rod fisheries in England and on the Border Esk. We received over 1,110 responses to one or more parts of the initial consultation, and we would like to thank all those who took the time to respond.
- 1.2 People and organisations were able to respond either through our online consultation site or by returning a copy of the consultation response form via email or via post. The consultation was publicised through various methods as detailed below.
- 1.3 We sent 11,963 emails containing a direct link to the consultation to:
 - Salmon and sea trout rod licence holders.
 - Local fisheries clubs.
 - Relevant businesses.
 - Fishery and salmon conservation organisations.

All organisations that were sent the email were asked to make their members aware of the initial consultation. 5,003 of these original emails were opened, with the campaign receiving a total of 18,862 views and forwards. The email campaign covered a wide geographic area, with differences in distribution reflecting that of licence holders. A heat map of those people who were sent the email is shown below (Fig. 1).

Figure 1: Heat map showing the distribution of those who were sent the campaign email (highest density is shown in white, to red, yellow, green and the lowest in blue).



- 1.4 At the start of the initial consultation, a total of 260 hard copies of the consultation documents were sent out by post to all salmon and sea trout netmen, fishing clubs, anglers and businesses who had requested one. A further 73 hard copies were requested and sent out during the initial consultation.
- 1.6 The initial consultation was publicised through print and social media by both the Environment Agency and fishery and salmon conservation organisations.
- 1.7 This document provides the results from the initial consultation, and summarises the written responses that were received. We have done this in two parts. The first (Initial consultation responses – Section 2) provides the results of how each question has been answered. We have also provided a broad summary of the additional information that respondents provided to these questions. For questions that only asked for a written response, we have summarised the answers given. The second part, in Section 3 (Our response to common questions) provides our response to commonly asked questions that have been made in the written responses. More technical questions relating directly to our proposed measures or suggested alternative approaches will be answered in the technical case that supports the advertising of the proposed byelaws.
- 1.8 Following the close of the initial consultation, we have been using the responses to help develop and understand the impact of the new measures on salmon net and rod fisheries. These measures include a number of proposed byelaws affecting both net and rod fisheries. When we advertise these proposed byelaws, in our Statutory Advertisement, you will be able to provide your views on them via our .GOV.UK website or by post.
- 1.9 Outside of the summer 2017 initial consultation we have recently carried out statutory advertising of specific measures to protect salmon and sea trout stocks on the Rivers Wye and Dee in England. These measures have mirrored those that Natural Resources Wales (NRW) have proposed for the Welsh parts of these rivers. We have also recently carried out statutory advertising of specific measures to protect salmon and sea trout stocks on the Solway Estuary and rivers Eden and Border Esk. The responses to both these sets of measures are not contained in this document, they will be responded to separately as part of the application process for the measures proposed for these fisheries.

2. Initial consultation responses

For each question, we have provided; the number of responses it received, the breakdown of these answers, and the number of respondents that provided additional written information.

We have provided a broad overview of the additional information provided to each question, where this does not contain personal or financial information.

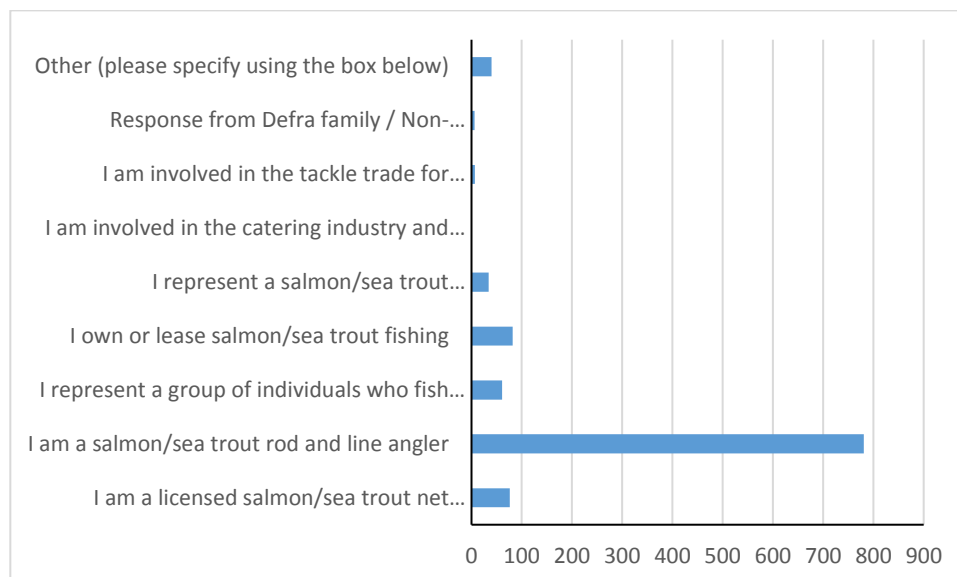
Our response to specific questions made through the initial consultation are provided in Section 3.

The question numbering below matches that used in the initial consultation forms.

2.1 What is your interest in salmon?

Question 1a: Please tell us which one of the following categories best describes your primary interest in salmon/sea trout.

Number of responses **1,088**

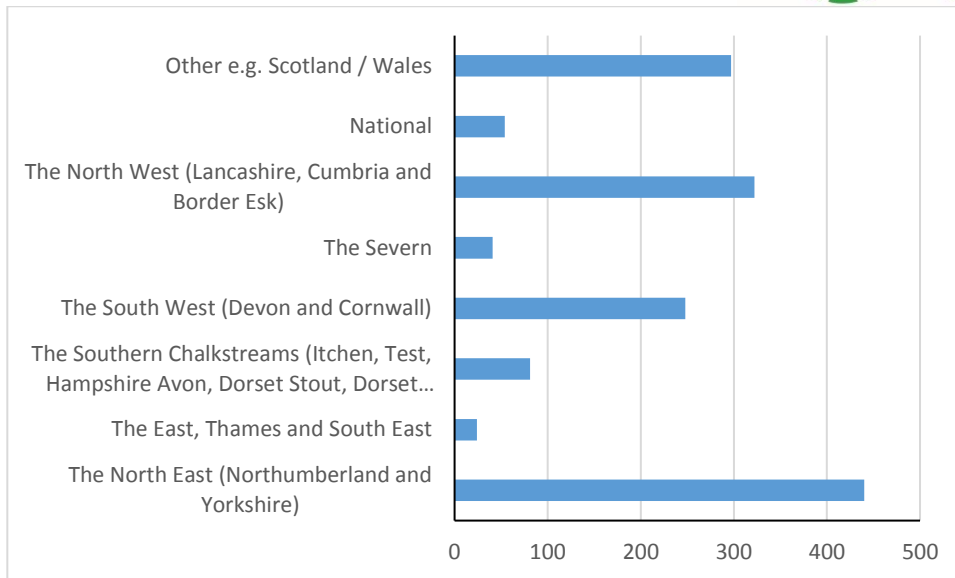


356 further answers to “Please provide us with the Name of group, organisation or other primary interest”.

Respondents who selected “other” included; angling coaches and guides, angling correspondents, retired and prospective anglers, conservation educators, riverside sports clubs, and other non-anglers with an interest in salmon.

Question 1b: What part of the country do you have an interest in? Please tell us where you primarily fish for salmon/sea trout or where the salmon/sea trout that support your business are from. You can select more than one option.

Number of responses **1,507**

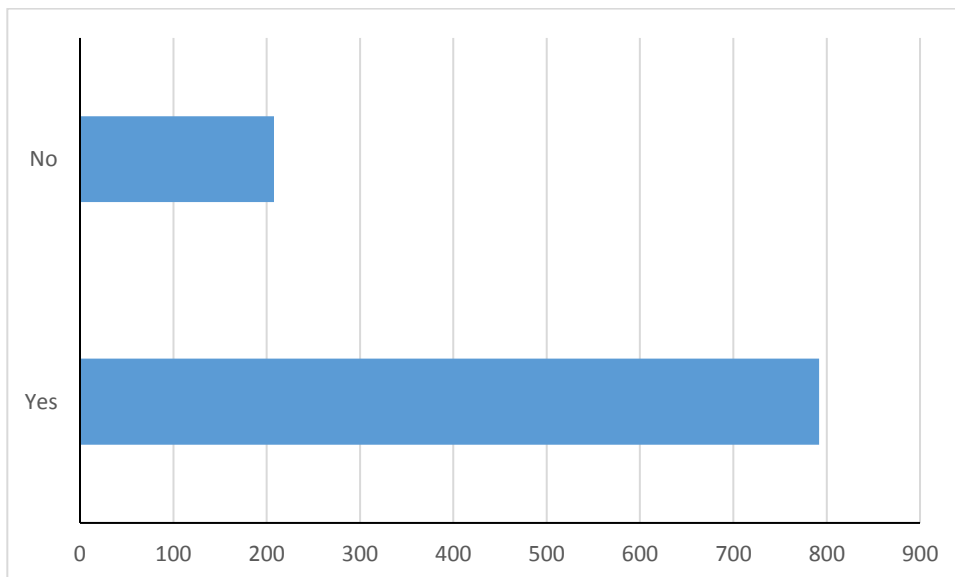


When answering this question respondents could, and have, selected more than one answer. For example, someone fishing on the Tamar and the Wye is likely to have selected “The South West” and “Other” (for Wales). This is why the number of responses (1,507) is higher than the number of respondents to the initial consultation (1,110). From people telling us which rivers they fish on, fishing in both England and Wales/Scotland is widespread.

Of those who selected “Other”, and provided more information, the vast majority of respondents had fishing interests in Scotland and Wales. However, answers also included Ireland and New Zealand.

Question 1b (part 2): Are you a member of a salmon/sea trout fishing club/organisation or an organisation that represents anglers, net and fixed engine fishermen or the interests of salmon/sea trout/wider conservation?

Number of responses 1,000

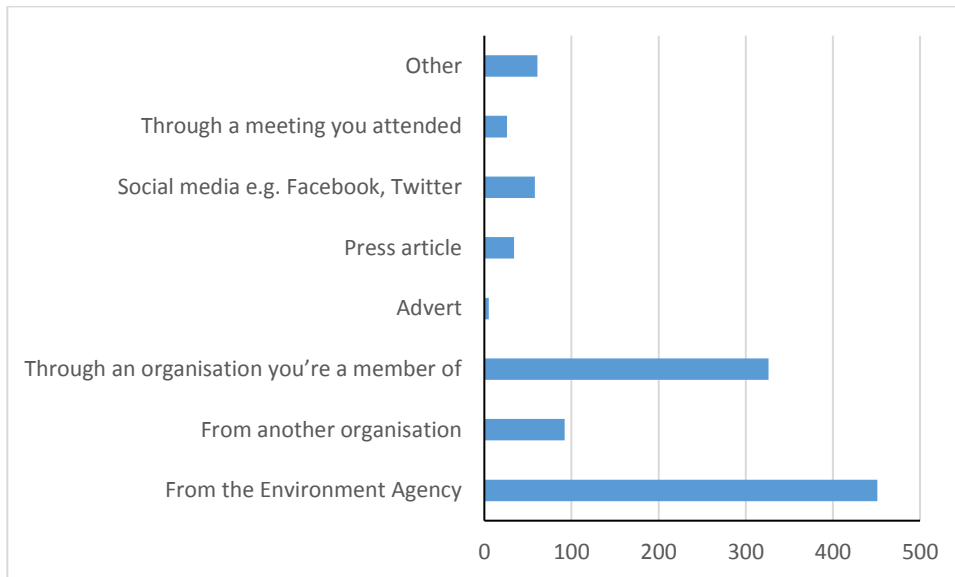


795 further answers to "Please tell us which organisation you are a member of".

Respondents were members of a wide range of angling clubs and associations, as well as a number of netsmen’s associations and salmon conservation organisations. Many respondents were members of several organisations.

Question Q1b (part 3): Please tell us how you found out about this salmon consultation:

Number of responses **1,053**



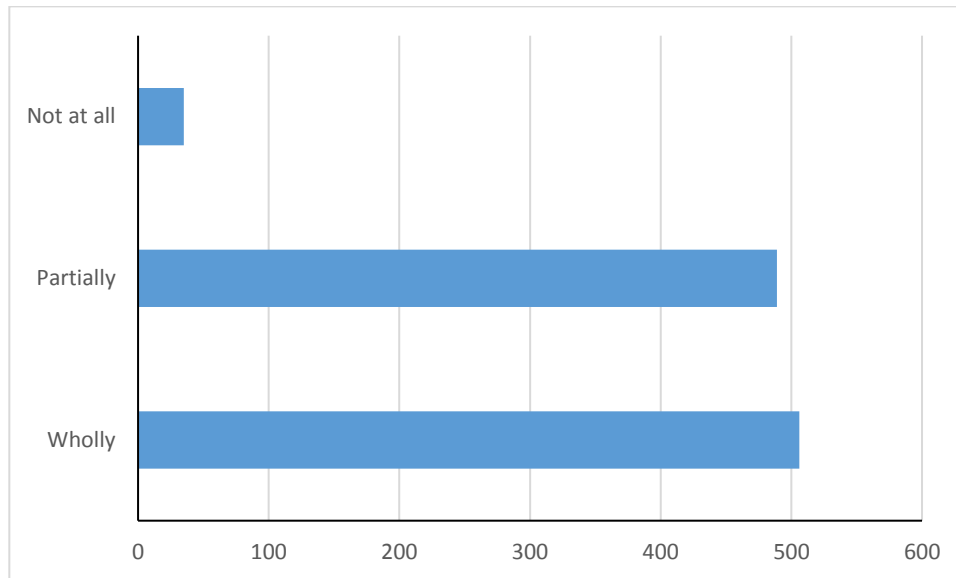
138 further answers to "If other, please specify".

Answers to Other included: from a friend, angler or netsman, from a tackle shop, word of mouth and press articles (both online and in print).

2.2 The current state of salmon stocks

Question 2.2: To what extent do you agree with the summary of the current state of salmon stocks and the supporting information provided in Appendix 2 to the consultation document?

Number of responses 1,030



755 further answers to "Please provide reasons to support answer".

In general, the majority of respondents agreed (either wholly or partially) with the current state of salmon stocks that we set out in the initial consultation document. For those who said they partially agreed this was typically because:

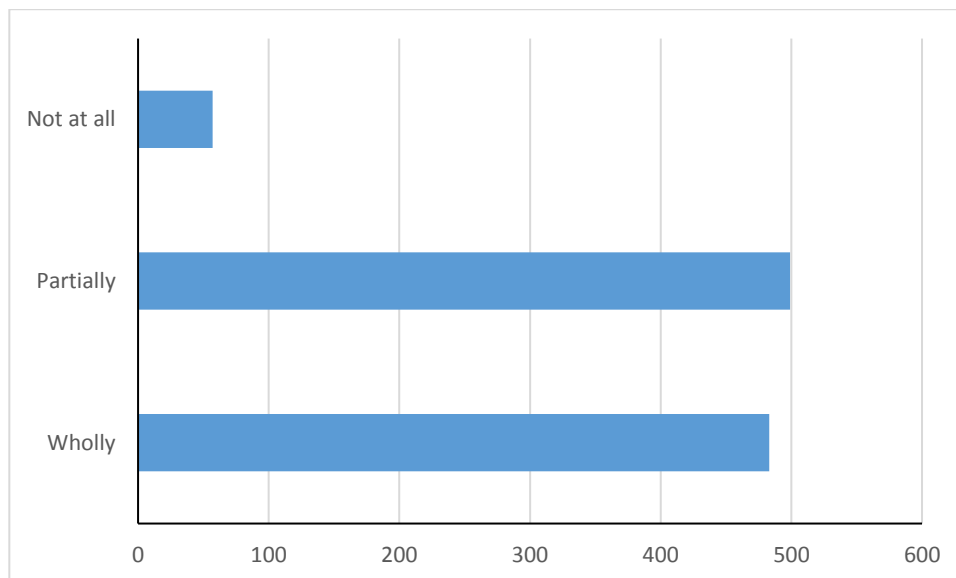
- They have concerns about the accuracy of the salmon stock assessment, in particular as it relies on rod catch returns for the majority of rivers and these returns have declined.
- The number of juvenile surveys or redd counts that are carried out has reduced.
- The right/biggest issues are not being tackled e.g. survival at sea, in-river predation and running/allowing more hatcheries.

Some respondents feel that their river is in a worse state than we assess it to be, and there is also a general concern of low sea trout numbers.

2.3 Deciding which salmon stocks need further protection

Question 3.2a: To what extent do you agree that a salmon stock should be subject to additional protection from net/fixed engine and rod exploitation if it is classified as either At Risk or Probably at Risk of failing to meet its Management Objective?

Number of responses **1,039**



775 further answers to "Please give your reasons and any evidence you have to support your answer. If you would like to provide us with an alternative approach then please do so".

For those answering "Not at all" to this question, in general they considered that rod fishing has very little impact and/or more needs to be done about other causes of decline (e.g. nets/pollution/predators).

