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Our ref: NEIFCA
Date: 04 March 2019

Dear Member

Science Advisory Group Meeting of North Eastern Inshore Fisheries & Conservation Authority –
Thursday 14 March 2019

I hereby give you notice that the next Science Advisory Group Meeting of North Eastern Inshore Fisheries and Conservation Authority will be held on **Thursday 14th March 2019, at the Bridlington Business Centre, Enterprise Way, Bessingby Industrial Estate, Bridlington, YO16 4SF starting at 12:30pm.** The agenda and reports for the meeting are enclosed.

On arrival please ask for David McCandless. Can members please send apologies by Friday 8th March 2019, please telephone 01482 393515 or email ne-ifca@eastriding.gov.uk. Thank you to members who have already given their apologies.

Please contact me if you have any queries.

Yours Faithfully

David McCandless
Chief IFC Officer

SCIENCE ADVISORY GROUP MEETING

Thursday 14 March 2019

Commencing 12:30 pm

**Bridlington Business Centre, Enterprise Way, Bessingby Industrial Estate, Bridlington
YO16 4SF**

AGENDA

1. Apologies for absence
2. To take the minutes of the last meeting held on 6 September 2018 as a correct record
(*page 1-4*)

Items for Decision

3. NEIFCA 5 Year Research & Strategic Plan (*page 5-42*)
4. NEIFCA Annual Research programme 2019/2020 (*page 43-56*)

Items for Discussion

5. NEIFCA Annual Research Report 2018/2019 (*page 57- 114*)
6. NEIFCA AIS & Crustacea Conservation Byelaw Update (*page 115-204*)
7. Licensing and consents update – verbal update
8. NEIFCA project updates – verbal update

Any other items which the Chairman decides are urgent by reason of special circumstances which must be specified

NORTH EASTERN INSHORE FISHERIES AND CONSERVATION AUTHORITY**SCIENCE ADVISORY GROUP****06 September 2018****Present**

Dr Stephen Axford (Chair)
 Emma Brown
 Mr Bob Houghton
 Councillor Chris Matthews
 Mr Michael Montgomerie
 Christian Proud
 Mr John Whitton

Representing

MMO Appointee
 Natural England Appointee
 MMO Appointee
 East Riding of Yorkshire Council
 MMO Appointee
 MMO Representative
 MMO Appointee

Chief Officer David McCandless, Tim Smith, Senior Scientific & Environmental Officer, Helen Devlin, Natural England and Bex Lynam, Yorkshire Wildlife Trust also attended the meeting.

The group met at the Authority's offices in the Green Lane Centre, Whitby. The meeting started at 12:30.

1. APOLOGIES

Apologies for absence were received from Marine Management Organisation appointees Mrs Kirsten Carter, Prof Mike Elliot, Mr Phillip Macmullen, and Environment Agency representative, Mr Paul Slater.

2. MINUTES OF THE MEETING HELD ON THE 23 MAY 2018

The Chief Officer circulated a written update on the Wheatcroft Outfall and the National Salmon and Sea Trout Protection Byelaws provided by Environment Agency representative Paul Slater as he was unable to attend the meeting. The Chief Officer informed members that the Executive Committee had requested that the Environment Agency provide an update presentation at the next full Authority meeting in December. Whilst members considered it beneficial to continue to highlight the ongoing concerns to the Environment Agency, the Authority needed to be mindful that the responsibility for resolving the issues fell outside the Authority's remit, and perhaps an alternative forum to discuss the issues should be explored.

Resolved - That the minutes of the Science and Governance Working Group Meeting held on the 23 May 2018 be confirmed and signed as a correct record by the Chair.

3. NEIFCA 5 YEAR RESEARCH & STRATEGIC PLAN

Senior Environmental Officer Tim Smith presented a report, which provided members with a draft NEIFCA strategic Research, and Evidence Plan for review and comment. The aim of the Strategic Research and Evidence Plan was to identify long-term approaches, research themes and core, on-going priorities for the organisation as well as setting out organisational research resources and capabilities. The strategy would communicate organisational priorities to stakeholders and partner agencies and form the basis for the Annual Research and Evidence Plans developed over the lifespan of the plan. Members were asked to provide feedback and comments including any further recommendations electronically.

Resolved – Members noted the report.

4.

NEIFCA ANNUAL RESEARCH PROGRAMME 2018/2019

The Senior Environmental Officer Tim Smith presented a report providing members with a draft copy of the scientific and environmental work programme for the 2018/19 season. The Authority's environmental and scientific work is supported by a detailed offshore and land-based programme of survey work linking to the delivery of the overarching annual plan. The Research and Evidence Annual Plan is the key to planning and operational document where actions and priorities can be agreed in context. The aim of the document is to identify continuing and new priorities for the organisation during the 2018-2019 period. Members discussed the report and suggested it would be useful to include the frequency of planned progress updates in relation to the ongoing delivery of the plan.

Resolved – Members noted the report.

5.

SCALLOP SURVEY PLAN

The Senior Environmental Officer Tim Smith provided a presentation updating on the planned monitoring and assessment work in relation to the scallop dredge fishery over the 2018/19 season and subsequent years. The presentation included information on the current scallop stock data, underwater video camera stills, proposed potting stations and comparisons from the 2016, 2017 and 2018 season. Members were supportive of the proposed sampling regime and recommended the inclusion of some comparative data and camera work on grounds both inside and outside the 6 nautical mile boundary.

Resolved – Members noted the report and supported the proposed sampling regime for 2018 – 2021.

6.

COCKLE STOCK ASSESSMENT REVIEW

The Senior Environmental Officer Tim Smith presented a report to update Members on the results of the 2018 cockle stock assessment surveys and to provide an overview of previous years sampling. The main cockle beds located within the Humber and the Tees estuaries have been subject to annual surveys since 2013. The beds in the Tees are located in two small areas at Bran Sands and Middleton Basin and in the Humber, across a wider area of foreshore known as Wonderland, on the main bathing beach at Cleethorpes in North East Lincolnshire. Officers do not consider these areas capable of sustaining any manageable long-term commercial exploitation. Further to considerations surrounding stock levels, neither the Tees nor the Humber are currently classified by the Food Standards Agency as bivalve production areas and cannot therefore support any legal commercial exploitation at this time. Given these factors, in accordance with the supporting byelaw regulation, officers had notified stakeholders of the intention to maintain existing closures until at least the end of the closed season in August 2019 and no permits would be issued during the 2018/2019 'open' season. Members discussed the stock assessment survey programme, and agreed that surveys should be carried out every other year as it is unlikely the cockle beds would support any legal commercial exploitation for the foreseeable future.

Resolved – Members noted the report and supported the recommendation that future cockle stock assessment surveys should be carried out every other year.

7.

LICENSING AND CONSENTS UPDATE

The Senior Environmental Officer Tim Smith updated members on marine licensing and consent applications reviewed by officers since the last meeting on the 8 March 2018. Most of the applications were for relatively routine activities or would have limited interaction/impact on marine fisheries. An EIA scoping report for a new long sea outfall at Withernsea had been notified and a consent summary would be circulated to members when the full application was received.

Resolved – Members noted the report.

8.

NEIFCA PROJECTS UPDATES

The Senior Environmental Officer Tim Smith updated members on the progress of all active externally funded project initiatives, currently officers were supporting two externally funded projects which included a Defra funded bait collection project which commenced in September 2017 and an EMFF funded lobster marketing project which commenced in December 2017.

Resolved – Members noted the report.

ANY OTHER BUSINESS

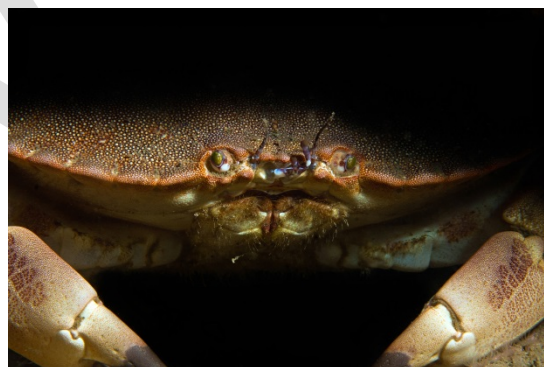
The Chief Officer informed members that the Executive Committee had endorsed a proposal to establish a Yorkshire coast Marine Protected Area Management Partnership, this would ensure a much more coordinated approach to MPA management across the Yorkshire region involving a much wider range of organisations including both statutory and non-governmental. Such a partnership would be unique nationally, demonstrate a strong and innovative vision. The Executive Committee had requested that the matter also be considered by the Science Advisory Group for endorsement.

Resolved – Members endorsed the Yorkshire Coast Marine Protected Area Proposal.

The meeting closed at 14.35



Inshore Fisheries and
Conservation Authority



Strategic Research and Evidence Plan

2018-2022

Date submitted:	
Report compiled by:	TS
Quality control by:	
Approved by & date:	
Version:	Draft

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Acronyms

CEFAS	Centre for Environment, Fisheries and Aquaculture Science
CFP	Common Fisheries Policy
Defra	Department for Environment, Food & Rural Affairs
EA	Environment Agency
EMS	European Marine Site
EU	European Union
GES	Good Environmental Status
HFIG	Holderness Fishing Industry Group
IFCA	Inshore Fisheries and Conservation Authority
IFCO	Inshore Fisheries and Conservation Officer
HLO	Higher Level Objective
MACAA	Marine and Coastal Access Act
MCZ	Marine Conservation Zone
MMO	Marine Management Organisation
MPS	Marine Policy Statement
MSFD	Marine Strategy Framework Directive
MSY	Maximum Sustainable Yield
NE	Natural England
NEIFCA	North Eastern Inshore Fisheries and Conservation Authority
SAC	Special Area of Conservation
SC	Success Criteria
SI	Statutory Instrument
SPA	Special Protection Area
TAG	IFCA Technical Advisory Group (TAG)
WLO	Working Level Objective
YWT	Yorkshire Wildlife Trust

1. Introduction

The North Eastern Inshore Fisheries and Conservation Authority (NEIFCA) is one of ten such Authorities established in October 2010 under provisions contained within the Marine and Coastal Access Act (MACAA) 2009. On the 1st April 2011, the Authority assumed full statutory responsibility for managing the exploitation of sea fisheries resources within its jurisdiction.

NEIFCA's district covers the area from the River Tyne, in the North, to a point drawn True East from Haile Sand Fort on the North East Lincolnshire Authority boundary, close to Humberston, on the South Bank of the Humber Estuary, then seaward to the 6 nautical miles (Figure 1). The District also encompasses all estuarine areas, landward to tidal limits, occurring within the boundaries of member Local Authorities.

NEIFCA wishes to further build upon its existing success by adhering to and working towards the successful delivery of the overarching success criteria (SC) by ensuring management decisions are supported by the best available evidence. The strategic research plan outlines the key research needs that the Authority will seek to provide evidence for in support of management over the next 5 years.

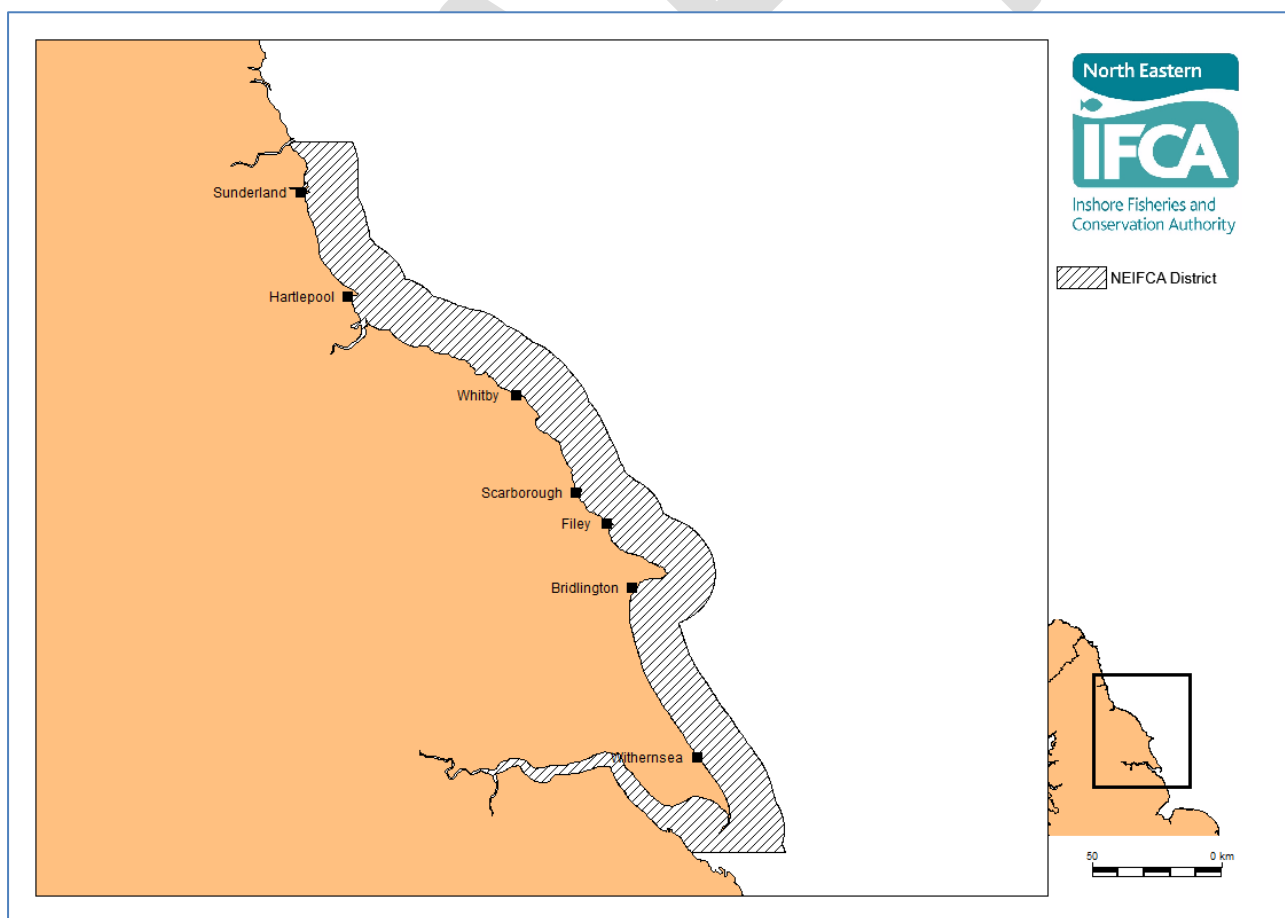


Figure 1. A map of the NEIFCA district, including major ports.

1.1 IFCA Principles

Under provisions contained within the Marine and Coastal Access Act 2009, IFCA's are responsible for the sustainable management of inshore sea fisheries resources within their jurisdictional area. Their statutory duties include the following:

- Seeking to ensure that the exploitation of sea fisheries resources is carried out in a sustainable way;
- Seeking to balance the social and economic benefits of exploitation with the need to protect the marine environment from, or promote its recovery from, the effects of such exploitation;
- Taking any other steps which, in the IFCA's opinion are necessary or expedient for the purpose of making a contribution to the achievement of sustainable development;
- Seeking to balance the different needs of persons engaged in the exploitation of sea fisheries resources in the district; and
- Seeking to further the conservation objectives of Marine Conservation Zones.

1.2 IFCA National Vision

To assist focus on the positive delivery of their statutory duties, Inshore Fisheries and Conservation Authorities (IFCAs) have agreed the following national vision, which has been adopted by NEIFCA:

"Inshore Fisheries and Conservation Authorities will lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry."

1.3 IFCA Success Criteria

In 2015 Defra developed a revised set of SC for all IFCAs which the NEIFCA has incorporated into its 2017/18 Annual Plan. The vision, success criteria, higher level objectives (HLOs) and working level objectives (WLOs) are designed to assist in the creation of a shared understanding of the aims and objectives of IFCAs, nationally, and focus positive service delivery towards achievement of the national vision. These national IFCA performance criteria also link directly to the UK Marine Policy statement.

To successfully achieve the adopted IFCA vision, any strategy document must focus around successfully delivering the SC. To ensure the successful delivery of these, the HLOs and WLOs are important reference points and should guide the work of the IFCA in the day-to-day running of the organisation, as well as planning for the future. The adopted SC and associated HLOs and WLOs are shown in Table 1, with those most relevant to this Strategic Research and Evidence Plan highlighted in green.

Table 1. The success criteria, higher level objectives and working level objectives adopted and implemented by the NEIFCA

Success Criteria		Higher Level Objectives (HLOs)	Working Level Objectives (WLOs)
1	IFCAs are recognised and heard, whilst working in partnership and engaging with stakeholders.	<ul style="list-style-type: none"> A. Implement an effective communication strategy B. Maintain a website. C. Maintain MoUs with the MMO, NE, EA & CEFAS and explore and implement opportunities for effective joint working. 	<ul style="list-style-type: none"> • Maintain a database of stakeholder contacts updated annually. • Maintain and review a communication strategy annually. • Review and update website by end of each month. • Review and update national MoUs annually.
2	IFCAs implement a fair, effective and proportionate enforcement regime.	<ul style="list-style-type: none"> A. Maintain and publish an enforcement risk register. B. Develop consistency in regulations. C. Manage operational activity. Capture, record, evaluate and disseminate intelligence. Engage in joint working. D. Ensure IFCOs are warranted, trained and accredited to national standards. Maintain professionalism and deliver efficient effective enforcement activity. 	<ul style="list-style-type: none"> • Enforcement strategy and risk register are published annually from 1 April each year. • Detail application and enforcement of management measures within Annual Report. • Compile and publish records of enforcement activity in standard format. • Adopt, review and publish national code of conduct for IFCOs & integrate with annual appraisal process. • Warranted officers attain national accreditation and continue professional development.
3	IFCAs use evidence based and appropriate measures to manage the sustainable exploitation of sea fisheries resources and deliver marine environmental protection within their districts.	<ul style="list-style-type: none"> A. Identify issues likely to affect sustainable management, undertake a risk assessment and gap analysis, review appropriateness of existing measures, evaluate management options and develop and implement proportionate marine management solutions. B. Support the implementation of a well-managed network of marine protected areas and contribute to delivery targets for MSFD, WFD and Marine Plans. C. Develop fisheries management plans for priority species where appropriate. 	<ul style="list-style-type: none"> • Record site-specific management considerations for MPAs and report progress. • Publish data analysis and evidence supporting new management measures. • Collect information to assess the effectiveness of new management measures. • Develop of a range of criteria based management options which are reviewed and updated annually. • Deliver new management measures within agreed timescales. • Management plans published annually and progress noted in Annual Report including MSY commitments.

4	IFCAs have appropriate governance in place and staff are trained and professional.	<p>A. Demonstrate a long-term strategic approach to sustainable marine management.</p> <p>B. Staff performance management systems are in place that link to IFCA success criteria. Induction procedure for new joiners. Staff training and development needs identified. Performance managed.</p> <p>C. Efficient and effective secretariat in place to support the Authority. New members will receive an induction pack. There will be a 'rolling' twelve month schedule of quarterly Authority meetings. Notice of meetings and documentation will be made available in line with standing orders.</p> <p>D. IFCA Committee meetings will be held in public unless material is either confidential or exempt.</p>	<ul style="list-style-type: none"> • Annual plan published by 31 March each year and submitted to the Secretary of State. • Annual report produced and published by 30 November each year and submitted to the Secretary of State. • All staff have annual performance management plans in place and annual appraisals are completed by 31 May each year. • An efficient secretariat of IFCA staff support IFCA Authority meetings. • Annual report demonstrates how marine, land and water management mechanisms have worked responsively and effectively together. • All MMO appointees to the Authority complete an annual appraisal review.
5	IFCAs make the best use of evidence to deliver their objectives.	<p>A. Strategic research plan that contributes to a greater understanding of the marine environment and delivery of cost-effective management of sea fisheries resources.</p> <p>B. Standard operating procedures describe how data is captured and shared with principle partners.</p> <p>C. Non-confidential meta-data collected through IFCA research programmes should be recorded in databases available to the marine research community.</p>	<ul style="list-style-type: none"> • An annual research plan will be published each year. • An annual research report will be published each year. • The Authority's contribution to TAG and progress towards a national evidence needs programme will be recorded within the Annual Report.

2. Purpose of the Strategic Research and Evidence Plan

NEIFCA has a statutory duty under MACAA to manage the exploitation of sea fisheries resources and to seek to ensure that the conservation objectives of any Marine Conservation Zone (MCZ) in the district are furthered. The Authority also has duties as a relevant authority in relation to marine areas and European Marine Sites (EMS) under the Conservation of Habitats and Species Regulations 2017 (SI:1012/2017).

IFCAs are small, multi-functional organisations that carry out a range of work to fulfil these responsibilities including evidence collection and research as well as the implementation and enforcement of legislation. The aim of the Strategic Research and Evidence Plan is to identify longer term approaches and core, on-going priorities for the organisation, outlining our role and capabilities and to maximise the coordination of resources.

3. Legislative Drivers

The work of the NEIFCA is guided and underpinned through a number of legislative drivers, both at a national and European level. Further to this, as a Public Authority, the NEIFCA must have regard to additional policy documents such as the Marine Strategy Framework Directive (MSFD) and Marine Policy Statement.

3.1 Marine and Coastal Access Act

The overarching legislative driver behind the work of the NEIFCA is the Marine and Coastal Access Act 2009¹ (MACAA). Within this document, the main duties for the IFCAs were outlined to aid with the management of the exploitation of sea fisheries resources in their jurisdictional areas, as well as to ensure that the conservation objectives of any MCZs in the district are furthered. To meet these objectives, MACAA states that in doing so IFCAs must:

- Seek to ensure that the exploitation of sea fisheries resources is carried out in a sustainable way.
- Seek to balance the social and economic benefits of exploiting the sea fisheries resources of the district with the need to protect the marine environment from, or promote its recovery from, the effects of such exploitation.
- Take any other steps which in the Authority's opinion, are necessary or expedient for the purpose of making a contribution to the achievement of sustainable development.
- Seek to balance the different needs of persons engaged in the exploitation of sea fisheries resources in the district.

3.2 Conservation of Habitats and Species Regulations

The Conservation of Habitats and Species Regulations 2017² consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in

¹ The Marine and Coastal Access Act (2009), HMSO, London, pp.346

<https://www.legislation.gov.uk/ukpga/2009/23/contents>

² <http://www.legislation.gov.uk/uksi/2017/1012/contents/made>

England and Wales. The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European sites. Under the Regulations competent authorities (which NEIFCA is considered to be) have a general duty in the exercise of any of their functions to have regard to the EC Habitats and Wild Birds Directives.

Of primary concern to NEIFCA is the management of fisheries activities and how these can potentially impact on European Marine Sites (EMS). EMS are marine areas which have been designated as Special Areas of Conservation (SAC) under the Habitats Directive and/or Special Protection Areas (SPA) under the Wild Birds Directive to protect and support wildlife and/or habitats that are of European importance. As a fisheries regulator, NEIFCA has a duty to ensure that fisheries do not damage, disturb or have an adverse effect on the wildlife or habitats for which EMS are designated.

This driver relates directly to the 'Revised Approach' in section 4 of this document.

3.3 Common Fisheries Policy

The Common Fisheries Policy (CFP)³ is the principal legal mechanism for managing fish stocks in EU waters, ensuring consistency across Member States. The policy allows for all European fishing fleets to access EU fishing grounds to enable fishermen to compete fairly. The main aim of the CFP is to ensure that the fishing industry is environmentally, economically and socially sustainable, fostering dynamic fishing industries whilst enabling a fair standard of living for fishing communities.

It recognises that the impacts of fishing on the marine environment are not fully understood and adopts a cautious approach regarding those impacts on all components of the ecosystem. It also seeks to make fishing fleets more selective in what they catch and to phase out the practice of discarding unwanted fish.

In order to achieve sustainability, the current policy has set targets for all fisheries to achieve Maximum Sustainable Yield (MSY) between 2015 and 2020. The achievement of MSY is largely dependent on the success of the fisheries management measures under the reformed CFP. Since its revision in 2014, the CFP has placed greater control to EU countries at a national and regional level, helping guide the work of the IFCA's.

Only commercial stocks that are covered by the Total Allowable Catches (TACs) under the TAC and Quota Regulations and for which the UK has an obligation to provide biological sampling data under the Data Collection Framework (DCF) will be used to assess progress against the targets. These are stocks for which ICES provides assessments to which the UK contributes through the DCF.

3.4 Marine Strategy Framework Directive

The Marine Strategy Framework Directive (MSFD)⁴ was first introduced by the EU in 2008, with the most recent revision being published in 2017. The MSFD aims to achieve "good environmental status" (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend. The Directive enshrines in a legislative

³ https://ec.europa.eu/fisheries/cfp_en

⁴ http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm

framework the ecosystem approach to the management of human activities having an impact on the marine environment, integrating the concepts of environmental protection and sustainable use. The objective of the MSFD is to enable the sustainable use of marine goods and services and to ensure the marine environment is safeguarded for the use of future generations. The Directive establishes a comprehensive structure within which Member States are required to achieve or maintain GES in the marine environment. This Directive underpins all work conducted by the NEIFCA Environmental and Scientific team, with research, monitoring and survey work being undertaken to help guide the decision making of the Authority and achieve the GES outlined in the MSFD.

In order to achieve GES by 2020, each EU Member State is required to produce a Marine strategy, which as a consequence of the MSFD's adaptive approach to management, must be kept up-to-date and reviewed every 6 years. Part three of this strategy outlines the UK programme of measures for achieving GES. Stocks of the main commercial species of interest to the UK (including *Nephrops* as a quota species) are to be managed through the CFP. The shellfish programme of measures for Descriptor 3 covers three UK commercially exploited non-quota species; i.e. brown crab (*Cancer pagurus*), lobsters (*Homarus gammarus*) and king scallops (*Pecten maximus*). National stock unit assessments as well as NEIFCA's own internal stock assessments show that brown crab and lobster stocks are being fished above MSY levels. There is currently insufficient data to undertake scallop stock assessments in English waters. Given the economic and social importance of these stocks within the NEIFCA district, research and evidence for these species is the primary focus for the Authority.

3.5 Water Framework Directive

The Water Framework Directive (2000) sets out a framework for the protection of inland surface waters (rivers and lakes), groundwater, transitional waters (estuaries) and coastal waters (out to 1nm). The aim of the Directive is to ensure that aquatic ecosystems achieve "good ecological status", or in the case of heavily modified waterbodies, "good ecological potential". The extension of IFCA jurisdiction to tidal limits in estuaries has reinforced the relevance of the Directive with regard to management decisions made by NEIFCA.

3.6 Marine Policy Statement

The Marine Policy Statement (MPS)⁵, introduced in 2011, was prepared and adopted for the purposes of section 44 of MACAA. This document provides the framework for marine planning and taking decisions affecting the UK marine area. This framework outlines the UK Administrations' vision for the UK marine environment and the underlying principles behind management decisions, as well as the approaches taken to deliver this vision. This ultimately outlines the environment, social and economic considerations to be made during the planning and decision making process.

The MPS also outlines the policy objectives for the key activities occurring within the marine environment. These objectives are the policy specific outcomes which the UK Administrations are seeking to achieve through the sustainable development of the UK marine area. Marine Plans will need to align with and contribute to delivery of these objectives, and marine plan authorities and

⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69322/pb3654-marine-policy-statement-110316.pdf

decision makers will need to consider pressures and impacts associated with these activities. The UK Administrations will ensure that the MPS is reviewed where circumstances indicate this is necessary.

The overall framework provided by the MPS guides the preparation of Marine Plans and decision making with regards to the marine environment to ensure marine resources are used sustainably. As a result of this, the MPS facilitates the following:

- Promote sustainable economic development;
- Enable the UK's move towards a low-carbon economy to mitigate the causes and adapt to the effects of climate change and ocean acidification;
- Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems, and protects marine habitats, species and our most important heritage assets;
- Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues.

While the Marine Management Organisation (MMO) is responsible for producing Marine Plans, as a statutory consultee NEIFCA has taken an active role in their development.

4. Marine Protected Area Management

In 2013 the UK government adopted a 'revised approach'⁶, outlining the overarching policy approach and key implementation steps to ensure that all existing and potential commercial fishing operations are managed in accordance with Article 6 of the Habitats Directive. The revised approach applies to all EMS and potential Special Protection Areas (pSPA) and possible Special Areas of Conservation (pSAC). Since its announcement this has developed to be a core working area for the Authority. The implementation phase of the revised approach required management measures for high risk features to be identified by December 2013, and for any additional fishery management measures for the conservation of sites to be identified by December 2016.

Initially, designated site features and supporting habitats were assigned to one or more generic matrix feature categories allowing a site specific activity/feature matrix to be developed and high risk interactions to be identified. Primary screening identified non-occurring interactions and those for which regulations prohibiting an activity were already in force. Individual activity/feature interactions were then grouped for assessment where appropriate and subjected to a test of Likely Significant Effect (tLSE). If the tLSE concluded the potential for significant effect on the condition of the feature then a more detailed Appropriate Assessment (AA) was carried out. This approach has since been extended to include the MCZ in the District.

Adaptive Risk Management (ARM) as a component of the ecosystem-based approach to management, integrating conservation and fisheries management objectives, is central to sustainable development of the marine environment. As such, the revised approach is intended to be an iterative process. Fishing is a dynamic industry with changing patterns of effort and new

⁶ <https://www.gov.uk/government/publications/revised-approach-to-the-management-of-commercial-fisheries-in-european-marine-sites-overarching-policy-and-delivery>

commercial fisheries developing. It is the role of the regulators to assess these changes over time and to implement management should adverse effects be expected or determined.

In order to assess the impact of changes in management and developing fisheries in the light of feature condition, NEIFCA has developed a monitoring and reporting framework for all Marine Protected Areas (MPA) within its jurisdiction, including both EMS and Marine Conservation Zones (MCZ). This feedback process will ensure that fisheries remain sustainable and the conservation objectives for all MPA are furthered.

