

**NWIFCA Technical, Science and Byelaw
Sub-Committee
11th August 2015: 10:00 a.m.**

**AGENDA
ITEM NO.
9**

BYELAW REVIEW REPORT

Recommendations:

1. Note and comment on new thinking re Byelaw 9 (Fishing for shrimp and prawn).
2. Approve draft of Byelaw 10 (Protection of lobsters) at Annex A for 'making' at the September meeting of the Authority.

Background:

1. As members will be aware, draft versions of Byelaw 9 (restrictions on fishing for Shrimps and Prawns) and Byelaw 10 (measures for the protection of lobster) were presented at the May TSB meeting.
2. Since the May TSB meeting, consultations have been carried out with Officers and industry and MMO.

Byelaw 9 Fishing for Shrimp and Prawn

3. Following informal consultations with industry and the Welsh Government it has become apparent that Byelaw 9 may need a different approach. It was planned to create a uniform set of measures across the NWIFCA District but latest thinking is that this may be unhelpful.
4. The current regime is as shown below:

Part of NWIFCA District	Permitted total beam length	Permitted mesh size	Requirement to riddle
Cumbria SFC Byelaw 14	9m	No limit (16mm EU)	yes
NWNWSFC Byelaw 6	10m	20mm	yes
Dee Estuary EA byelaw	7.62m	No limit (16mm EU)	no

5. Uniform measures across the District are difficult because:
 - The least restrictive measures would have to be adopted to avoid objections from industry: 10m beam length, 16mm mesh size and no requirement to riddle.
 - Increasing the permitted beam length in the Dee may be damaging for conservation and allow increased effort on other fisheries in the Dee.
 - Different regulations either side of the Welsh – English border would create enforcement loophole.
 - Slightly larger beams would be permitted in Cumbria although this may be considered insignificant

- Reducing the permitted mesh size in the NWSFC area could be expected to have an adverse impact on stocks.
6. Officers now suggest that if a NWIFCA shrimp byelaw is to be enacted now it should perpetuate existing measures unchanged, having different measures in the 3 parts of the District. A clause proposed by Defra would be included to ensure the requirement for discards does not interfere with the forthcoming landings obligation.
 7. A further difficulty is that while NWSFC Byelaw 6 and CSFC Byelaw 14 would be revoked, EA Byelaw 5 must be retained pending a review of netting regulations. While it could be partly revoked and amended Welsh Government would have to be in agreement and the resulting amended byelaw might leave confusion amongst both officers and industry.
 8. At present, riddling is considered important to assist stock conservation; however, some vessels are now using separator tanks at sea which remove small shrimp from the catch by flotation. This is less damaging than riddles. The Authority may want to require the use of separator tanks in future but at present they are not sufficiently widely adopted to be made into a byelaw requirement.
 9. Given the issues identified above, the Authority may prefer to leave the existing shrimp and prawn regulations unchanged pending clarity on the landing obligation, review of netting regulations and technical developments in size selectivity of gear.

Byelaw 10 Protection for Lobsters

10. The latest versions of Byelaw 10 and its Regulatory Impact Assessment (RIA) are at Annex A and B. Discussion and comment is invited and with agreement of members, the byelaw could be made at the September meeting if the detailed wording is agreed with MMO.
11. Following comment from MMO, this updated version includes additional definitions in the interpretation section, the addition of a prohibition on carriage of undersize lobster in the District (currently within our emergency byelaw), a slight change to the size of the escape gap gauge, a standard scientific exemption and a new deeming clause (para. 4). Some further discussion with MMO is underway on the wording of the deeming and carriage clauses.
12. The purpose of the byelaw is to put in place a single set of measures for the protection and enhanced sustainable exploitation of lobsters across the District. It would prohibit the taking, carriage, landing or selling of berried, V-notched and undersize lobsters and require all pots to be fitted with escape gaps to allow undersize lobsters to exit pots.

CEO and Science Officers
31st July 2015



MARINE AND COASTAL ACCESS ACT 2009

NWIFCA BYELAW 10

MEASURES FOR THE PROTECTION OF LOBSTERS

The Authority for the North Western Inshore Fisheries and Conservation District in exercise of the powers conferred by sections 155 and 156 of the Marine and Coastal Access Act 2009 makes the following byelaw for that District.