For those "Partially" agreeing, their written responses typically included that they:

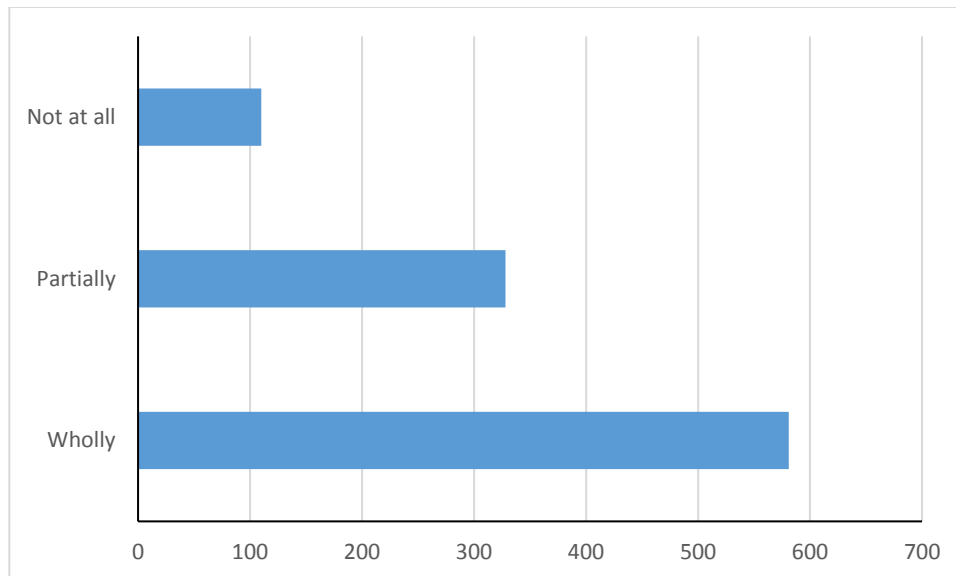
- Don't agree with having both rod and net and rod fisheries included in the question.
- Consider that differing approaches should be taken for net and rod fisheries.
- Consider that more needs to be done to target other threats to salmon.
- Have concerns around the impact of mandatory catch and release or closure of net fisheries
- Would like more accurate data.
- Consider that recovering salmon rivers should also be included in the measures.

For those that "Wholly" agreed, they often stated the need to do more to reduce other pressures on salmon populations or that the proposed measures did not go far enough.

2.4 Review of existing measures to protect spring salmon stocks

Question 4.2a: Do you agree with the proposal to renew without amendments the existing National Salmon Byelaws to protect spring salmon stocks?

Number of responses **1,019**



661 further respondents provided additional information to support their answer.

For those answering “Not at all”, their written responses indicated that they either wanted to see less stringent controls or they considered the current controls were not stringent enough.

For those “Partially” agreeing, their written responses typically included:

- They did not wish to be forced to return injured or dead fish.
- That there should be a total ban on the take of salmon for a short experimental period.
- That there should be differing approaches to net and rod fisheries.
- That the period the ‘spring salmon byelaws’ cover should be extended.
- There should be a bag limit or size limit instead.
- The measures for rod and net fisheries should end on the same day.
- That more needs to be done to combat other pressures on salmon.
- That protection for sea trout should also be included in the measures.

For those that “Wholly” agreed, they typically stated that they would like to see an increase in enforcement and that more needed to be done to combat the other pressures, especially marine survival, on salmon. Some respondents would also like to see additional measures, as well to those already in place, whilst others would not like to see any increase in the current measures.

Across all the answers a number of respondents did state that the existing measures had achieved nothing, or very little, to assist in the recovery of spring salmon stocks.

2.5 Future proposals and options for net and fixed engine fisheries

2.5.1 Questions directed to all net and fixed engine fishermen except those fishing the North East Coast

Question 5.2a: (This question is for net and fixed engine fishermen) - if you were no longer able to fish for salmon or sea trout, what would be the consequences for you?

This was a written response question and 105 answers were provided.

The most common response from netmen was the desire to maintain a tradition and way of life, and the impact its loss would have on their local community. Other answers included their loss of earnings (in some cases significant, up to 75%) and salmon fishing boats and equipment being made worthless.

Responses from non-net fishermen were also received, with many of these from rod anglers who felt there should have been a question along these lines in their part of the initial consultation and that nets should close.

Question 5.2b: (This question is for net and fixed engine fishermen) - what are the opportunities for you to fish for other species if you could no longer fish for salmon or sea trout (e.g. white fish or crustaceans)?

This was a written response question and 72 answers were provided.

Respondents either said that other fishing opportunities (e.g. whitefish or shellfish) were not available or were very limited with a high cost of entry, particularly with the current restrictions on bass.

Question 5.2c: (This is for businesses that are supplied with wild salmon and sea trout from English and Border Esk fisheries) - please provide details of the impact of stopping the supply of salmon and sea trout from the English fisheries that you buy from.

This was a written response question and 32 answers were provided.

A range of responses were provided to this question. Some felt that there would be some loss of income, but they would replace salmon/sea trout with a sustainable fish. Others stated that the first salmon and sea trout of the season creates a buzz within their business, and that it would be difficult to quantify the effect it would have. They were also concerned about the accumulative effect of ongoing bans, i.e. measures protecting bass stocks, which puts additional pressure on retail outlets. There were also those who responded that the impact would be very significant, and that the fishing for salmon and sea trout in June, July and August provides a high proportion of their total income for the year.

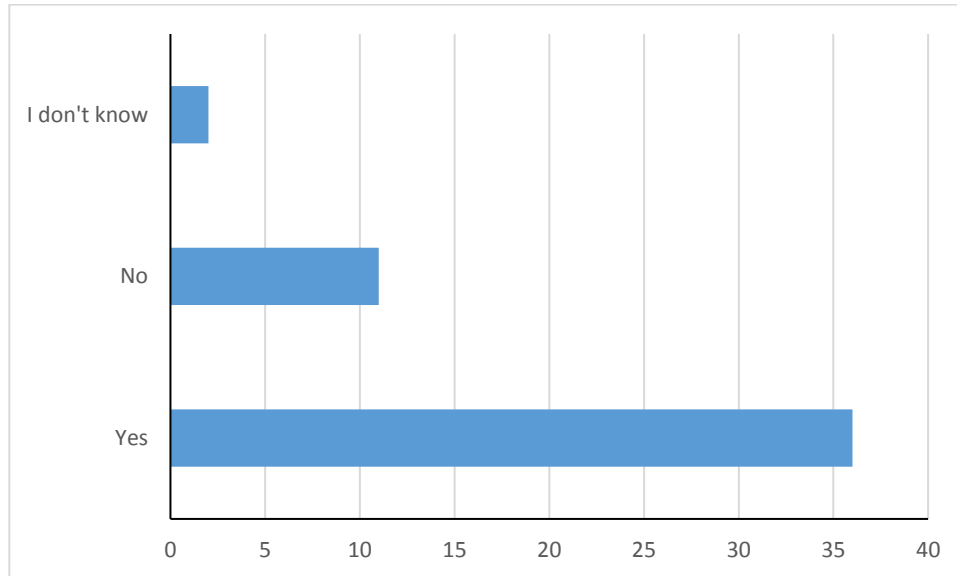
Question 5.2d: (This is for net and fixed engine fishermen) - please provide any other options for reducing the exploitation of salmon by your fishery that you would like us to consider.

This was a written response question and 55 answers were provided.

The response to this questions typically stated that they would prefer increased effort controls (such as reduction in season length and/or times allowed to fish) on their fishery, in preference to completely stopping the take of salmon.

Question 5.2e: (This question is for net and fixed engine fishermen) - do you consider that your fishing gear and how it is fished enables salmon to be released alive immediately after capture?

Number of responses **49**



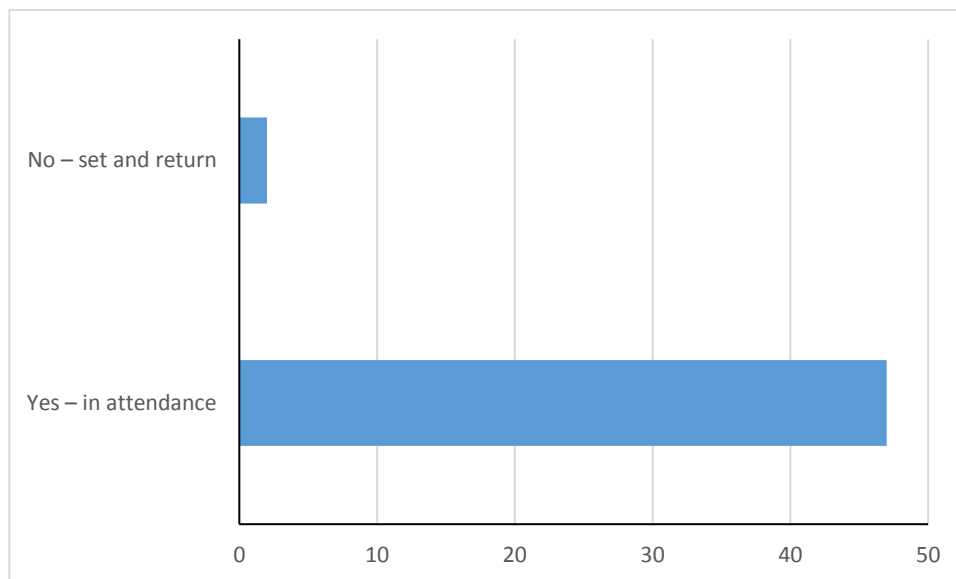
45 further answers to "If you wish, please provide us with your reasons for this answer".

The majority of respondents answering "Yes" were from Haaf and Lave netsmen who stated that they constantly attend their nets, and therefore any salmon caught can be released in seconds.

Those who answered "No" were predominantly drift net fishermen who stated that it is not possible to release a salmon from a drift net alive.

Question 5.2f: (This question is for net and fixed engine fishermen) - do you fish in attendance with your nets or do you set them and return?

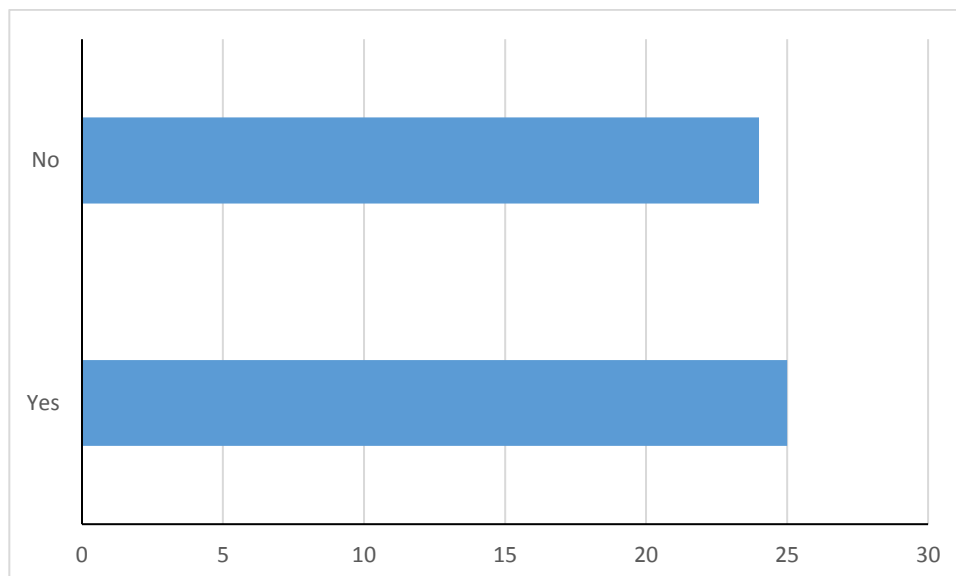
Number of responses 49



No additional information was provided for this question.

Question 5.2g: (This question is for net and fixed engine fishermen) - do you currently release salmon as a result of existing controls on your fishery?

Number of responses 49



40 further answers to "If yes, please provide us with details of why this is".

For those answering "Yes" this was because they are releasing anything over their quota, when fishing for sea trout before 1 June or through existing voluntary catch and release arrangements that they have as net fishermen.

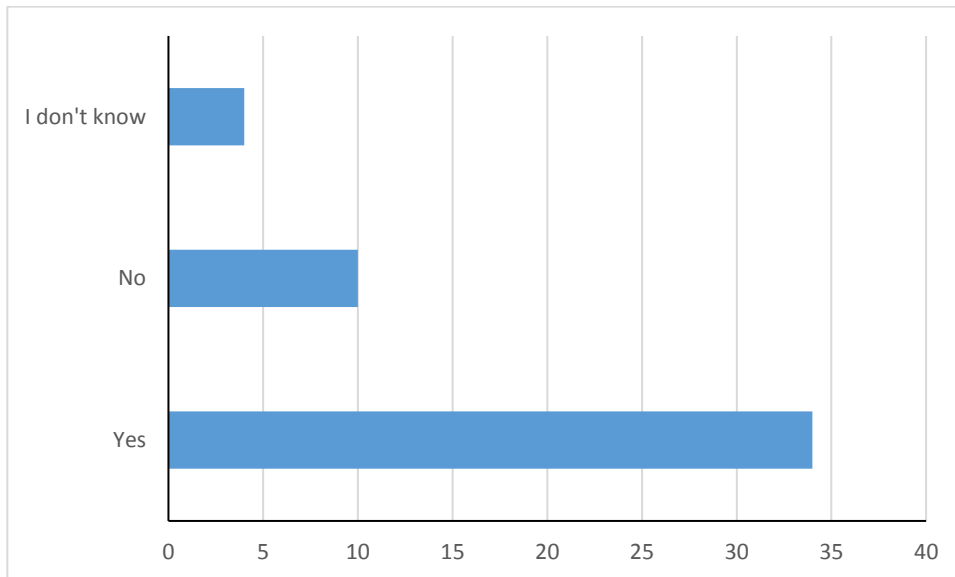
Question 5.2h: (This question is for net and fixed engine fishermen) - what type of gear do you use when fishing for salmon and/or sea trout? Please provide details.

This was a written response question and 63 answers were provided.

Respondents to this question listed the type of fishing gear that they use to capture salmon and sea trout.

Question 5.2j: (This question is for net and fixed engine fishermen) - do you consider that your fishing gear and how it is fished enables salmon to be released with minimal damage?

Number of responses 48

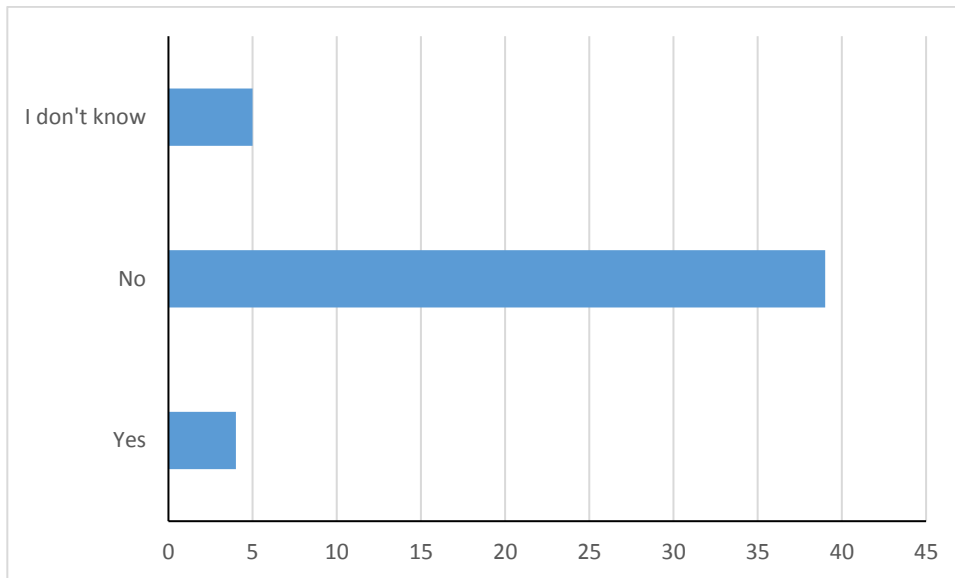


46 further answers to "Please provide us with information of the type of damage (e.g. scale loss or fin damage) that you see on the fish that you catch".

The written responses indicated that when damage was seen, it was typically scale loss and net marks.

Question 5.2j: (This question is for net and fixed engine fishermen) - would altering your gear make it easier to release and/or cause less damage to salmon?