Following initial site level assessments, Monitoring and Control Plans (M&CP) are used to outline how those gear/feature interactions will be monitored. NEIFCA has taken the approach of creating site level M&CP for all of its MPAs. An Annual Effort Report (AER) is currently in development which will include a synthesis of current reports and available and developing data streams. Within the report will be an assessment of whether the initial assessments need to be reviewed or updated outside of the proposed standard review period.

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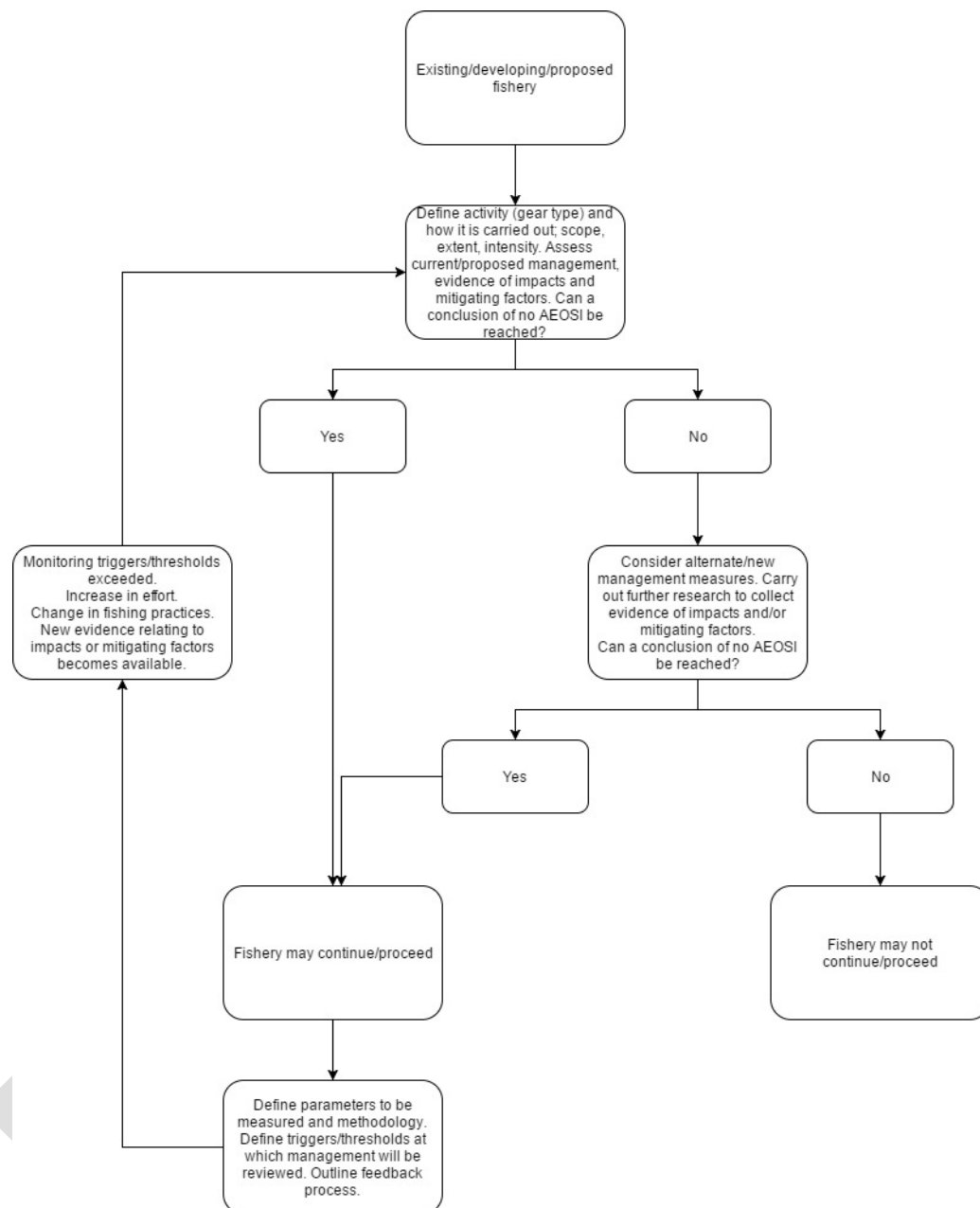


Figure 2. MPA monitoring and assessment framework.

5. Strategic Environmental Assessments

Strategic Environmental Assessment (SEA) is a statutory process which aims to provide high level protection of the environment. It seeks to ensure the integration of environmental considerations in the preparation and adoption of plans and programmes, with a view to promoting sustainable development. In 2008, North Eastern Sea Fisheries Committee commissioned an SEA for its shellfish management programme, the first time in Europe that the SEA process had been developed for a fisheries management regime. This was followed by another SEA for the whitefish management regime in 2014.

Where considered appropriate, management and monitoring recommendations arising from the two SEAs have or are being implemented. These include improved monitoring of stock status and

fisheries impacts, a new catch return system to capture all fisheries/gear types and a vessel monitoring system. It should be noted that the recommendations given are aspirational and do not take into account available resources. This document highlights the priority areas where work will be focussed on for the next five years.

5.1 Shellfish SEA

The shellfish SEA put forward a number of recommendations for moving towards an Ecosystem Based Fisheries Management (EBFM) approach (Table 2) and the associated monitoring framework needed in order to achieve this (Table 3). These are given below and details are given of how this is being implemented where appropriate. It should be noted that since the shellfish SEA was produced the Authority transitioned from the Sea Fisheries Committee and therefore adopted the national vision and high level objectives of the IFCA.

The shellfish SEA considered the following species within its scope:

- Lobster
- Brown crab
- Velvet crab
- Brown shrimp
- King scallop
- Queen scallop
- Blue mussels
- Edible periwinkle
- Cockle
- Common whelk

The regional significance of the potting fishery for lobster and crab means that a significant amount of monitoring and research is carried out on these species and in the development of their management regime. This has not changed since the SEA was carried out and will remain a core area of focus during the next five years.

Velvet crabs are considered a bycatch species within the potting fishery and landings reduced significantly in the period immediately after the SEA was completed. The introduction of escape gaps to protect juvenile lobsters and brown crabs has reduced the capability of vessels to land this species further however the measure was considered necessary given the socio-economic importance of the main target species. When observed, biometrics of velvet crabs are collected as part of the routine quayside monitoring programme however no specific research is currently planned.

Similarly, fishing for whelk occurs outside of NEIFCA jurisdiction and therefore data collection happens on an *ad-hoc* basis when landings are observed. This data is passed to Cefas, however no dedicated research or monitoring is planned.

Monitoring and research to support management of the king scallop dredge fishery will be a significant area of work over the next five years. Work is underway to develop a dataset to assess trends in stock status and further work is planned to understand the impacts of the fishery on crab and lobster stocks and associated habitats. There is no queen scallop dredge fishery in the district or regionally.

The brown shrimp fishery historically operated in the southern area of the district. Since the production of the SEA landings have reduced significantly and the fishery is no longer actively targeted. A restricted trawling permit is being introduced within the Humber Estuary as a result of the revised approach and should any permits be issued monitoring will be implemented.

Cockle stock assessments are carried out to inform management decisions made under Byelaw XXIV. Stocks in the monitored beds have been consistently low for a number of years and it is unclear whether these will recover to a point capable of supporting a commercially viable fishery. Apart from routine monitoring no further research on cockles is planned.

Shore collection of winkles and mussels is known to occur and is being assessed under the revised approach. It is unclear to what extent these species may be being exploited for commercial gain. The mussel bed within the Flamborough No Take Zone is monitored however the data gathered clearly does not inform management decisions regarding extractive activity.

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Table 2. Recommendations given in the Shellfish SEA for an EBFM approach and how these are being approached.

Recommendation	Approach taken
Strategy for EBFM	
1. Develop a strategy for EBFM in the NEIFCA district that will feed into the fisheries and habitat management.	Adopted through MACAA and implemented by the organisational Success Criteria, High Level Objectives, and MPA assessment framework.
2. Implement an agreed strategy for EBFM in the NEIFCA district	
Fisheries Management	
3. Design and implement Fisheries Management Plans to include:	
a) Restrictions on landings or harvesting, particularly for those species known to be under pressure from fishing (e.g. lobster, brown crab, whelk);	Restrictions on lobster and brown crab landings (Total Allowable Catch or quota) are not considered appropriate given alternative management measures both in place and in development. Harvest control measures have been implemented and are enforced. Further measures including potting effort limitation are in development.
b) Set fishing limitations by implementing a seasonal closure of the lobster fishery and by prohibiting the landing of berried females;	A seasonal closure of the lobster fishery is not considered appropriate at this time. The landing of berried female lobsters has been prohibited.
c) Increase the minimum landing size of brown crab and lobster;	The Minimum Conservation Reference Size (MCRS) for brown crab has been increased to 140mm. An increase in the MCRS of lobster is not considered appropriate at this time given planned and implemented management measures.
d) Set limitations on the number of pots per vessel by reducing the number of pots per vessel to 500;	The Authority is developing an effort control scheme for the potting fishery.
e) Put in place restrictions on overall fishing time and extent of the fishing area covered, of particular importance for trawling or dredging;	Fishing time (days at sea) is supported by elements of the fishing industry as a potential management alternative to quotas in a revised fisheries policy resulting from the UK exit from the EU. This policy is being developed at a national level. Temporal restrictions (daily and seasonal closures) are in place for the scallop dredging fishery in the district.
f) Put in place control measures to prevent encroachment of larger offshore vessels on inshore/nearshore fishing grounds;	Vessel size restrictions are in place for fisheries in the NEIFCA district.
g) Minimise the level of discards and bycatch, including the prohibition of the use of non-selective or destructive gear in critical areas;	Technical measures to reduce discards and bycatch are enforced. Escape gaps have been introduced in the potting fishery to reduce levels of discard and bycatch.
h) Limit granting of fishing permits in the absence of knowledge on the status of a particular stock;	A precautionary approach was utilised in the scallop dredge fishery when an increase in effort was detected. Due to the limited knowledge of the status of the stocks, a restricted permit system was implemented.
i) Introduce a 'day permit' or 'fixed size collection bucket' system to obtain an idea of the level of harvest for casual periwinkle, cockle or mussel pickers (<5kg per	Shore collection activities are currently under review as part of the wider revised approach to the management of commercial fisheries in European Marine Sites.

Recommendation	Approach taken
day). This will provide information on small harvest which will be valuable for future management of stocks;	
j) Engage in the development and deployment of more selective and less damaging fishing technologies;	Pilot gear studies would be carried out under the 'Viable industry' research theme. (see section 9.3)
Habitat management	
4. Identify and delineate all habitats vulnerable to fishing in the NEIFCA district to gain a better understanding of the ecosystem as a whole.	Designated feature location and extent data in MPAs is provided by Natural England. NEIFCA has implemented a long-term evidence programme utilising the patrol vessels multi-beam system to improve knowledge of sea bed habitats throughout the district.
5. Promote habitat recovery and restoration of degraded habitats by setting in place proactive measures such as closing areas to fishing or deployment of artificial reefs for fisheries enhancement.	Implemented in MPAs through the management and assessment framework outlined in Section 4.
6. Should these measures mean hardship for fishers, compensation to them and/or incentives to stakeholders should be negotiated with the government to gain support for the EBFM approach.	Full Regulatory Impact Assessments (RIA) are carried out for all new byelaws. Socio-economic research would be carried out under the 'Viable industry' research theme. (see section 9.3)
Ecosystem related	
7. Adopt the Precautionary Principle for fisheries management in the NEIFCA district, with emphasis on the ecosystem approach to fisheries management.	These principles have been adopted through the Marine and Coastal Access Act (MACAA). The explanatory notes for MACAA (Section 153:435) state: <i>'IFC authorities will be able to apply precautionary measures and use an ecosystem-based approach in order to fulfil their main duty. Precautionary measures in this context means that the absence of adequate scientific information should not be used as a reason for postponing or failing to take management measures to conserve target species, associated or dependent species and non-target species and their environment. The ecosystem-based approach in this context means that the capacity of the aquatic ecosystems to produce food, revenues, employment and, more generally, other essential services and livelihood, is maintained indefinitely for the benefit of present and future generations.'</i>
8. Set up an ocean zoning system in the NEIFCA district to set in place 'fishing boxes', 'no take zones' or fishery reserves to allow the recovery of species known to be under serious pressure. For example, the closure of the fishery for whelk. This measure will also benefit recovery of the seabed.	Elements have been utilised when considered appropriate. Examples: - No Take Zone introduced at Flamborough - Fishing boxes introduced in the scallop dredge fishery to reduce conflict with the static pot fishery, promote recovery of shellfish species, and reduce sea bed habitat impacts.
9. Reduce air emissions from fishing vessels; this should be supported from government funding.	While NEIFCA would support any measures to reduce emissions from fishing vessels, intervention should be implemented at a national or European level.

Recommendation	Approach taken
10. Where possible, utilise marine spatial planning principles in the management of the shellfish fisheries. This could include information on the key users of the resource, known habitats, archaeological wrecks, navigation routes, interactions with other fisheries, etc.	NEIFCA is engaged with the MMO in the development of Marine Spatial Plans. Fisheries and environmental information are to be incorporated into the plans.

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Table 3. Recommended monitoring framework for fisheries management outlined in the Shellfish SEA and how these are being approached.

Recommendation	Monitoring mechanisms
Strategy for EBFM	
1. Completion and execution of strategy.	Organisational annual plans and MPA assessment framework.
2. Provide feedback to fisheries and habitat management.	Research and stock assessment reports, MPA assessment documents.
Fisheries management	
3. Fisheries management plans	See fisheries management section in Table 2.
4. All species: standard parameters to include: stock assessment, growth, recruitment & mortality, minimum sizes, Total Allowable Catch (TAC)	Assessed when appropriate and where resources allow. Examples of previous work include assessment of lobster stocks. Where region specific metrics are not available proxy values are used from relevant literature.
5. Fishing patterns & effort	Analysis of vessel sightings data has been carried out for data since 2011. On-board vessel monitoring solutions are currently in development and will provide full coverage of all activity.
6. Level of bycatch	A revised catch reporting system is in development which will cover all activity within the NEIFCA district and allow for quantification of levels of bycatch including cetaceans and sea birds. Bycatch composition is monitored as part of the potting work undertaken on the patrol vessel. Bycatch within the dredge fishery is monitored by surveys aboard commercial operators vessels.
Habitat management	
7. Quality of seabed	Specific monitoring is carried out when required; e.g. dredge fishery
8. Water quality, e.g. salinity, temperature, DO, turbidity, etc.	Monthly sampling at established stations is carried out during routine patrols.
9. Cover of various benthic species, e.g. algae	Specific monitoring carried out when required; e.g. dredge fishery
Ecosystem related	
10. Frequency of dredging on identified section of seabed	Requirement for Automatic Identification System on all dredging vessels operating or transiting through the district has been implemented. Intensity of effort on fished grounds is assessed.
11. Timing of seabed recovery, e.g. from dredging or trawling; -if the seabed is heavily disrupted; -if the seabed is in reasonable condition.	Work to understand the impacts of the dredge fishery and recovery of sea bed habitats is a developing work stream.
12. Use of bio-indicators, e.g. seals or birds, to measure the health of the ecosystem	Considered when carrying out MPA fisheries impact assessments.

5.2 Finfish SEA

The finfish SEA, which also included the trawl fishery for *Nephrops*, made similar recommendations regarding the improvement of NEIFCA specific data on catches and spatial distribution of effort. The following fisheries were considered:

- Demersal trawl fishery
- *Nephrops* trawl fishery
- Static net fishery for cod
- Gill net fishery for bass and sole
- Longline fishery for cod
- Recreational fishery

All commercial fisheries were assessed during the revised approach to ensure that activities occurring within MPAs will not negatively affect the sites maintaining or reaching their conservation objectives. This resulted in changes to management for trawling and netting at Flamborough and trawling in the Humber.

Management of the finfish and *Nephrops* fisheries within the NEIFCA district is determined principally by the Common Fisheries Policy (CFP) and its implementation through the European Union (EU). These fisheries are controlled by a system of Total Allowable Catches (TACs), quotas, area restrictions, technical measures, minimum sizes, fishing effort restrictions and long term stock recovery programmes.

Previous assessments, including the SEA, have relied on data submitted to the MMO to give an indication of effort and landings based on ICES rectangles. The catch return system currently being implemented will provide NEIFCA with the data necessary to understand the extent of activity within its jurisdiction and inform management decisions.

The spatial distribution of effort is currently monitored through sightings made by the patrol vessel, but is obviously dependent on observations made at sea. The implementation of vessel monitoring technology during the lifespan of this plan will significantly improve data capture.

Data for *Nephrops* is collected during the routine quayside monitoring programme when landings are observed. Data is shared with Cefas who undertake assessments collaboratively with other ICES member states.

Table 4. Management recommendations for the Demersal/*Nephrops* trawl fisheries

Environmental effect	Risk rating given	Concern	Recommendation/monitoring	Implementation
Retained/Non-retained species	Moderate	Specific data should be collated to better assess the quantity and types of species specifically retained and discarded within the NEIFCA district	<ul style="list-style-type: none"> • Inshore VMS for all trawl vessels • Catch recording system should be implemented • Vessel/shore based observer data to ascertain total catch composition • Collaborative approach to data analysis with Cefas 	<ul style="list-style-type: none"> • VMS technology and a catch recording system are currently being implemented • Shore based observer data is gathered as part of the routine quayside monitoring programme, particularly for <i>Nephrops</i> • Data is shared with Cefas who undertake assessments collaboratively with other ICES member states
Habitat	Moderate	Sensitive habitats need to be identified in relation to trawling grounds	<ul style="list-style-type: none"> • Accurate habitat maps to be produced of trawling grounds • Inshore VMS for all trawl vessels to enable frequency/effort/extent data to be obtained 	<ul style="list-style-type: none"> • All sensitive habitats protected by international or national legislation have been assessed and appropriate management has been introduced • VMS technology is currently being implemented
Ecosystem	Moderate	Trophic effects on ecosystems are unknown	<ul style="list-style-type: none"> • Vessel based observer programme to establish trophic structure (fish assemblages) • Vessel based monitoring programme with DDC to ascertain ecosystem integrity • Stakeholder consultation of declines/changes • Promote responsible fishing scheme membership – best fishing practices 	<ul style="list-style-type: none"> • Not considered a priority work area given current resources • Potential for external student placements
Socio-economics	Moderate	Decline in trawling is having a potential impact upon local communities and infrastructure	<ul style="list-style-type: none"> • Socio-economic assessment of the supply chain to establish baseline data for assessment of potential management effects 	<ul style="list-style-type: none"> • Socio-economic data is collated annually

Environmental effect	Risk rating given	Concern	Recommendation/monitoring	Implementation
			on Hartlepool, Scarborough and Whitby	<ul style="list-style-type: none"> • This data is to be incorporated into the reporting/monitoring of effort for MPAs • Supply chain assessment not considered a priority given current resources • Potential for external consultant to complete as with the FLAG funded lobster supply chain study currently being undertaken
	Low	Trawling effects on archaeological heritage	<ul style="list-style-type: none"> • Participation in voluntary recording scheme (FIPAD) • Inshore VMS for all trawl vessels 	<ul style="list-style-type: none"> • Not considered a priority work area given current resources • VMS technology is currently being implemented

Table 5. Management recommendations for the static/gill/longline fisheries

Environmental effect	Risk rating given	Concern	Recommendation/monitoring	Implementation
Retained/Non-retained species	Low	Specific data should be collated to better assess the quantity and types of species specifically retained and discarded within the NEIFCA district	<ul style="list-style-type: none"> • Inshore VMS for all vessels • Catch recording system should be implemented • Vessel/shore based observer data to ascertain total catch composition and incidence of protected species capture • Engage specific stakeholders (if possible) to identify greater confidence in assessment • Collaborative approach to data analysis with Cefas 	<ul style="list-style-type: none"> • VMS technology and a catch recording system are currently being implemented • Catch reporting will require the submission of data on protected species capture • Shore based observer data is gathered as part of the routine quayside monitoring programme • Data is shared with Cefas who undertake assessments collaboratively with other ICES member states
Habitat	Negligible	None identified	<ul style="list-style-type: none"> • Accurate habitat maps to be produced of fishing grounds 	<ul style="list-style-type: none"> • All sensitive habitats protected by international or national legislation have been assessed and appropriate management has been introduced
Ecosystem	Low	Trophic effects on ecosystems are unknown	<ul style="list-style-type: none"> • Stakeholder consultation to map fishing grounds and ascertain levels of ghost fishing • Investigation into catch composition to better assess trophic effects 	<ul style="list-style-type: none"> • Patrol vessel sightings highlight key fishing areas • VMS and catch returns will improve data and knowledge • Trophic effects not considered a priority work area given current resources • Potential for external student placements
Socio-economics	Low	No specific concerns	<ul style="list-style-type: none"> • Consideration should be given to how regionally specific management may maintain employment and infrastructure within the region and offer opportunity to expand fisheries 	<ul style="list-style-type: none"> • Available quota and restrictions on bass landings continue to be a limiting factor in the expansion of net fisheries • VMS technology is currently being implemented

Environmental effect	Risk rating given	Concern	Recommendation/monitoring	Implementation
			<ul style="list-style-type: none"> Consider management approaches which can expand the existing availability of quota species Additional studies should aim to build upon the socio-economic studies previously undertaken of seal predation loss and its effect on small scale fisheries More robust baseline assessment of socio-economic indicators (employment <i>etc.</i>) Inshore VMS for vessels 	

Table 6. Management recommendations for recreational fisheries

Environmental effect	Risk rating given	Concern	Recommendation/monitoring	Implementation
Retained/Non-retained species	Low	Specific data should be collated to better assess the quantity and types of species specifically retained and discarded within the NEIFCA district	<ul style="list-style-type: none"> Catch recording system should be implemented (voluntary) and inspection records maintained on database Data collection programme for recreational anglers should be established 	<ul style="list-style-type: none"> Potential for a voluntary recording scheme to be incorporated into the new catch reporting system Charter angling vessels are to be required to submit returns
Habitat	Low	None identified	<ul style="list-style-type: none"> Habitat maps produced of fishing grounds Effort and interaction with protected areas 	<ul style="list-style-type: none"> Incorporated into wider habitat mapping programme
Ecosystem	Low	Trophic effects on ecosystems are unknown	<ul style="list-style-type: none"> Educational programme on fish handling to reduce mortality, selection of hook sizes, juvenile fish grounds Removal of litter 	<ul style="list-style-type: none"> Not considered a priority work area given current resources
Socio-economics	Low	Lack of NEIFCA specific data	<ul style="list-style-type: none"> Sea Angling 2012 should be reviewed for baseline data Further supply chain studies should be commissioned in relation to specific benefits of angling Promotion of safety awareness/minimum safety standards 	<ul style="list-style-type: none"> Not considered a priority work area given current resources

6. Partnership Working

The NEIFCA, and its predecessor NESFC, developed an excellent track record of working collaboratively with partner organisations, including academic institutions. These links allow for the expertise that exists within such institutions to be accessible and to provide opportunities for undergraduates and postgraduates to work on projects beneficial to the Authority. Officers continue to strengthen or create links with external institutions and meet to exchange project ideas on a regular basis.

Nationally, relationships will be strengthened between the Environment Agency, the Marine Management Organisation, Natural England and Cefas, in order to identify opportunities for collaboration, the collation and dissemination of data and adoption of best practices.

The Technical Advisory Group (TAG), comprised of IFCA Environmental/Technical Officers and members of the MMO, NE, EA and Cefas, provides a mechanism for developing these links and strengthening relationships. Furthermore, the group allows for standardisation of best practice between IFCAs and national bodies with regards to research, encouraging the sharing of information and non-duplication of effort. NEIFCA officers have been a part of this since its inception and will continue its involvement. National workshops and conferences are also recognised as valuable opportunities to strengthen the knowledge base and experience of NEIFCA Officers.

7. Working Groups

Whilst NEIFCA attends a number of working groups throughout the year, those highlighted in Table 2 are considered core, on-going groups that will continue throughout the lifespan of the strategic plan and help to deliver our statutory responsibilities as well as foster effective working partnerships. Through regularly attending these working groups, it is hoped that the NEIFCA can develop excellent working relationships and collaborative research projects with local industry groups as well as national organisations. Partnership projects and collaborative working is incredibly useful for the work that NEIFCA carries out, with local industry knowledge, skills and resources proving invaluable.

Table 4. The working groups attended by NEIFCA representatives, their scope, frequency and other attending organisations.

Group	Area	Other Members	Frequency
Science Advisory Group	District	Authority representatives	Bi-annually
IFCA Technical Advisory Group (TAG)	National	IFCAs, NE, Cefas, Defra, EA	Quarterly
Management of fisheries within MPAs	National	IFCAs, MMO	Monthly
Humber Estuary Relevant Authorities Group	Humber Estuary	NE, EA, MMO, Local Councils, Yorkshire Water, YWT	Quarterly
Flamborough Head Relevant Authorities Group	Flamborough and Filey	NE, EA, MMO, Local Councils, Yorkshire Water, YWT	Quarterly

Yorkshire Marine and Coastal Biodiversity Group	Yorkshire	YWT, NE, EA, Hull University, York University, National Trust, the Deep, RSPB, Humber and Flamborough Management Schemes	Bi-annual
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8. Research Themes

In order to deliver proportionate, evidence-led management, NEIFCA undertakes a range of research and survey activities under the themes outlined in this section

8.1 Sustainable Fisheries

8.1.1 Stock Status

This theme is central to the work of NEIFCA. Research and evidence can include fishery dependent sampling on commercial vessels or at the point of landing on the quayside, or fishery independent sampling carried out aboard the Authorities patrol vessel. Core stock assessment work for lobsters, brown crabs and scallops fall under this theme.

8.1.2 Species Biology and ecology

Research under this theme is aimed at developing a broader understanding of species biology and ecology. Previous work under this theme has included size at maturity and tagging work to develop knowledge of European lobster life history characteristics.

8.2 Healthy Seas

8.2.1 Marine Protected Areas

Work under this theme relates to understanding the impact of fisheries on designated species and habitats. Previous work under this theme has included understanding the impacts of potting on reef habitat at Flamborough. The MPA assessment and monitoring process outlined in section 4 would also fall under this theme.

8.2.2 Habitat Knowledge

The Authority is always looking to strengthen its knowledge of sea bed habitats within the District, both within and outside the network of MPAs. External data sources are continuously assessed while broad scale habitat classification can be carried out from the Authorities patrol vessel. The development of habitat knowledge in the designated scallop dredging area for instance was instrumental in the development of this fishery.

8.2.3 Invasive Non-Native Species

The Authority contributes to national databases when invasive non-native species are encountered. Work in this theme is constantly developing and Officers are working with partner agencies to develop monitoring regimes to address the risk posed by these species. The Authorities Biosecurity Plan will form the basis of work under this theme.

8.3 Viable Industry

8.3.1 Fisheries Enhancement

Work under this theme can include developing knowledge and evidence in support of new fisheries, carrying out pilot studies to offer diversification options to the industry or work with developing alternative industries such as aquaculture.

8.3.2 Socio-Economic Analysis

A range of socio-economic research is carried out in support of management measures and to understand the state of the industry. Regulatory Impact Assessments (RIA) in support of new byelaws is carried out to ensure that no undue financial burdens are placed on stakeholders while the annual effort survey of the number of active vessels helps to give a dynamic assessment of the state of the fleet. The latter will also contribute to the MPA assessment and monitoring process outlined in section 4.

8.4 Data, Communication and Developing Capabilities

8.4.1 Access to Information

Data collected by NEIFCA as a public body is freely available subject to data protection regulations. Officers are developing systems to manage the increased volumes of data being collected since the transition from an SFC to an IFCA. Metadata of biological sampling is uploaded to national systems such as the Marine Environmental Data and Information Network (MEDIN). Work to increase stakeholder participation and communication is constantly evolving and the development of social media avenues for the dissemination of information is a particular focus. The development of the Communications Strategy would fall under this theme.