Interpretation

1. In this byelaw:
 - a) 'the Authority' means the North Western Inshore Fisheries and Conservation Authority as defined in articles 2 and 4 of the North Western Inshore Fisheries and Conservation Order 2010 (SI 2010 No. 2200);
 - b) 'the District' means the North Western Inshore Fisheries and Conservation District as defined in articles 2 and 3 of the North Western Inshore Fisheries and Conservation Order 2010 (SI 2010 No. 2200);
 - c) 'fishing' for the purposes of this byelaw includes searching for sea fisheries resources, shooting, setting or hooking, whether from land or from a vessel, towing, hauling of a fishing gear, transiting between gear and taking sea fisheries resources on board;
 - d) "inboard, lashed and stowed" means that the pots are stored in such a way that they cannot readily be used for fishing;
 - e) 'lobster' means any animal of the species *Homarus gammarus*;
 - f) 'berried lobster' means a female lobster carrying eggs or spawn attached to its tail, abdomen or legs, or which is in such a condition as to show that at the time of capture it was carrying eggs or spawn so attached;
 - g) 'V-notched lobster' means a lobster with an indentation in the shape of the letter 'V' or resembling the shape of a 'V' made in any one or more of the five flaps on the tail fan;
 - h) 'mutilated lobster' means a lobster where any of the five flaps of the tail fan is missing or mutilated in such a manner that could hide or obliterate a V-notch;
 - i) "pot" means any device designed to entrap lobsters.

Prohibitions

2. A person must not take or remove from a fishery, sell, expose or offer for sale or possess for the purpose of sale:
 - a. a berried lobster;
 - b. a mutilated lobster;
 - c. a V-notched lobster; or
 - d. a lobster which has a carapace length, measured parallel to the mid-line from the back of either eye socket to the distal edge of the carapace, less than 87mm

and if any such lobster is caught it must be returned immediately to the fishery, as near as possible to the place where it was taken or removed.

3. A person must not carry on board any fishing boat any lobster below the size of 87mm within the District.
4. A person must not use for the purpose of fishing for lobster any pot unless:
 - a) it has at least one unobstructed escape gap located in the lowest part of the pot, or in the case of a parlour pot in each parlour pot area; and
 - b) it is so designed and constructed that each escape gap is of sufficient size that there may be easily passed through the escape gap and completely passed into the pot, a rigid boxed shaped gauge which is 79 mm wide, 44 mm high and 100 mm long.

Deeming

5. Whilst fishing within the District;
 - a) any lobster that is on board the vessel shall be deemed to have been taken and or removed from a fishery within the District;
 - b) any pots not inboard, lashed or stowed on board the vessel shall be deemed to be in use for fishing.

Revocation of legacy byelaws

6. The following byelaw made by the North Western and North Wales Sea Fisheries Committee is revoked in so far as it applies within the District:
 - a) Byelaw 31 – Protection of V-notched lobsters.
7. The following byelaws made by the Cumbria Sea Fisheries Committee are revoked in so far as they apply within the District:
 - a) Byelaw 8 – Berried lobsters;
 - b) Byelaw 25 – Requirement for escape gaps in pots, creels and traps.
8. The following byelaw made by North Western Inshore Fisheries and Conservation Authority is revoked in so far as it applies to the District:

- a) Emergency Byelaw: Minimum Landing Size for Landing, Carriage and Sale of Lobsters (*Homarus gammarus*).

Exemptions

- 9 This byelaw shall not apply to any person performing an act that would otherwise constitute an offence against this byelaw if that act was carried out in accordance with a written permission issued by the Authority permitting that act for scientific, management, stocking or breeding purpose.

I hereby certify that the above byelaw was
made by the Authority at their meeting on
??????? 2015

STEPHEN ATKINS
Chief Executive to the North Western Inshore Fisheries and Conservation Authority
1 Preston Street
Carnforth,
Lancashire,
LA5 9BY

The Secretary of State for Environment, Food and Rural Affairs in exercise of the power conferred by section 155(4) of the Marine and Coastal Access Act 2009 confirms the Byelaw 10 Measures for the Protection of Lobsters made by the North Western Inshore Fisheries and Conservation Authority on ???? 2015

.....
A Senior Civil Servant for, and on behalf of, the Secretary of State for Environment, Food and Rural Affairs

Date:

Explanatory Note **(This note does not form part of the byelaw)**

The purpose of this byelaw is to enhance sustainable exploitation of lobsters in the NWIFCA District by a) prohibiting the landing of berried or v notched lobsters, and b) requiring escape gaps in all pots, c) prohibiting the removal of lobsters under the minimum landing size. The byelaw creates a single shellfish regulatory regime for the NWIFCA District by extending to the whole District measures now in force in one or other of the previous SFC Districts.

Title: North Western Inshore Fisheries and Conservation Authority Byelaw 10: Measures for the protection of lobsters IA No: NWIFCA/ BL10 Lead department or agency: NWIFCA Other departments or agencies: MMO, Natural England, Defra	Impact Assessment (IA)	
	Date: 31/07/2015	
	Stage: Consultation	
	Source of intervention: Domestic	
	Type of measure: Secondary legislation	
	Contact for enquiries: Stephen Atkins, Head of Service NWIFCA, 1 Preston Street, Carnforth, Lancashire, LA5 9BY, 01524 727970. (s.atkins@nw-ifca.gov.uk)	
Summary: Intervention and Options	RPC Opinion: N/A	

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Measure qualifies as Two-Out?	
N/A	N/A	N/A	No	N/A

What is the problem under consideration? Why is government intervention necessary?