Number of response 48

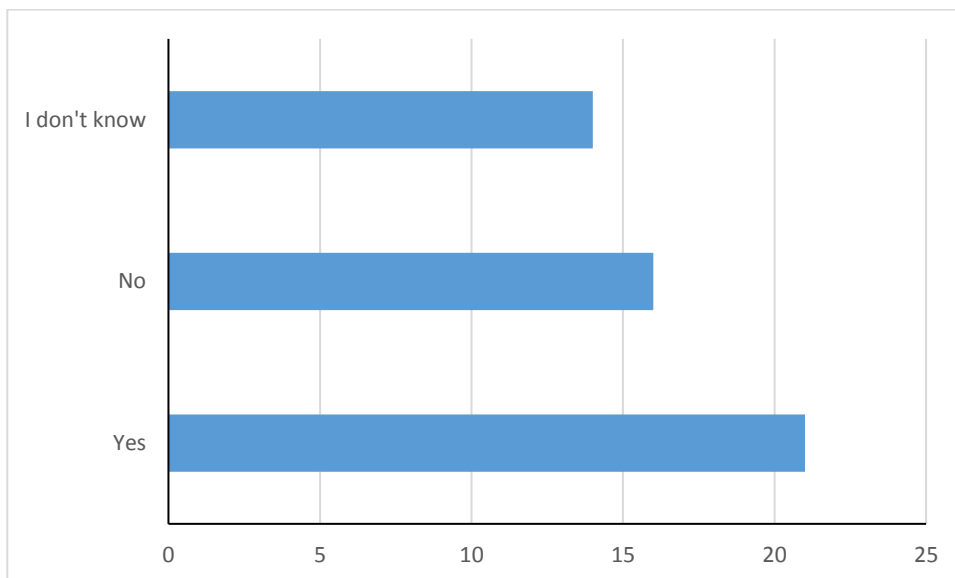


28 further answers to "Please provide details and an estimate of the cost if you consider this an option."

Most respondents felt that alterations could not be made to improve things, either because they are already released unharmed, or there is nothing that can be done to reduce the rate of harm (e.g. drift nets).

Question 5.2k: (This question is for net and fixed engine fishermen) - if you could release salmon and continue to take the sea trout that you catch would you continue to fish for sea trout?

Number of responses 51



52 further answers to "If you wish, please provide us with your reasons for this answer".

For those who answered "No" the reasons given were that the cost of the licence and/or running cost would mean it would not financially viable.

Those answering "Yes" said:

- They would continue to fish for the enjoyment and/or cultural reasons.
- They would be happy to release salmon as rarely catch them and therefore they contribute very little to their income.
- They would need an increased sea trout season and/or it would be difficult with their current net.

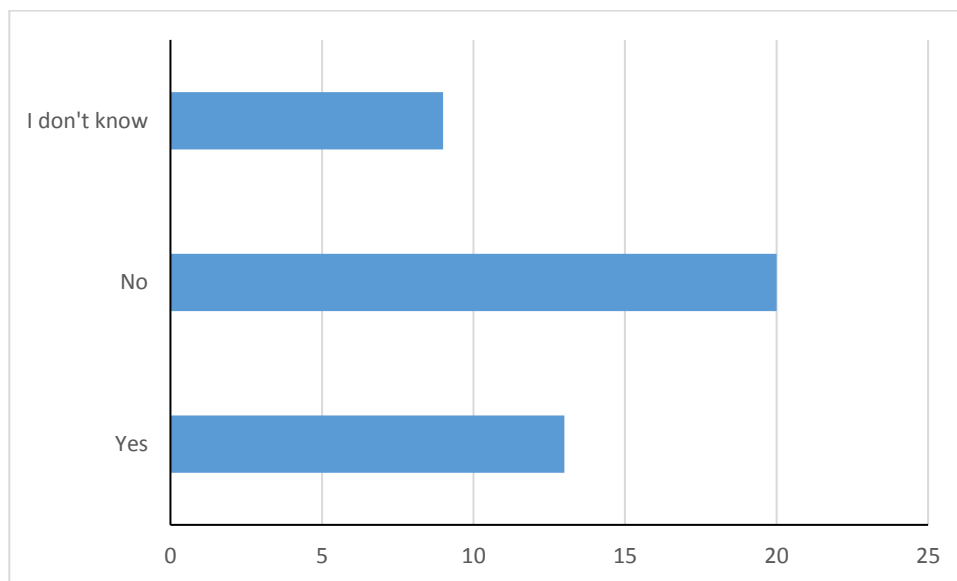
Question 5.2i: (This is for businesses that are supplied with wild salmon and sea trout from English and Border Esk fisheries) - please provide details of the impact of stopping the supply of salmon only from the English and Border Esk fisheries that you buy from.

This was a written response question and 22 answers were provided.

The majority of the responses to this question referenced the answer that they had provided to question 5.2k.

Question 5.2m: (This question is for both businesses and net and fixed engine fishermen that are supplied with / catch wild salmon and sea trout from Fisheries in England and on the Border Esk) - if fishing for salmon was required to cease, is there a date later than 2018 that would be economically easier to work towards?

Number of responses 42

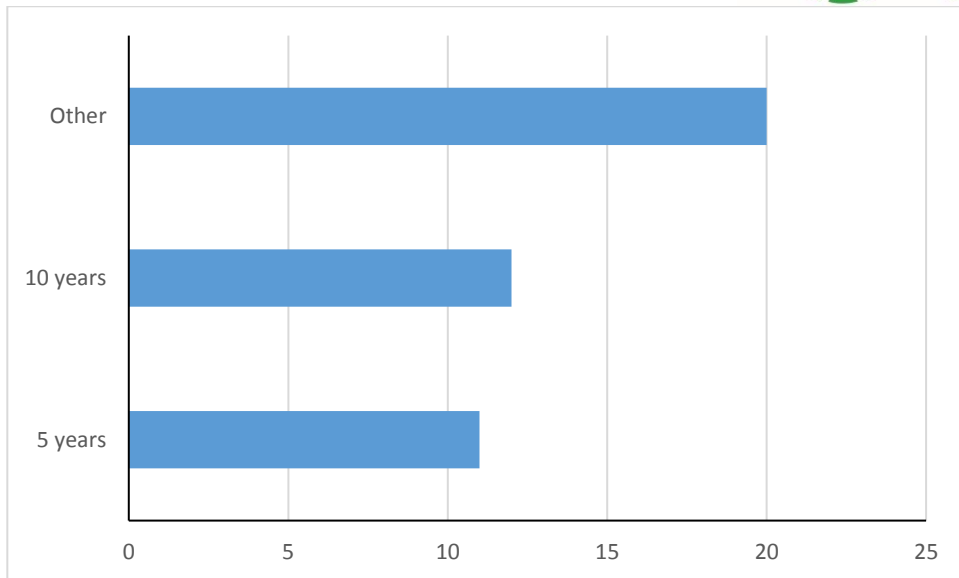


18 further answers to "If yes, what date would you suggest".

A range of dates including "never" were provided for this answer.

Question 5.2n: (This question is for both businesses and net and fixed engine fishermen that are supplied with / catch wild salmon and sea trout from Fisheries in England and on the Border Esk) - how long do you consider the measures covering a fishery should be in place for?

Number of response 43



16 further answers to "If other, please specify".

Respondents who answered "Other" gave a variety of answers ranging across 'permanently', 'when stocks recover' and 'annually'.

2.5.2 Questions directed to North East Coast net and fixed engine fishermen

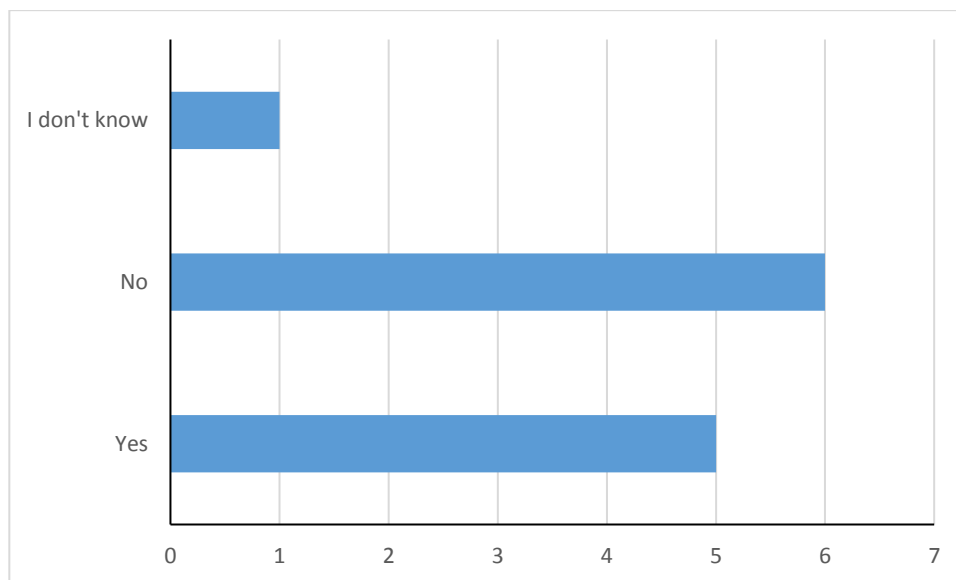
Question 5.3: (This question is for North East Coast drift net licence holders) - what implications would the closure of the drift net fishery prior to the end of the 2022 season have for you?

This was a written response question and 25 answers were provided.

Respondents to this question provided information of the economic and social impact of closing the north east coast drift net fishery prior to 2022.

Question 5.3b: (This question is for North East Coast drift net licence holders) - are there opportunities for you to fish for other species (e.g. white fish or crustaceans) if the drift net fishery closed prior to the end of the 2022 season?

Number of responses 12

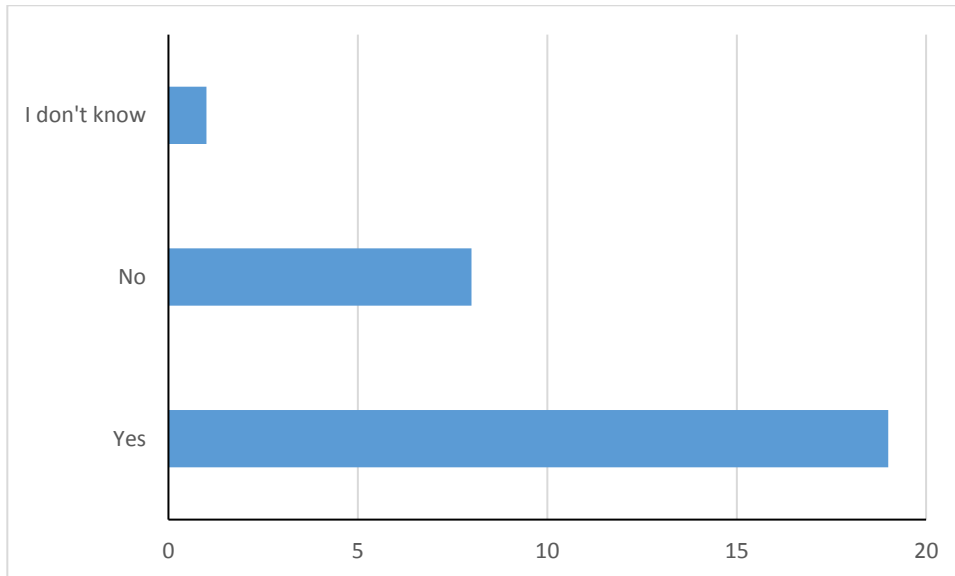


24 further answers to "Please provide estimates of cost to switch to a different target species".

Respondents either said that other fishing opportunities (e.g. whitefish or shellfish) were not available or were very limited with a high cost of entry. They also said that if they could switch to a different species it would not make the same income as fishing for salmon and sea trout in June, July and August.

Question 5.3c: (This question is for North East Coast beach net licence holders) - do you consider that your fishing gear and how it is fished enables salmon to be released alive immediately after capture?

Number of responses 28

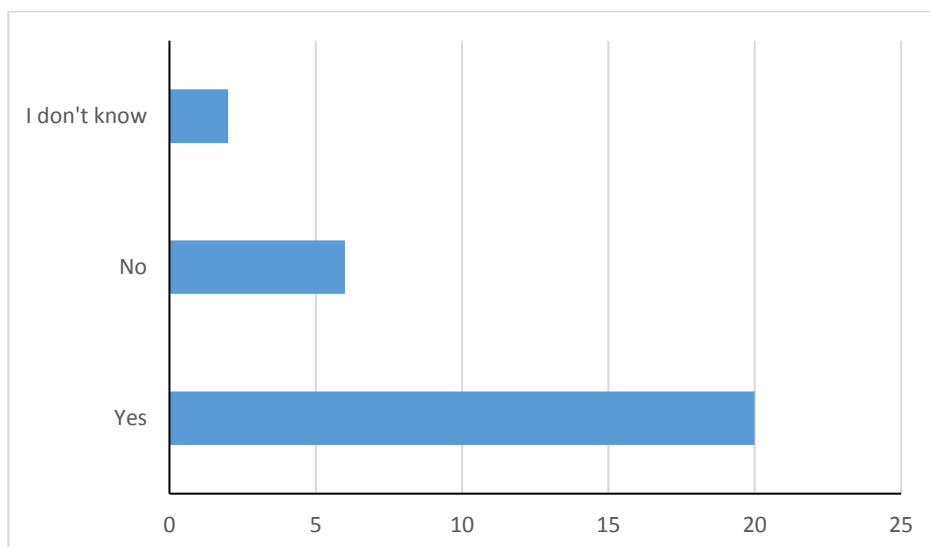


34 further answers to “Details of gear used and release salmon due to existing controls”.

Respondents provided detail of the gear that they used and how salmon are captured in it. A number of “T” netsmen stated that their nets are designed to trap salmon in the box at the end of the net, which minimises damage, and this results in a premium price paid. They also stated that they attend their nets at all times which enables fish to be quickly removed from the net.

Question 5.3d: (This question is for North East Coast beach net licence holders) – do you consider that your fishing gear and how it is fished enables salmon to be released with minimal damage?

Number of responses 28

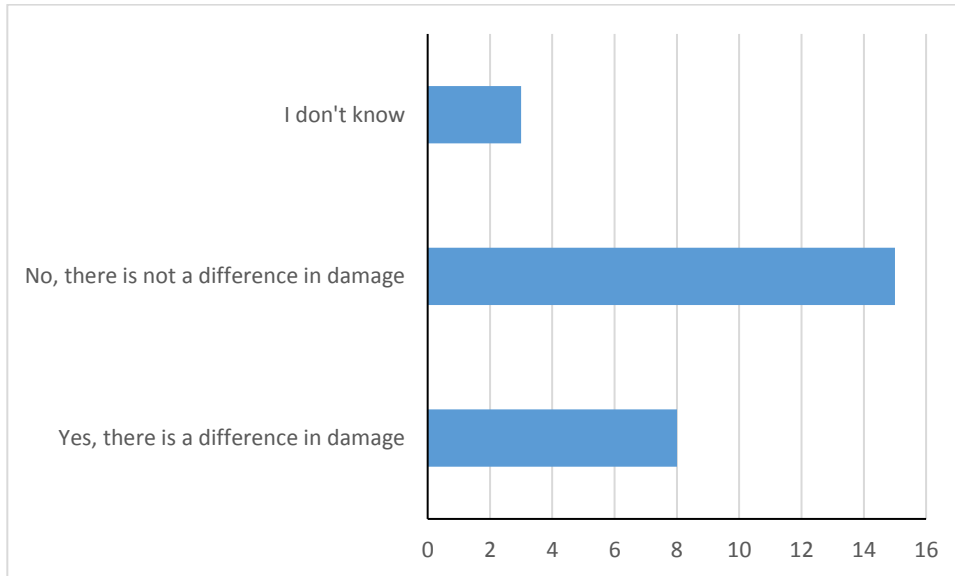


29 further answers to "Details of type of damage".

Respondents provided detail on the type of damage that they see, this ranged from no damage through to low levels of scale loss/fin damage.

Question 5.3e: (This question is for North East Coast beach net licence holders) - with regard to the release of salmon and any damage that is caused, is there a difference in damage if it is grilse or multi sea winter salmon that are caught?

Number of responses 26

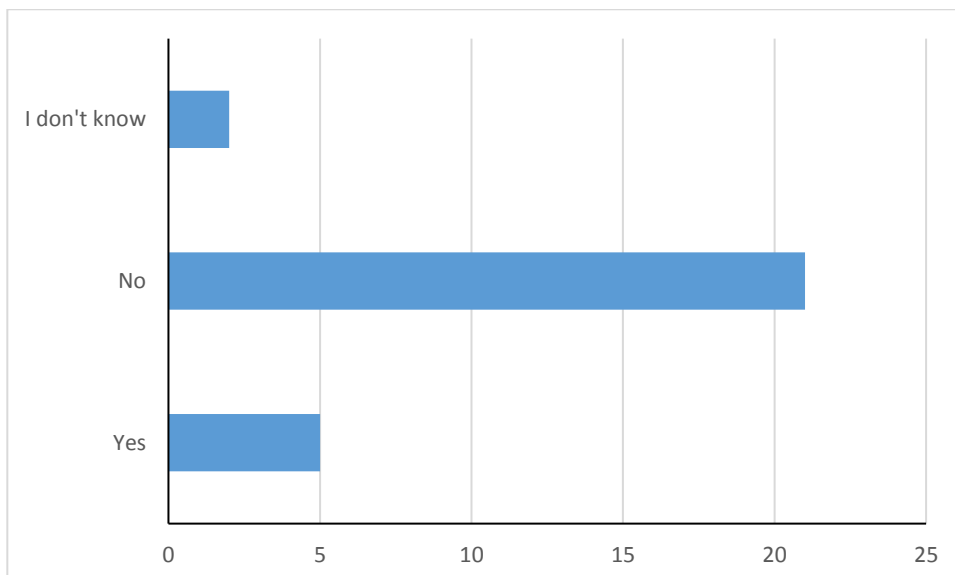


24 further answers to "Please provide details if you have answered yes".