8.4.2 Development of New Technologies

In order to utilise the best available evidence in support of management, tools and assets that enhance our capabilities are constantly assessed and improved upon. Previous work has included the development of the Authorities drop down and towed video systems. Another developing area is the utilisation of drone technologies in the assessment of shore based activities and habitats. Current work also involves the development of new catch reporting and vessel monitoring systems

9. Strategic priority areas

Priority areas	Objectives	Strategies	Actions	Theme	Priority
Ensure sustainable exploitation of sea fisheries resources.	Monitor stock status for key species; to incl. <ul style="list-style-type: none"> European lobster Brown Crab King scallop Common cockle 	Collect biometric, landings and effort data (to inform/and carry out) district specific stock assessments/management plans.	Undertake potting surveys from NEG III to monitor European lobster and Brown crab stocks and to capture data for population components subject to landings restrictions.	Sustainable fisheries	High
			Undertake quayside sampling at the major ports of Whitby, Scarborough and Bridlington with supplementary sampling at other ports.	Sustainable fisheries	High
			Share data collected with Cefas to inform stock unit level assessments against MSY targets.	Sustainable fisheries	High
			Undertake stock assessments for European lobster, Brown crab and King scallops to inform local management.	Sustainable fisheries	High
			Quality assess and input catch return forms.	Sustainable fisheries	High
			Analyse patrol vessel sightings to assess trends in the spatial and temporal distribution of fishing effort.	Sustainable fisheries	High
			Promote regional collaboration to ensure regulatory cohesion.	Sustainable fisheries	High
			Assess potential for cockle fishery every two years.	Sustainable fisheries	High
	Reduce fishing pressure on European lobster and Brown crab.	Develop effective effort control mechanisms.	Develop pot tagging, gear marking and/or technological solutions to allow effective enforcement of effort control system.	Sustainable fisheries	High
			Consult industry regarding proposed management system.	Sustainable fisheries	High
	Develop knowledge in support of stock based management of the King scallop fishery.	Develop King scallop stock assessment model and indicators of ecosystem health/resilience.	Undertake dredging surveys from NEG III to assess King scallop stocks and catch rates of European lobster and Brown crab.	Sustainable fisheries	High

Priority areas	Objectives	Strategies	Actions	Theme	Priority
Ensure sustainable exploitation of sea fisheries resources.	Develop knowledge in support of stock based management of the King scallop fishery. (cont.)	Develop King scallop stock assessment model and indicators of ecosystem health/resilience. (cont.)	Assess available stock assessment models, parameters and suitability.	Sustainable fisheries	High
			Ground truth modelled sea bed habitat maps.	Sustainable fisheries	High
			Monitor bycatch of European lobster and Brown crab in dredge fishery.	Sustainable fisheries	High
			Monitor regional catch rates of European lobster and Brown crab within potting fishery.	Sustainable fisheries	High
			Undertake potting surveys from NEG III to monitor European lobster and Brown crab stocks in the vicinity of dredging areas.	Sustainable fisheries	High
	Promote diversification of fishing effort.	Carry out a feasibility study for a velvet crab potting fishery to include potential management options.	Assess feasibility of introducing escape gap tailored to velvet fishery.	Viable industry	Medium
			Assess impacts on catch rates of juvenile lobster and brown crab.	Viable industry	Medium
			Analyse historic data and consult with industry regarding potential season for velvet fishery.	Viable industry	Medium
			Consult with industry to assess the number of vessels wishing to pursue a velvet fishery.	Viable industry	Medium
			If appropriate, identify management options and outline legislative changes required.	Viable industry	Medium
		Carry out a feasibility study for a Norway lobster potting fishery to include potential management options.	Consult with industry to assess the number of vessels wishing to pursue a Norway lobster potting fishery.	Viable industry	Low
			Estimate potential costs associated with vessel modifications/renewals required to change gear type used and identify potential sources of funding.	Viable industry	Low
			Assess economic viability of a Norway lobster potting fishery.	Viable industry	Low

Priority areas	Objectives	Strategies	Actions	Theme	Priority
Ensure sustainable exploitation of sea fisheries resources.	Promote diversification of fishing effort. (cont.)	Carry out a feasibility study for a Norway lobster potting fishery to include potential management options. (cont.)	If appropriate, identify management options and outline legislative changes required.	Viable industry	Low
		Carry out a feasibility study for a Common whelk potting fishery to include potential management options.	Consult with industry to assess the number of vessels wishing to pursue a Common whelk potting fishery.	Viable industry	Low
			Identify potential fishery areas.	Viable industry	Low
			Estimate potential costs associated with vessel modifications/renewals required to change gear type used and identify potential sources of funding.	Viable industry	Low
			Assess economic viability of a Common whelk potting fishery.	Viable industry	Low
			If appropriate, identify management options and outline legislative changes required.	Viable industry	Low
		Develop knowledge in support of diversification and evidence potential new fisheries.	Develop trawl sampling capabilities and investigate potential fisheries.	Viable industry	Low
			Investigate potential for a squid fishery.	Viable industry	Low
	Incorporate all sources of sea fisheries exploitation into management framework.	Develop recreational sea angling strategy	Assess available information and data sources.	Sustainable fisheries	Medium
			Increase engagement with recreational angling sector.	Sustainable fisheries	Medium
			Identify opportunities for joint working and utilising citizen science.	Sustainable fisheries	Medium

Priority areas	Objectives	Strategies	Actions	Theme	Priority
Further the conservation objectives of MPAs.	Ensure that the impacts of commercial fisheries are not causing adverse effects on the integrity of designated sites	Implement Adaptive Risk Management (ARM) for commercial fisheries within MPAs.	Undertake periodic assessment of the distribution of <i>Zostera</i> spp. at Spurn Point.	Healthy seas	High
			Develop MPA monitoring and reporting tools.	Healthy seas	High
			Carry out periodic review of all initial assessments by Dec 2022.	Healthy seas	High
Contribute to a greater understanding of the marine environment.	Develop in-house environmental datasets and maintain long term monitoring programmes.	Develop knowledge of the distribution of sea bed habitats.	Develop in-house Multi-Beam Echosounder dataset.	Data, communication and developing capabilities	High
		Monitor environmental variables that may affect catch rates of lobster and crab.	Capture monthly sea surface and bottom temperatures while on routine patrols.	Data, communication and developing capabilities	High
Ensure effective enforcement of fisheries regulations.	Deliver cost-effective management of sea fisheries resources.	Support renewal process for the Authorities offshore assets.		Data, communication and developing capabilities	High
		Implement catch return system for all commercial fisheries.	Explore suitable database platforms.	Data, communication and developing capabilities	High
		Implement remote vessel monitoring system for all commercial vessels.	Explore suitable database platforms.	Data, communication and developing capabilities	High
		Develop capability in the use of Unmanned Aerial Vehicles for monitoring of activities.	Improve data processing capabilities to produce georeferenced orthomosaic images.	Data, communication and developing capabilities	Low

Priority areas	Objectives	Strategies	Actions	Theme	Priority
Ensure effective enforcement of fisheries regulations.	Deliver cost-effective management of sea fisheries resources. (cont.)	Provide analytical evidence in support of enforcement activities	Develop evidence base in support of effective enforcement of egg bearing lobster legislation.	Data, communication and developing capabilities	High
			Strengthen enforcement capabilities through improved detection of egg bearing lobsters.	Data, communication and developing capabilities	High
		Maintain continuous assessment of current regulatory framework.	Schedule byelaw reviews in line with stated timelines.	Data, communication and developing capabilities	High
			Review NTZ byelaw effectiveness and mussel sampling programme.	Healthy seas	High

10.Staff

The Authority is a direct employer and employs fifteen dedicated staff members with a wide variety of expertise and high level of competency. The current staffing structure is outlined below. Clerkship, financial, human resources and legal functions are undertaken by the East Riding of Yorkshire Council – one of the member Authorities.

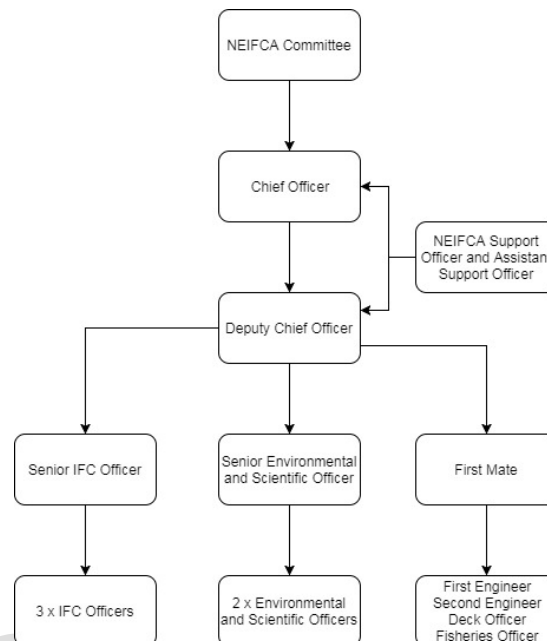


Figure 3. NEIFCA Organogram

11.Assets

The Authority's largest asset is a 26m-patrol boat, the 'North Eastern Guardian III' (built and delivered November 2007), capable of a top speed of 26 knots and equipped with the latest electronic navigation systems and a wide range of marine survey and monitoring equipment. The vessel also carries a 6.4 metre RIB capable of speeds up to 30 knots. During the 2013/2014 year the Authority purchased a new 4.7 m RIB specifically designed for launching and recovery from the shore. This new RIB provides a small, flexible asset, easily deployed from a wide range of locations and capable of a top speed of 20 knots.

The Authority leases a 4 x4 truck and owns four multi-purpose vans , a 4x4 'pick up' and a multi-terrain 'gator'. The vehicles are used to transport and launch vessels, equipment and access coastal and estuarine areas.

12.Finance

Financial sources for funding the scientific research of the Authority are mainly derived from central proceeds. In addition to this, NEIFCA has a good track record of developing and collaborating on externally funded projects. The North Sea is a particularly busy area with extensive offshore development, such as oil and gas exploration and storage, ports and navigation, dredging and

disposal and offshore wind farms to name a few. NEIFCA actively assesses the potential for generating external funding streams, with a view to identifying areas of research that will assist offshore developments in minimising impacts on the marine environment. NEIFCA will ensure that any future project development directly feeds into the Scientific Research Plan and the high level objectives of the IFCA.

DRAFT

DRAFT



Inshore Fisheries and
Conservation Authority



Research and Evidence Annual Plan

2019-2020

Date submitted:	
Report compiled by:	TS
Quality control by:	
Approved by & date:	
Version:	Draft

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Offshore survey work	2
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DRAFT

Acronyms

DHC	Durham Heritage Coast partnership
EA	Environment Agency
EMS	European Marine Site
HFIG	Holderness Fishing Industry Group
IFCA	Inshore Fisheries and Conservation Authority
MCZ	Marine Conservation Zone
MIF	Multiple Indicator Framework
MPA	Marine Protected Area
NE	Natural England
NEG III	North Eastern Guardian III
NEIFCA	North Eastern Inshore Fisheries and Conservation Authority
NTZ	No Take Zone
SAC	Special Area of Conservation
SI	Statutory Instrument
SPA	Special Protection Area
YWT	Yorkshire Wildlife Trust

1. Introduction

North Eastern Inshore Fisheries and Conservation Authority (NEIFCA) is one of ten such Authority's established in October 2010 under provisions contained within the Marine and Coastal Access Act 2009. NEIFCA have a statutory duty under the Marine and Coastal Access Act 2009 to manage the exploitation of sea fisheries resources.

The Authority also has duties as a relevant authority in relation to marine protected areas and European Marine Sites (EMS) under the Conservation of Habitats and Species Regulations 2017 (SI:1012/2017), as such are responsible for monitoring and managing fishing activity within a network of marine protected areas in the district including:

- Teesmouth and Cleveland Coast SPA
- Flamborough Head EMS (SAC & SPA)
- Humber EMS (SAC & SPA)
- Northumbria Coast SPA
- Greater Wash SPA

In addition to two Marine Conservation Zones:

- Holderness Inshore MCZ
- Runswick Bay MCZ

IFCAs are small, multi-functional organisations that carry out a range of work to fulfil these responsibilities including evidence collection and research as well as the implementation and enforcement of legislation. The Research and Evidence Annual Plan is the key planning and operational document where actions and priorities can be agreed in context. The aim of this document is to outline survey, research and evidence gathering priorities for the 2019-2020 period.

Cockle surveys at beds in the Humber and Tees Estuaries were until recently carried out annually. Following a review in 2018 it was agreed that sampling would take place on a biennial basis. The next surveys will be included in the 2020/21 annual plan.

2. Working groups

The NEIFCA sits on a variety of working groups as a statutory relevant authority or participating stakeholder. Core, on-going working groups are outlined in the Strategic Research and Evidence Plan. The table below outlines additional shorter term working and project groups that Officers will be engaged with during 2019/20.

Table 1. NEIFCA working groups

Group	Area	Other Members	Frequency
Holderness Fisheries Local Action Group	Holderness	HFIG, MMO, YWT	Quarterly
Durham Heritage Coast - Seascape Partnership	Tyne to Tees		Quarterly

3. Research and evidence work streams for 2019/20

Offshore survey work

Shellfish potting – NEG III	
In order to capture data on lobster and crab population components that are subject to landings restrictions, potting surveys are undertaken from the patrol vessel over the summer months. Data is used to carry out annual stock assessments and is shared with Cefas to inform stock unit level assessments against MSY targets. Additional fleets are worked within and in the vicinity of the permitted dredge areas in order to monitor any impacts arising from the scallop fishery.	
Outputs	
Stock status reports to include: <ul style="list-style-type: none"> Length/width frequency data for assessment against MSY targets Sex ratios Seasonal trends in catch composition and population structures CPUE Proportion V-notched lobsters Proportion of egg bearing female lobsters Condition (1 or no claws, prevalence of black spot disease) Pre-recruit abundance 	Data Acquisition
	May-Oct
	Reporting
	Sep
	Priority
	High

Scallop dredging – NEG III

Following the introduction of a scallop dredge permitting system in 2015, annual assessment of stocks within the permitted dredge areas are required to inform management decisions including the number of permits to be issued. The number of permits to be issued each year is to be published by the 1st of November. Offshore sampling is carried out using industry standard Newhaven dredges from NEG III.

Outputs

Stock status reports to include:

- Size frequency data
- Pre recruit data
- Age (ring) frequency data
- Catch Per Unit Effort (CPUE)
- Bycatch species

Data Acquisition

Apr, Mar

Reporting

Sep

Priority

High

Scallop dredging – Video assessment – NEG III

Concerns have been raised regarding the impacts of the dredge fishery on habitats. To increase confidence surrounding the knowledge base of impacts arising from the fishery, video assessment work will be undertaken to gather data on indicator species and habitat condition. The utility of the Authorities remote baited camera system will also be assessed.

Outputs

- Comparison of areas exposed to varying levels of scallop dredging effort to those with no effort
- Establish survey stations for annual monitoring

Data Acquisition

Apr, Mar

Reporting

Sep

Priority

High

Scallop dredging – Permitted vessels

Concerns have been raised regarding the impacts of the scallop dredge fishery on habitats and, in particular, on lobster and crab stocks. Supplementary to dredge surveys carried out from NEG III, surveys aboard permitted vessels are undertaken throughout the season to accurately record bycatch levels and to capture further scallop stock data.

Outputs

Stock status reports to include:

- Size frequency data
- Pre recruit data
- Age (ring) frequency data
- Catch Per Unit Effort (CPUE)
- Bycatch species

Data Acquisition

Nov-Apr

Reporting

Sep

Priority

High

MSFD partnership project

The project aims to research, develop, and validate potential GES indicators for habitats or species where substantial knowledge gaps have been identified including mud, subtidal rock and biogenic reef. Considerable desk based study including conceptual models, combined with extensive field data collection and experimentation, aims to identify, calibrate, and test new GES indicators. Monitoring methods will also be investigated and critically compared, with innovative methods and equipment trialled against existing industry standards, advising on new monitoring requirements where necessary. Research and data analysis is to be carried out by the project officer (Newcastle University). NEIFCA has committed to providing 5 boat days in 2019.

Partners involved: Newcastle University, Natural England and Northumberland IFCA.

Outputs

- Grab sampling and Side Profile Imaging to be carried out at 2 muddy sites – Sunderland and Runswick Bay
- Towed video and baited cameras to be deployed in 3 rocky sites – Sunderland, Runswick Bay and Flamborough

Data Acquisition

Aug-Sep

Reporting

2020 (Partner project report)

Priority

High

Broad Scale Habitat Classification

NEIFCA has implemented a long term programme of data collection to improve knowledge of sea bed habitats within the district utilising the Authorities multibeam echosounder. Surveys are carried out on an ad hoc basis during routine patrol, focussing on a series of 1km² sampling sites and as such are not included in the survey Gantt chart.

Outputs

- Complete coverage the 48, 1 km² survey areas
- Bathymetry profile from 0.1-0.25m²
- Hardness profile

Data Acquisition

Apr-Mar

Reporting

N/A

Priority

High

Sea temperatures

The patrol vessel continues to maintain a long term data set of sea surface and bottom temperatures taken at stations throughout the district while on routine patrol and as such are not included in the survey Gantt chart.

Outputs

- Monthly sea bed and surface temperature

Data Acquisition

Apr-Mar

Reporting

N/A

Priority

High

Shore and desk based work streams

Catch returns	
It is a condition of the shellfish permit for all vessels to submit accurate returns for the preceding month. These are collected using the Marine Shellfish Activity Returns (MSAR) form. Officers quality assure the returns and input the data to produce summary statistics. This process will be reviewed after the implementation of the revised catch return byelaw encompassing all fishing methods occurring within the District.	
Outputs	
Summary data for inclusion in stock status reports including: <ul style="list-style-type: none"> • Total landings • Landings • Number of pots set/hailed • Quarterly catch distribution • Landings per unit effort 	Data Acquisition
	Apr-Mar
	Reporting
	Sep
	Priority
	High

Quayside sampling	
Quayside sampling of commercial catches provides biometric data on the main species landed within the NEIFCA district. Effort is focussed on lobster and brown crab to inform annual stock assessments with additional sampling of <i>Nephrops</i> , velvet crab and whelk undertaken when observed. Data is shared with Cefas to inform stock unit level assessments against MSY targets. Monthly sampling is carried out in the major ports of Bridlington, Scarborough and Whitby with supplementary sampling at other ports.	
Outputs	
Stock status reports to include: <ul style="list-style-type: none"> • Length/width frequency data for assessment against MSY targets • Sex ratios • Seasonal trends in catch composition and population structures • CPUE 	Data Acquisition
	Apr-Mar
	Reporting
	Sep
	Priority
	High

Berried lobster testing

During 2017 national legislation and a local byelaw were introduced which prohibited the landing of egg bearing female lobsters. In order to enforce this management measure NEIFCA is having to develop its own in-house knowledge and capability in order to positively identify lobsters that have had their eggs forcibly removed; an act known as 'scrubbing'. Current work is building on tests developed for the US Maine lobster fishery and previous work carried out by Eastern IFCA and Devon and Severn IFCA. Once the test process and procedures are in place, ongoing testing will likely become a major work stream for the Environmental and Scientific team.

In order to address questions surrounding the differentiation of scrubbed and naturally shed lobsters, holding tanks are being developed so that supporting evidence may be collected.

Outputs

- Test validation and development of internal policies and procedures for the detection of scrubbed lobsters.
- Successful prosecution based on testing results.

Data Acquisition

Apr onwards

Reporting

As required

Priority

High

Flamborough Head EMS NTZ mussel monitoring

The mussel bed in the No Take Zone at Flamborough is surveyed to assess mussel distribution, density and biomass to monitor effectiveness of the byelaw. This monitoring has the added benefit of contributing to knowledge of site condition for the EMS.

Outputs

Stock status reports to include:

- Identification of bed spatial extent
- Size frequency data
- Estimated density and biomass within bed

Data Acquisition

May

Reporting

Mar

Priority

Low

Humber Estuary EMS eelgrass monitoring

Monitoring of the eelgrass bed is carried out annually to assess byelaw effectiveness. Officers work closely with other statutory partners to maximise the utility of resources and data collected to address NEIFCA and partner priorities.

Partners involved: Natural England, Environment Agency, Yorkshire Wildlife Trust.

Outputs

Stock status reports to include:

- Identification of bed spatial extent
- Population length and age structure
- Estimated density and biomass within bed

Data Acquisition

Jul

Reporting

Mar

Priority

Moderate

MPA effort reporting

The MPA effort report draws together effort, landings and socio-economic data in order to assess the need for revision to existing MPA fisheries impact assessments. This work is part of a rolling programme of assessments to ensure that activities occurring will not adversely affect the achievement of designated sites conservation objectives.

Outputs

Annual Effort Report synthesising:

- Review of spatial distribution of effort
- Review of catch return and landings data
- Review of socio-economic data including numbers of active vessels and employment
- Assessment of impacts on MPAs

Data Acquisition

Apr-Mar

Reporting

Mar

Priority

Moderate

Greater Wash SPA assessments

The Greater Wash SPA extends from North Norfolk to the Holderness Coast and was fully designated in March 2018. It is DEFRA policy that sites are assessed and management measures identified within two years of designation. Assessments for the Greater Wash SPA will be completed during 2019/20 and the site will be incorporated into the existing management framework.

Outputs

Annual Effort Report synthesising:

- Review of spatial distribution of effort
- Review of catch return and landings data
- Review of socio-economic data including numbers of active vessels and employment
- Assessment of impacts on MPAs

Data Acquisition

Apr-Mar

Reporting

Mar

Priority

Moderate

Table 2 Survey Gantt Chart 2019/20

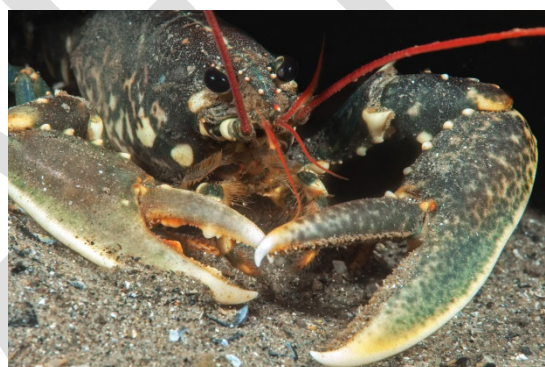
Workstream	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Shellfish potting – NEG III												
Scallop dredging – NEG III												
Scallop dredging – Video assessment – NEG III												
Scallop dredging – Permitted vessels												
MSFD partnership project - Newcastle University ,NIFCA												
Flamborough Head EMS NTZ mussel monitoring												
Humber Estuary EMS eelgrass monitoring												

Table 3 Reporting Gantt Chart 2019/20

Workstream	May SAG Spc	Sep SAG	Mar SAG
Annual research report			
MPA effort report			
Lobster and crab stock assessment			
Scallop stock assessment			
Flamborough Head EMS NTZ report			
Humber Estuary EMS eelgrass report			



Inshore Fisheries and
Conservation Authority



Annual Research Report

2018/19

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Date submitted:	01/03/2019
Report compiled by:	TS, JB, AB, CF
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Version:	1

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1. Introduction

The Authority's Environmental and Scientific team complements the Enforcement and Administrative teams to deliver evidence based fisheries management that is sensitive to social, environmental and economic needs. As well as a range of inshore fisheries operating in the district, the district supports a wealth of important natural features that are protected under a suite of UK and EU designations (Sites of Special Scientific Interest, Ramsar sites, Special Protection Areas, Special Areas of Conservation and Marine Conservation Zones). These sites collectively contribute to the national network of Marine Protected Areas.

In addition to continuing to support the Authority's management of the shellfish potting and scallop dredge fisheries, the Environmental and Scientific team undertake research, monitoring and assessment to ensure that the Authority delivers its statutory duties with regards to Marine Protected Areas. The annual research report highlights the key research and monitoring results for 2018/19. Significant time during 2018/19 has been directed towards on-going programmes that will be reported on at a later date. These include:

- Development of testing procedures to effectively enforce legislation prohibiting the landing of egg bearing female lobsters.
- Management of recreational shore collection in Marine Protected Areas.

2. European lobster stock monitoring

Since 2007 the European lobster (*Homarus gammarus*) fishery has been subject to targeted data capture to support periodic stock assessments and the review of harvest regimes in relation to Maximum Sustainable Yield (MSY) targets, in addition to annual review by the Authorities Science Advisory Group (SAG) to identify survey priorities (Table 2.1).

Table 2.1 Lobster data requirements

Requirements	Source	Priority	Programme review
Mortality rates	Quayside and Offshore size compositions	High	Performed and updated annually
Stock structure	Quayside and Offshore size compositions	High	Performed and updated annually
NEIFCA management impact Effects	Targeted offshore surveys	High	Performed and updated annually
Effort intensity, distribution and landings	Vessel sightings and MSAR	High	Performed and updated annually*
Length ~ weight relationship	Targeted capture of individual weights for larger animals	Low	Performed ad-hoc as workload allows
Male functional maturity	Potential partnership project	Low	Currently not performed

* Accuracy greatly increased by forthcoming vessel monitoring and catch return byelaws

2.1 Overview

The NEIFCA lobster fishery reported landings of 542 tonnes in 2017 (Figure 2.1), accounting for 16% of the UK's total landings. Total landings into the main ports within the district were reported as 985 tonnes, providing an estimate of the offshore fishery at 443 tonnes, an increase of 28% since 2015. As a singular port, combined landings from inshore and offshore fisheries into Bridlington accounted for 453 tonnes, equating to 46% of landings into the NEIFCA region (Table 2.4).

Since 2007 NEIFCA district-wide fishing effort has increased from 3.5 to 4.2 million pots hauled, however there is a decreasing trend in the number of pots registered from 102,000 to 83,000. Relative landings per unit effort (kg per 1000 pots hauled) is variable across the fishery with reported annual LPUE ranging from 115 to over 142 kg (Table 2.4).

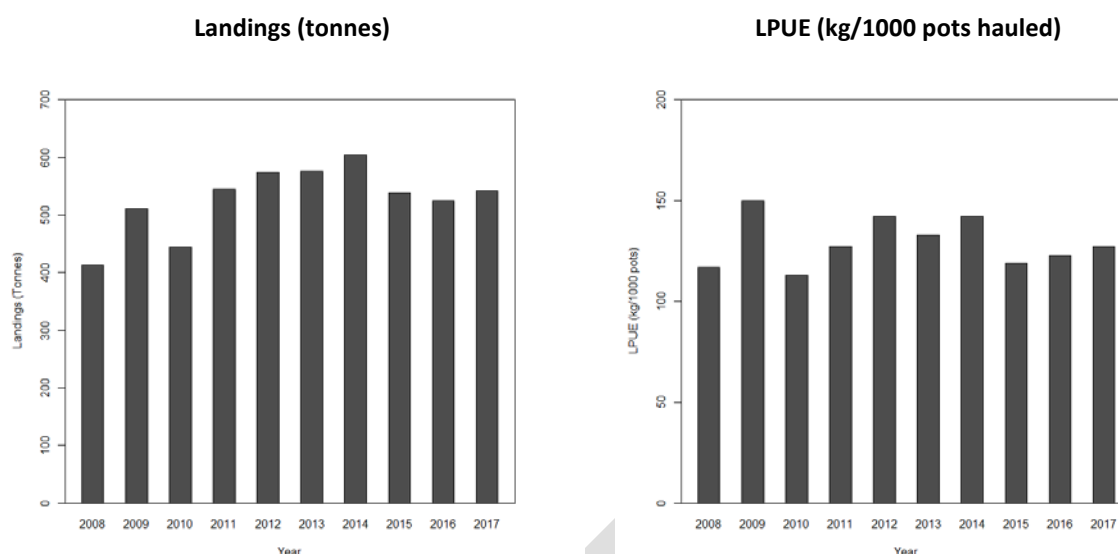


Figure 2.1 Reported lobster landings and calculated landings per unit effort (LPUE) for the NEIFCA district between 2008 and 2017.

2.2 Stock structure and population dynamics

Abundance

Recruit abundances varied throughout the year, July to September accounted for almost 40% of landings. Reduced landings were recorded between February and April (Figure 2.2), corresponding with low local sea temperatures and poor weather conditions. This broadly replicates previous years and continues the adherence to seasonal patterns.

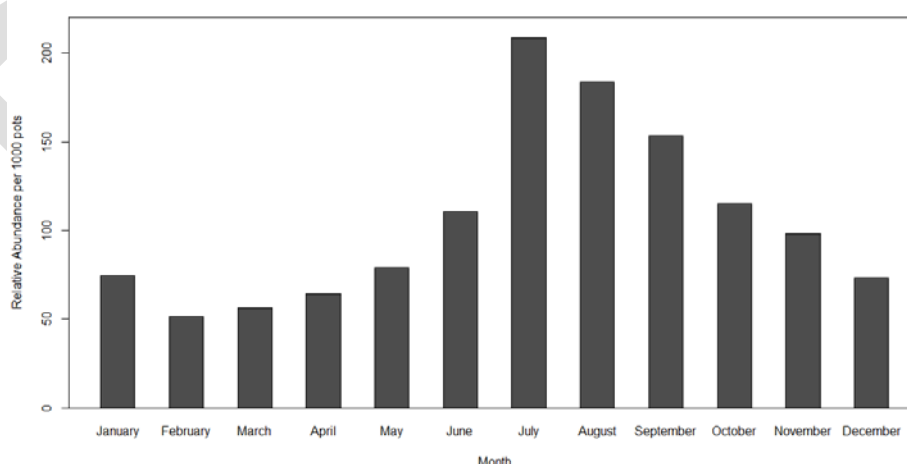


Figure 2.2 Relative monthly abundances (per 1000 pot hauls) for 2018.

Animal Size

The assessment of monthly size distributions for recruits determined that these did vary significantly in males (Kruskal Wallis $df = 11$, $\chi^2 = 148.77$, $p < 2.20 \times 10^{-16}$) and females (Kruskal Wallis $df = 11$, $\chi^2 = 56.297$, $p < 4.48 \times 10^{-08}$) (Figure 2.3). Post-hoc pairwise comparisons for males highlighted significant differences in September and December compared to most

other months, and between April and the first quarter months. Significant differences in female size distribution is also observed in April, while a restricted size range in August is likely linked to reproductive factors.

Annual size distributions for recruits determined that these did vary significantly in both males (Kruskal Wallis $df = 5$, $\chi^2 = 101.79$, $p < 2.20 \times 10^{-16}$) and females (Kruskal Wallis $df = 5$, $\chi^2 = 150.83$, $p < 2.20 \times 10^{-16}$) (Figure 2.4). In 2017, a small but significant increase in the median size of both males and females was observed, reversing the decreasing trend observed over previous years. Size distribution is highly constrained around the Minimum Landing Size (Figure 2.5) and there has been a decrease in larger animals in recent years (>100mm in females and >110mm in males).