There are different byelaws covering protection measures for lobster in the North West Sea Fisheries Committee (NWSFC) and Cumbria Sea Fisheries Committee (CSFC) parts of the North Western Inshore Fisheries and Conservation Authority (NWIFCA) District. A new IFCA byelaw is required to harmonise and consolidate these provisions, and to strengthen lobster protection measures for both commercial and hobby fishing in order to manage inshore fisheries sustainably across the District and simplify and reduce legislation, meeting IFCA duties.

Government intervention is required to redress market failure in the marine environment by implementing appropriate management measures (e.g. this byelaw) to protect lobster stocks to ensure negative externalities are reduced or suitably mitigated. Implementing this byelaw will support continued provision of public goods in the marine environment.

What are the policy objectives and the intended effects?

1. To establish a single byelaw placing lobster protection measures across the entire NWIFCA District.
2. To strengthen the current restrictions in place in a way acceptable to the fishing industry, whilst improving the environmental and fisheries protection across the District.
3. To reduce the risk of overfishing and promote sustainable exploitation in the District, protecting breeding stock and subsequent recruitment into the fishery with continued environmental and social-economic benefits.
4. To simplify, standardise and reduce current legislation allowing consistent regulation across the District.
5. Meet IFCA High Level Objectives set by Defra.

The intended effects are to provide protection to lobster stocks resulting in sustainable fishing.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 0. Do nothing, no new byelaw- retain the current NWSFC and CSFC byelaws.

Option 1. (Preferred option) Introduce a new NWIFCA byelaw covering the prohibition of the removal of berried, mutilated or V-notched lobsters, a minimum landing size for lobster (with a prohibition of carriage of undersize), and pot escape gap specifications across the District.

Option 2. A separate byelaw for each measure.

Option 3. Voluntary agreement.

All options are compared to Option 0. The preferred option is option 1 which will place lobster protection measures across the NWIFCA District, promoting sustainable exploitation in line with IFCA duties.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 6 years

Does implementation go beyond minimum EU requirements?

No

Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro Yes	< 20 Yes	Small Yes	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)			Traded: N/A	Non-traded: N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible SELECT SIGNATORY: _____ Date: _____

Summary: Analysis & Evidence

Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year n/a	PV Base Year n/a	Time Period Years n/a	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: n/a

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	n/a		n/a	n/a
High	n/a		n/a	n/a
Best Estimate	n/a		n/a	n/a

Description and scale of key monetised costs by 'main affected groups'

An estimate of the industry costs of purchasing escape gaps and time taken to fit them is detailed in Table 1. There are no quantifiable costs to the NWIFCA associated with the making of this byelaw.

Other key non-monetised costs by 'main affected groups'

There will be some changes to provisions in the NWSFC and CSFC areas. This will create a non-quantifiable cost to fishing in the area through changes in pot escape gap requirements, necessitating physical adaptations in the pots used, and prohibitions on the taking of berried, mutilated and V-notched lobsters in areas they were not previously in place. It is expected that the byelaw will be brought in during winter time while pots are out of the water, allowing time for gaps to be fitted in order to minimise the financial impact to fishermen. There should not be a cost associated with the MLS restriction as this is already in place under NWIFCA emergency byelaw- fishermen only take this size already, and may own measuring devices to do this. There will be a certain administrative cost in drafting, preparing and communicating the new measure but it is not expected to impose any greater administrative cost in enforcement than is already expended enforcing the current byelaws.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	n/a		n/a	n/a

Description and scale of key monetised benefits by 'main affected groups'

There are no monetised figures available for the benefits to the fishing industry or the NWIFCA

Other key non-monetised benefits by 'main affected groups'

The byelaw will standardise and significantly simplify the current legislative regime, making enforcement more efficient. It is expected to contribute to better management of lobster stocks across the entire NWIFCA District and improved sustainability of stocks. Although difficult to quantify, the intention of the protection measures is to lead to an increased breeding stock resulting in greater recruitment to the lobster fishery, benefitting the marine environment and future fishing.