For those answering "Yes" they indicated that smaller grilse can show greater levels of damage (predominantly scale loss and fin damage) than larger salmon, as they are more likely to become entangled in the mesh of the net.

Question 5.3f: (This question is for North East Coast beach net licence holders) - would altering your gear or the way it is fished make it easier to release and/or cause less damage to salmon?

Number of responses 28

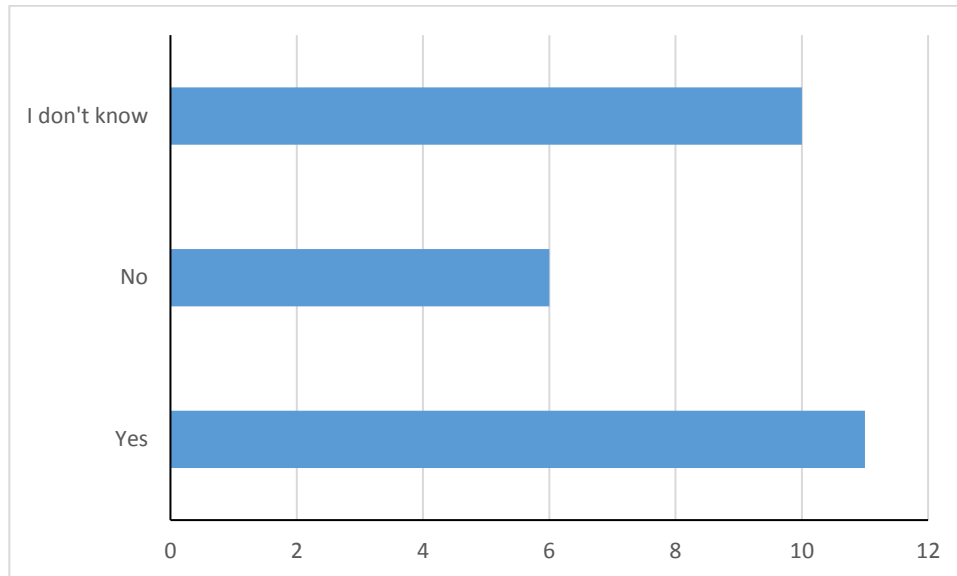


26 further answers to “Please provide details and cost estimate if you have answered yes”.

For those answering “Yes” they provided detail on the cost of switching from a “J” net to a “T” net.

Question 5.3g: (This question is for North East Coast beach net licence holders) – If you could release salmon and continue to take the sea trout that you catch would you continue to fish for sea trout?

Number of responses **27**



33 further answers to “If you wish, please provide us with your reasons for this answer”.

Respondents provided additional information on the viability of them continuing to fish and retain just sea trout.

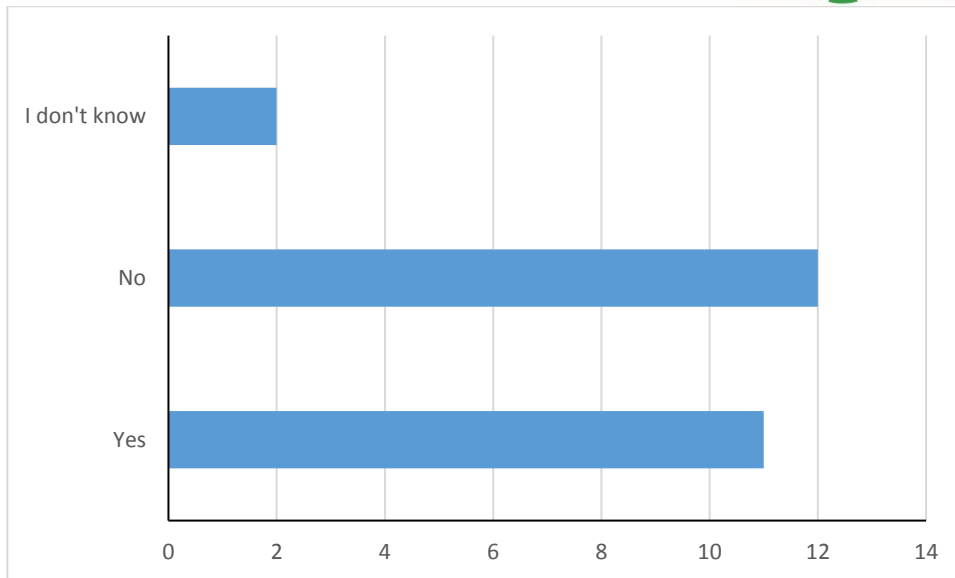
Question 5.3h: (This question is for North East Coast beach net licence holders) – what implications would the closure of the beach net fishery have for you?

This was a written response question and 32 answers were provided.

Respondents generally expressed the severe financial and cultural impacts that would result if the north east coast beach net fishery were to close. Some stated that compensation would help offset the impact of a decision to close the fishery.

Question 5.3i: (This question is for North East Coast beach net licence holders) – are there opportunities for you to fish for other species (e.g. white fish or crustaceans) if the beach net fishery were to close?

Number of responses **25**



27 further answers to "Please provide estimates of cost to switch to a different target species".

Respondents either said that other fishing opportunities (e.g. whitefish or shellfish) were not available or were very limited with a high cost of entry. They also said that if they could switch to a different species it would not make the same income as fishing for salmon and sea trout in June, July and August.

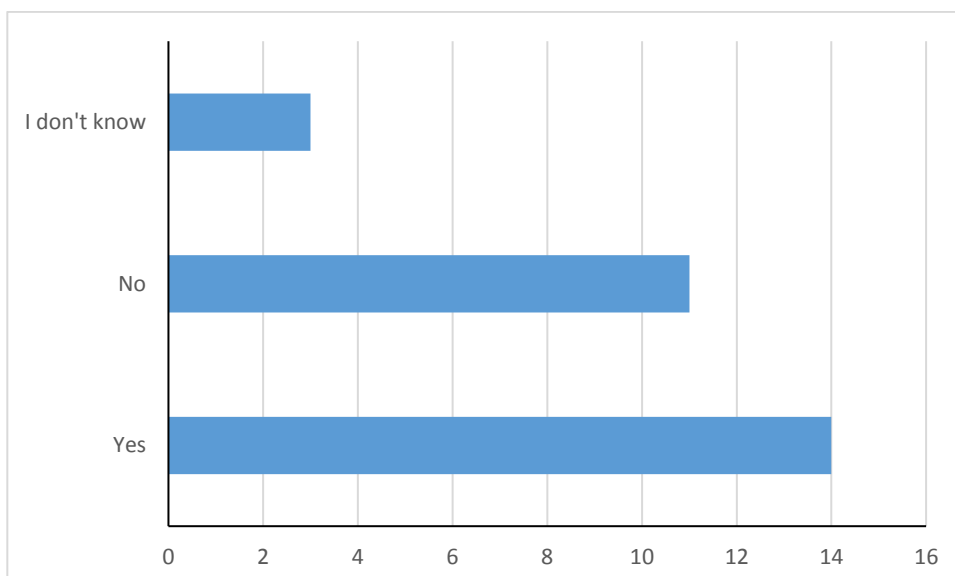
Question 5.3j: (This is for businesses that are supplied with wild salmon and sea trout from the North East Coast Net Fishery) - please provide details of the impact of the stopping of supply of salmon only from the North East Coast fishery.

This was a written response question and 18 answers were provided.

Limited information was provided that was relevant to this question.

Question 5.3k: (This question is for North East Coast drift and beach net fishermen and the businesses that they supply to) - if fishing was required to cease, is there a date later than 2018 that would be economically easier to work towards?

Number of responses 28



28 further answers to "Please provide details of why a later date would reduce the impact closure".

Some respondents felt that a date of 2022, to match the current stated date of the closure of the drift net fishery, would be preferable to a 2018 closure. Most though felt that the fishery should continue with existing netsmen leaving the fishery when they so desired.

Question 5.3i: (This question is for North East Coast drift and beach net fishermen and the businesses that they supply to) - are there other options for reducing the exploitation of salmon by your fishery that you would like us to consider?

This was a written response question and 34 answers were provided.

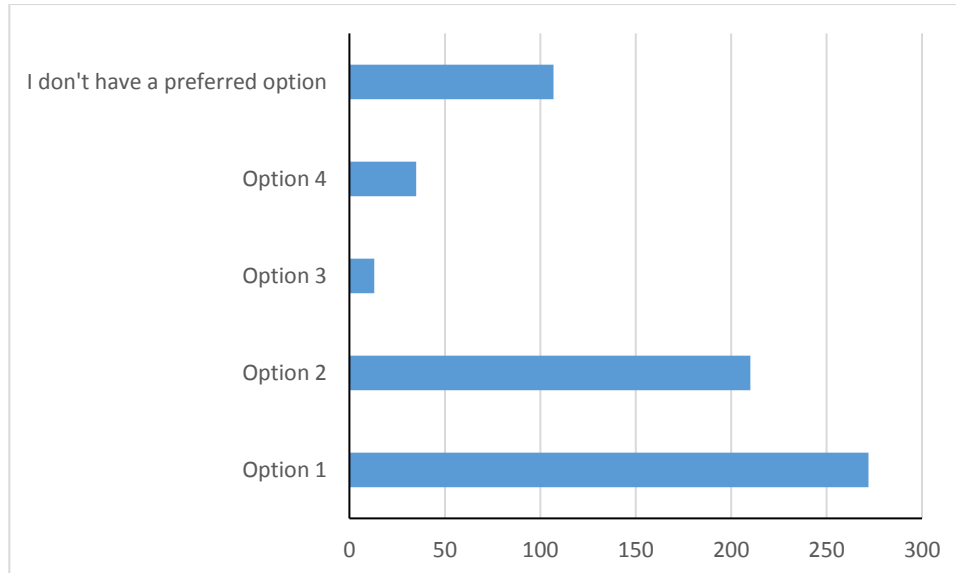
A range of options were put forward by respondents including:

- Bringing quotas to limit the catch of salmon.
- Reducing fishing season and/or weekly fishing times.
- Changes to fishing gear to reduce likelihood of capturing salmon.

2.5.3 Questions directed to all consultees on future proposals and options for net and fixed engine fisheries

Question 5.4a: (Seeking all consultees' views on the options for net and fixed fisheries in England and on the Border Esk (except North East Coast Net Fishery Options)) - which is your preferred option for net and fixed engine fisheries as set out in Section 5.2:

Number of responses 637



Option 1 = Stopping the take of salmon by net and fixed engine fisheries that are returning to all Principal Salmon Rivers (except North East Coast Net Fishery) by national byelaw.

Option 2 = Stopping the take of salmon by net and fixed engine fisheries that are returning to all Principal Salmon Rivers that are At Risk and Probably at Risk (except North East Coast Net Fishery) by national byelaw.

Option 3 = Stopping the take of salmon by net and fixed engine fisheries that are returning to all Principal Salmon Rivers that are At Risk (except North East Coast Net Fishery) by national byelaw.

Option 4 = Revised fishery based Net Limitation Orders and catch/effort controls to move to zero exploitation of At Risk and Probably at Risk Principal Salmon Rivers.

504 further answers to "Please provide details of why you have given this answer".

A broad overview of the written responses provides an insight into why respondents may have answered in the way that they have:

- All commercial netting of salmon should cease, salmon are worth far more in the river than they are being taken by nets.
- Option 3 is not precautionary enough and therefore Option 2 seems to strike the right balance between protecting stocks and allowing netting of salmon where there is a surplus.
- For those answering Option 4, there seems to be some desire to retain a locally based (perhaps more flexible approach) than would be provided by a national byelaw.
- A number of respondents have raised concerns about sea trout stocks and that they should be considered alongside salmon as well.
- A number of respondents do not believe that salmon can be caught and released by net fisheries.

Question 5.4b: (This question is for all consultees to answer and is in reference to the answer that you have given to Q5.4a) - what are the benefits, if there are any, which you would see from your preferred option for net and fixed engine fisheries?

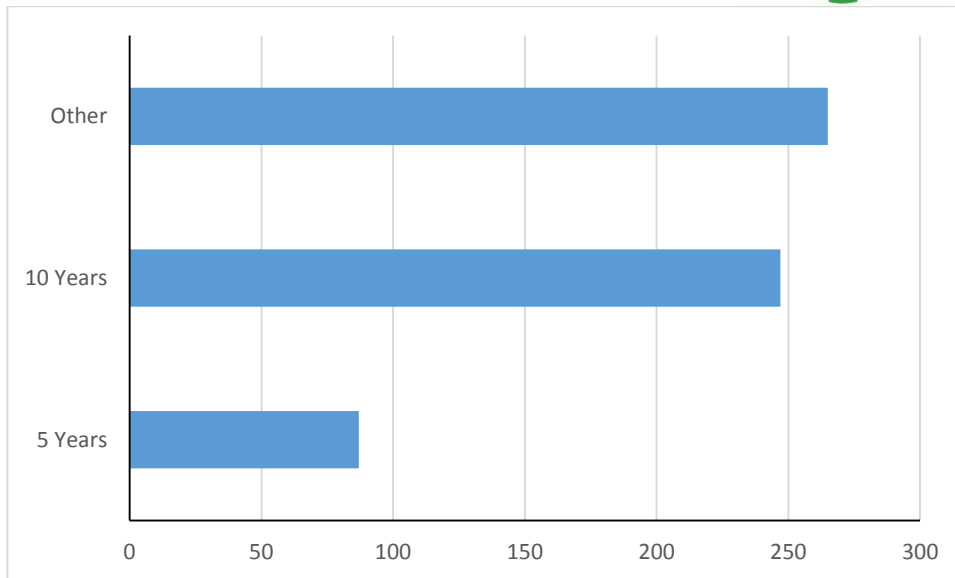
This was a written response question and 487 answers were provided.

The majority of respondents stated that the benefits from the option that they selected would be to assist in the sustainable recovery of salmon stocks in the river(s) that they fish, and that these fish have a greater value (both economically and socially) returning to the river and being fished for by rod anglers than being taken by a net fishery. Some respondents provided data to support the valuation of rod caught salmon.

Some respondents stated that the option that they had selected would enable the cultural traditions of a specific net fishery to carry on.

Question 5.4: (Seeking all consultees' views on the options for net and fixed engine fisheries in England and on the Border Esk (except North East Coast Net Fishery)) - how long do you consider the measures covering a net and / or fixed engine fishery should be in place for?

Number of responses 599



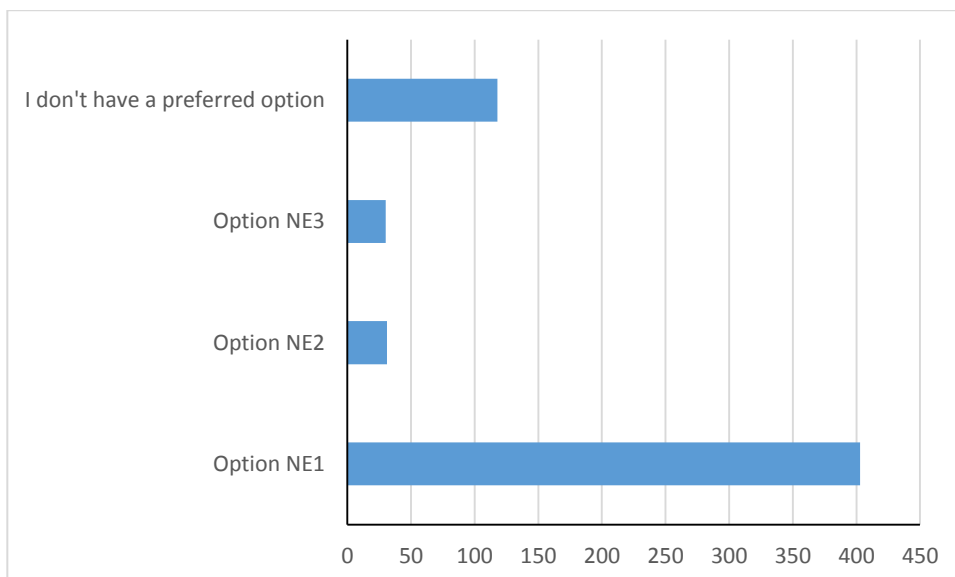
266 further answers to "If other, please specify".

Summary of typical responses for those who have answered "Other":

- Permanently
- Until it can be proven stocks can recover
- 20 years
- A few respondents have suggested that measures should be reviewed every 1 to 2 years, but this is very much the minority.

Question 5.4d: (Seeking all consultees' views on the options for the North East Coast Net Fishery) - which is your preferred option for the North East Coast Net Fishery as set out in Section 5.3:

Number of responses 582



NE1 = Stopping the take of salmon by the North East Coast Net Fishery from 2018 by national byelaw.

NE2 = Stopping the take of salmon by the North East Coast Net Fishery from 2022 by national byelaw.

NE3 = From 2018 revised fishery based Net Limitation Order and catch/effort controls to further limit the catch of salmon.

454 further answers to "Please provide details of why you have given this answer".