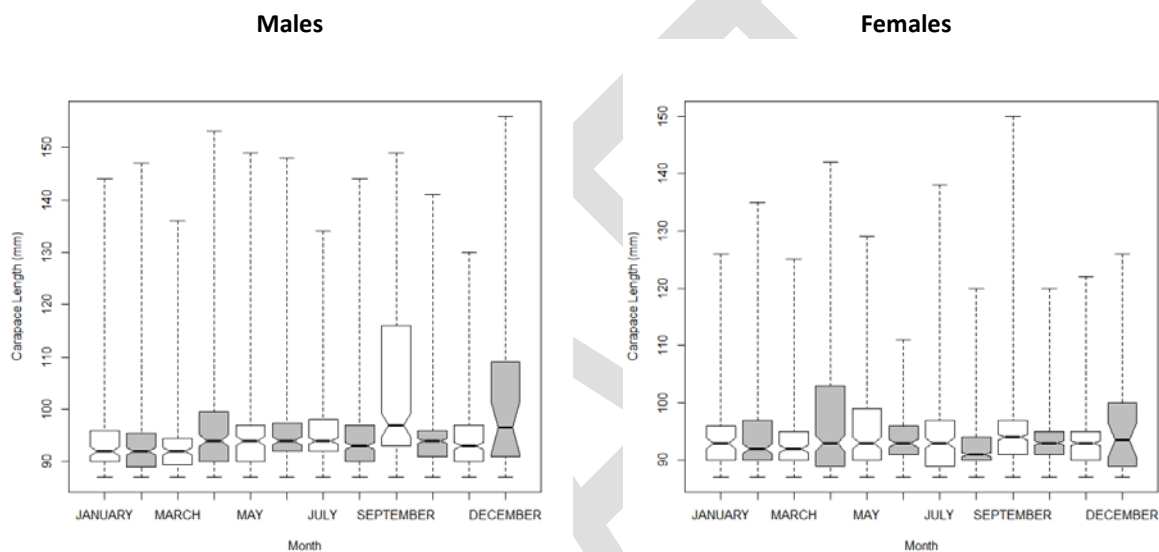


Figure 2.3 Notched box and whisker plots of monthly male and female recruit carapace lengths. Aggregated data for 2012-2017.

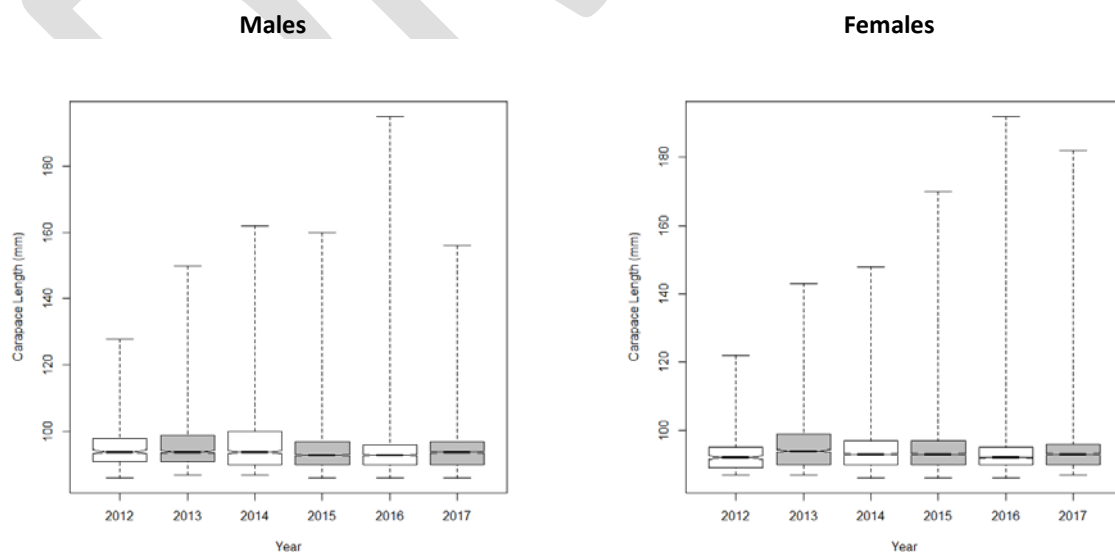


Figure 2.4 Notched box and whisker plots of annual male and female recruit carapace lengths for the period 201-2017.

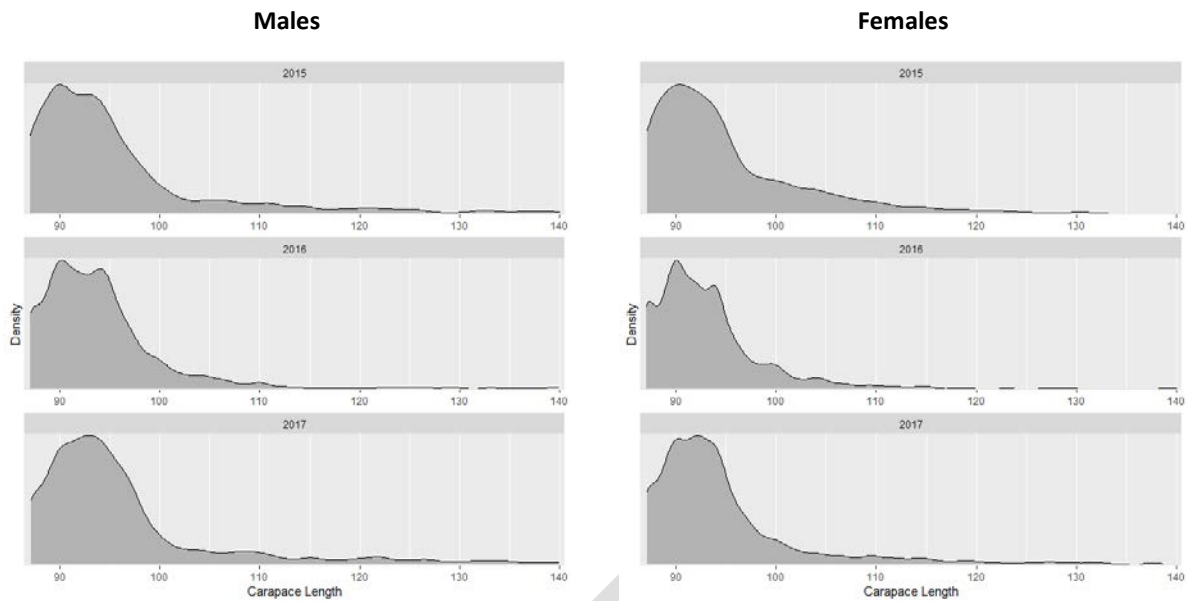


Figure 2.5 Density plots of male and female recruit carapace lengths for the period 2015-2017.

Sex Ratio

The proportion of female lobsters in catches increased to 60% during the early months of the year, before falling to 40% over June and July. There was then a marked increase in female catches in August followed by a decreasing trend for the remainder of the year (Figure 2.6). This broadly correlates with seasonal patterns of reproductive behaviour and ecdysis (shelling) observed in previous years.

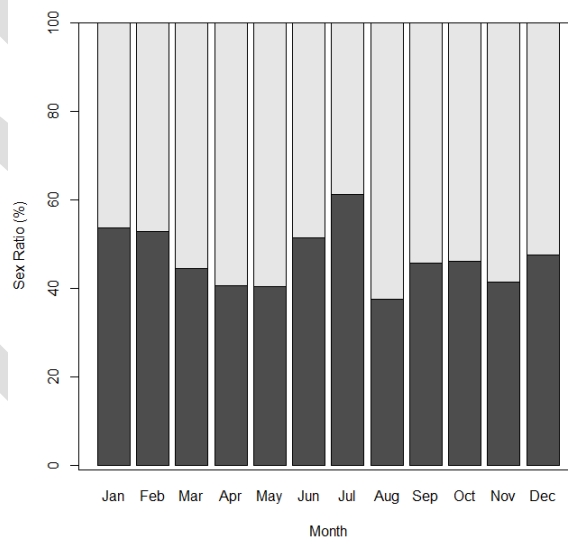


Figure 2.6 2017 monthly recruit sex ratios (%). Males in black and females in grey.

2.3 Mortality estimates

Since 2013 annual exploitation rates in the main have been steadily increasing, within a range of 40-55% and 45-60% for males and females respectively. Female mortality continues to show a greater degree of annual variability, which as previously noted appears attributed to the representation of older females in samples. However both male and female

exploitation rates are subject to a reduction of ~9%, between 2016 and 2017 (Figure 2.7). In part, this decrease can be attributed to the introduction of mandatory escape gaps in latter part of 2015 via NEIFCA bylaw XXVIII. Although shown, the 2012 annual harvest rate estimate is thought to be artificially inflated as the assessment was performed on a reduced data set from only one port.

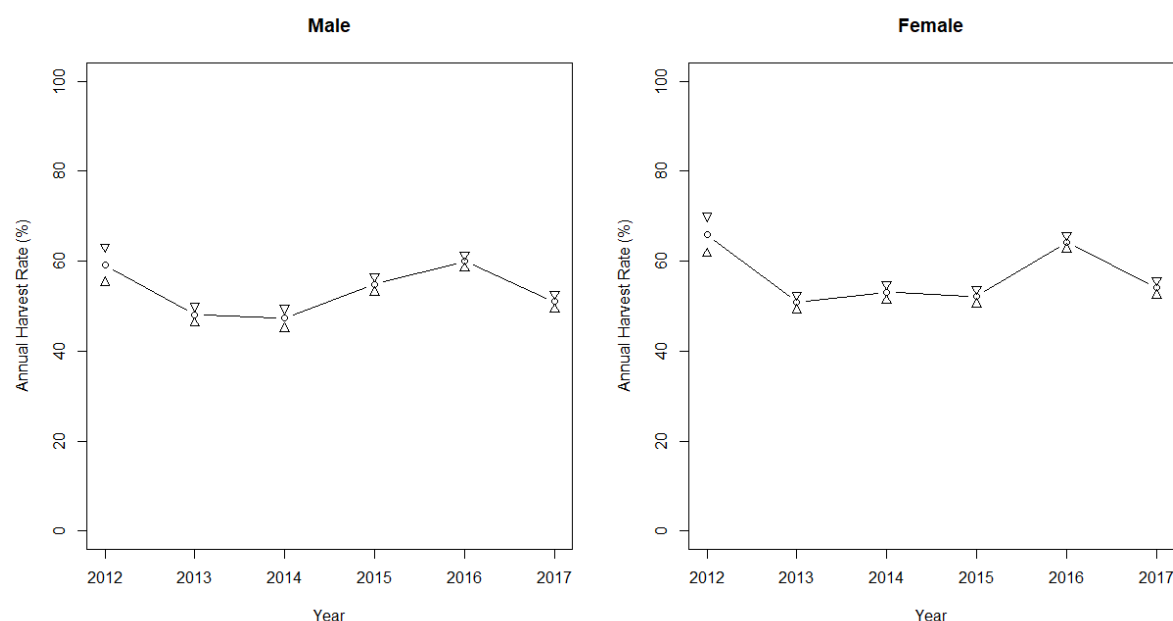


Figure 2.7 Chapman-Robson derived estimates of annual harvest rates for male and female lobsters for the period 2012-2017. Upper and lower (95%) confidence limits for each data point are included.

2.4 Stock Modelling

Models were developed in consideration of the Food and Agriculture Organisations (FAO's) recommended MSY target, which identifies that a stock subject to exploitation should retain a minimum of 35 % of the stock's unfished level of spawning stock biomass to remain sustainable (35 % Virgin SpR, Caddy & Mahon 1995¹). Adapted age-based Thompson – Bell (predictive) models were utilized to assess mortality and survivorship for a cohort through multiple years (FAO methodology, as detailed in Sparre & Venema 1998² and King 1995³).

Models were developed for both sexes as relative estimates, predicting the impact of mortality rates (F) ranging from 0 to 1.5 on the spawning stock biomass for a nominal

¹ Caddy JF and Mahon R (1995). Reference points for fisheries management. FAO Fisheries Technical Paper. 347 83pp, Rome, FAO ftp://ftp.fao.org

² Sparre UPE and Venema SC (1989) FAO methodology found in, Introduction to tropical fish stock assessment. Part 1 Manual FAO Fish. Tech. Pap. 306:337

³ King M (1995) FAO methodology found in, Fisheries Biology, assessment and management. Fishing News Books, Blackwell Science Ltd, Oxford UK.

population of 1,000 individuals. The input parameters included: natural mortality of 0.15, average animal weights identified through quayside sampling and female functional maturity proportions identified during the 2007-2010 offshore study. Males were assumed to be mature from 87 mm and females at 90mm carapace length, with male and female assessments using age ranges from 5-15 and 6-15 years respectively. A cut off at 15 years was used rather than an encompassing plus group, as reproductive capacity has been noted to be restricted by behavioural, biological and anthropogenic factors for larger individuals (Skog 2009)⁴. Chapman-Robson derived mortality estimates from 2015-17 are presented within the models for context in relation to MSY estimates (Figure 2.8).

The status of lobster stocks in the NEIFCA district is low, with both male and female fishing mortality rates above the maximum reference point of 15% Virgin SpR (Table 2.2). An increase of over 200% in SSB is needed for both male and females to attain MSY, equating to a 70-75% reduction in fishing mortality (Table 2.2).

Table 2.2 Thompson-Bell model outputs.

Model	Current % of virgin SSB retained	Additional SSB biomass to achieve 35 % (MSY)	MSY F value	Relative decrease in F to achieve MSY
Male	10%	236%	0.23	75%
Female	10%	202%	0.31	75%

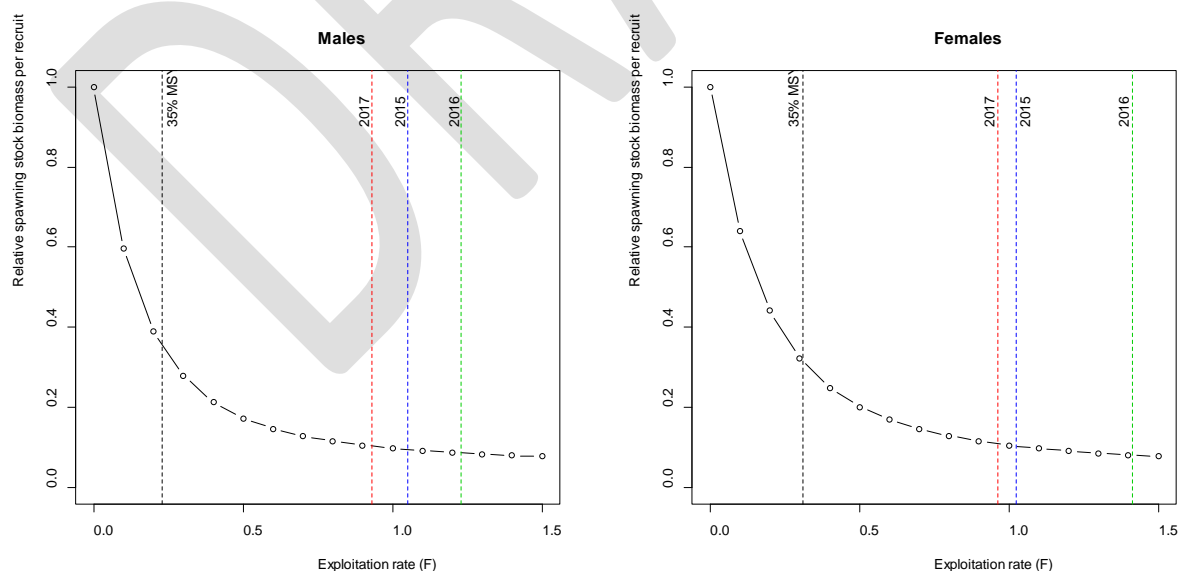


Figure 2.8 Plots of male and female lobster mortality estimates for 2015-2017 in relation to MSY target.

⁴ Skog M (2009) Male but not female olfaction is crucial for intermolt mating in European lobsters (*Homarus gammarus* L.). Chem. Senses 34:159-169

2.5 Comparison with Cefas Stock Assessment

The Centre for Environment, Fisheries and Aquaculture Science (CEFAS) undertake periodic assessment of lobster stocks, most recently in 2017⁵. Cefas assess stock status by defined Lobster Fishery Units (LFU) of which there are two which encompass the NEIFCA district; Yorkshire and Humber which covers from the south of the district to the River Tees, and Northumberland and Durham which covers the River Tees to the Scottish border. NEIFCA results were assessed in relation to the Yorkshire and Humber stock unit (Table 2.3), however Cefas results for both the Yorkshire and Humber and Northumberland and Durham LFU were similar.

Cefas describe the status of the stock as fairly low. Female biomass is below the minimum reference point limit however the male biomass is slightly above. The exploitation level is very high, above the maximum reference point limit but has decreased in recent years. The assessment also states that fishing pressure is particularly high around the Minimum Landing Size, in agreement with the current and previous NEIFCA assessments.

Table 2.3 Comparison of NEIFCA stock monitoring results and Cefas assessment of stock status in the Yorkshire and Humber Lobster Fishery Unit.

Parameter	NEIFCA result	CEFAS result	Comparison
Landings & effort	General increase, however decrease in last few years (2015-2017)	General increase (>2009). however decrease in last few years (2015-2016)	Similar
Size distribution	Highly constrained around MLS, decrease in larger animals in recent years (>100 F, >110M)	Highly constrained around MLS, decrease in larger animals in recent years	Similar
Fishing mortality estimates	2016: 0.6 males, 0.64 females 2017: 0.51 males, 0.54 females	2016: 0.55 males, 0.6 females	Similar

2.6 Conclusion

Both NEIFCA and Cefas assessments consider the status of the lobster stock to be low and not reaching targets for MSY. NEIFCA data for 2017 suggests that the introduction of mandatory escape gaps in all pots is having a positive impact, reversing the long term trend of increasing harvest rate and reducing mortality estimates towards sustainable levels.

During the latter part of 2017 a national Statutory Instrument and local byelaw were introduced banning the landing of egg bearing lobsters. This measure should increase productivity by allowing a greater proportion of female lobsters to release their eggs and

⁵ Cefas (2017) Lobster (*Homarus gammarus*) Stock Status Report 2017. Centre Environment, Fisheries and Aquaculture Science, Lowestoft. <https://www.gov.uk/government/publications/crab-and-lobster-stock-assessment-2017>

future stock assessments will investigate if any measurable impact on the metrics routinely used can be identified.

NEIFCA is progressing the introduction of an effort limitation system within the district which will place a cap on the number of pots that can be used and provide the management mechanism to reduce effort if deemed appropriate. Collaboration with regional and national fishery managers and scientific advisors should be further progressed in order to improve regulatory cohesion and reduce data uncertainties.

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Table 2.4 Lobster Multiple Indicator Framework

Multiple Indicator Framework												Value Ref	Data Source
Fishery Overview	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Total Landings (NEIFCA)	406	413	511	444	545	575	576	605	539	525	542	Tonnes	NEIFCA MSAR Collation
MMO Bridlington Landings	X	X	362	322	366	375	362	421	405	410	453	Tonnes	MMO Stats
Total Effort (Hauled)	3.5	3.5	3.4	3.9	4.2	4.0	4.3	4.2	4.5	4.3	4.2	Million	NEIFCA MSAR Collation
Total Effort (Pots Set)	102	91	109	113	117	109	114	105	92	90	83	Thousand	DEFRA
Q3 Catch Distribution	62	67	67	66	64	62	57	60	58	62	61	Q3 %	NEIFCA MSAR Collation (36F0)
Primary Reference Points	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Annual Mortality Rate - Males	55	58	57	x	x	54	43	42	50	55	46	%	CR - QS Sampling
Annual Mortality Rate - Females	67	71	66	x	x	61	46	48	47	59	50	%	CR - QS Sampling
LPUE 36 F0	140	180	270	210	180	200	240	120	200	212	195	KG/1000ph	NEIFCA MSAR Collation
LPUE 36 E9	170	130	180	130	150	140	170	130	180	202	202	KG/1000ph	NEIFCA MSAR Collation
LPUE 37 E9	110	110	140	100	120	120	110	150	105	115	136	KG/1000ph	NEIFCA MSAR Collation
LPUE 38 E8	70	80	110	60	70	80	50	140	60	69	67	KG/1000ph	NEIFCA MSAR Collation
LPUE 38 E9	90	60	60	50	100	110	100	160	70	85	80	KG/1000ph	NEIFCA MSAR Collation
Economic	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Average Annual Price	12.20	11.79	9.00	9.91	10.28	9.75	10.54	9.72	9.49	12.00	13.18	£	MMO GCV / Kg
Gross Catch Value	4.95	4.90	4.60	4.40	5.60	5.60	6.10	5.19	4.20	6.30	7.14	Million	MMO Annual Stats
No. Vessels	171	225	150	168	158	161	159	181	177	193	217	#	Effort Survey
No. Employment	376	406	407	391	389	424	406	376	376	432	471	#	Effort Survey
Biometric	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Average Carapace Length M (mm)	92	92	94	x	94	96	96	98	95	95	97	mm	QS Sampling
Average Carapace Length F (mm)	91	91	92	x	93	93	97	95	95	94	95	mm	QS Sampling
Max Carapace Length M (mm)	126	116	153	x	127	128	150	162	160	195	156	mm	QS Sampling
Max Carapace Length F (mm)	110	188	127	x	111	122	206	148	170	192	182	mm	QS Sampling
Sex Ratio (% Female)	x	x	x	x	44%	49%	58%	64%	54%	50%	56%	%	QS Sampling
Proportion Crippled (%)	x	x	x	x	2.2%	1%	5%	5%	7%	5%	5%	%	QS Sampling
Proportion Berried (F-FB %)	x	x	x	x	x	x	23%	17%	33%	30%	N/A	%	QS Sampling

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3. Edible Crab stock monitoring

Since 2007 the Edible crab (*C. pagurus*) fishery has been subject to targeted data capture to support periodic stock assessments and review of the harvest regime in relation to maximum sustainable yield (MSY) targets, in addition to annual review by the Authorities Science Advisory Group (SAG) to identify survey priorities (Table 3.1).

Table 3.1. Crab data requirements

Requirements	Source	Priority	Programme review
Mortality rates	Quayside and Offshore size compositions	High	Performed and updated annually
Stock structure	Quayside and Offshore size compositions	High	Performed and updated annually
NEIFCA management impact Effects	Targeted offshore surveys	High	Performed and updated annually
Effort intensity, distribution and landings	Vessel sightings and MSAR	High	Performed and updated annually*
Length ~ weight relationship	Targeted capture of individual weights for larger animals	Low	Performed ad-hoc as workload allows
Size at maturity	Lawler and Addison, 2006 (Smith, 2010 ⁶)	Low	Currently not performed
Stock boundaries	Cefas Stock Status report (Cefas, 2017 ⁷)	Low	Currently not performed

* Accuracy greatly increased by forthcoming vessel monitoring and catch return byelaws

3.1 Overview

Landings of crab originating from within the district are declared via Monthly Shellfish Activity Returns (MSAR) directly to NEIFCA as a permit condition. Annual landings followed an increasing trend between 2009 and 2013 when the fishery peaked. Since this time landings have declined to 1,394 tonnes in 2017, down 205 tonnes on the previous year (Figure 3.1). Despite relative stability in the number of pots set and hauled (Figure 3.2), Landings Per Unit Effort (LPUE, kg/1000 pots hauled) has mirrored the landings data closely with a declining trend since 2013 (Figure 3.1).

Over the same period landings into ports within the NEIFCA district, recorded by national reporting mechanisms, highlight an increasing trend from 2,393 tonnes in 2009 to 5,678 in

⁶ Smith (2010). Development of a multiple indicator framework macrocrustacean fishery assessment and management. Available at:

http://www.shellfish.org.uk/files/PDF/25439C3609%20Stage_1_Report_6_2010_Final.pdf

⁷ Cefas Stock Status report 2017. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/722904/Cefas_Crab_Stock_Assessment_2017.pdf

2017 (Figure 3.3). An assessment of the relative contribution of the inshore fishery however shows that the proportion of regional catches originating from within NEIFCA jurisdiction has declined from almost 50% in 2009 to only 25% in 2017 (Figure 3.4). This finding is in agreement with anecdotal reports of reduced crab catches within 6nm in recent years and fishers shifting effort further offshore, as well as an increase in the number of offshore vivier vessels. The value of crab landed into ports within the district follows the same trend as landed tonnage. The average annual price per kilo for crab increased steadily between 2009 (£1.01) and 2016 (£1.23). Despite the fall in landings in 2017, regional landings values increased to £8.63 million due to a sharp increase in the first sale value to £1.52/kg (Figure 3.5).

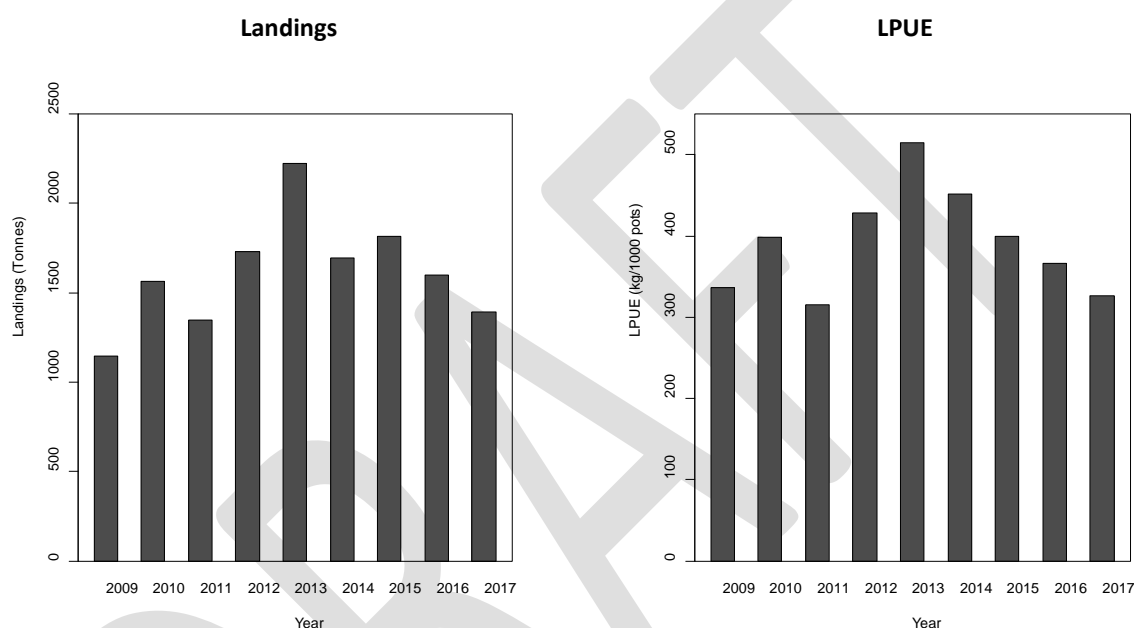


Figure 3.1 Annual landings (tonnes) originating from with the district and corresponding landings per unit effort (LPUE, kg/1000 pots hauled) for the period 2009-2017.

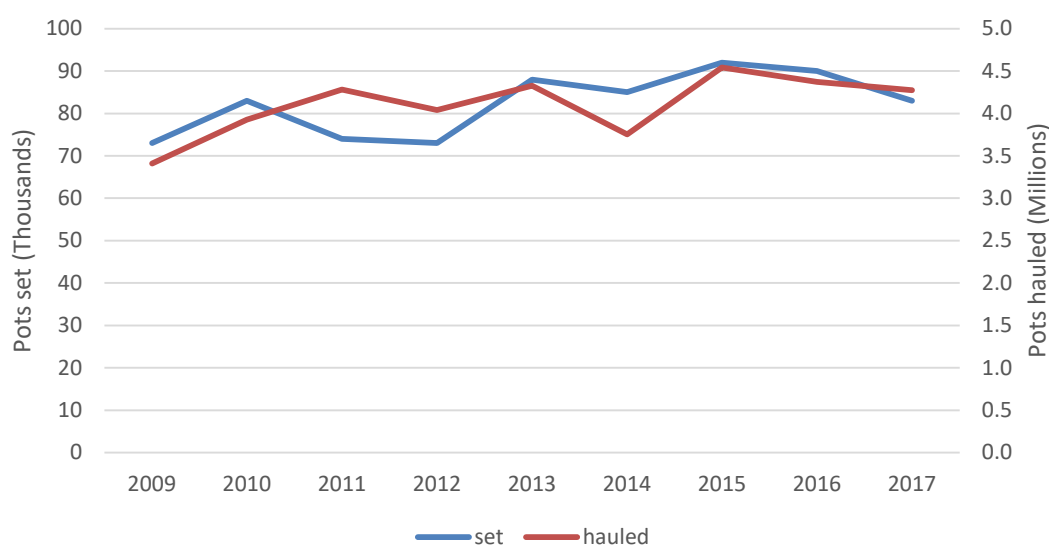


Figure 3.2 Annual number of pots set and hauled within the NEIFCA district for the period 2009-2017.

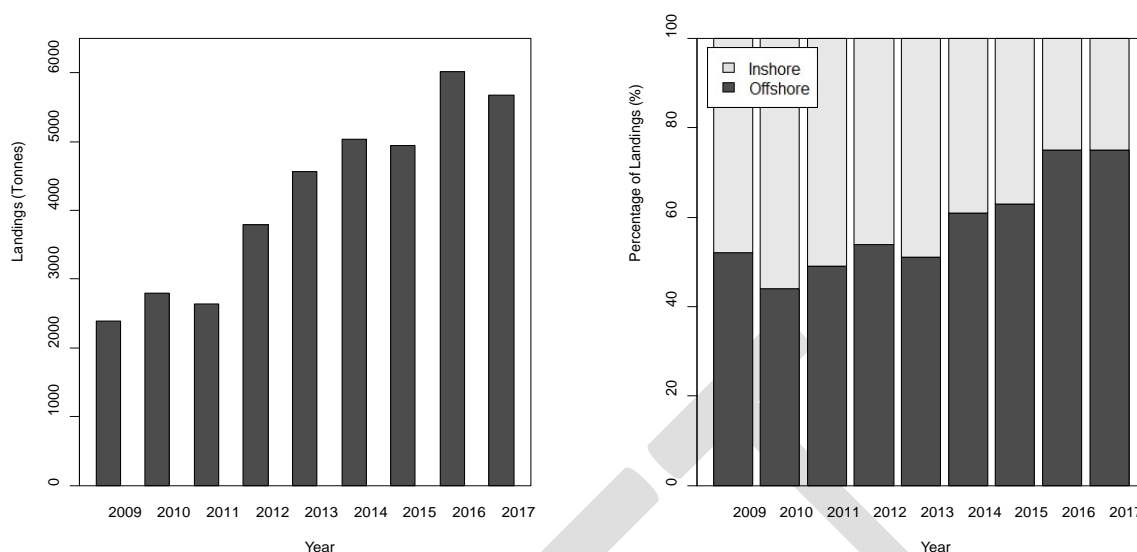


Figure 3.3 Annual landings (tonnes) made into ports within the NEIFCA District (Source: MMO).