Key assumptions/sensitivities/risks	Discount rate (%)
It is assumed that fishing activity remains at current levels (particularly the number of pots being fished) and there is compliance with the byelaw. The comments given to the NWIFCA during the informal consultation stage were from IFCA officers, it is assumed that there are no other costs of the proposed measure to the industry.	n/a

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: N/A	Benefits: N/A	Net: N/A	No	N/A

Evidence Base (for summary sheets)

1. Introduction

Inshore Fisheries and Conservation Authorities (IFCAs) were set up in April 2011 under the Marine and Coastal Access Act 2009 with duties to ensure that fish stocks are exploited in a sustainable manner in their District, and that any impacts from that exploitation in the marine environment are reduced or suitably mitigated, by implementing appropriate management measures. Implementing this byelaw will ensure that fishing activities are conducted in a sustainable manner and the marine environment is suitably protected.

2. Rationale for intervention

Legacy SFC byelaws are currently in place in the NWIFCA District, placing different measures in different parts of the District. Consolidating these lobster protection measures into a new NWIFCA byelaw will help meet IFCA duties in seeking to ensure that the exploitation of sea fisheries resources is carried out in a sustainable manner (MaCAA s153(2)(a)) and that the marine environment is suitably protected across the NWIFCA District. The byelaw is necessary to prevent overfishing of lobsters, helping to ensure sustainable stocks of this species in the District for the future. Consolidation of this legislation would also support part of the Defra high level objectives set for IFCAs to review legacy byelaws in order to update older SFC byelaws to cover the new IFCA Districts and reduce the number of byelaws in place.

Inshore Fisheries and Conservation Authorities have duties to ensure that fish stocks are exploited in a sustainable manner, and that any impacts from that exploitation on designated features in the marine environment are reduced or suitably mitigated, by implementing appropriate management measures (e.g. this byelaw). Implementing this byelaw will ensure that fishing activities are conducted in a sustainable manner and that the marine environment is suitably protected.

Fishing activities can potentially cause negative outcomes as a result of 'market failures'. These failures can be described as:

- Public goods and services – A number of goods and services provided by the marine environment such as biological diversity are 'public goods' (no-one can be excluded from benefiting from them, but use of the goods does not diminish the goods being available to others). The characteristics of public goods, being available to all but belonging to no-one, mean that individuals do not necessarily have an incentive to voluntarily ensure the continued existence of these goods which can lead to under-protection/provision.
- Negative externalities – Negative externalities occur when the cost of damage to the marine environment is not fully borne by the users causing the damage. In many cases no monetary value is attached to the goods and services provided by the marine environment and this can lead to more damage occurring than would occur if the users had to pay the price of damage. Even for those marine harvestable goods that are traded (such as wild fish), market prices often do not reflect the full economic cost of the exploitation or of any damage caused to the environment by that exploitation.
- Common goods - A number of goods and services provided by the marine environment such as populations of wild fish are 'common goods' (no-one can be excluded from benefiting from those goods however consumption of the goods *does* diminish that available to others). The characteristics of common goods (being available but belonging to no-one, and of a diminishing quantity), mean that individuals do not necessarily have an individual economic incentive to ensure the long term existence of these goods which can lead, in fisheries terms, to potential overfishing. Furthermore, it is in the interest of each individual to catch as much as possible as quickly as possible so that competitors do not take all the benefits. This can lead to an inefficient amount of effort and unsustainable exploitation.

IFCA byelaws aim to redress these sources of market failure in the marine environment through the following ways:

- Management measures will support continued existence of public goods in the marine environment, for example conserving the range of biodiversity in the sea of the IFCA District.
- Management measures will also support continued existence of common goods in the marine environment, for example ensuring the long term sustainability of fish stocks in the IFCA District.

3. Policy objectives and intended effects

The objective of this policy is to consolidate and simplify existing byelaws into a single NWIFCA byelaw, implementing lobster protection measures across the District. The intended effects are that lobster fisheries will be exploited sustainably and protected, assisting the NWIFCA in delivering this and other success criteria.

1. To establish a single byelaw placing lobster protection measures across the entire NWIFCA District.
2. To strengthen the current restrictions in place in a way acceptable to the fishing industry, whilst improving the environmental and fisheries protection across the District.
3. To reduce the risk of overfishing and promote sustainable exploitation in the District, protecting breeding stock and subsequent recruitment into the fishery with continued environmental and social-economic benefits.
4. To simplify, standardise and reduce current legislation allowing consistent regulation across the District.
5. Meet IFCA High Level Objectives set by Defra.

4. Background

At present the North Western Inshore Fisheries and Conservation Authority (NWIFCA) has inherited legacy lobster protection byelaws from the Cumbria Sea Fisheries Committee (CSFC) and the North West Sea Fisheries Committee (NWSFC). CSFC Byelaw 8 prohibits the taking of berried lobsters, CSFC Byelaw 25 specifies the escape gap requirements for pots, whilst NWSFC Byelaw 31 prohibits the removal of V-notched or otherwise mutilated lobsters in the relevant SFC parts of the District. There is also a NWIFCA emergency byelaw introduced in April 2015, placing a minimum landing size of 87mm for the landing, carriage, and sale of lobsters.