A broad overview of the written responses provides an insight into why respondents may have answered in the way that they have:

- This coastal mixed stock fishery should be closed immediately as it is unsustainable.
- You should follow Scotland's approach of stopping coastal fishing for salmon.
- Allowing it continue impacts on our ability to limit exploitation of Greenland and Faroes Fisheries.
- A number of respondents have raised concerns about sea trout stocks and that they should be considered alongside salmon as well.
- A number of respondents do not believe that salmon can be caught and released by net fisheries.
- The drift net fishery is due to close in 2022 anyway, and licences for the beach nets reduce as existing fishermen leave the fishery, so it should be left like this.

Question 5.4e: (This question is for all consultees to answer and is in reference to the answer you have given to Q5.4d) - what are the benefits, if there are any, which you would see from your preferred option for the North East Coast Net Fishery?

This was a written response question and 449 answers were provided.

The response was the same as those received from the wider net fisheries. The majority of respondents stated that the benefits from the option that they selected would be to assist in the sustainable recovery of salmon stocks in the river(s) that they fish, and that these fish have a greater value (both economically and socially) returning to the river and being fished for by rod anglers than being taken by a net fishery. Some respondents provided data to support the valuation of rod caught salmon.

Respondents also stated the benefits the measure they selected would have for salmon stocks in Scottish rivers, and that this measure would help in further reducing the catch of salmon in Greenland and Faroes.

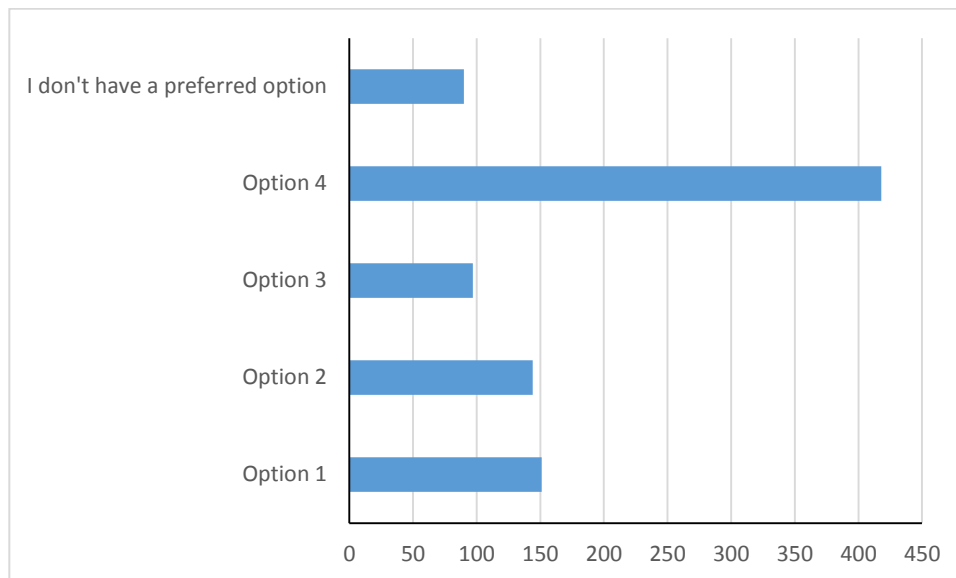
Some respondents stated that the option they had selected would enable them to continue fishing and that their finances are linked to the current closure date of the drift net fishery.

2.6 Future proposals and options for rod fisheries

2.6.1 Increasing the catch and release of salmon

Question 6.2a: (This question is for all consultees to answer and we are seeking your views on the possible options that have been developed) - which is your preferred option for the catch and release of salmon by rod fisheries from those that are set out in Section 6.2: Table 6?

Number of responses **900**



Option 1 = Byelaw for 100% catch and release of rod caught salmon for all rivers post 16 June.

Option 2 = Byelaw for 100% catch and release of rod caught salmon for rivers that are classified as At Risk and Probably at Risk post 16 June. Voluntary catch and release at specified rates for Probably Not at Risk rivers post 16 June.

Option 3 = Byelaw for 100% catch and release of rod caught salmon for rivers that are classified as At Risk post 16 June. Voluntary catch and release at specified rates for Probably at Risk and Probably Not at Risk rivers post 16 June.

Option 4 = Voluntary catch and release at specified rates for rivers that are classified as At Risk, Probably at Risk and Probably Not at Risk rivers post 16 June.

725 further answers to "Please provide details of why you have given this answer".

A broad range of answers were provided to support the option that respondents had selected, a summary of the most common of these is provided here:

- Anglers already return the majority of salmon they catch, and further restrictions on taking fish won't make any difference. You should focus your efforts on the other 4 points of the Salmon five Point Approach.
- Voluntary catch and release means that if a fish is damaged then an angler is not forced to put it back. I have practiced catch and release for years and only take a fish if it won't recover.
- Anglers should be issued with 1 or 2 tags so that they can take a fish if they want and then release the remainder that they catch. I go fishing to take a salmon for the pot, I would stop fishing if I had to return all the fish I catch.

- Voluntary catch and release means that anglers feel part of the solution and are more willing to support habitat work and other initiatives to improve salmon stocks.
- If netsmen are required to stop taking salmon then anglers should too, we all need to play our part in helping salmon stocks recover.
- Salmon stocks are too low and they should all be returned.
- Some anglers will always take salmon if catch and release is voluntary, and therefore a mandatory byelaw should be used to protect stocks.

Question 6.2b: (This questions is for all consultees to answer and is in reference to the answer that you have given to Q6.2a) - what are the benefits, if there are any, which you would see from your preferred option for the catch and release of salmon by rod fisheries?

This was a written response question and 704 answers were provided.

For those providing Option 1 as their answer the typical benefits that they considered were:

- It gives all rivers the chance to recover and ensures all rivers currently not “at risk” to stay so.
- Compulsory catch and release makes it easier to control. Anyone caught with a dead salmon will have some explaining to do.
- All rod fishing for salmon throughout England would henceforth be catch and release everywhere and so a new culture of protecting salmon stocks through that would become the norm.
- Total protection of salmon is necessary. After a period of time, if catches improve you can always change to voluntary catch and release. Of course this level of intervention is also necessary for net and fixed engine fisheries.
- We still get to fish for salmon and we should see improved runs of salmon and catches. This policy will only work if it is combined with all the other measures in the 5 point approach, in particular marine conservation and removal of netting at all stages.

For those providing Option 2 and 3 as their answer, the typical benefits that they considered were:

- Many anglers feel the need to take fish, they should be able to where this is sustainable but where it is not they should not be taken.
- It protects the rivers at risk and on other rivers allows anglers to take home the occasional fish to eat.
- Option 2 provides protection from exploitation for the worst performing salmon stocks, while allowing anglers to show personal responsibility over those few stocks where there may be deemed a harvestable surplus. Wherever possible, the support for management and conservation projects that anglers already show across the country should not be jeopardised. Option 2 allows a balance between regulation where it is most badly needed, and voluntary angling restraint where it can be accommodated.
- This would enable stock regeneration where most needed but ensure the angling industry is maintained and clubs still survive. There is a drop in those participating generally and some businesses and clubs are finding it hard to survive.
- Minimising the application of mandatory catch and release will also minimise the risk of destroying the sport of salmon angling which makes a positive contribution to the environment and rural economies

For those providing Option 4 as their answer, the typical benefits that they considered were:

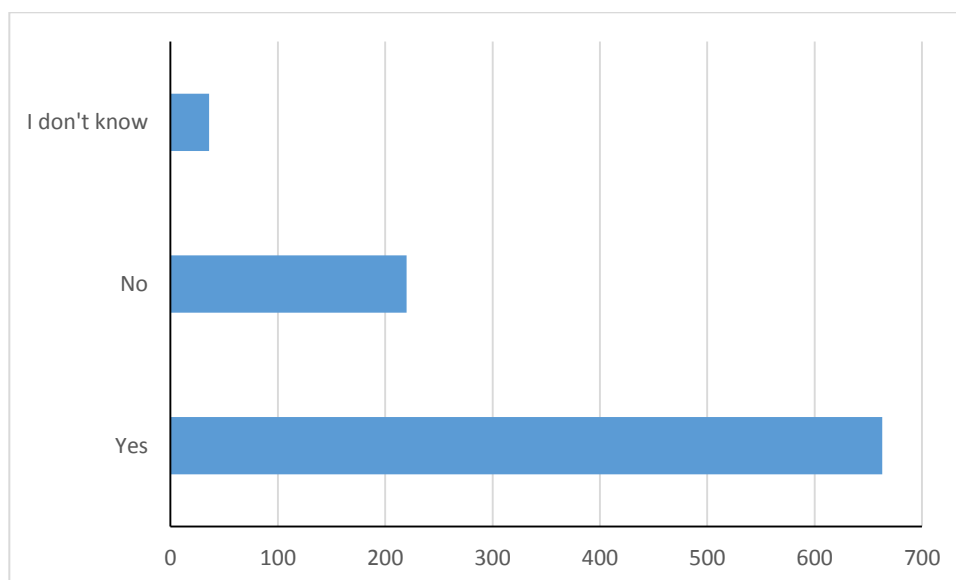
- The thought of being able to take an occasional salmon is appealing to some salmon anglers and it would mean that any fish that were clearly not going to survive would not have to be returned. There is a danger that if we switch to 100% mandatory catch and

release the numbers of anglers would drop away and the benefits to the local economies, the incentives to manage river banks etc. would also reduce.

- Mandatory catch & release will cause some people to give up salmon fishing completely. This will have a detrimental effect on businesses that rely on anglers such as hotels and B&B's. It could lead to financial difficulties for some angling clubs. With voluntary catch & release most people will continue to fish. They will appreciate that if (for example) they land a fish that is damaged they will be able to take it instead of returning it dead to the water. As already stated, anglers already release a high proportion of the salmon they catch.
- Voluntary and high levels of catch and release will have the combined benefits of maintaining fishing interest (and thus the investment of time, work and money from the fishing community in preserving their sport) and increasing the number of salmon able to spawn.

Question 6.2c: (We would like to seek all consultees' views on the use of a voluntary (as opposed to mandatory) approach to deliver increased levels of catch and release) - do you agree with using a voluntary approach to deliver improved catch and release of salmon by rod fisheries?

Number of responses 919



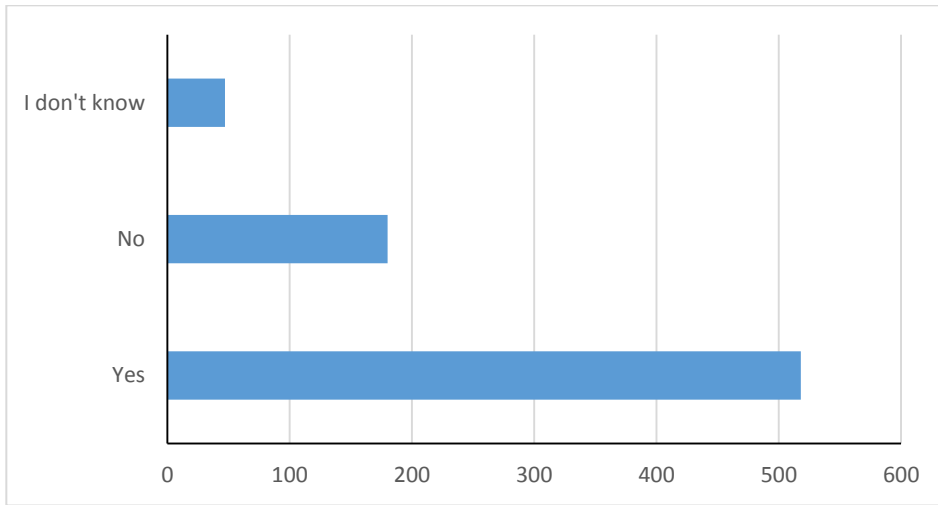
318 further answers to "If no or don't know, please explain your answer and include any dis-benefits that you consider the use of voluntary catch and release would bring".

A summary of the typical responses is provided here:

- Voluntary catch and release will result in some fish being taken and killed at the risk of adding to the pressure on declining stocks. It would also be very hard to justify the end of net fisheries if other fishermen are still killing fish
- Anglers who think they have a right to their catch will no longer be free to kill anything they catch.
- Voluntary catch and release is not good enough as you will always get people exploiting the situation. You need to take a hard stance on this issue and enforce a mandatory catch and release so that everyone knows exactly where they stand with no excuses. Salmon stocks need protecting fully.
- I believe it needs to be mandatory at least until stock levels can be shown to have recovered significantly.
- Given the clear evidence of declining stocks, I see no supportable reason to keep any wild fish that can be returned to the river.

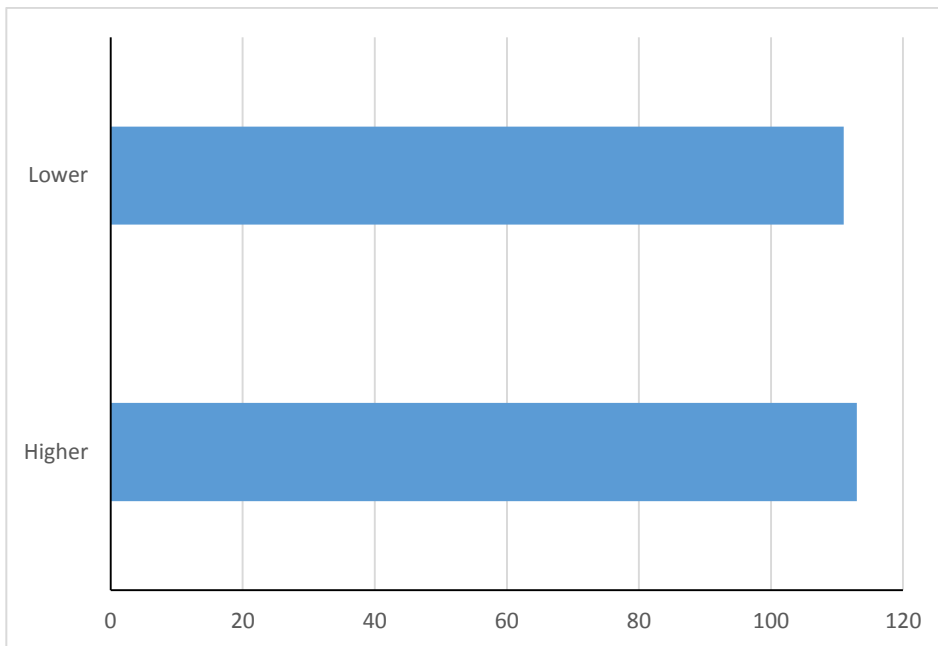
Question 6.2d: (If you answered yes to Q6.2c please answer these questions) - do you support the proposed levels of voluntary catch and release for rivers whose salmon populations are either At Risk, Probably at Risk or Probably Not at Risk (see Section 6.2: Table 6: Option 4)

Number of responses **745**



Question 6.2d (Part.2): If you answered no, do you think voluntary C&R levels should be lower or higher?

Number of responses **224**



290 further answers to "If you wish, please provide us with what you think the levels of voluntary catch and release should be and the reasons for your answers".

For those who answered higher levels of catch and release, they generally said that it should be 100%, with some considering that this should be across all rivers, and others for rivers that are "At Risk" and "Probably at Risk".

For those who answered lower levels of catch and release, they generally said that it should be 95% for "At Risk" and 80% for "Probably at Risk" rivers.

Question 6.2e: (If you answered yes to Q6.2c please also answer this question) - what are the benefits that you would see in voluntary catch and release?

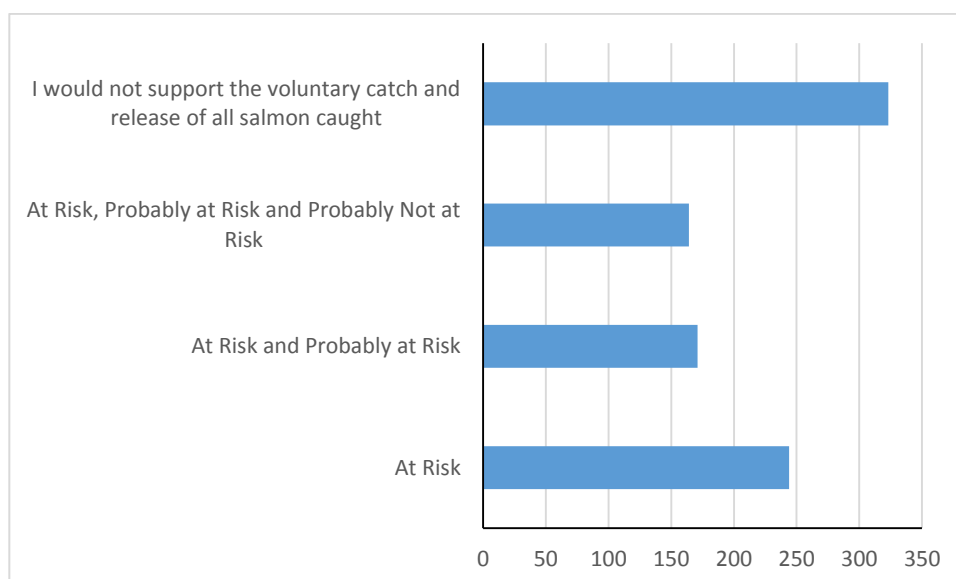
This was a written response question and 575 answers were provided.