Figure 3.4 Relative contribution (%) of landings captured within the district (inshore) and beyond 6nm (offshore).

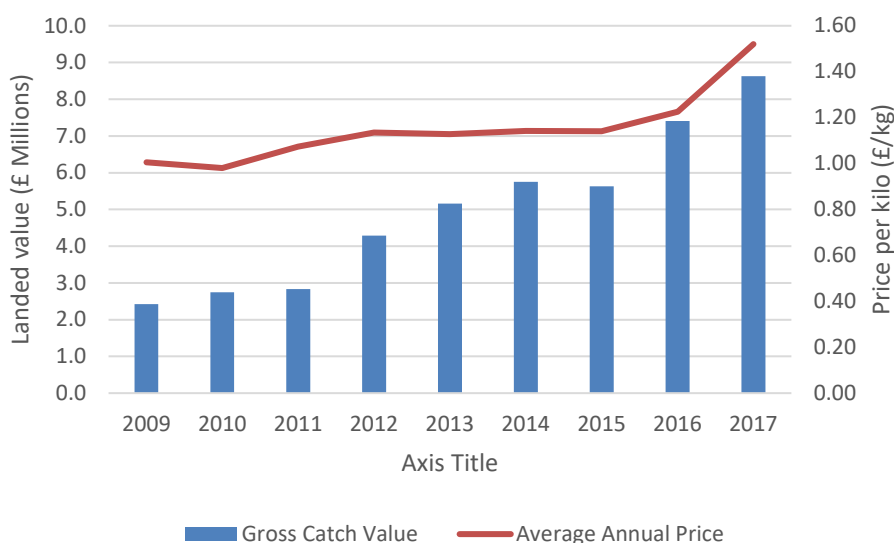


Figure 3.5 Annual gross catch value (£ millions) for landings into ports within the NEIFCA District and the national average price per kilogram (£/kg) for the period 2009-2017 (Source:MMO).

3.2 Stock structure and population dynamics

Abundance

Recruit abundances varied significantly throughout the year, with the period of September-December accounting for 43% of relative monthly abundances in 2017 (Figure 3.6). Large reductions in landings were observed during January and February, corresponding with a

decrease in local sea temperatures and adverse weather conditions. The seasonality of *C. pagurus* landings in 2017 largely conformed to previous trends in the data, although the relative monthly abundance of *C. pagurus* (kg/per 1000 pots hauled) in 2017 was an average of 19% lower than 2016 (80 kg/per 1000 pots hauled).

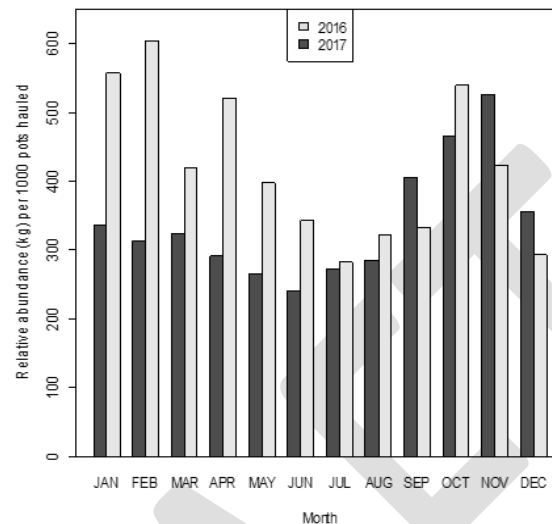


Figure 3.6 Relative monthly abundances (kg/1000 pots hauled) of crab for 2016 and 2017.

Animal Size

Given the lack of offshore data collected in 2017, the assessment of monthly size distributions was carried out using recruit data from quayside sampling. The assessment determined that these sizes varied significantly in both males (Kruskal-Wallis; $df = 11$, $\chi^2 = 179.21$, $p\text{-value} < 0.05$) and females (Kruskal-Wallis; $df = 11$, $\chi^2 = 350.5$, $p\text{-value} < 0.05$) (Figure 3.7). Post-hoc pairwise comparisons indicated that for male crab, September differed significantly to April and May, while for females, July differed significantly from April and May.

Inter-annual comparisons for males shows a stable median carapace width between 2012-2017 with no significant variation (Kruskal-Wallis; $df = 5$, $\chi^2 = 70.35$, $p\text{-value} > 0.05$). Female median carapace length however varied significantly (Kruskal-Wallis; $df = 5$, $\chi^2 = 435.98$, $p\text{-value} < 0.05$) with a decreasing trend between 2012 and 2015 but remaining stable in subsequent years (Figure 3.8). The size distribution covers a large range, with animals over 200mm not uncommon. There does tend to be a greater proportion of larger females compared to males however (Figure 3.9)

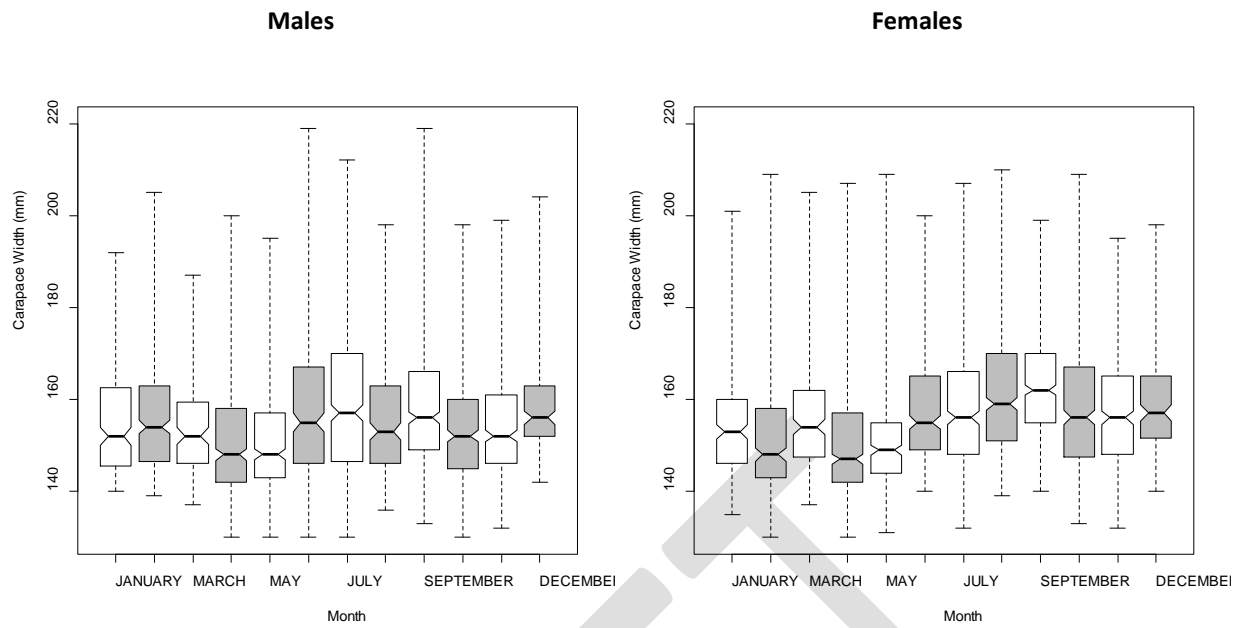


Figure 3.7 Notched box and whisker plots of monthly male and female recruit carapace width for 2017.

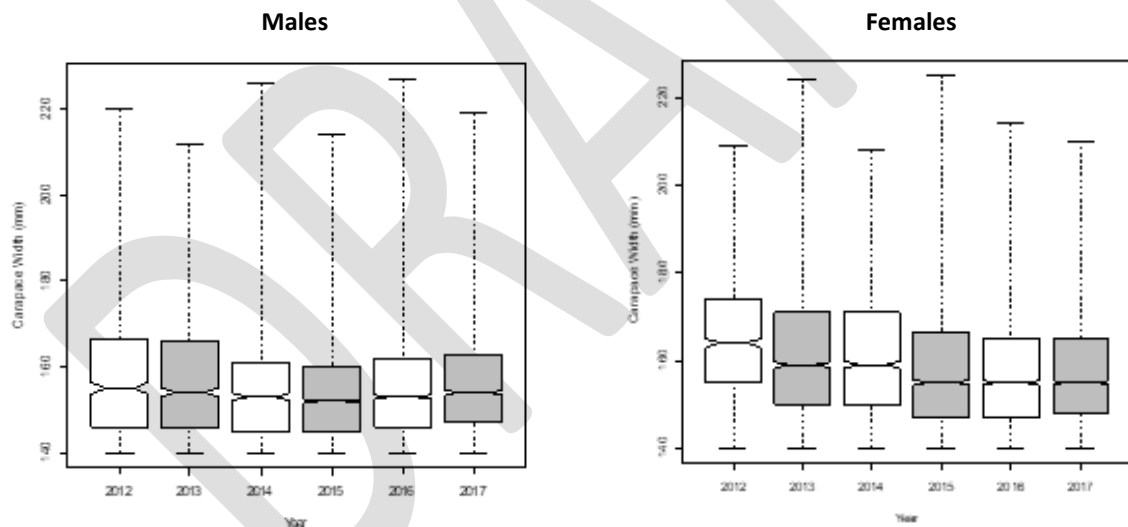


Figure 3.8 Notched box and whisker plots of monthly male and female recruit carapace width for 2017.

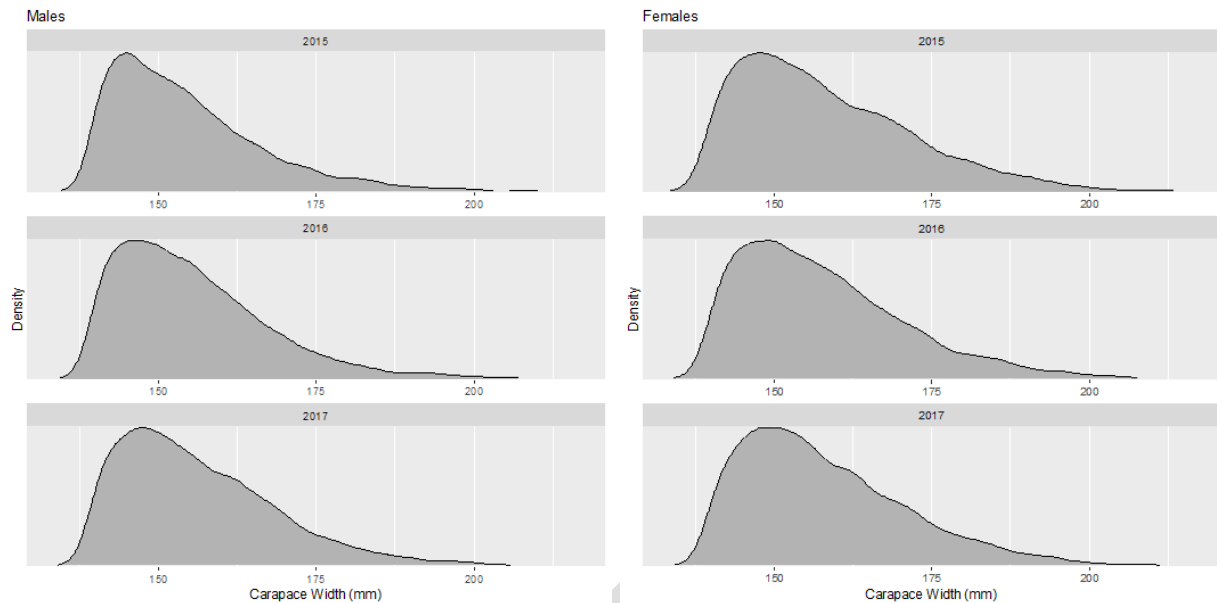


Figure 3.9 Density plots of male and female recruit carapace lengths for the period 2015-2017

Monthly sex ratio

Offshore survey crab data collected between 2014 and 2016 highlights a disparity between males and females amongst pre-recruits, with a much greater proportion of juvenile females being captured (Figure 3.10). Data for recruits is divided more evenly however, with males accounting for around 50% of crab captured. The proportion of males captured was highest in May (59%). It is unclear to what extent sex ratios differ over the winter months due to survey limitations.

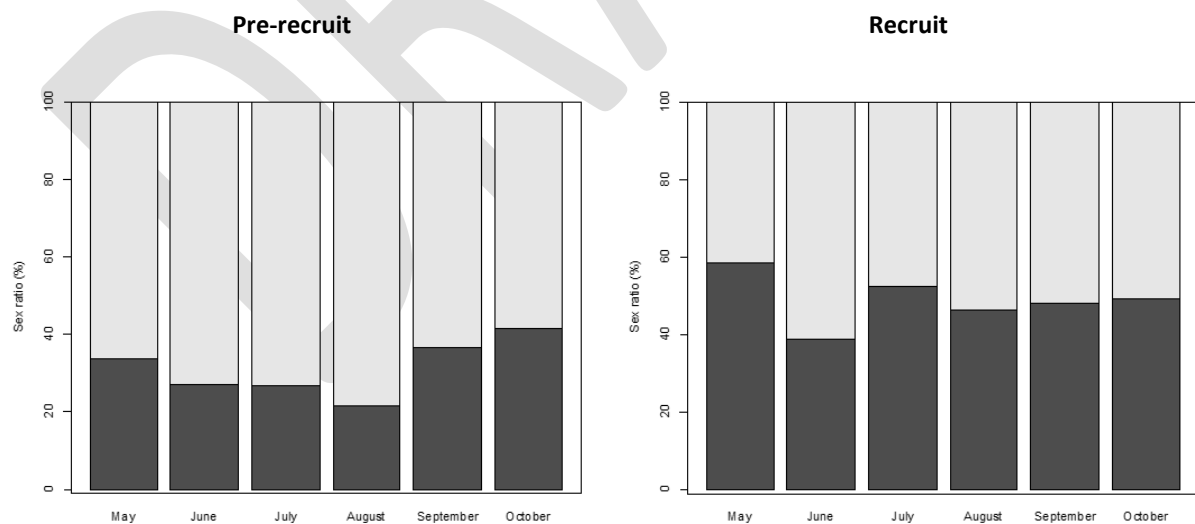


Figure 3.10 Monthly pre-recruit and recruit sex ratios (%) for the period 2014-2016. Females shown as light grey.

3.3 Mortality estimates

Exploitation rate for both sexes has followed an increasing trend since 2012 (Figure 3.11). This trend was slowed in 2017 for females which remained stable at 47%, and reversed in males with harvest rate falling from 52% to 49%. It is thought that the increase in the minimum crab size to 140mm, introduced in late 2015, is contributing to halting the long term increasing trend.

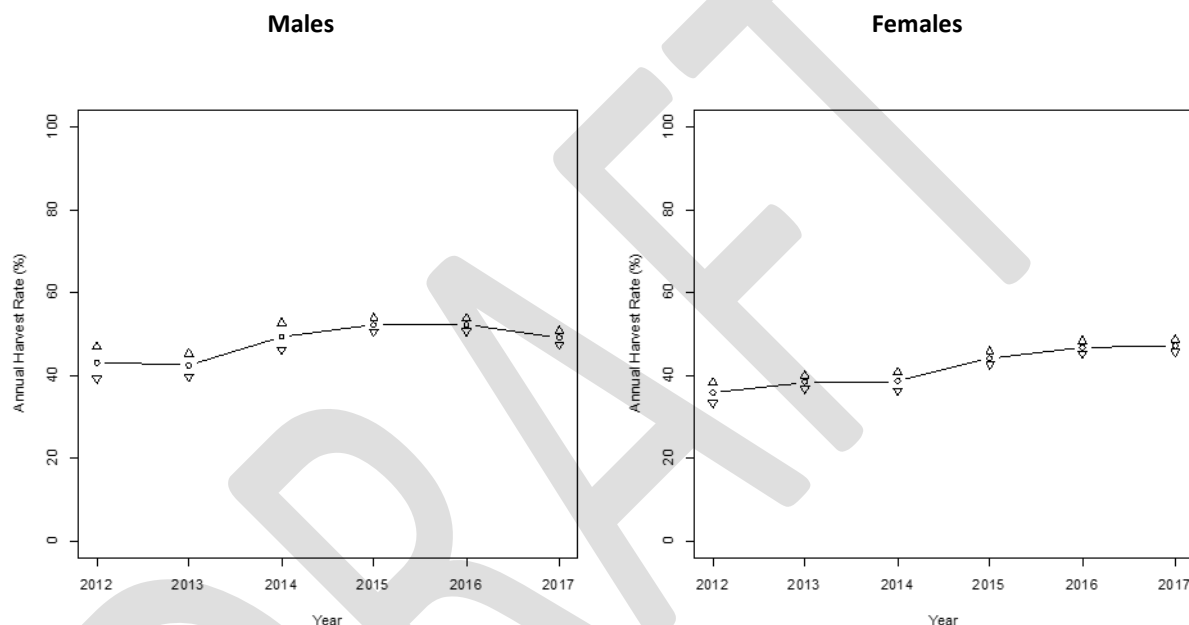


Figure 3.11 Chapman-Robson derived estimates of annual harvest rate for Edible crab for the period 2012-2017. Arrows indicate upper and lower 95% confidence intervals.

3.4 Stock modelling

Models were developed in consideration of the Food and Agriculture Organisations (FAO's) recommended MSY target, which identifies that a stock subject to exploitation should retain a minimum of 35 % of the stock's unfished level of spawning stock biomass to remain sustainable (35 % Virgin SpR, Caddy & Mahon 1995⁸). Adapted age-based Thompson – Bell (predictive) models were utilized to assess mortality and survivorship for a cohort through multiple years (FAO methodology, as detailed in Sparre & Venema 1998⁹ and King 1995¹⁰).

⁸ Caddy JF and Mahon R (1995). Reference points for fisheries management. FAO Fisheries Technical Paper. 347 83pp, Rome, FAO ftp://ftp.fao.org

⁹ Sparre UPE and Venema SC (1989) FAO methodology found in, Introduction to tropical fish stock assessment. Part 1 Manual FAO Fish. Tech. Pap. 306:337

¹⁰ King M (1995) FAO methodology found in, Fisheries Biology, assessment and management. Fishing News Books, Blackwell Science Ltd, Oxford UK.

Models were developed for both sexes as relative estimates, predicting the impact of fishing exploitation rates (F) ranging from 0 to 1.5 on the spawning stock biomass for a nominal population of 1,000 individuals. The input parameters included a natural mortality of 0.2 with average animal weights identified through quayside sampling. Both sexes are considered to be fully mature at a carapace width of 140mm, with male and female assessments using age ranges 5 to 8 and 5 to 9 respectively. Chapman-Robson derived mortality estimates for 2016 and 2017 are presented within the models context in relation to MSY estimates (Figure 3.12).

The status of the crab stock within the NEIFCA district is considered fairly low. Mortality rates are above the level needed to achieve MSY but are below the maximum reference point of 15% Virgin SpR (Table 3.2).

Table 3.2 Thompson-Bell model outputs.

Model	2017 F estimate	Current % of virgin SSB retained	Additional SSB biomass to achieve 35 % (MSY)	MSY F estimate	Relative decrease in F to achieve MSY
Male	0.98	21%	68%	0.37	63%
Female	0.91	21%	68%	0.38	59%

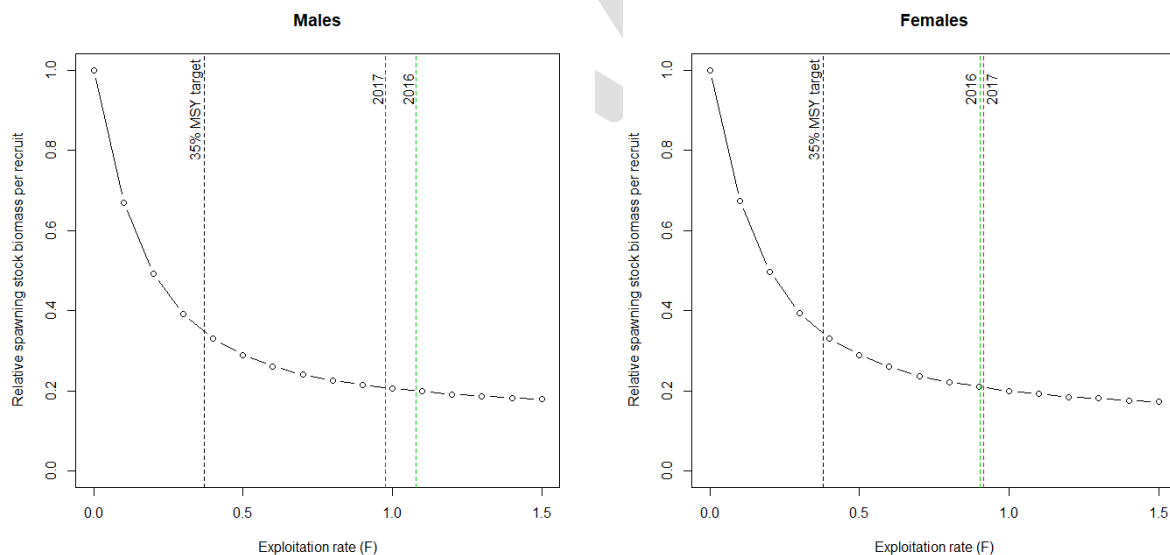


Figure 3.12 Plots of male and female Edible crab mortality estimates for 2016-2017 in relation to MSY target.

3.5 Comparison with Cefas stock assessment

The Centre for Environment, Fisheries and Aquaculture Science (CEFAS) undertake periodic assessment of edible crab stocks, most recently in 2017¹¹. Edible crab in the North Sea are assessed as two separate crab fishery units (CFU); the Central North Sea CFU which includes Northern England to Flamborough Head and offshore to grounds off the Danish coast, and the Southern North Sea CFU which includes the Holderness fishery and two further distinct fisheries in Norfolk.

The increasing trend in landings for both CFU is reflected by landings into ports in the NEIFCA district (Figure 3.3). A large increase in landings from vessels over 10m in length was highlighted by the assessment of the Central North Sea CFU. Size frequency observed in catches covers a large range with animals over 200mm carapace width not uncommon. A reduction in the exploitation rate on males over the past four years in the Central North Sea CFU is thought to be the result of an increase in the landings of larger male crab.

Table 3.3 Comparison of NEIFCA stock monitoring results and Cefas stock status assessment.

Parameter	NEIFCA result	CEFAS - Central North Sea	CEFAS - Southern North Sea
Landings	Increasing trend 2009-2013. Decreasing trend 2013-2017.	Increasing trend since 2013. Large increase in landings from >10m fleet in 2016	Increasing trend since 2009.
Size distribution	Large size distribution with animals over 200mm carapace width not uncommon.	Increase in landings of larger males observed.	Large size distribution with animals over 200mm carapace width not uncommon.
Fishing mortality estimates	2016: 1.08 males, 0.90 females 2017: 0.98 males, 0.91 females	2016: ~0.85 males, ~0.7 females	2016: ~1 males, ~0.85 females

3.6 Conclusion

Both NEIFCA and Cefas assessments consider the status of the Edible crab stock to be fairly low. Mortality rates are considered to be high, around the maximum reference point limit for both males and females. It is thought that the increase in the landings size to 140mm and the introduction of escape gaps has contributed to the stabilisation of harvest rates within the district and the impact of these measures will continue to be monitored.

¹¹ Cefas (2017) Edible crab (*Cancer pagurus*) stock status report 2017. Centre for Environment, Fisheries and Aquaculture Science, Lowestoft. <https://www.gov.uk/government/publications/crab-and-lobster-stock-assessment-2017>

Table 3.4 Edible crab Multiple Indicator Framework

Multiple Indicator Framework												Value Ref	Data Source
Fishery Overview	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Total Landings (NEIFCA)	1,175	791	1,144	1,563	1,350	1,730	2,226	1,695	1,818	1,599	1,394	Tonnes	NEIFCA DEFRA
MMO Bridlington Landings	1,679	1,260	1,423	1,755	1,576	2,284	1,849	2,134	2,053	2,485	2,045	Tonnes	MMO Stats
MMO Scarborough Landings	176	139	147	150	187	259	694	754	370	626	562	Tonnes	MMO Stats
MMO Whitby Landings	376	211	260	233	230	374	675	494	483	369	418	Tonnes	MMO Stats
MMO Hartlepool Landings	x	18	9	11	14	19	30	35	29	29	20	Tonnes	MMO Stats
MMO Grimsby Landings	x	484	460	555	483	610	1,087	1,453	1,803	2,329	2,517	Tonnes	MMO Stats
Total Effort (Hauled)	3.5	3.5	3.4	3.9	4.3	4.0	4.3	3.8	4.5	4.4	4.3	Million	NEIFCA DEFRA
Total Effort (Pots Set)	85	91	73	83	74	73	88	85	92	90	83	Thousand	Effort Survey
Q1 Catch Distribution (% of Annual Total)	16	18	16	15	17	22	8	12	13	15	14	Q1 %	NEIFCA DEFRA
Q2 Catch Distribution (% of Annual Total)	24	33	29	30	35	30	33	24	25	26	21	Q2 %	NEIFCA DEFRA
Q3 Catch Distribution (% of Annual Total)	29	31	27	32	27	24	41	39	37	40	39	Q3 %	NEIFCA DEFRA
Q4 Catch Distribution (% of Annual Total)	31	18	28	23	21	24	18	24	26	26	25	Q4 %	NEIFCA DEFRA
Primary Reference Points	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Annual Mortality Rate - Males	x	x	x	x	x	43	43	49	52	52	49	%	CR - QS sampling
Annual Mortality Rate - Females	x	x	x	x	x	35	38	39	44	47	47	%	CR - QS sampling
LPUE 36 F0	471	418	813	970	652	919	877	814	857	745	737	KG/1000ph	NEIFCA DEFRA
LPUE 36 E9	164	202	177	171	145	256	275	169	157	155	128	KG/1000ph	NEIFCA DEFRA
LPUE 37 E9	227	185	233	309	241	262	649	561	295	329	415	KG/1000ph	NEIFCA DEFRA
LPUE 38 E8	168	116	342	169	87	91	129	171	73	102	105	KG/1000ph	NEIFCA DEFRA
LPUE 38 E9	346	108	76	93	104	140	470	352	334	301	255	KG/1000ph	NEIFCA DEFRA
Economic	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Average Annual Price	1.00	0.88	1.01	0.98	1.07	1.13	1.13	1.14	1.14	1.23	1.52	£	MMO GCV / Kg
Gross Catch Value	1.18	2.23	2.42	2.75	2.83	4.29	5.16	5.75	5.63	7.41	8.63	£ Million	MMO Annual Stats
No. Vessels	197	193	205	196	191	194	204	181	177	194	213	#	Effort Survey
No. Employment	376	406	407	391	389	424	406	376	376	432	471	#	Effort Survey
Biometric	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Average Carapace Length M (mm)	x	x	x	x	151	156	153	151	149	154	155	mm	NEIFCA QS
Average Carapace Length F (mm)	x	x	x	x	159	165	160	158	154	156	157	mm	NEIFCA QS
Max Carapace Length M (mm)	x	x	x	x	215	220	240	226	214	227	219	mm	NEIFCA QS
Max Carapace Length F (mm)	x	x	x	x	208	209	224	266	225	214	240	mm	NEIFCA QS
Sex Ratio (% Female)	x	x	x	x	55	65	70	61	51	54	53	%	NEIFCA QS
Proportion Crippled (%)	x	x	x	x	2	1	4	4	9	8	7	%	NEIFCA QS
Proportion Nuns (%)	x	x	x	x	<1	<1	<1	<1	<1	<1	<1	%	NEIFCA QS

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4. Scallop dredge fishery

4.1 Introduction

King scallops (*Pecten maximus*) in UK waters are the focus of a highly valuable fishery, with landings in 2016 valued at £62.8m (MMO data). The fishery off the Yorkshire coast is the only significant fishery between Sussex, on the south east coast of England and the Aberdeenshire coast, in eastern Scotland (Figure 4.1). The regional fishery has received little research attention in the past and is poorly understood. The Centre for Environment, Fisheries and Aquaculture Science (Cefas) is currently undertaking the first stock assessment of the English North Sea fishery. This, combined with on-going research carried out by NEIFCA, will greatly improve knowledge of the state of the stocks.

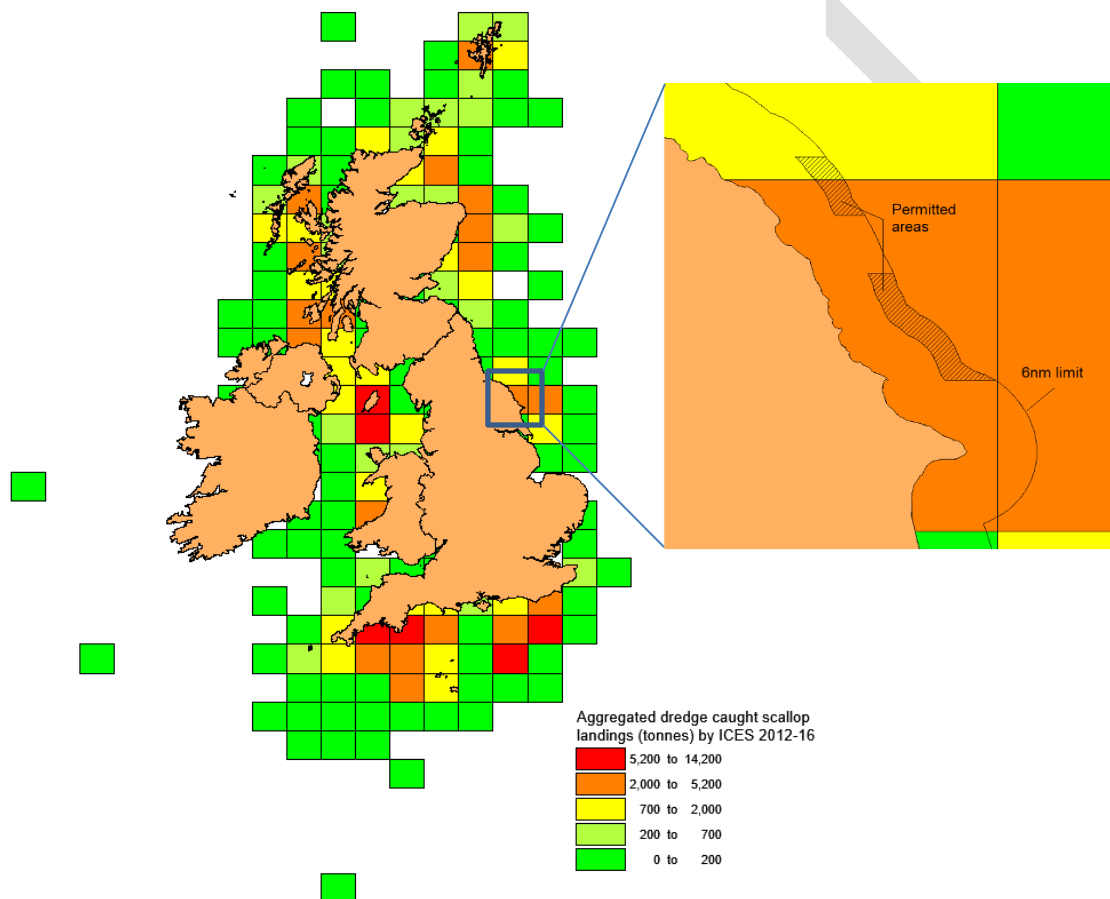


Figure 4.1. UK dredge caught scallop landings (tonnes) by ICES reporting rectangles. (Source: MMO). Detail highlights the current permitted dredge areas within 6nm off the Yorkshire Coast.