The various byelaws are inconsistent across the two SFC parts of the District and overcomplicate the regulatory framework, making compliance more difficult with industry members having to be aware of different rules in different areas, and problems in enforcement. The lobster protection measures need to be amalgamated into one workable byelaw covering the entire NWIFCA District, seeking to ensure sustainable exploitation of fish stocks. This will help meet IFCA duties to promote sustainable fishery management as well as contributing to the IFCA byelaw review process to reduce legislation.

5. The options

Option 0- Do nothing: keep legacy byelaws and continue to enforce them. Enforcement would continue to be more complicated and inefficient than necessary for both enforcers and the enforced. There would be a risk of unsustainable exploitation of lobster stocks in the CSFC and NWSFC parts of the District where there are no prohibitions on the landing of v-notched or berried lobsters respectively, and no MLS would be in place after the NWIFCA lobster emergency byelaw ends in April 2016. The lack of escape gap measure in the NWSFC part of the District is counter to established and recognised good practice in sustainable fishing. This could lead to economic loss in future years if lobster stocks decline, and an overall detrimental impact on the marine ecosystem. This option also would not meet the IFCA high level objectives to review and reduce inherited legislation.

Option 1- (Preferred option): Introduce a new NWIFCA byelaw encompassing legacy byelaws, placing a prohibition on the taking of V-notched, mutilated and berried lobsters, a minimum landing size (MLS) for lobster (87mm) (and a condition to return any prohibited catch as near as possible to the place they were removed from), a prohibition of carriage of any lobster <87mm, and pot escape gap requirements (to fit a gauge 79 x 44 x 100mm) for all lobster fishing, enhancing sustainable exploitation of lobsters in the NWIFCA District. There is also a deeming clause and a scientific exemption. In the NWSFC area there is currently already a prohibition on taking V-notched or mutilated lobsters, whereas although this

is not included in the CSFC area there is a separate prohibition on the taking of berried lobsters (not included in the NWSFC area). In this new byelaw, both these prohibitions will be included and extended to cover the District. [A 'berried lobster' is defined as a female lobster carrying eggs or spawn attached to its tail, abdomen or legs, or which is in such condition as to show that at the time of capture it was carrying eggs or spawn so attached. A 'V-notched lobster' is defined as a lobster with an indentation in the shape of the letter 'V' or resembling the shape of a 'V' made in any one or more of the five flaps of the tail fan. A 'mutilated lobster' is defined as a lobster where any of the five flaps of the tail fan is missing or mutilated in such a manner that could hide or obliterate a V-notch].

There will be escape gap requirements for pots based on scientific evidence. Currently a smaller size is in place in the CSFC area (to fit a gauge 74 x 44 x 100mm) but there is no requirement for escape gaps in the NWSFC area. A minimum landing size of 87mm for lobster was previously in place across the District by virtue of the Undersized Lobsters Order (SI 2000/1503) which was of national application; however this was revoked in March 2015 by Defra. NWSFC Byelaw 19 contains minimum landing sizes but as this does not cover the CSFC part of the District, a NWIFCA Emergency Byelaw for lobster measures was brought in in April 2015, reinstating a minimum landing size of 87mm across the whole District. This emergency byelaw will expire in April 2016.

Option 2- Separate byelaws for each measure: Separate byelaws would be made for each of the lobster protection measures (prohibition against taking berried, V-notched; a MLS and lobster pot escape gap requirements). This option is considered inappropriate; although it would provide the protection to lobsters, it would not meet the IFCA duty to review and reduce legislation and would increase regulatory burden and paperwork and be contrary to government direction to reduce red tape.

Option 3- Voluntary agreement: This option would involve the development of voluntary codes of practice between fishermen to protect stocks through sustainable exploitation and would avoid the need to introduce more regulations. It would need to be continually updated to reflect current fishermen potting in the District. Although this option would reduce the regulatory burden, it is considered inappropriate due to the risk of potential damage to lobster stocks if there is not compliance from all fishermen. Reducing the level of regulation may result in over-exploited fisheries and may not meet the IFCA duty in promoting sustainable exploitation in the District.