A summary of the typical responses is provided here:

- The club to which I belong has voluntary catch and release but allows members to take 2 fish per season. We see >94% of fish released with no reduction in the enjoyment in the fishing experience.
- Experience on the river that I fish has shown that a voluntary catch and release system is respected and because of this fishermen still come back to the river. A compulsory regime would almost certainly drive fishermen away. This would have serious consequences for the local economy and in the end be detrimental to the control and prevention of illegal fishing resulting in decline in some stocks.
- Voluntary catch and release gives the option of a novice keeping their first ever fish, and allows the killing of a bleeding fish which would die anyway. I have personal experience of a number of fish which the angler released, but which subsequently died in spite of all attempts of revival. The option of legally keeping an obviously dead fish makes common sense.
- The introduction of compulsory return of all fish will also cause a decline in value and maintenance of fisheries. The allowance of the taking of one fish which is tagged on capture, the tag being purchased at the time of renewing the rod licence will to some extent retain enthusiasm.
- Self-regulation puts the onus on the angling community to keep its house in order, and encourages their efforts to preserve their sport. Legislative approaches will kill off the feeling of 'ownership' that means anglers work very hard to improve their rivers. The very occasional taking of a salmon in rivers that can sustain it should also be allowed to maintain interest in the art of fishing with the benefits it brings to society and fish stocks.
- Voluntary as averse to mandatory places the responsibility on the anglers and avoids the regulatory approach and the need for costly enforcement.

Question 6.2f: (This question is for all consultees - would you support the voluntary catch and release of all salmon caught (100%) on rivers whose salmon populations are either?)

Number of responses 902

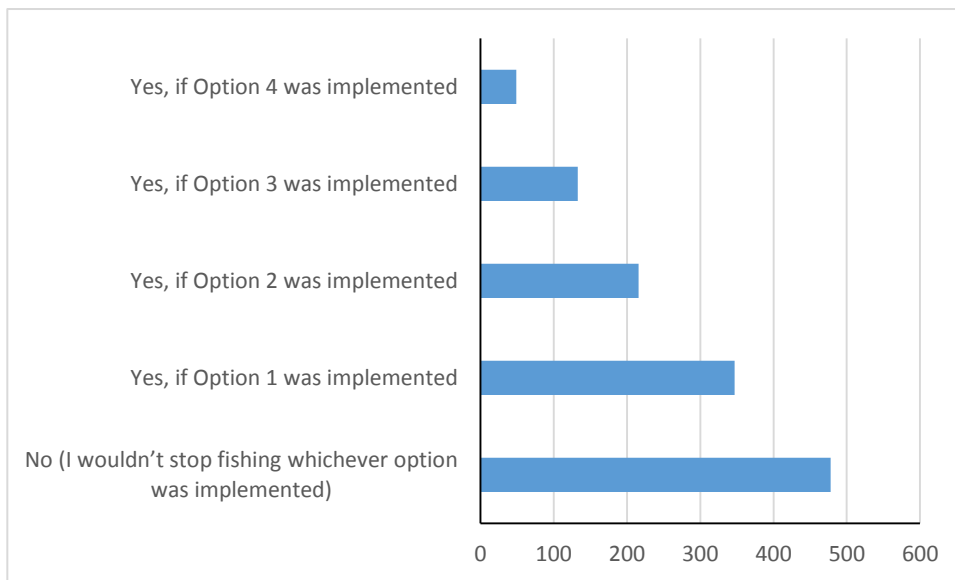


438 further answers to "If you wish, please provide us with the reason for your answer."

For those answering “I would not support...” there is a strong contingent who believe that 100% mandatory catch and release should be bought in (primarily for those rivers with poor stocks). There are also those who have answered this as they don’t believe anglers should release 100% of the fish that they catch.

Question 6.2g: (This question is for salmon anglers) - would you stop fishing for salmon if the proposed levels of catch and release were implemented (see Section 6.2: Table 6)?

Number of responses **1,223 – respondents could provide more than one response to this question.**

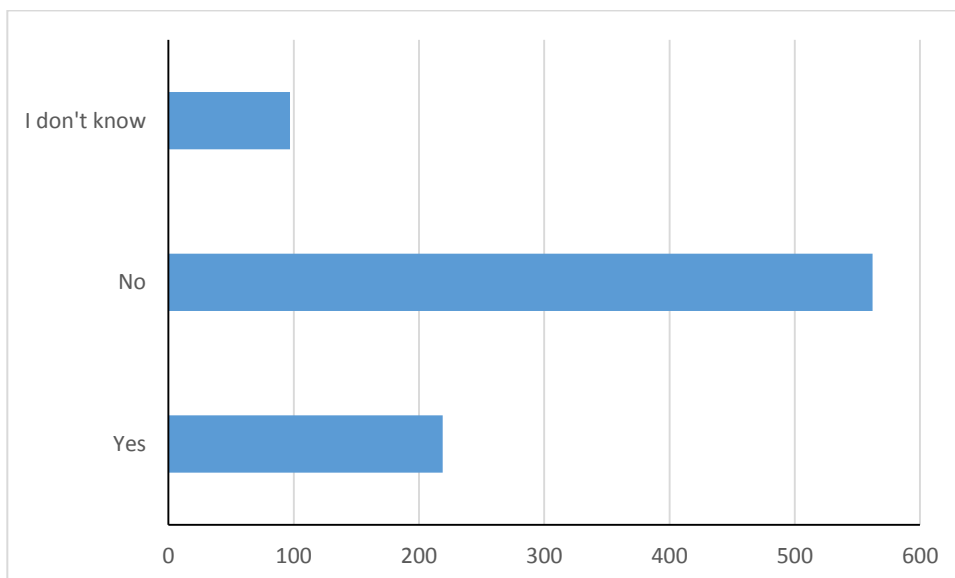


764 answers to "Please tell us which river(s) you fish for salmon on".

Respondents listed the rivers that they fish on, with the majority fishing on a least two different rivers.

Question 6.2h: (This question is for salmon anglers) - would you consider moving to a river where lower levels of catch and release were required?

Number of responses **878**



371 further answers to "If you wish, please provide us with your reasons for your answer".

For respondents who answered “No” they typically said that there reasons for this were:

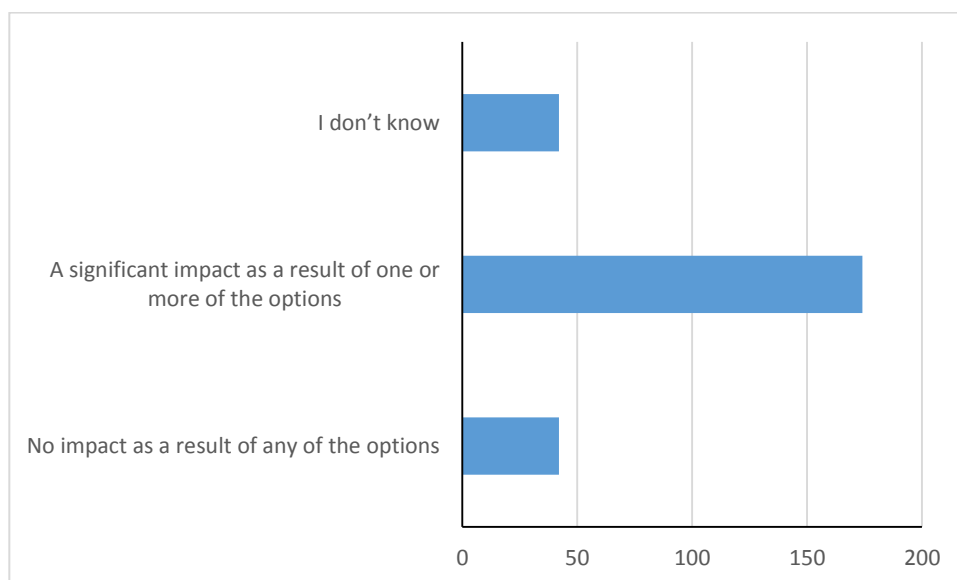
- They enjoyed fishing their local river and wouldn't want to fish anywhere else.
- The cost of fishing a river further from home would be prohibitive to them.
- They already practice 100% catch and release and therefore wouldn't want to move to a river were they might be able to take a salmon home.

For respondents who answered "Yes" they typically said that there reasons for this were:

- I would want to be able to take an occasional fish home.
- Only if there was river with lower catch and release requirements close to me.
- A river with lower catch and release requirements would imply that there is a better opportunity of catching a fish.

Question 6.2i: (This question is for owners/lessees of salmon rod fisheries - what would the impact of these catch and release proposals be on your fishery (see Section 6.2: Table 6)?)

Number of responses 258



197 further answers to "Please provide us with details of which of the possible option(s) would result in a significant difference to your fishery. Please provide us with details of financial and social impacts".

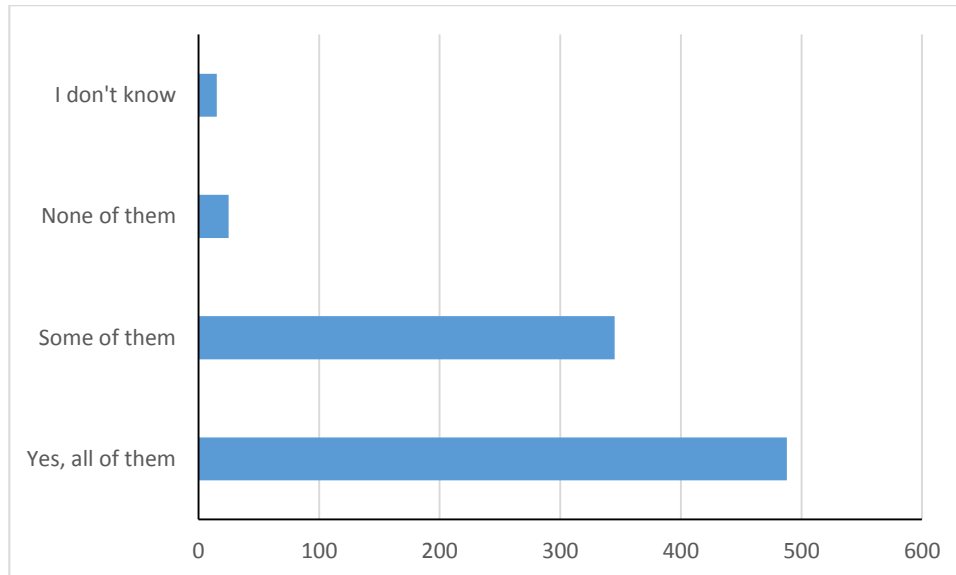
Respondents typically said that mandatory catch and release would see a drop in membership for their club or syndicate. They said this would result in difficulty paying rents and public liability insurance, which are the majority of their costs. They also said that if their club were to fold, then the other work that they do to protect and improve the river would stop as well.

A number of respondents provided evidence of the numbers of members that left when mandatory catch and release was bought in for before the 16 June. Some said that the uncertainty of what measures would happen in 2017 meant their members were reluctant to take out their membership.

2.6.2 Recommendations to improve survival of caught and released salmon

Question 6.3a: (This question is for all consultees to answer and is about the best practice recommendations for catch and release) - do you agree with the catch and release best practice recommendations?

Number of responses **873**



329 further answers to "If you wish, please tell us which of them you agree/disagree with and provide us with further information to support your answer".

The two main recommendations that have resulted in respondents answering "Some of them" rather than "Yes, all of them" are "Use a landing net" and "Use single or double barbless hooks". The reasons they have given for disagreeing with "Use a landing net" are:

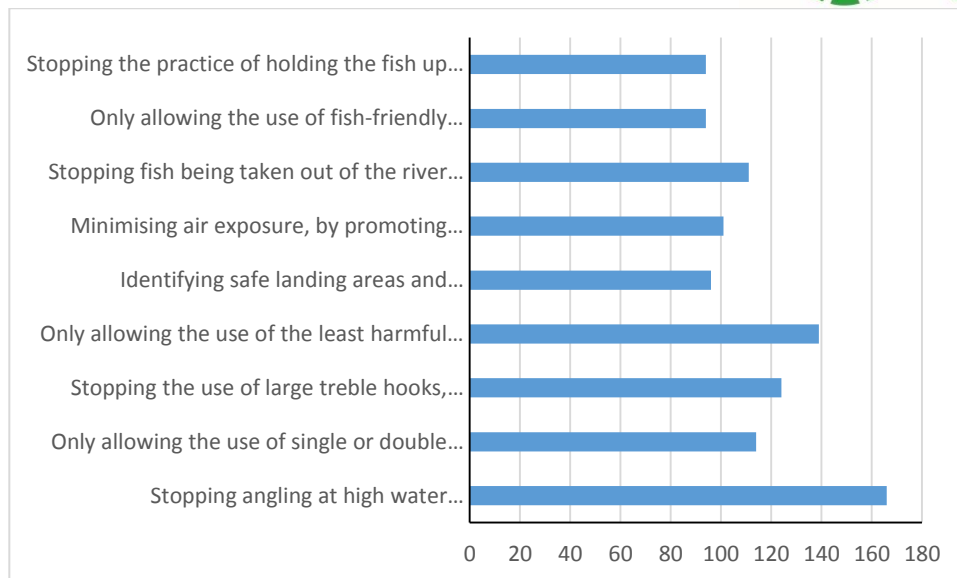
- It is not always safe to do so, especially when wading in deep water.
- Gently beaching a fish in the shallows allows it to be unhooked and returned with minimal handling.

The reasons they have given with disagreeing with "Use single or double barbless hooks" were more centred on the barbless hook aspect with many saying that:

- Barbless hooks can create a bigger wound as a result of moving around more.
- You're more likely to lose a fish on a barbless hook and if this is at the end of the fight then you can't ensure the fish recovers properly.

Question 6.3b: (This question is for angling club and fishery owners) - with reference to the catch and release best practice recommendations in Section 6.3.3, which, if any, of these would you have difficulty applying to the waters under your control?

Number of responses **1,039**



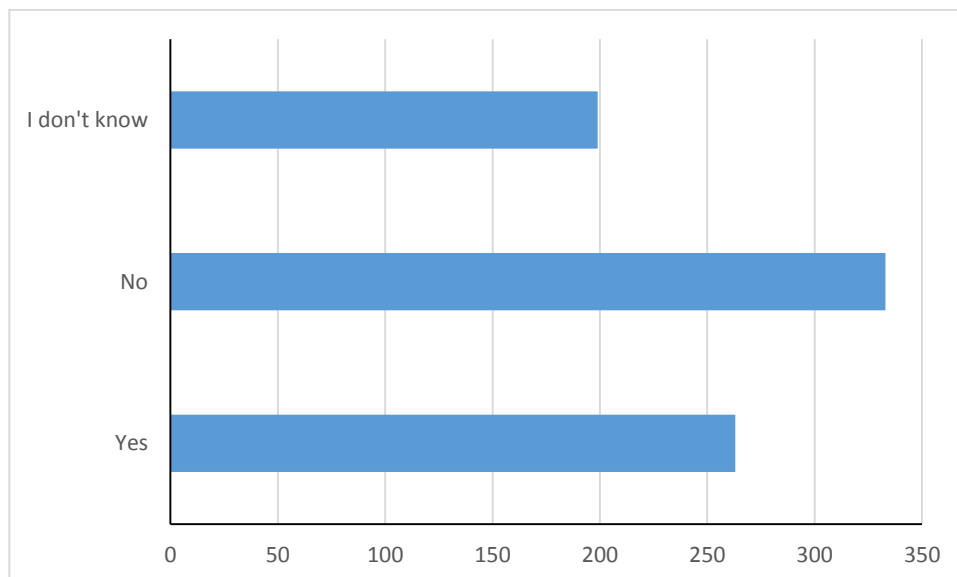
211 further answers to "Please provides us with the details of your reasons why you would have difficulty applying these recommendations to the waters in your control".

The majority of respondents said that the policing of these recommendations would be the most difficult thing to achieve, and it would be down to the good will of their members to undertake the recommendations.

The stopping of angling at high water temperatures was considered by many respondents to be the hardest to implement.

Question 6.3c: (This question is for all consultees to answer and is about other ways that you might improve salmon surviving capture) - are there any other catch and release best practice recommendations that you feel should be included?

Number of responses **795**



296 further answers to "Please provide us with the details of these and your reasons why".