4.2 Evolution of management

Between 1999 and 2012 scallop dredging was managed through a byelaw which prohibited fishing with 3nm, placed a limit on the total number of dredges that may be used by a vessel (10), implemented a closed season (July to September) and stated additional technical regulations specifying Newhaven style dredges with minimum 100mm belly rings. A dredging specific permit scheme was not in place at this time and authority to fish within the NEIFCA (then North Eastern Sea Fisheries Committee) district was issued by way of a general trawling permit. Specified vessel length and power under this byelaw was 18.3m and 400kw.

In 2012, an increase in scallop dredging activity was observed in the south of the district in an area known as Silver Pit (ICES rectangle 36F0), a large channel feature running north east from the mouth of the Humber Estuary. It was thought that the increase was driven by closures in the Irish Sea and the identification of new beds in the Silver Pit and Inner Dowsing areas, resulting in intensive fishing effort and interest from much of the UK scallop fleet. There was an increase in trawl permit applications from vessels engaged in the emergent fishery to access and prospect grounds within the NEIFCA district and landings for 36F0 rose sharply to over 400t (Figure 4.2).

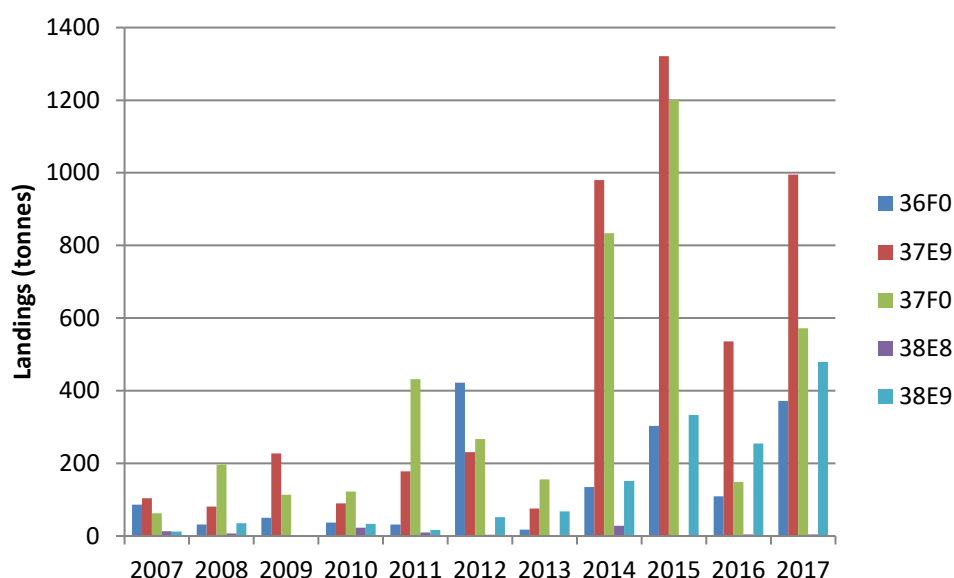


Figure 4.2. Scallop landings by ICES rectangles between 2007 and 2017. Source MMO.

In addition to increasing inshore scalloping effort there was also anecdotal reports of significant breaches of a long term voluntary agreement, established in 2006 between the local potting industry and the main scallop operators, which set aside exclusive potting and dredging zones between Flamborough Head and Spurn Point and out to 12nm. Concerns were also raised regarding potential impacts on sensitive habitats including biogenic *Sabellaria spinulosa* reefs.

In response to the emerging situation, and in consideration of the Flamborough Head SAC, the Authority invoked its new emergency byelaw making powers to establish a no dredge

zone between Filey Brigg and Spurn Point, extending to the 6nm limit but leaving the area of Silver Pit open to exploitation (Figure 4.3).

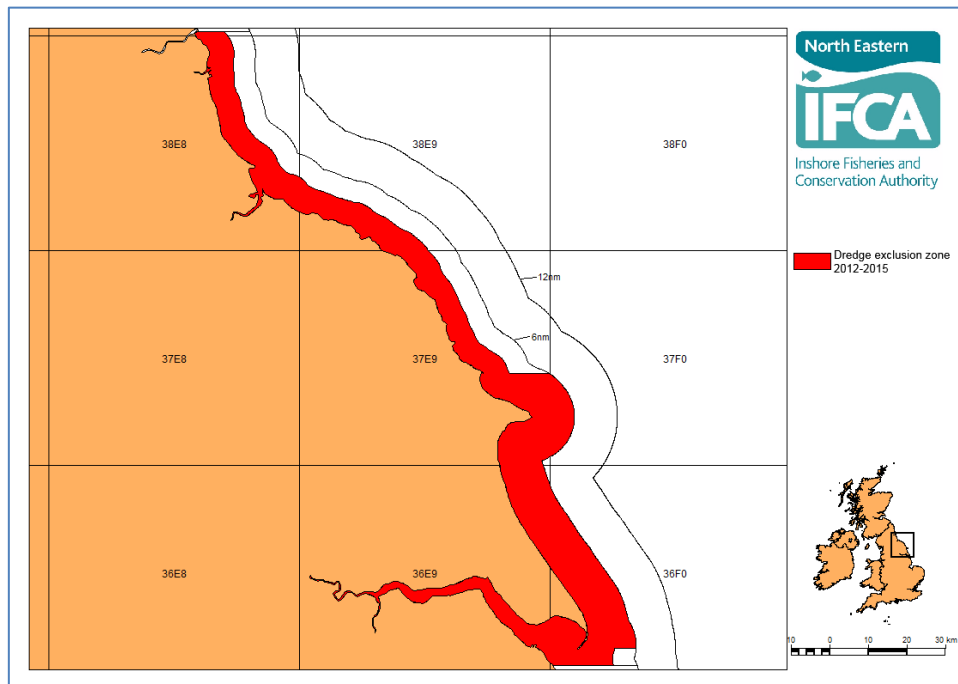


Figure 4.3. Dredge exclusion zone established utilising emergency byelaw making powers in 2012.

In late 2014 and early 2015 a similar situation emerged in North Yorkshire, however the increase in the level of inshore effort was unprecedented. Based on officer knowledge and information provided on trawl permit applications it is thought that the number of vessels targeting King scallops with dredges rose from around 22 to 46, with a steady stream of new permit applications being received. Previous landings for the area (attributed to ICES rectangle 37E9) tended to peak at around 200t. In 2014 and 2015 landings rose to 1000t and 1300t respectively (Figure 4.2). Recognising the limitations of the existing management regime and to address concerns regarding impacts on crab and lobster stocks, the Authority again introduced an emergency byelaw, this time prohibiting all dredging within the 6nm limit while a new management system could be developed.

The new management provisions introduced a restricted permit scheme, allowing the Authority to control the number of permits issued for the first time. Other management measures included:

- A reduction in the maximum vessel size (12m OAL) and engine power (221 kw)
- Extending the closed season (May to October inclusive)
- A daily closure period (7pm to 7am)
- Mandatory requirement for all vessels carrying dredges (IFCA permitted or otherwise) through the district to operate an Automatic Identification System (AIS)
- Mandatory submission of catch returns

- Maximum number of dredges was kept at 10, however a maximum limit of 5m was placed on the towing bar

A significant change in the way the byelaw was framed was the setting of a specified dredge area (Figure 4.4). This approach allows further refinement of management through the application of permit conditions, rather than the relatively costly and slow process of revising an existing byelaw. Previous regional management defined prohibited zones and this is still the normal approach in many scallop dredge fisheries around the UK and elsewhere globally.

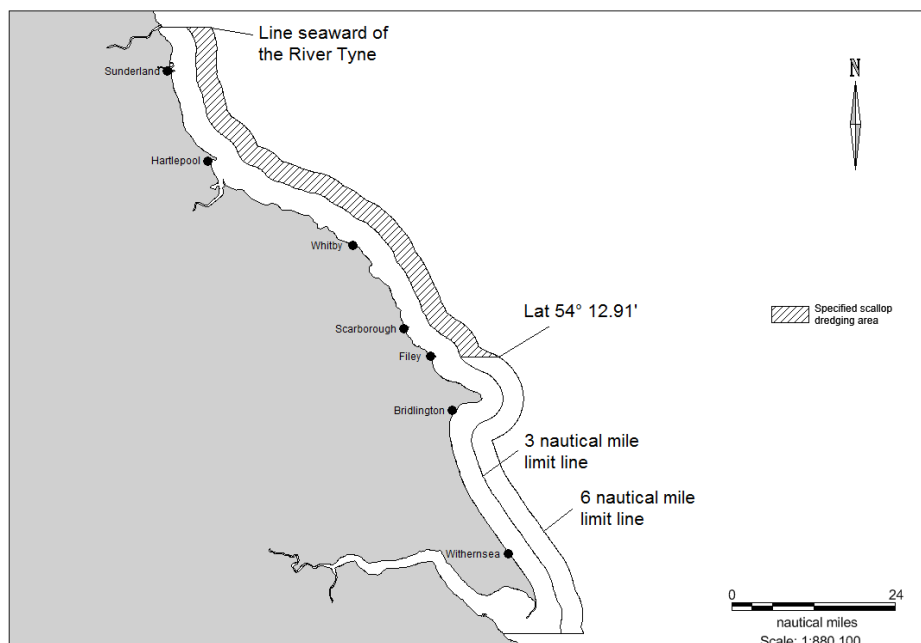


Figure 4.4. Specified scallop dredging area as defined in Byelaw XXIII Method and Area of Fishing (Scallop Dredges) 2015.

Throughout the byelaw consultation period significant representation was made to the Authority by static gear operators regarding concerns about potential impacts on local crab and lobster stocks, damage to gear and opinions regarding the number of permits to be issued. Through substantial consultation and negotiation with the potting fleet, the final permitted dredge areas were refined further from the specified dredge area stated in the byelaw. Two areas were permitted between 4nm and 6nm, avoiding key static gear areas inshore of 4nm and between the two areas where the ground has a greater amount of cobble and boulder (Figure 4.5).

Utilising further new powers granted under the Marine and Coastal Access Act, the byelaw also introduced a permit charge allowing a degree of cost recovery for management of the fishery. While the revenue generated from these permits in no way covers the complete cost of managing the fishery (including administration, enforcement and research), it is an important principle in the future funding of fisheries management and potential expansion of this approach to other regional fisheries is being investigated.

Three vessels currently hold permits to access the scallop fishery in the North Eastern IFCA district between November 1st and April 30th. A prime focus for the authority is the continued research and monitoring into the King scallop stock and impacts arising from the fishery.

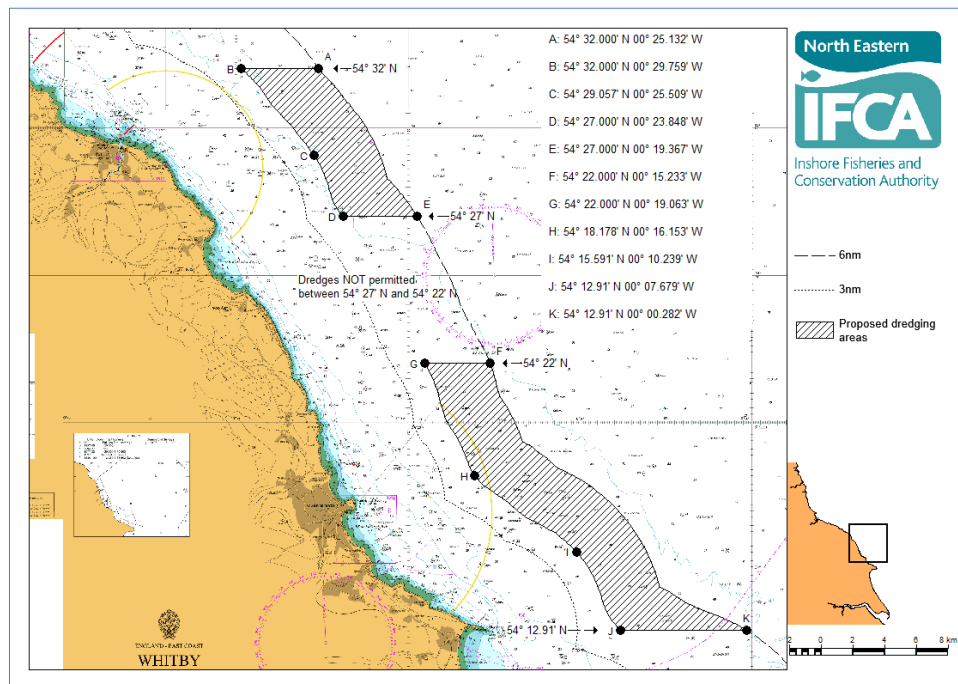


Figure 4.5. Permitted scallop dredge areas finalised through consultation with static gear operators.

4.3 Monitoring Methods

Mandatory monthly catch returns collect daily information on:

- Number of dredges used
- Number of tows
- Tow length (time and distance)
- Area fished
- Landings and bycatch information

Automatic identification System (AIS) data is collected via the MarineTraffic website. While there are limitations to this data it provides the best estimate of the relative intensity of effort within each permitted area. The method of data capture and parameters such as reporting frequency may change in the future given ongoing development of an inshore vessel monitoring system.

Stock monitoring efforts consist of dredge sampling from North Eastern Guardian III (NEG III) using two Newhaven dredges within each of the permitted areas and outside of the permitted areas for comparison. Officers also undertake a significant number of surveys aboard the permitted vessels to sample catches and to monitor bycatch. Since permitted vessel surveys began no targeted scallop quayside has been carried out due to resources.

4.4 Fishery overview

The primary reason for the variation observed between summary data for the two previous seasons was the addition of a third active vessel in 2017/18. There was an increase in the number of active days (up 77 days) and the number of tows (up 285) reported (Table 4.1). Landings rose by 134.9 tonnes in 2017/18 however additional data is required before trends in landings per unit effort can be reliably used as indicators of stock status (Table 4.2).

Table 4.1. Active days and number of tows for the 2016/17 and 2017/18 seasons reported on catch returns.

Season	Active days			Number of tows		
	Total	Northern	Southern	Total	Northern	Southern
2016/17	89	33	54	473	201	260
2017/18	166	81	84	758	415	337

Table 4.2. Reported landings from catch returns and landings per unit effort (LPUE) presented as tonnes per kilometres swept area and kilogram per kilowatt hour.

Season	Total reported landings (tonnes)	LPUE (tonnes/km ²)	LPUE (kg/kWh)
2016/17	63.9	2.8	0.9
2017/18	198.8	4.0	1.3

A review of MMO statistics by major port highlights the increase in landings into Scarborough in 2015, followed by a significant decrease in subsequent years (Figure 4.6). This reduction may be an indication of the level of landings originating from within the NEIFCA district in 2015 and the effect that the change in management regime has had on regional landings, however a definitive assessment of management impacts is not considered possible due to national reporting limitations. The data also highlights increased landings into Hartlepool in 2017. Anecdotal reports suggest this is in large part due to increased harbour dues in Scarborough resulting in some vessels choosing to operate and land into Hartlepool instead. All of the three permitted vessels currently operate from Scarborough.

Effort during the two completed seasons to date has been distributed relatively evenly between the two permitted areas (Table 4.1, Figure 4.7). Reports from the first half of the 2018/19 season suggest a shift to greater effort in the southern permitted area. Effort in the

far south of this area around Filey Brigg is considered low, partly due to the persistent presence of static gear during the dredging season.

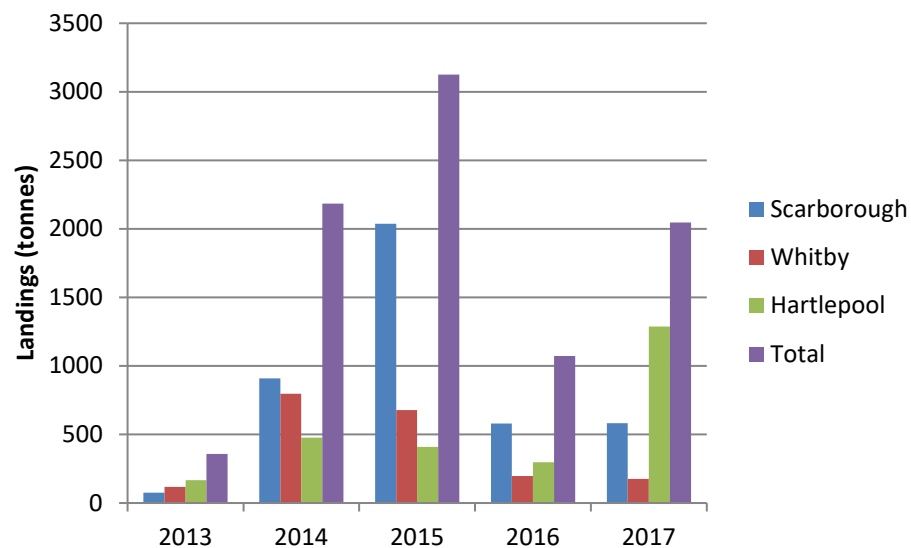


Figure 4.6. Scallop landings into NEIFCA ports for the period 2013-2017. Source: MMO statistics.

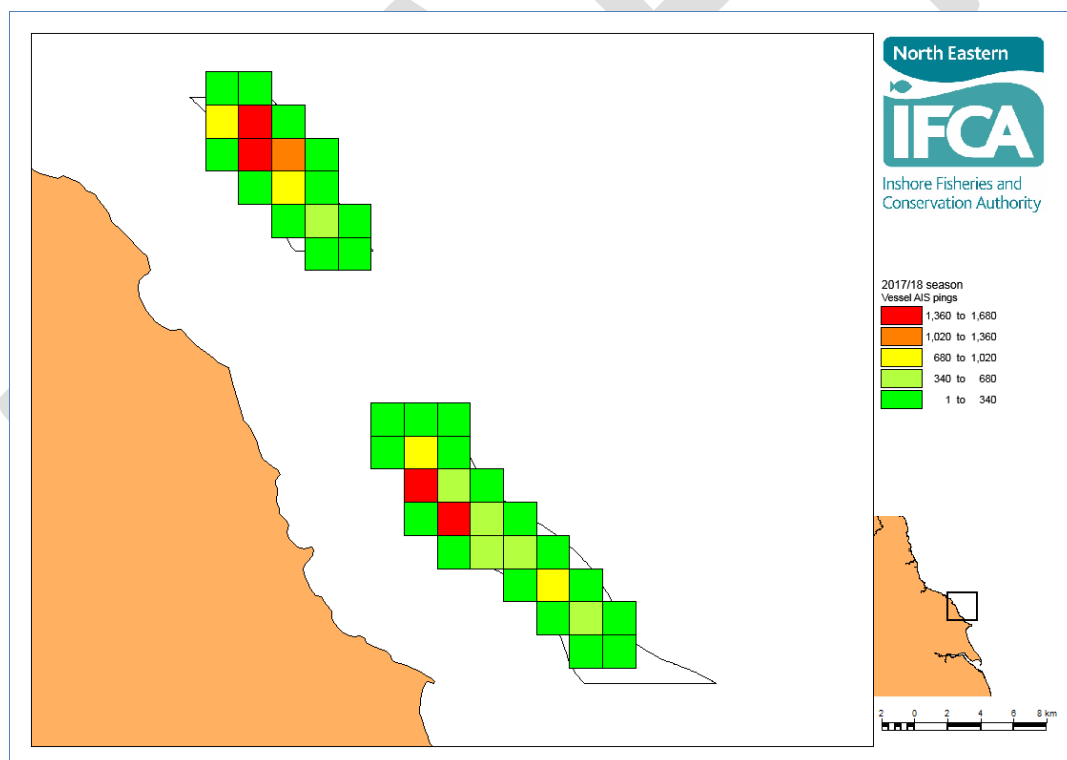


Figure 4.7. Relative fishing effort derived from Automatic Identification System (AIS) pings from permitted vessels during the 2017/18 season.

4.5 Population structure

Biometric data collected during research vessel surveys and observer trips aboard the permitted vessels in 2018 indicate a good population structure, with a wide range of recruit size scallops up to around 140mm shell width (Figure 4.8). Tows carried out from the research

vessel retained a greater proportion of pre-recruits. This could be due to industry experience in setting the gear to minimise pre-recruit bycatch or could be a product of sample size. For tows undertaken within the permitted areas in 2018 there was a greater proportion of pre-recruits in the northern area (23%) compared to the southern area (7%). The southern area contained a greater proportion of larger scallops, with size frequency increasing above 120mm shell width (Figure 4.9). Further data collection will allow for the analysis of inter-annual variation in population structure.

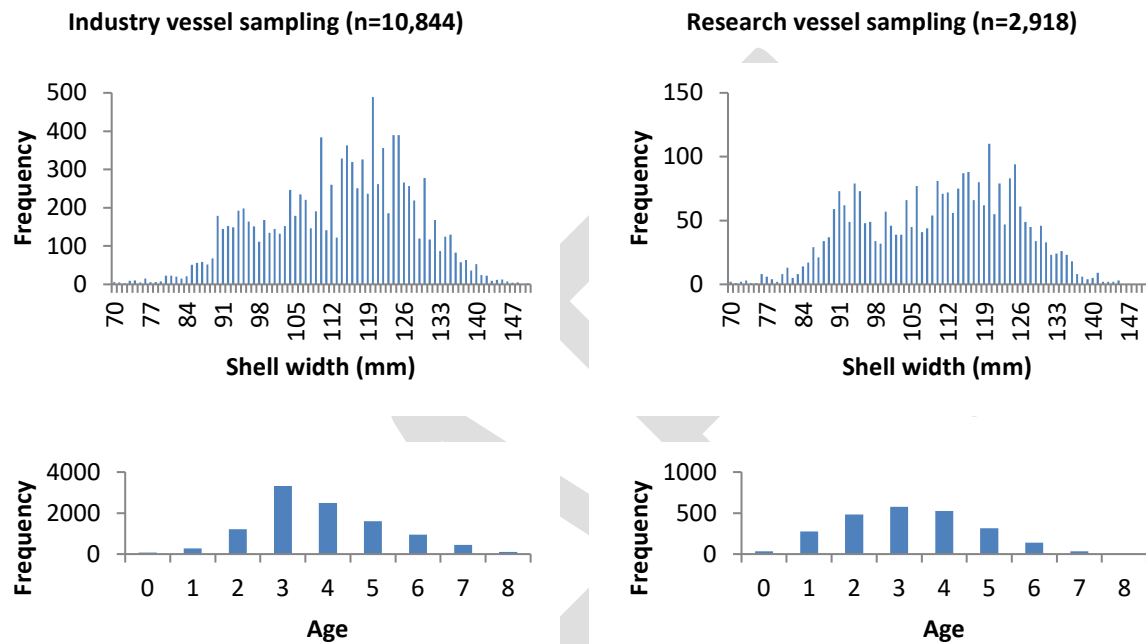


Figure 4.8. Scallop size and age frequency from industry (left) and research vessel (right) tows undertaken in 2017/18.

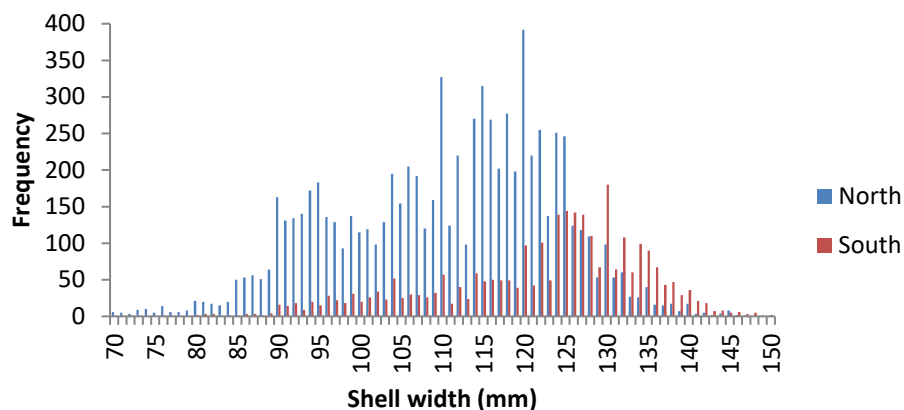


Figure 4.9. Scallop size frequency for tows undertaken within the permitted areas in 2017/18.

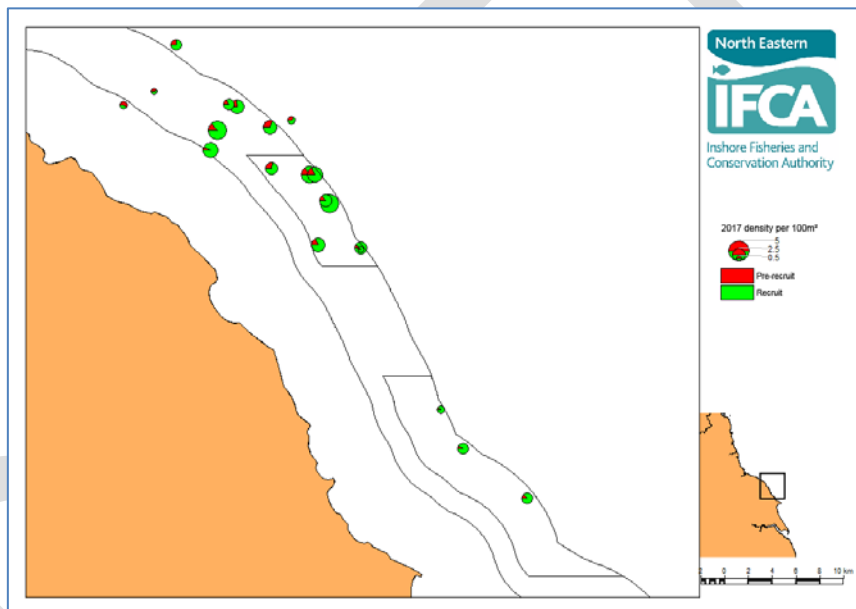
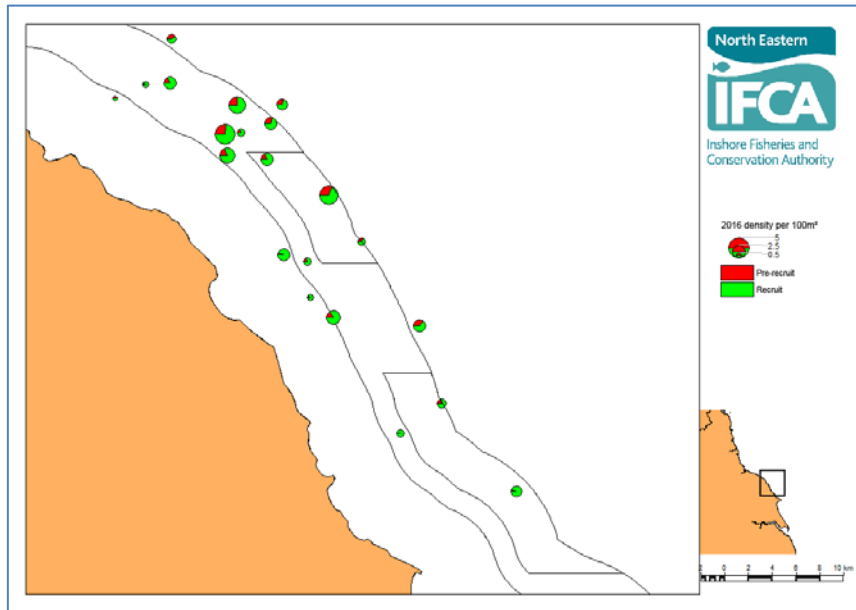
4.6 Stock density

Stock density maps are presented in Figure 4.10 and average density by sector is presented in Figure 4.11.

While data is limited, total scallop density for tows undertaken beyond the 6nm limit, where effort is still considered to be high, was in the range of 1.2-1.5 per hectare (/ha). Within the 3nm total density was also low and did not exceed 0.75/ha. Due to the restrictions placed on dredging within 3nm this is likely due to other factors. Dredging in the 3-4nm sector has been prohibited since the emergency byelaw in 2015 and is exhibiting some limited signs of recovery with an increasing trend in total scallop density from 1.3 to 2.4/ha.

Prior to the 2015 byelaw most of the effort within this region of the district was focussed in the 4-6nm sector and it is within this band where the two permitted areas are located. Outside of the permitted areas and despite a slight reduction in total density between 2016 and 2017 (2.8 to 2.2/ha respectively), density in 2018 increased to 6.3/ha. This trend occurred for both pre-recruit and recruit size scallops, however the significance of these results as an indication of recovery is unclear due to the inclusion of tows in between the permitted areas in 2018. Future sampling programmes should continue to undertake tows in this area.