6. Analysis of costs and benefits

Option 1 (preferred option): This option involves several non-quantifiable costs. It requires a certain small administrative cost in drafting, preparation and communication but it is not expected to impose any greater administrative cost in enforcement than is already expended enforcing the current byelaws. The byelaw creates a single, consolidated shellfish regulatory regime for the NWIFCA District by extending to the whole District measures now in force in one or other of the previous SFC Districts, and increasing the escape gap size. In implementing this new byelaw, Cumbria SFC Byelaws 8 and 25 and NW SFC Byelaw 31 will be revoked, along with the NWIFCA emergency byelaw for lobsters. A simplified single regulatory system will be easier, clearer and more efficient for enforcement officers and stakeholders, with a reduced regulatory burden and therefore there will be no overall increase in administrative costs. This option achieves all of the main policy objectives to simplify regulation, update and consolidate IFCA byelaws. The new management measure can be advertised on the Authority's website, and published in the NWIFCA Byelaws booklet which is available to the public both electronically and in hard copy. Local knowledge and experience from fishery officers in the District have highlighted the requirement for a byelaw of this type to be introduced in order to standardise measures across the District and further protect stocks of lobsters. It will assist with improved protection of the marine environment and a sustainable fishery for future industry.

There will be a negligible cost of increased restriction to fishermen in some areas: for example the new prohibitions against taking V-notched and berried lobsters in the CSFC and NWSFC areas (respectively) where they were not previously in place. Berried females are only temporarily removed from the fishery stock available to fishermen, as when they are no longer carrying eggs they can be fished. Therefore there are no negative economic impacts identified as a consequence of this measure. This is likewise for V-notched lobsters which will be removed from the fishable stock for a maximum two years (until moulting results in a fully formed tail) or until re-captured and re-notched. This removal from the available fishing stock through both measures would be expected to result in net economic gain through increased recruitment to the stock and an improved fishery. Some fishermen already do this voluntarily. These protection measures will

however be of great benefit to the environment and local lobster stocks, as well as help to ensure sustainable stocks for the future fishing industry and a continual economy in the District.

The prohibition of taking berried lobsters is designed to protect ripe female lobsters, thereby enhancing the biomass of the stock. Cefas studies have reported that a ban on taking berried individuals can lead to a 113% increase in egg production per recruit in inshore fisheries ⁽¹⁾. Berried or egg-bearing lobsters are not present all year round therefore it is not always possible to distinguish breeding stock. V-notching is a method of protection where a V-mark is painlessly cut into a berried lobster tail by fishermen or officers and released, so if caught again it can be identified and released again ⁽²⁾. Prohibitions on the landing of berried, V-notched and undersize lobsters are very effective conservation measures as they allow mature, reproductively active females, or immature animals to be returned alive to sea ⁽²⁾.

The proposed byelaw will create a small economic burden on potters within the NWIFCA District through the introduced requirements for escape gaps in pots in the NWSFC area, where commercial and recreational fishermen will have to add escape gaps to their pots to follow legislation, as shown in Table 1. Escape gaps on pots in the CSFC area will need to be altered as the size changes (to fit a gauge) from 74mm x 44mm to 79mm x 44mm, although these figures provide a worst case scenario as some fishermen are reported to already use this size escape gap. If they do not already use them or are unable to alter them, potters will have to purchase escape gaps (available online at £0.44 per 45mm x 80mm gap inc. VAT) and fitted to pots. The time taken (when not fishing) to fit the gaps (IFCO reports of around 10 minutes per pot) must also be considered. The increase in escape gap size is in line with measures enforced in other IFCA Districts, and follows recommendations from Cumbria SFC committee. It is also expected the escape gaps would save fishermen time in sorting catch and would not be a hindrance once fitted.

Consultation on the introduction of escape gaps, and increased size of escape gap has been carried out with Officers and industry. The NWIFCA expects the byelaw to be brought in during winter 2015/2016 while pots are out of the water, allowing fishermen to fit or alter escape gaps over the winter in order to minimise the financial impact to fisher stakeholders. The other measures would be in force immediately from the byelaw being signed by the SoS.

Entrapment and return of undersize lobsters can result in damage and mortality ⁽³⁾ due to infighting, pot retrieval/ sorting and subsequent translocation. The requirement for escape gaps on pots is designed to allow small immature lobsters (that have not had a chance to breed) to escape from pots and creels and thereby enhance the biomass of the remaining stock. They should help to reduce undersize bycatch and the damage to undersize lobsters associated with discards, for example through hauling and sorting, displacement and increased vulnerability to predation. Bangor University ⁽⁴⁾ carried out research into the effectiveness and efficiency of different sizes of escape gap, recognising that it is important that the size of escape gap used retains as many lobsters of or above the MLS as possible while allowing undersize individuals to escape. The aim of the study was to verify if escape gaps of 80 x 45 mm and 84 x 46mm would retain lobsters of ≥ 87 mm while allowing smaller individuals to escape. Results are shown in Figure 1. The study reported that fitting escape gaps to pots was an effective means of allowing undersized lobsters to escape with increased larger lobster catch efficiency ⁽⁴⁾, and other studies reported an increase fishing efficiency through a reduction in time spent sorting catch ^(5,6), as there is size selectivity on the seabed rather than on the boat. The fitting of 80 x 45mm escape gaps would allow many lobsters < 87 mm to escape with minimal loss of lobsters ≥ 87 mm carapace length. The escape gap size specified in the byelaw (to fit a gauge 79 x 44 x 100mm) only allows sized lobsters (of at least MLS) to be retained, bringing the current CSFC measure up to date as a sustainable conservation measure and in line with that used by other IFCA's (80 x 46 x 100mm NE & E, 84x46x100mm KE, DS & C).