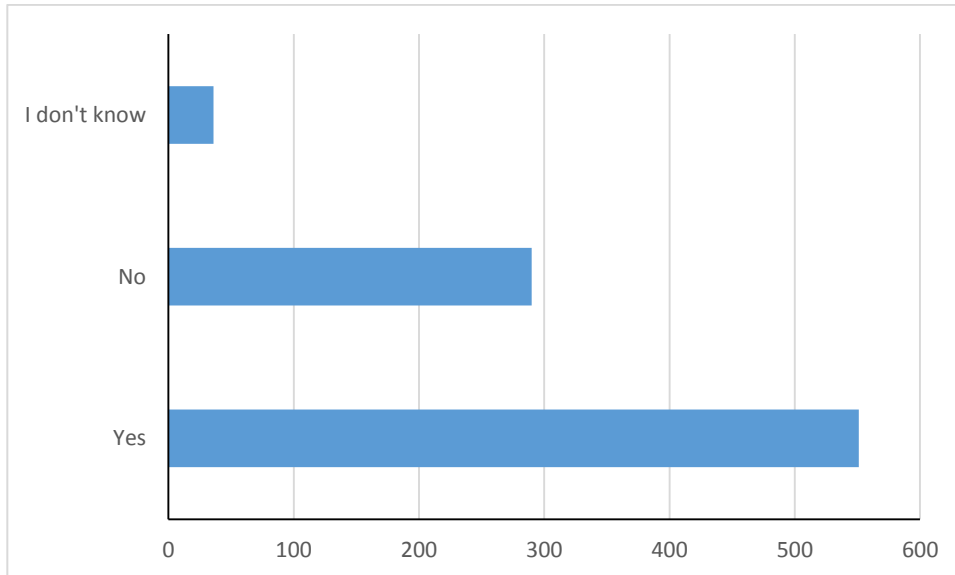
The most common recommendations that respondents provided were:

- Use of worm as bait should not be allowed.
- Lures with multiple treble hooks (e.g. Rapals) should be banned.
- Long forceps/disgorgers should always be carried/used.

2.6.3 Possible mandatory measures to improve survival of caught and released salmon

Question 6.4a: (This question is for all consultees) - do you consider that having a landing net available to use should be required by byelaw whilst fishing for salmon or sea trout in England and Border Esk?

Number of responses 877



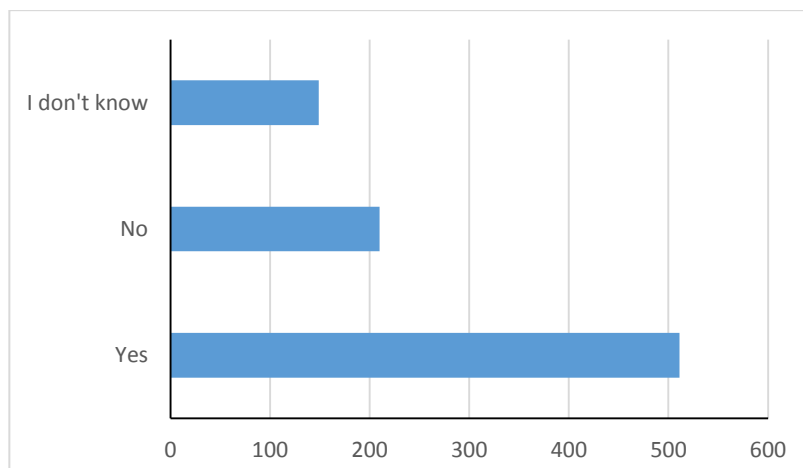
405 further answers to "If you wish, please provide us with your reasons for this answer".

In the main, while the majority of respondents agree that a net is often the best way to land a salmon, they said it is not always necessary to use a net. They also said that fish can be released quickly and with less impact without a net in some circumstances than if a net was used. They also questioned how "available to use" would be defined, and how enforceable this would be.

For those who answered "No" they felt that having a net available to use should remain a best recommendation.

Question 6.4b: (This question is for all consultees) - do you consider that a landing net used when fishing for salmon and sea trout should be required by byelaw to have a maximum mesh size of 20mm (as measured across the widest point of the stretched mesh)?

Number of responses 870



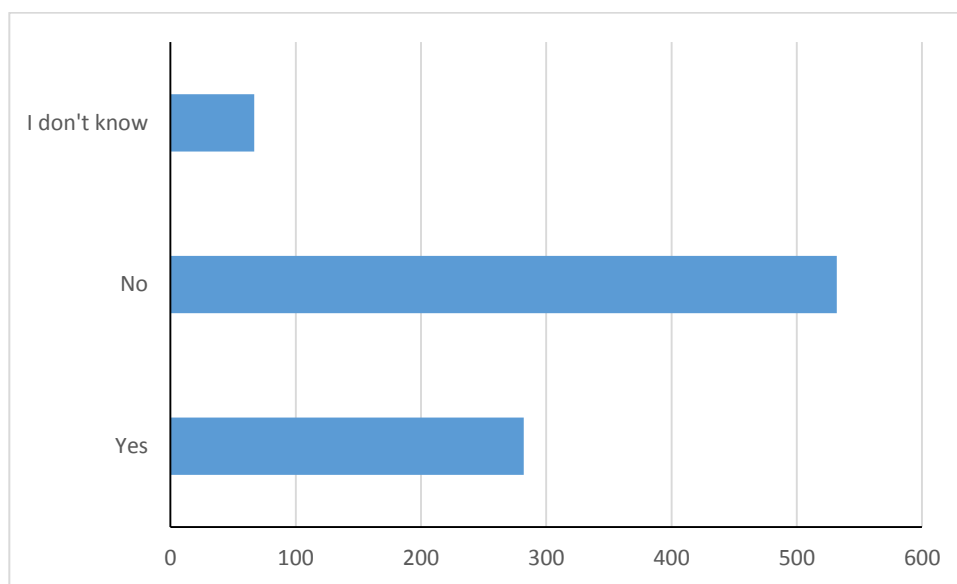
221 further answers to "Please tell us if you think this mesh size should be different from this and why".

Whilst the majority of respondents have answered "Yes" there is a number of considered responses which all state that using such a small mesh size in fast water is very difficult, and can be dangerous when wading (i.e. increased drag from the net).

They also responded that whilst the best type of net mesh to use should be recommended, it should not be required by byelaw. Also, that it should be up to the angler to decide the best way of landing a fish, given the location and river conditions that they are fishing in.

Question 6.4c: (This question is for all consultees) - do you consider that the use of barbed hooks should be prohibited by byelaw when fishing for salmon or sea trout with flies, lures or bait?

Number of responses 881



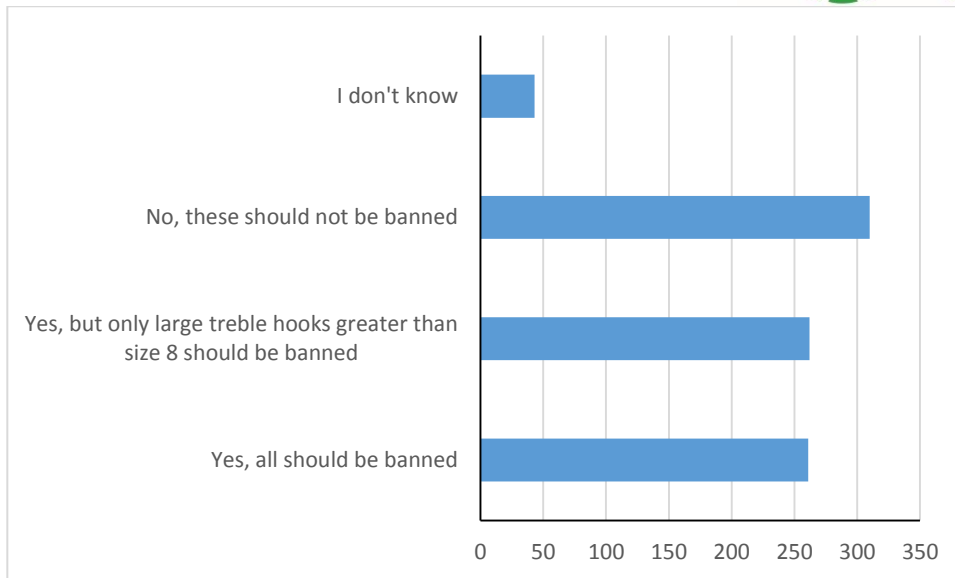
427 further answers to "What would the impact, if any, be for you or your business of prohibiting the use of barbed hooks when fishing for salmon or sea trout with flies, lures or bait".

The typical written responses provided to this question were:

- The use of barbless or de-barbed hooks should be voluntary not mandatory.
- Barbless hooks move around more and can create a bigger hole than barbed hooks.
- I would lose more fish, especially sea trout which jump more than salmon.
- Fish are more likely to come off with barbless hooks which means that they can't be helped to recover, especially at the end of the fight.
- I prefer micro-barbed hooks to barbed.
- I have flattened all the barbs on my flies and don't see much of a difference in the numbers of fish I land.
- Barbless hooks are required when fishing for salmon in other countries.

Question 6.4d: (This question is for all consultees) - do you consider that the use of treble hooks should be prohibited by byelaw when fishing for salmon or sea trout with flies, lures or bait?

Number of responses 876



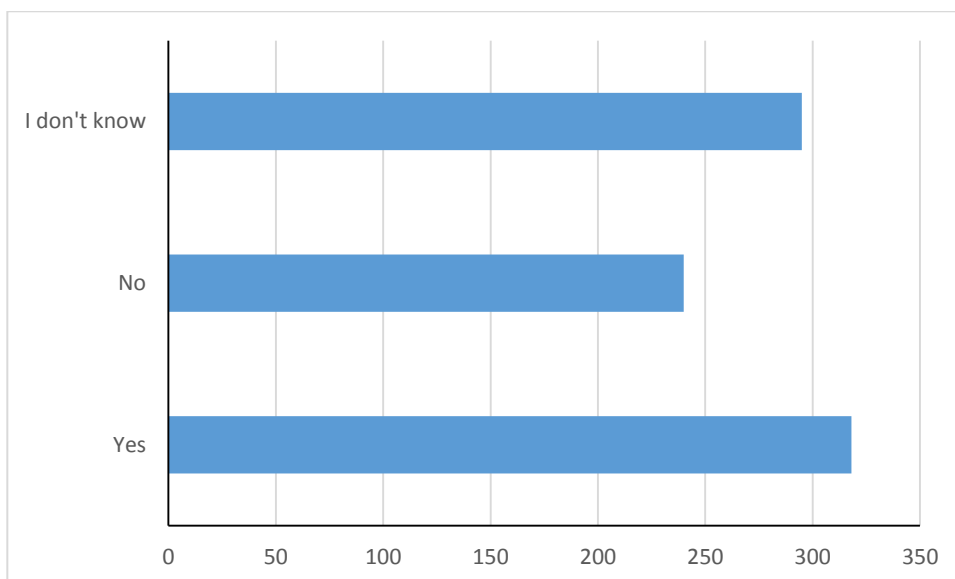
389 further answers to "If you wish, please provide us with your reasons for this view, and if you think that large treble hooks of a different size, greater than size 8, should be banned".

The typical written responses provided to this question were:

- Smaller treble hooks can be easily removed.
- I see no difference in damage between doubles and trebles.
- Some lures are designed for the weight of treble hooks e.g. Rapalas.
- Lures with more than one set of trebles should be banned.
- Some would be in favour of banning trebles for salmon if the ban didn't extend to include when fishing for sea trout.
- I would not be able to use a lot of my flies.

Question 6.4e: (This question is for all consultees) - do you consider that the use of circle hooks should be mandatory by byelaw when using worm as bait when fishing for salmon or sea trout?

Number of responses 853

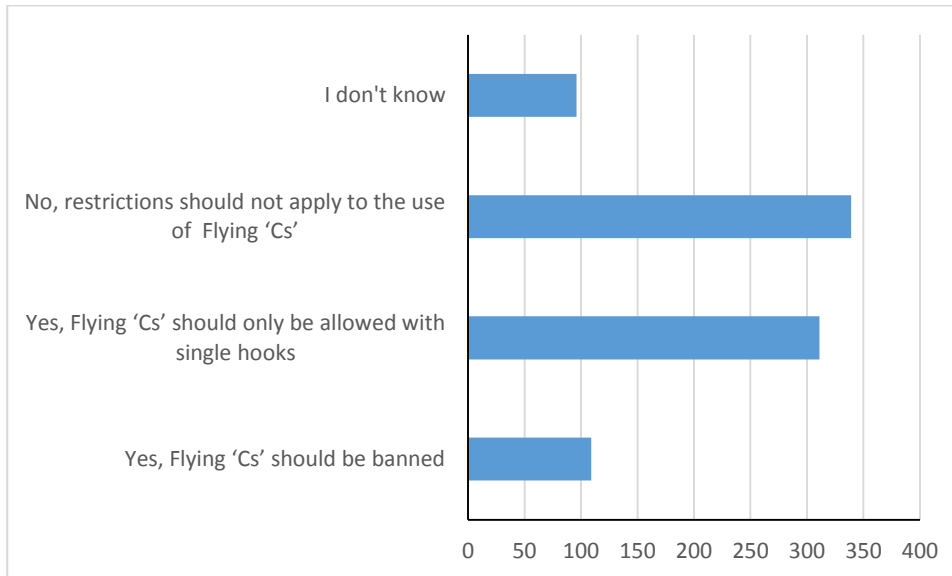


387 further answers to "If you wish, please provide us with your reasons for this answer".

A number of respondents said that worming, or all bait fishing, should be banned. Whilst the majority of respondents felt that if worming was allowed then it should be with circle hooks, a number of responses were received from angling clubs who have been trialling the use of circle hooks on their waters. They told us that in their experience, circle hooks do not work as designed when fishing for salmon and can do more harm than good. They have therefore changed to using single barbless hooks as these provide the best all round option.

Question 6.4f: (This question is for all consultees) - should there be restriction on the use of Flying 'Cs' when fishing for salmon or sea trout?

Number of responses 855



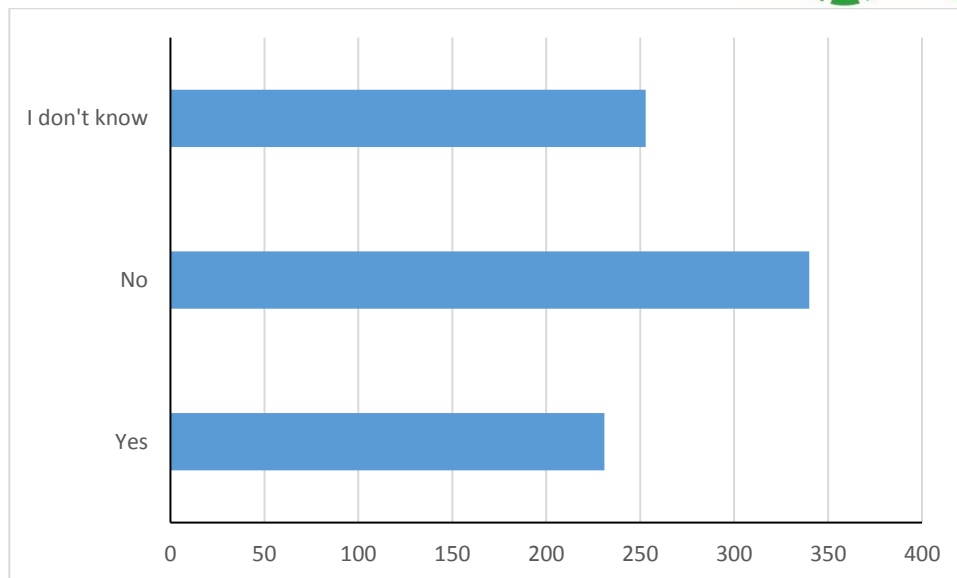
386 further answers to "If you wish, please provide us with this reasons for your answer".

The typical written responses provided to this question were:

- Why have you singled out Flying Cs? They are no worse than Mepps etc.
- Multi-hook lures cause more damage e.g. Rapalas
- Salmon aren't deep hooked if you fish them properly, upstream and across.
- They are easy to unhook if they are barbless.
- Single hooks work well on Flying Cs and make unhooking easy.

Question 6.4g: (This question is for all consultees) - in your opinion, are there other types of equipment that should be prohibited by byelaw when fishing for salmon and sea trout?

Number of responses 824



301 further answers to “Please provide what these could be and why you think they should be prohibited or altered.”

The main types of equipment that respondents considered should be prohibited by byelaw were:

- Fishing with worms.
- Fishing with shrimp or prawns.
- Lures with more than one set hooks (e.g. Rapalas).

2.7 Further comments and consultation tool question

Question 7: (This is for all consultees) - please tell us if you have any further comments that you would like to provide on this consultation.

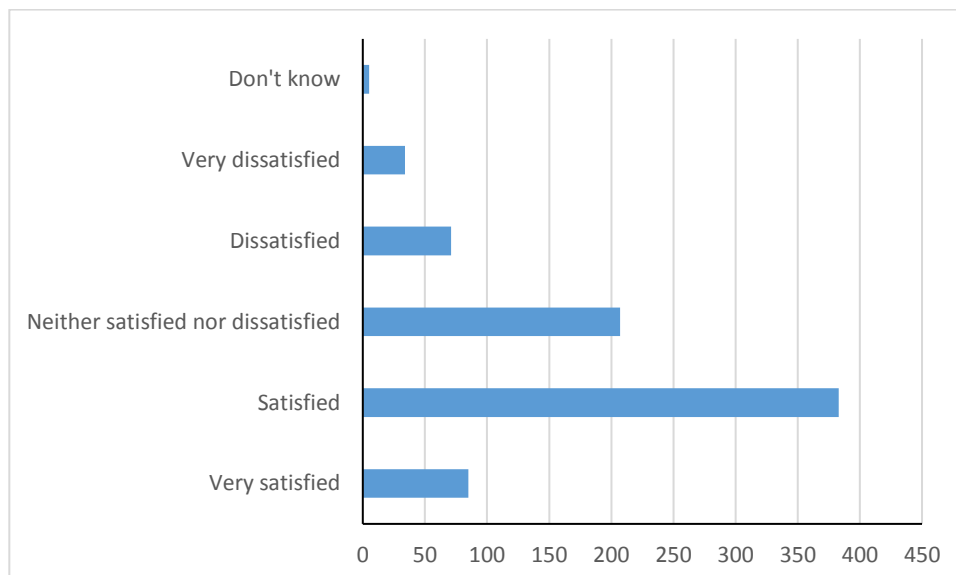
This was a written response question and 762 answers were provided.