Density within both of the permitted areas is exhibiting an increasing trend, although the increase was more pronounced in the northern area where it rose from 2.3/ha in 2016 to 4.2/ha in 2018. Pre-recruit density within the northern area decreased slightly in 2017 but increased to 1.4/ha in 2018 and continues to be higher when compared to the southern area. Similarly, recruit density for both permitted areas is showing an increasing trend but is higher in the northern area.



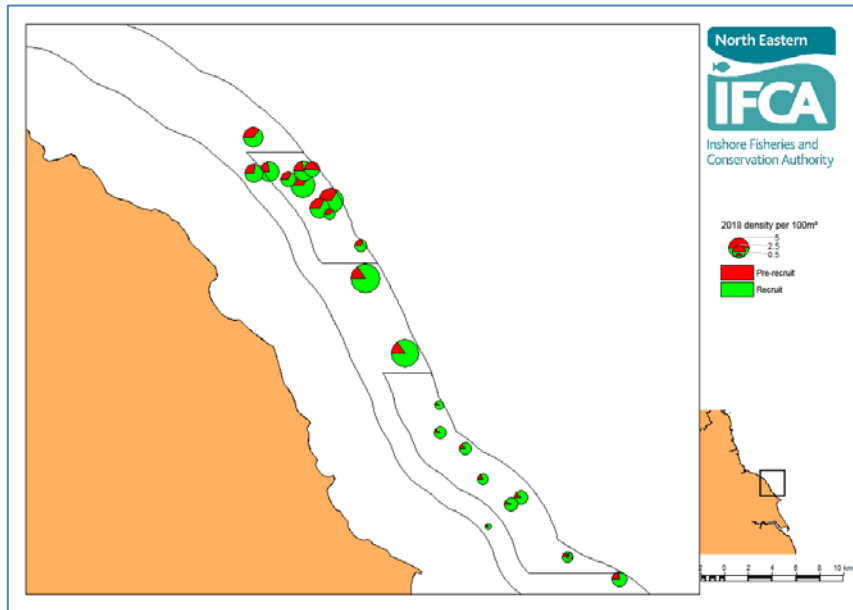


Figure 4.10. Scallop density per hectare (#/100m² swept area) from research vessel tows for the period 2016-2018.

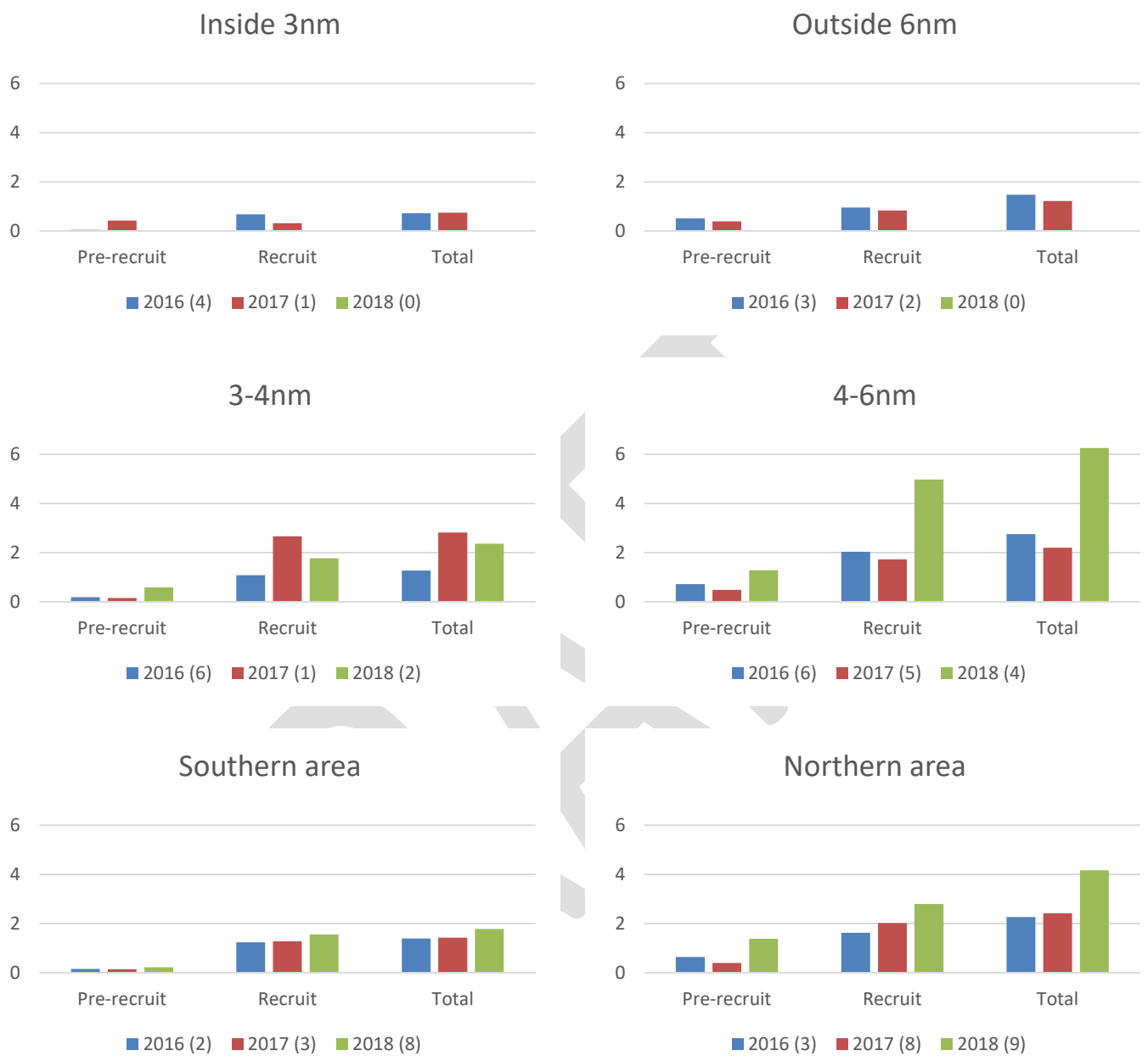


Figure 4.11. Average density of scallops per hectare (#/100m² swept area) by area or sector from research vessel tows for the period 2016-2018. Numbers in brackets show the number of tows in each sector.

4.7 Fishery impacts

Concern regarding impacts on vulnerable habitats and the commercially important crab and lobster stocks have driven much of the research effort to date. The location of the permitted areas was finalised following analysis of the spatial distribution of fishing effort, benthic habitat types and extensive consultation with the static gear fleet.

A number of underwater video surveys have been carried out since 2016, trialling a range of different techniques and further surveys are planned for early 2019. The southern permitted area is a mosaic of fine sand, mud and mixed sediments with a small amount of coarse sediment habitats. The northern permitted area is almost exclusively classified as coarse sediment (Figure 4.12). The permitted areas do not coincide with any Marine Protected Areas and are located in parts of the district that have been trawled and dredged historically and are still open to trawling. Introduction of the current dredging management regime has reduced the number of dredging vessels operating in the district by over 93% compared to 2015 levels. The permitted areas represent less than 20% of the dredge area contained within the byelaw and constitute less than 5% of the total area of the district

In order to monitor local catch rates of lobster and crab, fleets of survey pots were fished within and in the vicinity of the permitted dredge areas in 2018 in addition to the historic sampling stations further inshore (Figure 4.12). Initial CPUE data is presented in Table 4.3. This monitoring will provide a useful metric in order to assess potential impacts arising from the fishery and any changes in management.

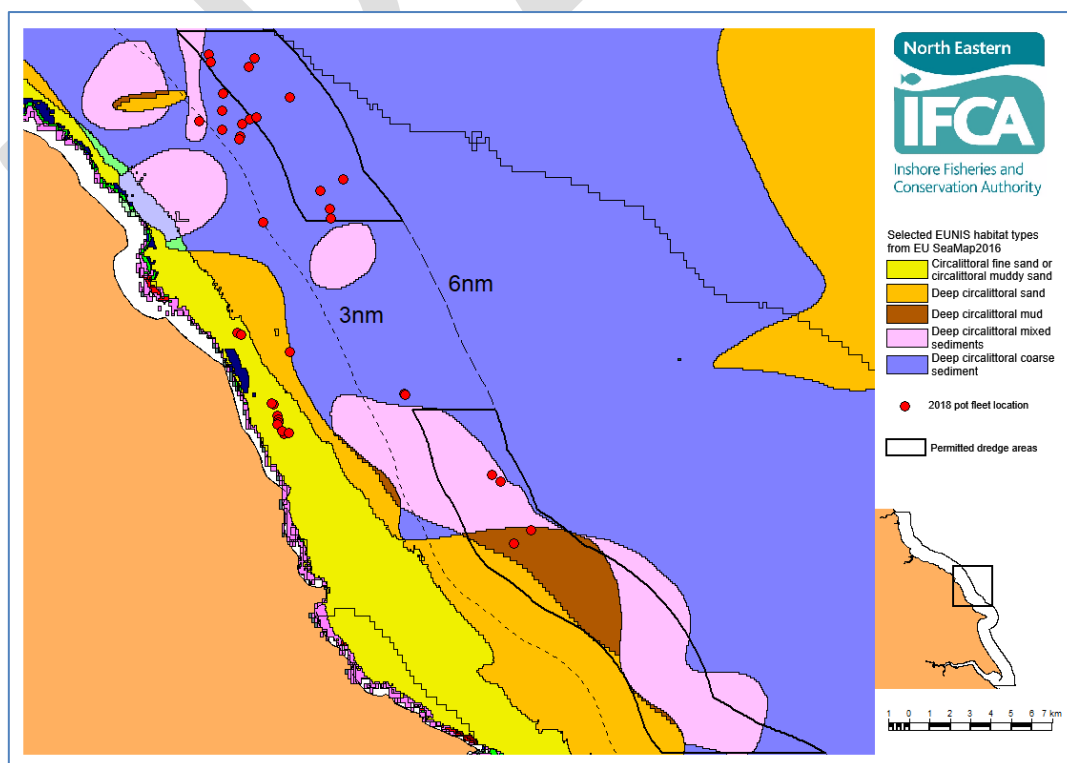


Figure 4.12. Location of potting fleets surveyed during 2018. Selected seabed habitat types from EU SeaMap2016 are highlighted.

Table 4.3. Lobster and crab catch per unit effort (CPUE) from survey pots in 2018.

Survey area	Pots hauled	Lobster CPUE	Crab CPUE
Northern dredge area	150	0.32	2.01
Southern dredge area	60	0.05	3.98
Total dredge areas	210	0.24	2.57
Control fleets 3-6nm	158	0.37	5.03
Historic sampling area 0-3nm	150	2.51	1.91

In addition to the potting surveys, monitoring surveys aboard the permitted dredging vessels have been carried out each season. These provide scallop biometric data and bycatch information from one dredge for each tow undertaken. Starfish (primarily *Asterias rubens* and *Crossaster papposus*) are the most abundant species observed, followed by sea urchins (*Echinus esculentus*) and edible crab. Lobsters are captured very rarely with only a single lobster observed in the sampled dredges over both seasons (Table 4.4).

Catch Per Unit Effort (CPUE) for edible crab was consistent over both seasons, equating to 0.17 crabs/dredge/km towed. During the 2017/18 season observer trips, Officers used a damage index to quantify the condition of crabs captured in the sampled dredges (Table 4.5). The majority of crab were classified as having either no observable damage (46.5%) or damage to the carapace (42.5%), with low observed frequency of the other damage categories. Monitoring surveys are being continued for the 2018/19 season.

As discussed, further monitoring including video, dredge and potting surveys undertaken from the patrol vessel as well as monitoring surveys aboard permitted vessels are ongoing. It is felt, however, that habitat and bycatch impacts are strongly mitigated against by the range of technical and management measures contained within the byelaw and applied as permit conditions. The NEIFCA fishery is one of the most highly regulated dredge fisheries in the UK. At a national level, dialogue between fishers, processors, fisheries managers and researchers are focussed on potential revision of dredging management. In a number of forums in 2018/19 the NEIFCA management model has been lauded as an example of best practice which could potentially be replicated in other fisheries.

Table 4.4 Total bycatch observed in dredges sampled on board permitted vessels for seasons 2016/2017 (n=16) and 2017/2018 (n=97)

Species	2016/17	2017/18
Starfish spp.	60	545
Common urchin	42	152
Edible crab	24	146
Dab		107
Plaice	1	54
Pogge	1	47
Whelk		23
Velvet crab		14
Dragonet		10
Hermit crab		10
Sea scorpion spp.		10
Whiting		8
Swimming crab spp.		6
Brill		5
Thornback ray		4
Cod		3
Flat fish spp.	5	3
Squat lobster		3
Ocean quahog	2	2
Gurnard		1
Lobster		1
Monkfish		1
Pouting		1
Spider crab		1
Lumpsucker	1	
TOTAL	136	1185

Table 4.5. Numerical damage index of edible crab bycatch observed in dredges sampled on board permitted scalloping vessels for the 2017/2018 season

	Damage index	No. of edible crab
1	No visible damage	66
2	1-2 legs missing	9
3	> 2 legs missing	1
4	1-2 claws missing	6
5	1-2 claws missing, at least 1 leg missing	2
6	Puncture to carapace	62

5. Cockles

5.1 Introduction and methodology

The common cockle (*Cerastoderma edule* L.) lives in semi-sheltered, intertidal or shallow subtidal marine systems and has a wide geographic presence in warm to temperate waters, with distribution highly influenced by variables such as water currents, salinity and sediment composition as well as resource availability, predation and human exploitation.

NEIFCA management of cockles is delivered through byelaw XXIV, which includes a permit and catch return system, a closed season between the 1st of May and the 31st of August, daily catch limits, technical gear restrictions and minimum landing size. Currently no cockle beds in the NEIFCA district are open for gathering.

Three areas of intertidal habitat in the NEIFCA district are routinely monitored to assess cockle stocks in the Tees and Humber Estuaries; Middleton Basin and Bran Sands in the Tees Estuary and the intertidal sands of Cleethorpes known as Wonderland. In addition to the standard annual reporting carried out to inform decisions on the number of permits (if any) to be issued, a review of previous years data was undertaken in 2018.

Monitoring Methods

Survey work was carried out during low water spring tides across the 3 survey sites; Bran Sands on the 29th of May, Middleton Basin on the 31st of May and Wonderland on the 1st of July 2018. Set sampling stations have been used in Bran Sands and Middleton Basin since 2014 and at Wonderland, Cleethorpes since 2015.

Samples were taken by digging sediment from a 0.1m² quadrat into a 2mm sieve and removing individual cockles. Samples were dug to a depth of 10cm or until the Redox Potential Discontinuity (RPD) layer was reached. All cockles collected were placed in re-sealable bags with waterproof labels and returned to the laboratory for enumeration and biometric analysis. Further analytical methodology and survey stations are detailed in the full report.

5.2 Wonderland, Cleethorpes

A total of 322 cockles were recorded from 18 stations during the 2018 surveys. The dominant year class was the 1+ age class (2016 spat cohort) which accounted for 78% of all recorded cockles (Figure 5.1). Total cockle density ranged from 10-780m⁻², while density for stations with size cockles (≥20mm) ranged from 10-110m⁻² (Figure 5.2).

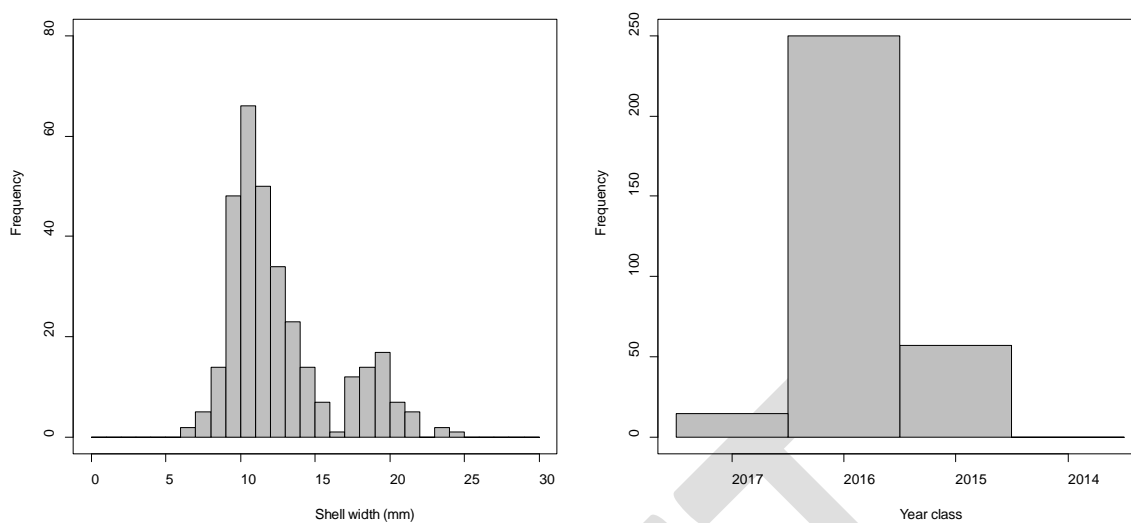


Figure 5.1. Shell width (left) and year class (right) frequency distribution from 2018 surveys at Wonderland, Cleethorpes.

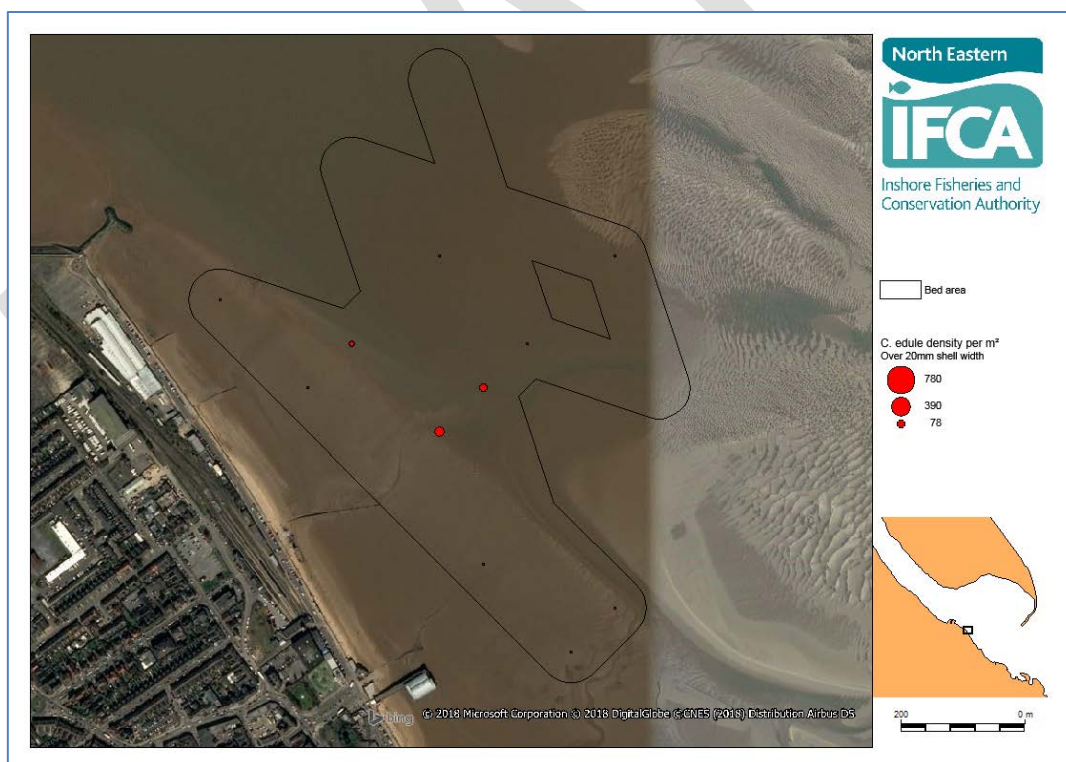


Figure 5.2 Density of cockles $\geq 20\text{mm}$ per m^2 . Note bed area derived from stations with cockles present including juveniles.

Since the establishment of the current sampling stations in 2015 the estimated bed area has remained consistent within the range of 0.33-0.39km². Average density of size cockles and subsequent derived metrics peaked in 2015 but have reduced year on year since then. At its peak, the potential fishery value was estimated at £50,013.

Shell width and year class frequency histograms show a clear year class progression between 2014 and 2015. Data from 2016 onwards highlights the lower abundances of cockles observed. Across all years, cockles rarely exceed 30mm shell width or the 2+ age class.

Table 5.1 Inter-annual cockle stock comparison from 2014 – 2018 at Wonderland, Cleethorpes

Year	Average density ≥20mm (m ⁻²)	Average shell width ≥20mm (mm)	Average weight ≥20mm (g)	Bed area (m ²)	Bed stock ≥20mm (tonnes)	Targetable stock (tonnes)	Potential fishery value (£)
2014	6.3	24.5	5.3	510,500	17.0	5.7	3,823
2015	188.1	21.8	3.6	332,400	222.9	74.3	50,013
2016	64.7	21.7	3.5	330,800	75.6	25.2	16,959
2017	21.4	23.4	4.6	389,800	38.4	12.8	8,607
2018	17.8	20.9	3.1	352,300	19.3	6.4	4,331

5.3 Bran Sands

Twenty-eight cockles were recorded in total during the 2018 survey period across 14 sample stations at this location. The dominant year class was the 0+ (2017) year class which accounted for 75% of all recorded cockles. Abundance was very low, with total density ranging from 10-40m⁻². Density for stations with size cockles ranged from 10-20m⁻².

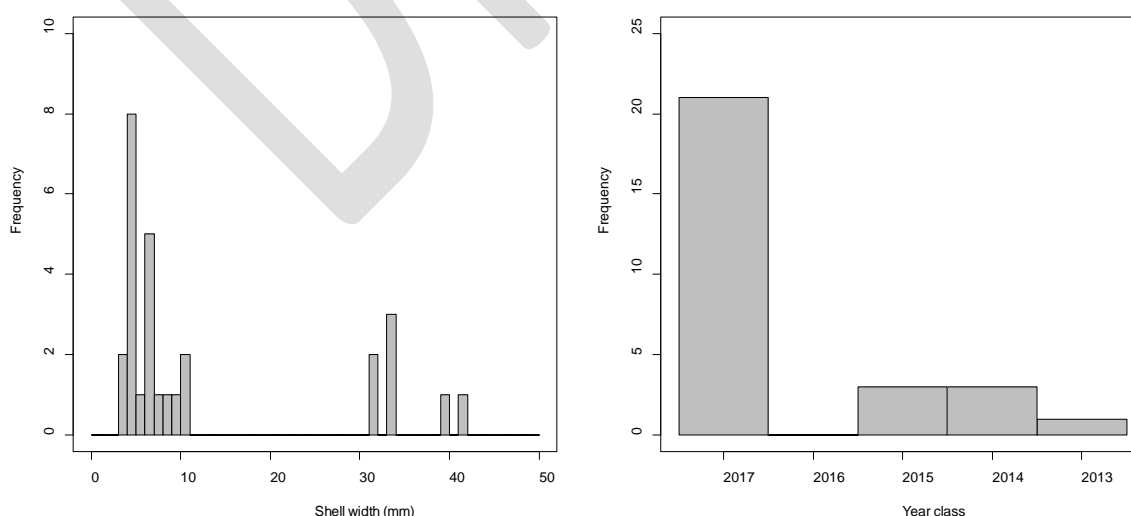


Figure 5.3. Shell width (left) and year class (right) frequency distribution from 2018 surveys at Bran Sands.



Figure 5.4. Density of cockles $\geq 20\text{mm}$ per m^2 . Note bed area derived from stations with cockles present including juveniles.

Between 2014 and 2016 bed area estimates ranged between 0.13km^2 and 0.16km^2 , however this value has reduced in subsequent years. The current estimate is the lowest since the establishment of the monitoring stations. The average density of size cockles has typically been low, with the range of $4.7\text{--}13.8\text{m}^{-2}$. Shell width frequency data highlighted a clear year class progression between 2015 and 2016. Data for other years merely emphasises the low abundances found.

Table 5.2 Inter-annual cockle stock comparison from 2013 – 2018 at Bran Sands.

Year	Average density $\geq 20\text{mm}$ (m^{-2})	Average shell width $\geq 20\text{mm}$ (mm)	Average weight $\geq 20\text{mm}$ (g)	Bed area (m^2)	Bed stock $\geq 20\text{mm}$ (tonnes)	Targetable stock (tonnes)	Potential fishery value (£)
2013	8.9	29.3	9.4	38,000	3.2	1.1	715
2014	8.3	34.7	15.5	130,100	16.8	5.6	3,768
2015	4.7	34.1	14.7	158,800	11.0	3.7	2,471
2016	13.8	24.3	5.2	159,600	11.5	3.8	2,590
2017	11.4	33.1	13.6	55,310	8.6	2.9	1,930
2018	5.0	35.4	16.5	38,000	4.5	1.5	1,006

5.4 Middleton Basin

A total of 26 cockles were recorded from 5 of the sample stations in 2018. The dominant year class was the 0+ age class (2017 spat cohort) which accounted for 71% of all recorded cockles (Figure 5.5). Abundance was low with density ranging from 10-190m⁻². Density for stations with size cockles ranged from 10-30m⁻². A bed area of 0.008km² was estimated using a 20m buffer around stations with cockles present (Figure 5.6).

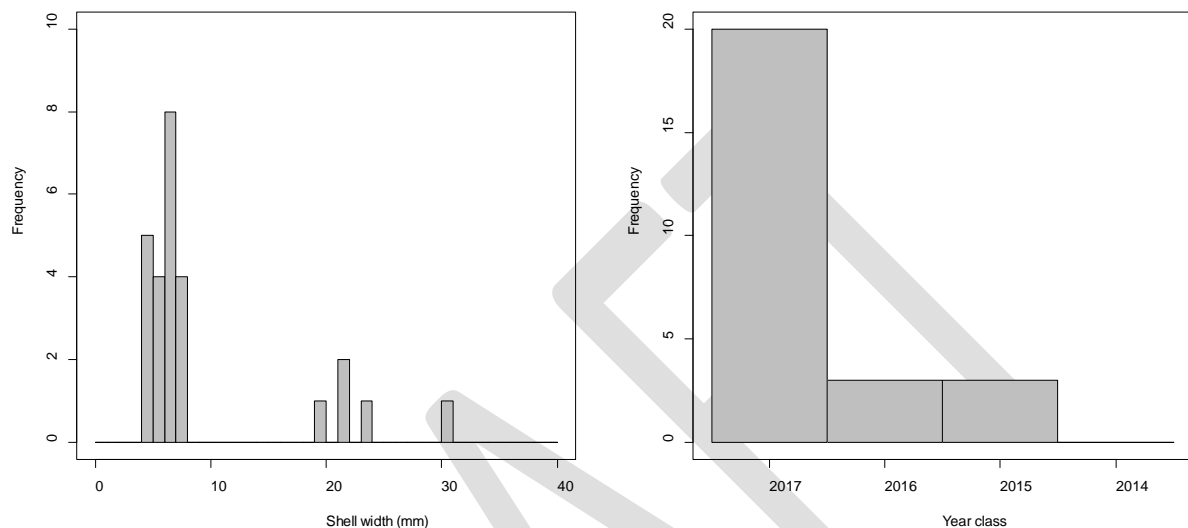


Figure 5.5 Shell width frequency distribution and frequency histogram of year classes at Middleton Basin

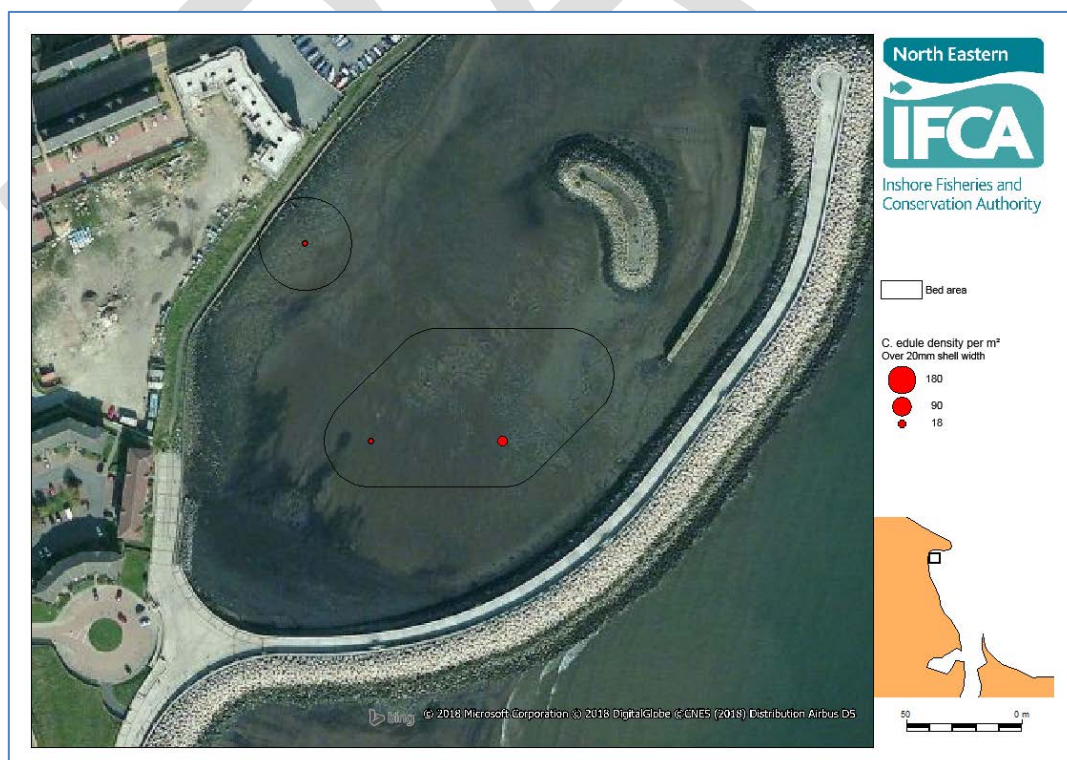


Figure 5.6 Density of cockles ≥20mm per m². Note bed area derived from stations with cockles present including juveniles.