There is no change to previous regulations with a MLS of 87mm- fishermen only take this size currently and may already own measuring devices to do this, therefore there will be no costs from this part of the regulation; however it will help to ensure sustainable exploitation of lobster stocks and consistent regulation across the entire District. A minimum landing size allows sufficient time for the species to reach maturity and reproduce before being taken in order to protect stocks, and preventing overfishing across the whole NWIFCA District ^(7,8). The prohibition of carriage of any lobster below 87mm is already in place under the NWIFCA emergency byelaw. As there is an EU minimum landing size of 87mm (specified in 850/98) covering outside of 6nm, lobsters caught outside and carried through the district will also not be affected by this prohibition.

The deeming clause included in the byelaw ensures that whilst fishing in the District, any lobster on board a vessel will be deemed as taken from within the District, and any pots not lashed or stowed deemed as being used for fishing.

Current legacy byelaws for NWSFC and CSFC areas are numerous and over complicated. This new byelaw will help to ensure lobsters are protected and measures are consistent across the entire NWIFCA District. These measures are viewed as essential, practical and effective in preventing the taking of juvenile or berried lobsters. Although difficult to quantify, the intention of the protection measures is to lead to an increased breeding stock resulting in sustainable exploitation and greater recruitment to the lobster fishery, benefitting the marine environment and socio-economics through future fishing in line with the IFCA duty to promote sustainable fisheries and reduce legislation.

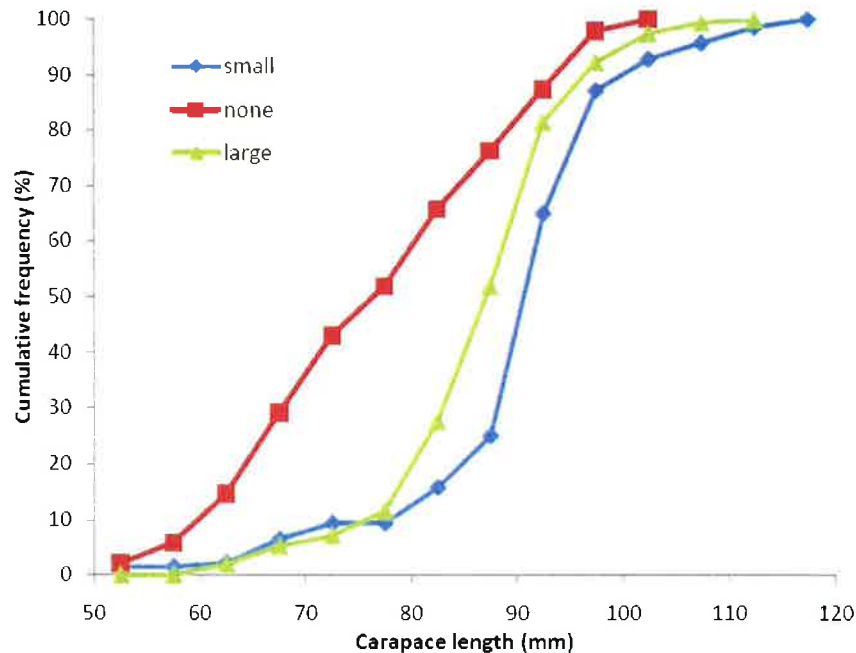


Figure 1: Cumulative size-frequency distribution of lobsters caught in traps with small, large or no escape gaps. (Source: Murray *et al.* 2009).

One In Two Out (OITO)

IFCA byelaws are not in the scope of OITO.

Small firms impact test and competition assessment

No firms are exempt from this byelaw as it applies to all firms who use the area, it does not have a disproportionate impact on small firms. It also has no impact on competition as it applies equally to all businesses that utilise the area.