Whilst a wide range of responses were provided to this question, there were a number of recurring themes. These were:

- Respondents urged action on the other four elements of the Salmon Five Point Approach as they see these as being far more critical to improving salmon stocks.
- The lack of reference and action on predation of salmon by birds and mammals was raised as a key concern, with many respondents feeling that far more needed to be done on this issue.
- Respondents often questioned why salmon hatcheries aren't used more extensively, particularly with stocks at such low levels.
- The state of sea trout stocks on some rivers was raised as an issue and that more needs to be done for these fish.
- The impact that mandatory catch and release of rod caught salmon could cause to angling clubs/fishery owners was reiterated. With further detailed information provided on the value that rod fishing brings to local salmon stocks and the local economy. A number of respondents provided evidence to support their statements.
- Concerns were raised by some respondents about how individual rod licence holders had been made aware of this initial consultation. With some respondents suggesting that all salmon and sea trout licence holders should have been written to informing them that the consultation was taking place.

Question 8: How satisfied were you with the consultation tool?

Number of responses 785



318 further answers to "Please tell us if you have any suggestions on how we could improve the tool"

A range of suggestions were made to improve our online consultation tool and specifically how this consultation was set out. In particular the length of the consultation was raised as a concern, but respondents appreciated being able to have sight of the measures for all fisheries rather than just those for the fishery that they are interested in. Another common suggestion was having the

options of measures for each fishery clearly displayed alongside the questions, rather than in an embedded document.

3. Our response to common questions

3.1 **Predators such as cormorants, goosanders or seals are killing large numbers of salmon. Why are we not considering controlling their numbers?**

Fishery Management Advisors (FMAs), employed by the Angling Trust, and Environment Agency Fisheries Officers both provide advice to angling clubs and landowners on cormorant and goosander control. The FMAs have helped many fishery managers on both rivers and lakes with; licence applications to control cormorants and goosanders, advice on safe shooting, practical advice about measures to protect fish using innovative techniques, such as the use of lasers and lifelike mannequins to deter birds, exclusion tactics, and fish refuges. The Angling Trust successfully secured the implementation of Area Based Licences to reduce the bureaucracy of multiple licence applications by individual fishery owners, and to co-ordinate shooting to scare across a whole catchment.

The Angling Trust set up www.cormorantwatch.com for anglers to record sightings of cormorants, goosanders and mergansers. It is currently campaigning to persuade government to increase the number of cormorants which can be controlled, and to remove the requirement of fisheries for evidence of damage by goosanders. They will use the number of sightings of fish eating birds on www.cormorantwatch.com as part of their evidence for this campaign, along with new evidence from the Atlantic Salmon Trust. The Atlantic Salmon Trust evidence shows that on some rivers, up to 50% of salmon smolts don't survive the migration to the estuaries. It is thought that predation by birds plays a large part in this figure. The Angling Trust is also urging Ministers to bring in regulations for the owners of barriers to fish migration. These would require the owners to allow the installation of easements to fish passage, which would significantly reduce the vulnerability of salmon smolts, and many other fish species, to predation.

The Environment Agency has no powers to regulate the number of birds, seals or other marine mammals. We recognise that seals can be a problem where there are barriers to fish migration. These obstacles can allow fish to be corralled, and increase the risk of them being taken by seals. Generally, the actual numbers of salmon as a composition of most seals' diet are thought to be low. However, some specific seals have learnt strategies that do focus on salmon, especially at such barriers. Scaring deterrents are currently being researched for locations such as the Tees Barrage to combat this problem.

3.2 **Why are we not stopping off shore and high seas fisheries from over fishing species which salmon prey on, such as prawn and sand eels?**

The Environment Agency has no role in managing the quotas for species such as prawns and sand eels in the off shore and high seas fisheries. However, we have raised the issue with relevant departments within Defra.

The International Council for the Exploration of the Sea (ICES) based in Copenhagen, Denmark, comprises of 20 member nations including: Belgium, Canada, Estonia, France, Iceland, Ireland, Latvia, Lithuania, Poland, Portugal, Spain, and the United States. It also has affiliate institutes with observer status from: Australia, Chile, Greece, Peru, and South Africa. Formal observer status has been given to two non-governmental organisations: Worldwide Fund for Nature and Birdlife International.

ICES provides unbiased scientific advice to member nation governments and international regulatory commissions in support of the management and conservation of coastal and ocean resources and ecosystems. Advice on the management of 135 separate finfish and shellfish stocks is provided to the North-East Atlantic Fisheries Commission (NEAFC),

North Atlantic Salmon Conservation Organisation (NASCO) and the European Commission (EC).

The response to this advice and subsequent management of the exploitation of these stocks falls to relevant individual national governments or international regulatory commissions e.g. EU Common Fisheries Policy depending on the nature and location of the fishery.

3.3 Why are we not pressing for closer regulation or closure of open cage salmon farms?

There is evidence that salmon farms can affect local wild salmon and sea trout stocks, however there have been no studies on the impacts of aquaculture on distant salmon or sea trout stocks.

At present we don't know if North West post-smolts actually migrate near, or close enough to, salmon farms to potentially be impacted. However, we recognise as a potential issue and are looking to work with Marine Scotland, Atlantic Salmon Trust and other possible partners to specifically track the early stage sea migrations of North West smolts.

Though there are no open cage marine salmon farms in English waters, we fully support North Atlantic Salmon Conservation Organisation's (NASCO) efforts to ensure that regulatory regimes protect wild salmon and sea trout stocks. In highlighting current best practice, NASCO held a Theme-Based Special Session on salmon farming in 2016, which resulted in the following report: [Addressing impacts of salmon farming on wild Atlantic salmon: Challenges to, and developments supporting, achievement of NASCO's international goals](#). The UK Government has signed up to NASCO's international goals for the protection of wild Atlantic salmon, including the 'Williamsburg Resolution'.

3.4 Why are we not investing in hatcheries, or encouraging private individuals / clubs to open their own hatcheries, so as to increase salmon recruitment?

Recent scientific evidence demonstrates that large scale stocking of hatchery-reared salmon can potentially result in adverse impacts on the long-term fitness, and consequently the numbers, of wild salmon populations. We consider that it is better to support natural production in the river and maximise wild smolt output as the primary way of aiding the recovery of salmon populations.

There is very good evidence which demonstrates that wild reared salmon have a much higher level of marine survival when compared to hatchery reared salmon (between three and ten times the differences being recorded).

We will consider authorising appropriately sized salmon hatchery schemes if these are fully funded by external interests, and supported by a comprehensive hatchery stocking plan. The stocking plan will seek to ensure that the inherent risks associated with hatchery schemes are adequately managed and controlled.

At the current time, we will not be able to consent any salmon stocking schemes that are proposed on rivers designated as Special Areas of Conservation (SACs) or Sites of Special Scientific Interest (SSSI), and which include salmon as an interest feature. This reflects the fact that we are not able to confidently conclude that hatchery schemes will not have potentially negative consequences for wild reared salmon. In such cases, in agreement with Natural England, we believe that it is necessary to protect the unique genetic traits of these stocks for as long as possible.

The stocking that we currently carry out is principally for the mitigation of previous infrastructure developments (building of reservoirs) that have impacted on salmon productivity over a long term and funded by third parties.

3.5 If these proposed plans go ahead, and it is no longer possible to take salmon, will the cost of a rod or net licence be reduced, or will licences be revamped in some way?

There are currently no plans to review the cost of a salmon licence on the basis of not allowing salmon to be taken. Many rivers already practice 100% catch and release.

The migratory salmonid licence currently does not fully cover the costs associated with managing these fisheries. The licence itself only covers the angler to fish with rod and line taking account of the rules and regulations in place on each river to ensure that the salmon stock remains sustainable.

3.6 What are we doing to stop salmon poaching and increase enforcement? Have we considered using voluntary bailiffs?

Where salmon are present, the Environment Agency has dedicated enforcement resources to use in protecting stocks such as active patrols. We are also increasing the use of intelligence-led work, and improved technology and surveillance, on identified hot spots, which has improved our ability to prevent and deter illegal activity. We work alongside angling clubs, landowners and partner organisations to maximise our resources on the ground. In particular, the intelligence that we use to target our enforcement activity relies on the close relationship that we have with our customers and partner organisations, such as the Angling Trust and the Inshore Fisheries and Conservation Authorities. We also use volunteer bailiffs to help us with compliance checking of rod licenses. This gives our enforcement officers, who are fully trained and compliant under the Police and Criminal Evidence Act, to be available to tackle illegal activity that has been identified.

3.7 What are we doing to address the other four points of the Salmon Five Point Approach?

The other four priorities are:

1. Improve marine survival.
2. Remove barriers to migration and enhance habitat.
3. Safeguard sufficient flows.
4. Maximise spawning success by improving water quality.

Since the launch of the Salmon Five Point Approach there have also been some notable successes in these work areas, these include:

- Being part of a £4 million pound investigation into salmon migration pathways along the south coast as part of the European funded SAMARCH project. This work should give us a greater understanding of how salmon move out of our rivers and into sea. This could help inform future management and planning decisions in our coasts and estuaries.
- Investigations into low flow and water quality improvements as part of the 2019 Price Review process with the water companies.
- Ongoing programmes of works to improve passage for salmon migration by adding fish passes or removing weirs.

We recognise that there is still a lot to do on the other four strands of our approach, and these will remain the focus of ours and partner organisations' work over the coming years. A great deal of this work is long term and, although much has begun, benefits will not be realised immediately. Some areas of work will need more legislation, or will be delivered through non fisheries specific work, such as water abstraction and future farming reforms.

3.8 What are we doing to prevent farm pollution, particularly runoff such as slurry and soil?

We continue to be innovative in our approaches to targeted enforcement of potentially polluting agricultural activities, and we are looking to extend the lessons learnt from successful trials across the country. Partnership work and better targeted enforcement in Devon, Herefordshire and the North West, have all seen improvements in land management and soil run off. These projects can be used to demonstrate the benefits that this approach makes to salmon habitat.

This year also sees the introduction of the new Farming Rules for Water. These will provide a clearer, outcome based regulatory system for farmers to abide to, and should enable more straightforward prosecution action where needed once they are established.

We are already working closely with partners, particularly at catchment scale, to ensure that farmers receive advice and guidance on how to meet the requirements. In the medium term, there are significant opportunities for improvement through conversion of the existing agricultural payments system to one which provides greater rewards for public goods. Future funding systems should provide an opportunity to transition farming infrastructure, to offer higher levels of environmental protection. There is also growing recognition within the wider supply chain, and the farming industry, of the need for UK produce to have the highest reputation for environmental standards, particularly post EU exit. We will continue to press for, and facilitate, the incorporation of farming standards that protect the water environment into assurance schemes.

Going forward, our Future Agriculture Programme will be pursuing this agenda of; better regulation, funding of environment improvements, and greater supply chain assurance. While progress has generally been slower than we would like in this area of the programme, to date we are confident that the Salmon Five Point Approach has helped identify the main areas that need more attention. Also, that these areas are now much more clearly understood and recognised by our partners and by Government, and that there are programmes of work in place to drive improvements forward.

3.9 What is the Environment Agency doing to protect sea trout, and will these proposals lead to increased pressure on their populations?

Many of the actions delivered by the Salmon Five Point Approach will be of benefit to sea trout and brown trout populations as well as to salmon.

In the development of the proposed measures for net and rod fisheries, we will consider the impact that these measures may have on sea trout populations. We have already stated that: “in developing options for further reducing the exploitation of salmon, the intention will be not to increase the level of sea trout exploitation by a fishery beyond its typical current level.”

Where sea trout stocks remain fully sustainable and at surplus levels, we will continue to allow these stocks to be taken by net fisheries. We will however review this situation on a regular basis.

3.10 Could the changes in population numbers and composition not be due to natural cycles in the population, such as the 60 year Grilse / Multi Sea winter cycle proposed by the Tweed Foundation?

The strong evidence of grilse and multi-sea-winter (MSW) salmon population cycles should not be viewed in isolation from other key facts about salmon population biology.

At the last period of MSW salmon dominance in the 1960's, the survival of salmon at sea was in the region of 20% or more. Nowadays we are seeing sea survival of around 5%. Over this time there has also been a continual decline in the average size of same aged fish. There is also an estimated 5 million less salmon in the North Atlantic countries now, compared to 30 to 40 years ago. All this information together, does not afford the likelihood

of salmon returning to previous levels of abundance in the years to come, despite the grilse/multi sea winter salmon cycle.

3.11 How do you consider the socio and economic effects on measures that you propose?

Our primary objective in managing salmon populations is the conservation or restoration of stocks. However, when considering new regulations we look carefully at their potential socio and economic impacts. In doing this we consider:

- Whether proposed measures will have an unreasonable effect on someone's livelihood (e.g. net fishing) or the value of their property (e.g. fishing rights).
- Effects on different groups – we seek equal impact on commercial and recreational fisherman.
- The effect on the viability of fisheries.
- Heritage value: where fishing methods are unique to a very small number of locations, we consider retaining a residual fishery and/or permitting a low level of catch.

3.12 These proposals are likely to lead to a drop in angler numbers, and therefore salmon catch. As river classifications are derived from rod catch data would this not, in turn, lead to a drop in these classifications?

We recognise the likelihood that salmon catches could fall further if angler activity declines. However, we can account for this in the stock assessments for rivers where we have independent 'run' data, such as from fish counters or traps.

We are also investigating how we might do this for rivers without fish counters or traps.

3.13 What are we doing to educate anglers on best practice?

As part of their commitment to the Salmon Five Point Approach, The Atlantic Salmon Trust, FishPal and the Angling Trust have produced an excellent step by step instructional video on how to play, handle and release an Atlantic salmon:

https://www.youtube.com/watch?v=g7uoXk_hFOk. The Environment Agency fully supports these initiatives both with funding support and providing technical advice.

3.14 Will recovering salmon rivers be included in the measures?

We are intending to include rivers that have populations of salmon present, but are not classed as principle salmon rivers, within the proposed byelaw package that will be advertised in March 2018.

3.15 In your four categories of risk, what is the relationship between the forecast stock performance of salmon and actual performance?

The national salmon stock assessment process used by the Environment Agency is fully explained within our latest ICES background report which we produce annually in collaboration with Cefas and NRW. Please see link below:-

<https://www.gov.uk/government/publications/assessment-of-salmon-stocks-and-fisheries-in-england-and-wales-in-2016>

To summarise, the current methodology provides an annual assessment of stock performance against a catchment specific Conservation Limit (CL). We have previously communicated the development of river specific CLs for 42 principal salmon rivers within their respective Salmon Action Plans. These were subject to full and open public consultation when developed both with local and national stakeholders.

In addition to the annual CL compliance assessment, our approach also seeks to predict the probability of future CL compliance in 5 years' time. This is based upon historic salmon stock performance over the previous 10 year period. The confidence in the predicted status in 5 years is dependent upon the extent of meeting the CL annually, and level of variability in stock performance observed over the 10 year period. The main objective of this predictive approach is to provide an early warning to ensure that the stock will not fall below this minimum desired CL threshold level. If this were to happen, the stock of returning adults will be likely to decline to unsustainable levels and potentially result in a collapse in the fishery.

If a stock has previously been predicted to be at risk of failing its CL in 5 years, we have actively sought, where possible, to implement management measures to avoid the risk of the stock falling below this level. This however cannot account for other external factors that are outside of our direct control. A good example, is the observed significant and rapid decline in the 1 Sea Winter (grilse) stock component since 2013.

Therefore, as a result of either direct management intervention or recent and rapid changes in stock performance the accuracy of the prediction 5 years ago when compared to the current stock status is very likely not going to be the same. The predicted or projected salmon stock status in 5 years, where this demonstrates a stock to be at risk or probably at risk, is something that we have therefore actually sought to avoid through the implementation of measures to avoid this becoming a reality.

It is the observed rapid decline of a key stock component (grilse) that we are currently dealing with through our national salmon management regulations, and the reason why so many salmon stocks have been highlighted to be probably at risk or at risk in 5 years. We are now actively seeking to implement management measures to avoid this potential predicted risk.

We are not fundamentally trying to predict what the salmon stock will be in 5 years-time using this technique. If we wanted to do that, we would do it very differently from this stock assessment technique, incorporating direct measures of environmental production, perhaps as; eggs laid, fry/parr productivity, smolt output, sea survival etc., and incorporating some sort of measures or correlates of how those features will change. What we are doing, is identifying the likelihood of the stock failing to meet the management objective of meeting or exceeding CL in at least four years out of five.

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