Cumbria SFC		NWSFC
Number of potting vessels in that part of District Licenced/ registered vessels	14	Barrow - 2 (possibly 3 more in future) Fleetwood- 4
Permitted (CSFC Byelaw 26, NWSFC Byelaw 30)	62 permits issued in 2014	62 permits issued in 2014
Total number of pots potentially fished this season Licenced/registered vessels	3000	Barrow- 400 (300 and 100 pots) Fleetwood- 130 (80, 20, 20, 10 pots)
Permitted	310 (max)	310 (max)
Number of escape gaps that will need to be bought (based on current estimated figures)	3310	840
Cost per escape gap (45mm x 80mm) (inc. VAT) http://www.gtproductsmarine.com/shop/lobster-escape-hatches.html	£0.44 (possibly cheaper if current gaps can be altered)	£0.44
Total cost to whole industry of purchasing escape gaps	£1456.40	£369.60
Average cost per vessel Licenced/ registered fleet	£94.29	Barrow £132 and £44 Fleetwood £35.20, £8.80, £8.80, £4.40
Permit holders	£2.20	£2.20
Average/ individual time expected to fit escape gaps per vessel Licenced/ registered fleet	Average 36 hours	Barrow- 50 hours and 17 hours Fleetwood- 13, 3, 3, 1.5 hours.
Permit holders	0 hours 50 minutes	0 hours 50 minutes

Table 1: The current estimated numbers of potters in the District, and estimated costs and time taken to fit escape gaps that would need to be purchased. NB this is worst case scenario as many potters are reported to already use the specified escape gap size and would not need to purchase new ones.

Conclusion

Recommended option: Introduce a new NWIFCA byelaw encompassing legacy byelaws, placing a prohibition on the taking of V-notched, mutilated and berried lobsters, a minimum landing size (MLS) for lobster (87mm), a prohibition on the carriage of <87mm lobster, and pot escape gap requirements (to fit gauge 79 x 44 x100mm) for all lobster fishing, enhancing sustainable exploitation of lobsters in the NWIFCA District.

This byelaw will impose lobster protection measures in the NWIFCA District and revoke three previous SFC byelaws and the NWIFCA emergency byelaw. The byelaw will be reviewed in 2021 for any potential adverse impacts. Stakeholders will be made aware of the proposal as part of the statutory consultation period. Once the Byelaw is made the Authority will advertise the change in legislation on the NWIFCA website. It is envisaged that fishermen will be able to install escape gaps to pots over the winter while they are out of the water in order to comply with the new escape gap measure with minimal financial impact. The other measures would be in force immediately from the byelaw being signed by the SoS. The new byelaw will also be included in the NWIFCA byelaw booklets, available to download online from the NWIFCA website and available in hard copy.

Annex A: Policy and Planning

Which marine plan area is the MPA and management measure in?

– The management measure for the NWIFCA district is in the North West Inshore marine plan area- there is no adopted marine plan currently, therefore consideration is given to the UK Marine Policy Statement in this assessment.

Have you assessed whether the decision on this MPA management measure is in accordance with the Marine Policy Statement and any relevant marine plan?

- Yes /No

If so, please give details of the assessments completed:

- Which policies support this management measure and which policies this management measure may not comply with. For the latter, the assessor will be asked to explain the case for proceeding.
- The assessment must not consider the marine plan policies in isolation but all policies where relevant.
- Where an assessment takes place in a marine plan area that does not have an adopted marine plan consideration must be given to the MPS in the assessment.

In making this byelaw, NWIFCA has had due regard to the Marine Policy Statement, in particular the following sections:

Section 2.1- this byelaw is in line with the UK vision for the marine environment for 'clean, healthy, safe, productive and biologically diverse oceans and seas', along with section 2.6.1 which details the UK's aim to ensure conservation of biodiversity in healthy ecosystems.

The NWIFCA District includes Marine Protected Areas that this byelaw will apply to. This takes into account section 3.1 of the UK Marine Policy Statement. The byelaw also has regard for the provisions of the CFP, in line with section 3.8.3, along with continuing the move towards more sustainable fisheries management (section 3.8.4). The byelaw will help to assist with sustainable fisheries in the District, in line with section 3.8.6 and reduce any damage to stocks (3.8.7).

References

- (1) <http://webarchive.nationalarchives.gov.uk/20130123162956/http://www.defra.gov.uk/marine/pdf/fisheries/cefas-lobsteradvice.pdf>
- (2) http://www.seafish.org/media/Publications/SeafishResponsibleSourcingGuide_CrabsLobsters.pdf
- (3) Clark, R (2007). Lobster escape hatches in Selsey. Sussex Sea Fisheries District Committee.
- (4) Murray, L.G., Hinz, H. & Kaiser, M.J. (2009). Lobster escape gap trials. Fisheries & Conservation report No. 9, Bangor University. pp.11.
- (5) Shelmerdine, R.L; White, E (2011). Escape gaps for velvet crabs (*Necora puber*); stock and economic benefits for the catching sector. Marine Scotland.
- (6) http://www.seafish.org.uk/media/Publications/10610_Lobster_escape_hatch_development.pdf
- (7) <http://www.fao.org/docrep/008/y5880e/y5880e06.htm>
- (8) http://www.shellfish.org.uk/files/22622best_practice_guide.pdf

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