Similar to the results for Bran Sands, bed area estimates for Middleton Basin were relatively stable between 2014 and 2016 within the range of 0.015km² and 0.02km². Estimates for 2017 and 2018 were lower with values of 0.006km² and 0.008km² respectively. The available bed area at Middleton Basin is restricted by the artificial structures which border the site and therefore, the bed area is unlikely to ever exceed the maximum estimates already stated. The density of size cockles peaked in 2016 at 63.3m⁻² while values for other years were in the range of 9-35m⁻² (Table 5.3). No meaningful trends could be established from the shell width frequency data due to the low abundances observed.

Table 5.3 Inter-annual cockle stock comparison from 2013 – 2018 at Middleton Basin.

Year	Average density ≥20mm (m ⁻²)	Average shell width ≥20mm (mm)	Average weight ≥20mm (g)	Bed area (m ²)	Bed stock ≥20mm (tonnes)	Targetable stock (tonnes)	Potential fishery value (£)
2013	11.0	32.7	13.1	20,000	2.9	1.0	646
2014	18.8	30.9	11.2	19,740	4.1	1.4	926
2015	35.3	27.4	7.7	20,160	5.5	1.8	1,234
2016	63.3	24.4	5.3	15,540	5.2	1.7	1,173
2017	9.0	26.4	6.9	5,627	0.3	0.1	78
2018	10.0	23.8	4.9	7,943	0.4	0.1	87

5.5 Discussion

Tees Estuary sites

Historically a small cockle fishery had been targeted at several sites throughout the Tees Estuary, however not to the scale of the previous commercial fishery at Horseshoe Point in the Humber Estuary. Concerns were raised regarding organised groups coming to the Tees from other parts of the country to target cockles resulting in the revision of NEIFCA Byelaw XXIV (Cockle Management Byelaw) in 2012. Although a previous restricted permit scheme had been implemented prior to this, the revised byelaw was implemented to ensure the recovery of the depleted stocks as well as wider environmental protection and conservation.

The constrained nature of the beds surveyed in the Tees limits the size of any potential fishery. Furthermore, a full Habitats Regulations Assessment would need to be carried out to ensure that any plans to open the beds would not adversely affect the site integrity of the Teesmouth and Cleveland Coast Special Protection Area.

Humber Estuary

Before the transition to an IFCA, NESFC managed a small cockle production area at Horseshoe Point comprising of three beds on Haile Sands, between Tetney Haven and Donna Nook in North Lincolnshire. Historically, these beds were targeted by vessels from Boston and King's Lynn in addition to local hand-gatherers. The last significant fishery occurred in 1999 with an estimated 400 tonnes taken.

The area was closed to fishing in 2003 with the introduction of the first cockle management byelaw due to low stock levels. In 2006, the stock was estimated at only 51 tonnes. Since assuming management responsibility Eastern IFCA have carried out nine stock surveys, the most recent in July 2017. Observations made during these surveys indicate that the beds are suffering similar atypical mortality to that observed in the Wash since 2008 and the Burry Inlet since 2004. Despite good spatfalls, most of the cockles had died during the following summer with over 90% of stocks 1 year or older being lost between August 2011 (105 tonnes found) and January 2012 (52 tonnes found)

After management and hence survey responsibility for the Horseshoe Point beds was transferred to EIFCA, NEIFCA began cockle surveys at the Wonderland site as it was an area known to be targeted by gatherers in the past. The area surveyed is on the main bathing beach and discussions would need to be held with the Local Authority before any collection. As with the Tees, a Habitats Regulations Assessment would need to be carried out due to the Humber Estuaries designations as both a Special Protection Area and Special Area of Conservation.

Atypical mortality in cockles

Cockle populations have been known to suffer periodic mass mortalities with resulting population crashes. Events in places such as the Wash, the Thames and the Burry Inlet remain largely unexplained but have been associated with a variety of factors including disease, predation, pollution, recruitment failures, over fishing and more recently climate change (Woolmer, 2013).

Since 2002 reports of 'atypical' mortalities have been reported in the UK and a comparison between 'typical' and 'atypical' mortalities is provided for clarity (taken from Woolmer, 2013).

Characteristics of typical mortalities:

- These are commonly episodic mortality events punctuating extended periods of recovery and persistence of the population.
- These are often associated with a clear causative agent.
- These may manifest as a sudden catastrophic mass mortality or a prolonged event occurring over a single season.
- Post-event the population either recovers to pre-mortality state of multiple year classes and spatial distribution, or, in some instances, may be locally extinct for a period until environmental conditions are suitable.

Characteristics of atypical mortalities:

- These are chronic and persistent mortality events that repeat over a number of years.
- May begin with a mass mortality of all year classes.
- Mortality is chronic occurring (at low levels) over a period (e.g. mortality ~0.5% per day) but there may be localised mass mortality instances within this period.
- Characterised by moribund and dead cockles on sediment surface.
- The causative agent for the chronic low-level mortality is unclear although the periodic localised mass mortalities may be associated with a particular factor e.g. heavy rainfall, high temperatures etc.
- The affected cockle population becomes characterised by low proportions of older or larger individuals and dominated by small cockles of year 1 or 2.
 - It is likely that size rather than year is a key factor with mortality affecting individuals larger than >15mm.
- The typical population follows a cycle of spawning (year class 1 or 2) – chronic mortality (year class 1 or 2) – spat settlement – fast growth (year class 0) – spring spawning

There are concerns that similar atypical mortality may be occurring within the NEIFCA district, however the lack of comparable long term data makes investigating this difficult. Large numbers of cockle shells have been observed lying on the sediment surface during multiple surveys at the Wonderland site and following discussions with Officers from EIFCA it reasonable to assume that both beds are facing similar pressures.

Shellfish classification

Shellfish production areas are classified by the Food Standards Agency (FSA) and determines the treatment required before Live Bivalve Molluscs (LBM) may be marketed for human consumption. LBM production and relay areas are classified according to the levels of *E. coli* detected in shellfish flesh. Currently there are no classified shellfish beds within the NEIFCA district. Horseshoe Point was declassified in September 2017 due to an insufficient number of samples being tested.

In order to classify a production or relay area, application forms need to be completed by applicants (fishers) and the Local Authority. Fishers would need to request initiation of this process directly to the relevant Local Authority. After the application is received by the FSA a Provisional Representative Monitoring Report (PRMP) is carried out to assess pollution sources affecting the area, to find appropriate sampling points and determine a sampling plan. Ten samples at least a week apart are required for a provisional classification. After a full year of sampling, annual classification may be granted.

Minimum size

A cockle size of 20mm has been used to separate fishable and juvenile individuals in this and previous reports. The cockle byelaw states that no cockle shall be removed which will pass through a square gauge measuring 20mm over each side. Depending on the orientation of the cockle this could effectively impose a minimum size of ~24mm on any potential fishery. Discussions with other IFCA's which operate cockle fisheries indicate that a much smaller minimum size is used elsewhere in the country (EIFCA 14mm, K&EIFCA 16mm). Consideration should be given to the minimum size used in future analyses as this will significantly affect estimates of fishable stock.

Conclusion

Since the establishment of the current sampling regime, cockle beds within the NEIFCA district have been characterised by low abundances with limited viability as potential fisheries. If stocks were to improve to a level thought to be able to sustain a degree of harvesting, full consideration would need to be given to impacts on designated habitats and species. It also needs to be recognised that in order to open the beds an appropriate sampling regime would need to be established to ensure the cockles were suitable for human consumption.

In light of the current and historic stock levels, it was agreed at the September 2018 Science Advisory Group meeting that surveys would be carried out on a biennial basis, rather than annually. The next surveys are planned for spring 2020.

DRAFT

Introduction and methodology

Intertidal sampling is undertaken during low water spring tides, with the seaward extent of transects taken as close as practicable to the low water line. Sampling methodology since 2014 has followed Walker and Nicholson (1986)¹³. Bed perimeter is first determined using GPS. Surveyors then walk a transect line over the bed area in a zigzag fashion recording the number of footsteps which fall on mussels and those that fall on bare sediment/rock, allowing an estimation of percentage cover to be made.

¹³ Walker, P. & Nicholson, M. D., 1986. *The precision of estimates of mussel biomass by zigzag survey*. International Council for the Exploration of the Sea, Shellfish Committee. CM 1986/K:6

At the end of each transect a 0.1m² quadrat is placed on the nearest patch of mussels. All mussels within the quadrat are collected and washed through a 5 mm sieve to remove any sediment. Post-survey shell length measurements are recorded to the nearest millimetre using Mitutoyo vernier callipers (0.02 mm accuracy). The density and biomass of *M. edulis* was calculated by converting the number and weight of retained individuals to values/m², then multiplying by the bed area.

Results

The extent of the mussel bed area has fallen from 6,802m² in 2014 to 2,068m² in 2018 (Figure 6.2). The most pronounced reduction was between 2014 and 2015 and the bed area has continued to contract, albeit to a lesser degree (Figure 6.3). As in previous years, while mussels are observed at very low, patchy density in the vicinity of the main bed they are not found in the rest of the NTZ at any significant levels.

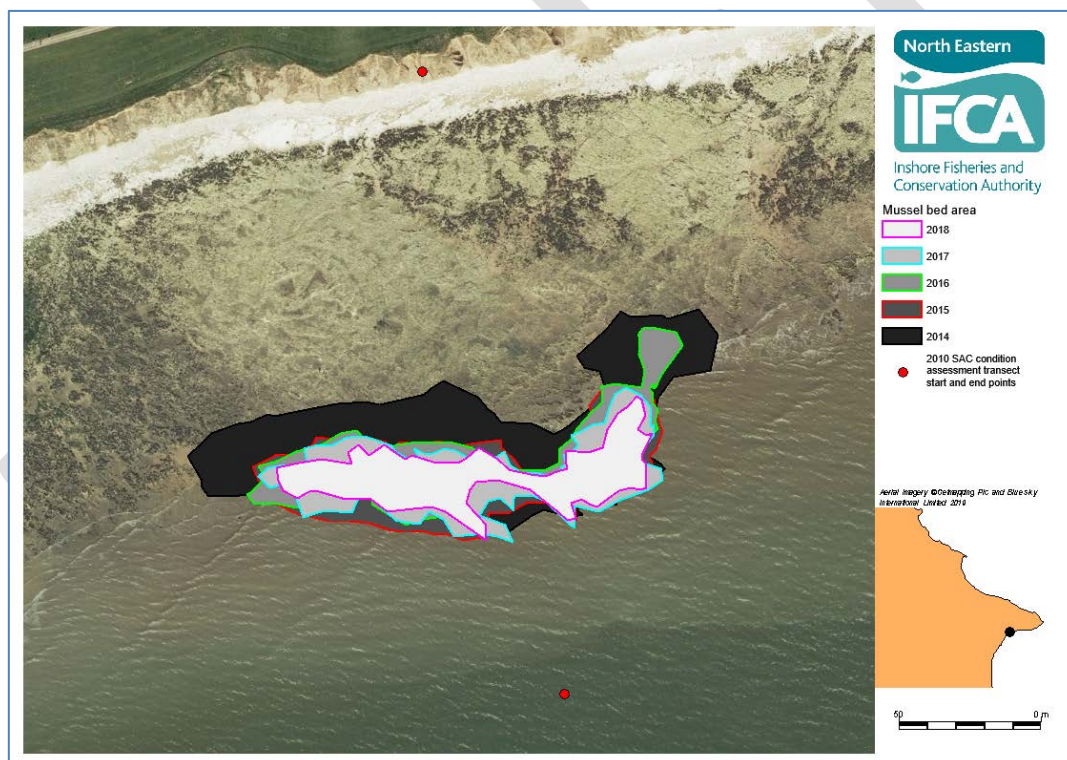


Figure 6.2. Mussel bed area for the period 2014-2018. SAC condition monitoring transect points are shown for reference.

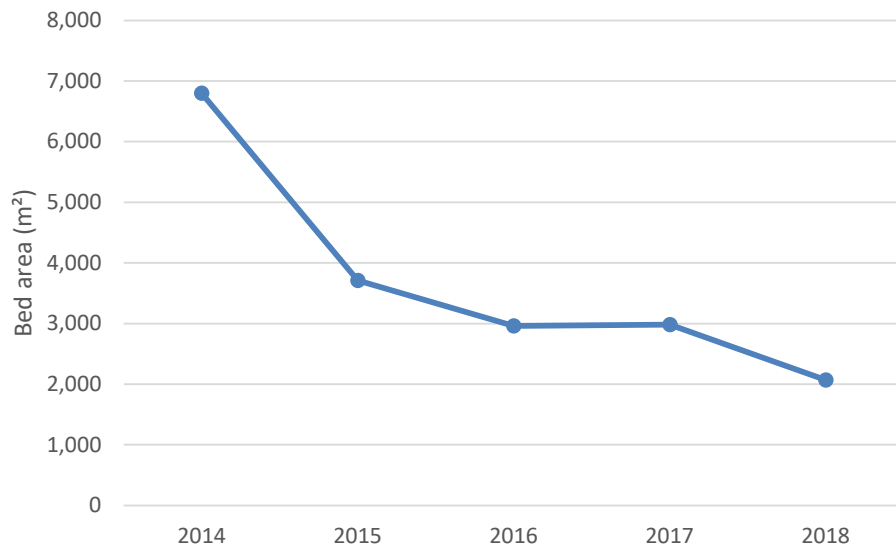


Figure 6.3. Mussel bed area for the period 2014-2018. SAC condition monitoring transect points are shown for reference.

The percentage of footfall on mussels for the 2018 transects ranged from 29.3-46.4% (Figure 6.4). Percentage cover since 2011 is variable but has tended to be within the range of 30-40% since 2014 (Figure 6.5). In 2016 a significant decrease in average shell length was attributed to an increase in the abundance of spat (<10mm shell length) which accounted for 90.6% of the mussels sampled (Figure 6.7). Adjusting the historic data to only include those records where shell length is equal to or over 10mm highlights an increasing trend over time (Figure 6.6).



Figure 6.4. Percentage cover of mussels for the main bed area in 2018.

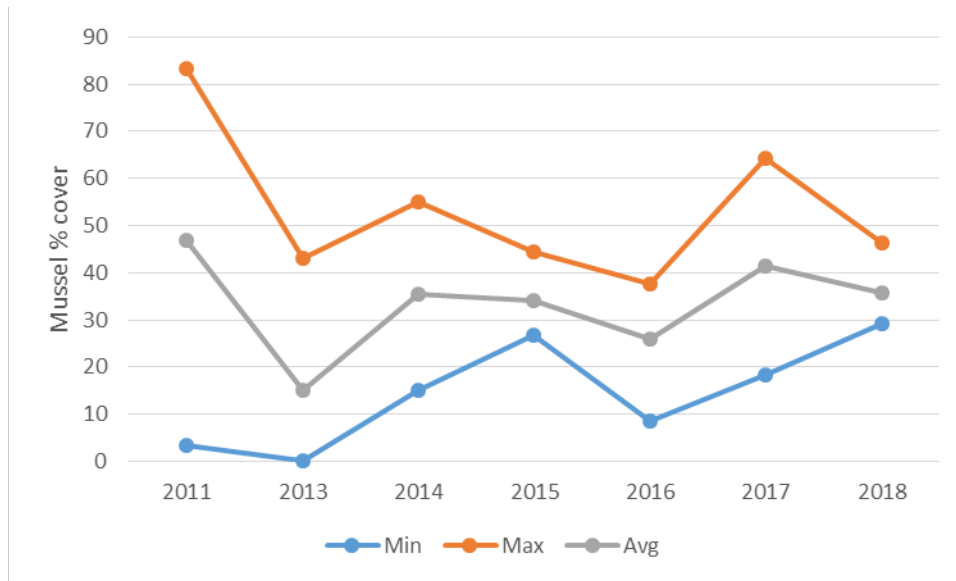


Figure 6.5. Transect percentage cover derived from number of footsteps falling on mussels. Minimum, maximum and average values are presented by year.

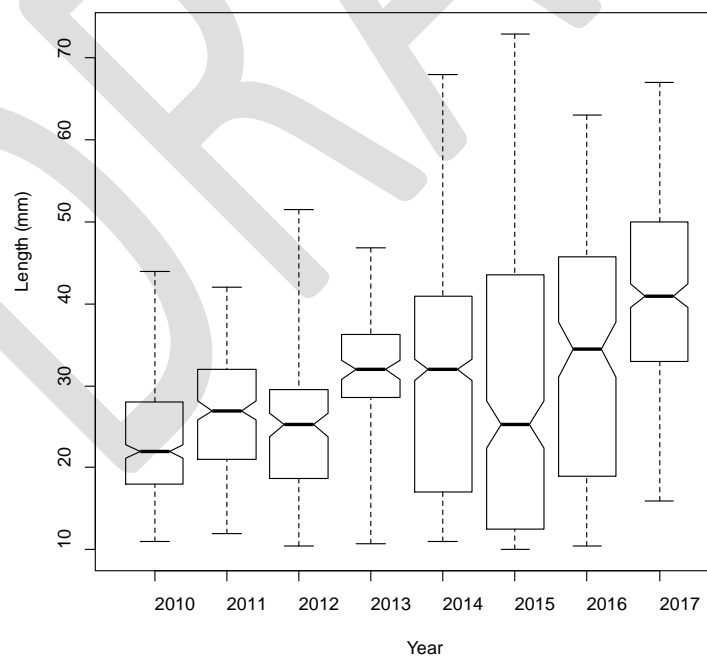


Figure 6.6. Notched box plots of mussel shell lengths >10mm in the representative samples for the period 2010 – 2017.

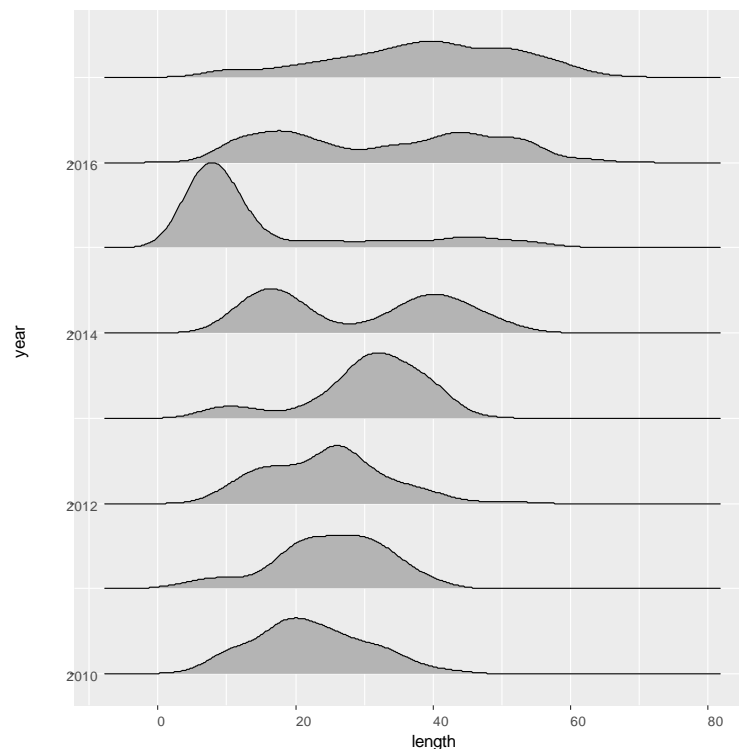


Figure 6.7. Shell length density ridgeline plots for the period 2010-2017.

Discussion

The abundance, distribution and structure of bivalve populations are known to be subject to natural variation, and as such, changes between surveys can readily occur. However, recording and assessment artefacts can also occur. The reduction in bed area between 2014 and 2015 can, at least in part, be attributed to methodological changes. It is also worth considering the relatively small size of the bed and the impact that environmental factors such as tide can have on estimates of bed area. These factors do not however affect interpretation of the long term trend of decreasing bed extent. Mussel beds at other locations around the headland have exhibited considerable reduction in extent and in some areas have been replaced by *Semibalanus* and *F. vesiculosus* habitats.

The NTZ benefits from signage at the top of Sewerby steps and knowledge of the designation and compliance is considered good. To what extent mussels are collected by shore gatherers at other locations around the headland is unknown, however the protection afforded the bed in the NTZ could be contributing to its continued persistence at this location.

7. Eelgrass

As part of the revised approach to fisheries within European Marine Sites, a byelaw was introduced in 2014 to protect eelgrass (*Zostera* spp) beds at Spurn Point in the Humber Estuary. Annual surveys are carried out in partnership with the Yorkshire Wildlife Trust and other statutory agencies including Natural England and the Environment Agency. The aim of the surveys for NEIFCA is to assess whether the bed area has extended beyond the management zone and the appropriateness of the byelaw.

The distribution of eelgrass has increased since the first survey in 2013. To what extent this can be attributed to the introduction of management measures is unclear due to confounding factors such as periodic breaches of the point in recent years during extreme tidal and storm conditions and the subsequent changes this has had on access.

Despite point records of eelgrass presence outside the designated area, the extent of the main bed is still contained within the designated area and management is considered appropriate.

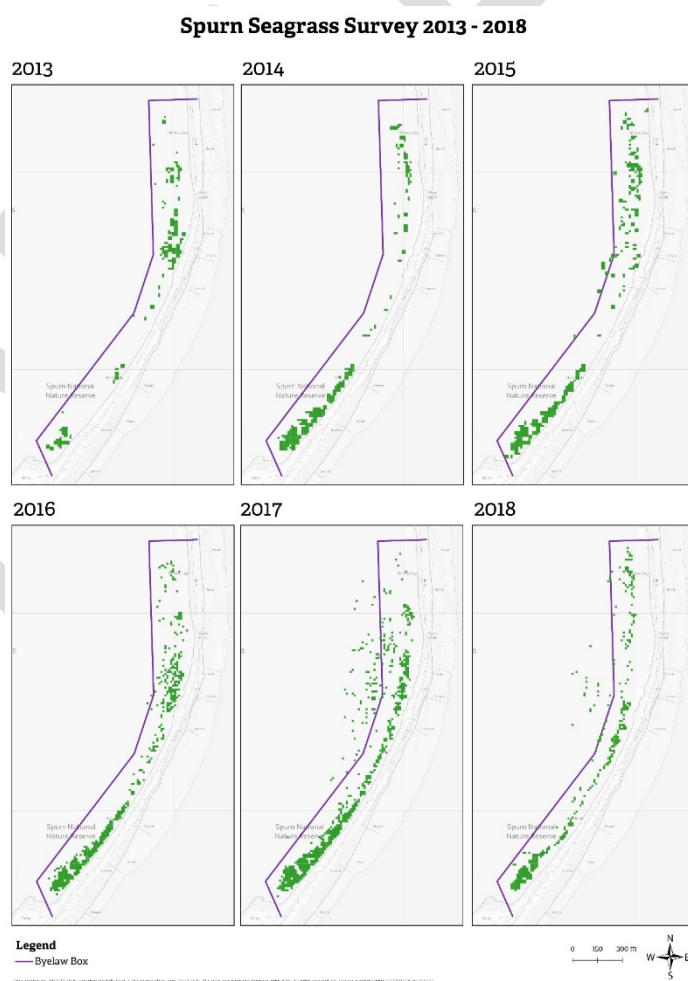


Figure 7.1. Eelgrass distribution within the Byelaw area for the period 2013-2018. (Figure reference: Yorkshire Wildlife Trust)

8. Sea Temperatures

Method

Sixteen locations in total are used to record sea surface and bottom temperature throughout the year across the district, previously using the YSI Sonde 6600 probe from 2008 – 2016 and then the SWiFT SVP Sound Velocity probe hereon after.

Upon arrival at a location, the probe is lowered into the water over the side of NEIFCA patrol vessel North Eastern Guardian III where a number of sea water variables are recorded, including sea temperature. These recordings can then be downloaded onto a computer and analysed.

Results

Both surface and bottom temperatures experience the same trend through the year across the data recorded (Figure 8.1). The lowest temperatures are seen during the winter months at the start of the year where they gradually increase through the spring and hit peaks during the summer months. From there, temperature gradually decreases once again into the following year.

Peak surface temperature was seen in July 2018 at 16.2°C. This does not correspond with bottom temperature, where the highest temperature was seen in September 2010 at 14.3°C. April 2013 produced the lowest sea surface and bottom temperatures.

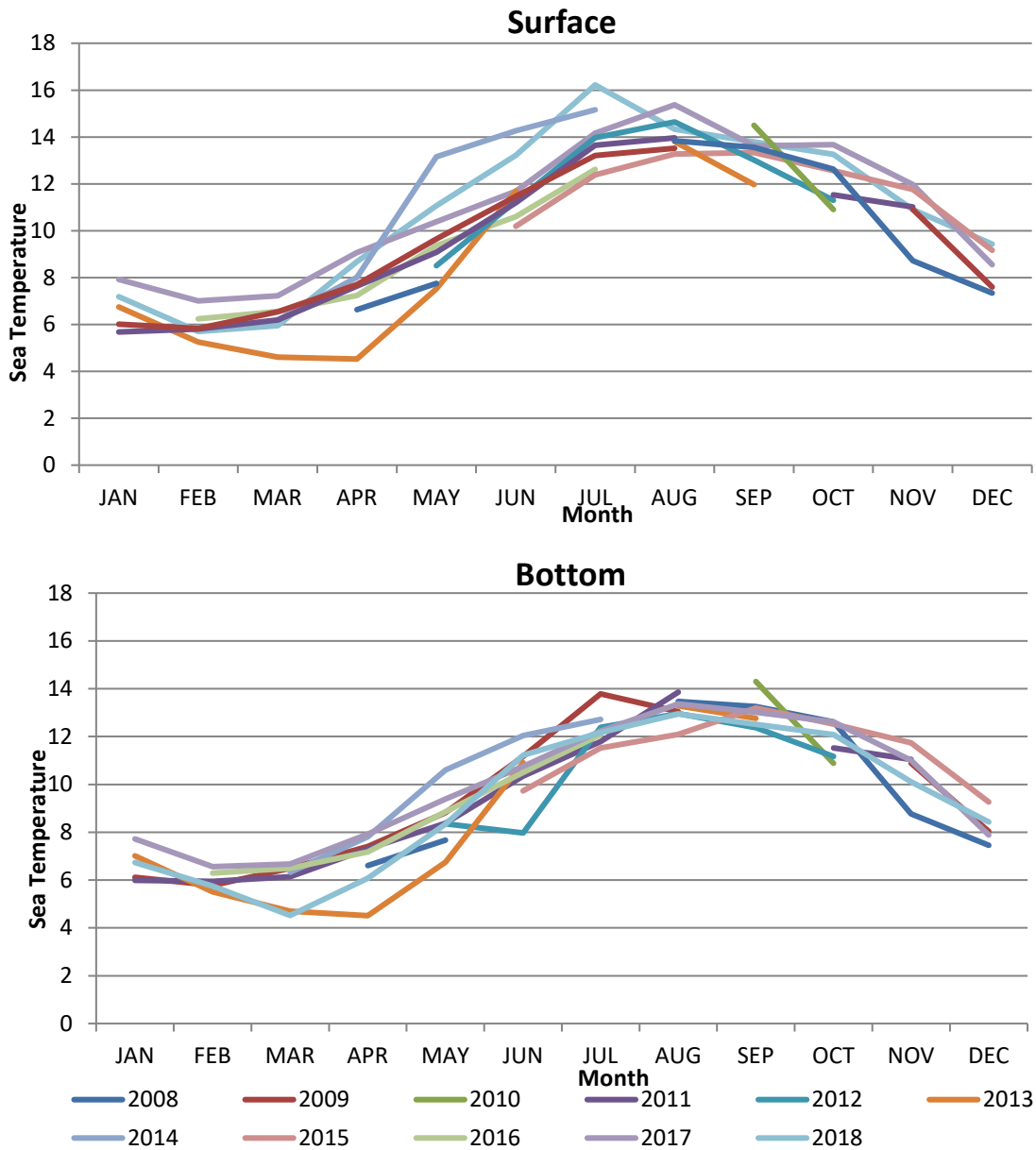


Figure 8.1. Monthly bed and sea surface temperature readings for NEIFCA sampling stations

NORTH EASTERN INSHORE FISHERIES AND CONSERVATION AUTHORITY

Report to: Science Advisory Group
14 March 2019

NEIFCA Byelaws Update - XXVIII Crustacea Conservation 2018 & XXX Automatic Identification System (AIS) 2016

Report by the Chief Officer.

A. Purpose of Report

To update the group on all current fisheries byelaw work streams.

B. Recommendation

1. That members note the report and endorse the decision to progress both byelaw regulations for final confirmation.

1. Background

1.1 Byelaw XXVIII Crustacea Conservation Byelaw 2018

- 1.1.1 This new byelaw regulation was made by the Authority at its meeting on 14 June 2018 (minute record 52 refers). It retains, updates and rationalises existing management regulations covering the exploitation of lobster, edible crab, velvet crab and nephrops within the Authority's district and includes the following key revisions:

- Incorporates existing protections for 'V' notched lobsters which are currently provided for in a separate byelaw regulation.
- Incorporates existing protections for egg bearing lobsters which are currently provided for in an emergency byelaw regulation which will expire on 17 October 2018. This includes new protection for lobsters displaying mutilated pleopods.
- Specifies a new vessel length size for shell fishing of 10 m overall length within 3 nautical miles with additional protections for all existing vessel operators who currently operate within the 3 mile limit under a 'sunset' provision.
- Specifies a new protection for 'soft' lobsters
- Specifies a new maximum pot frame size of 50 cm H x 60 cm W x 110 cm L.

- 1.1.2 Following a period of informal consultation with the MMO IFCA byelaws team, formal public consultation commenced on 15 October 2018 and concluded on 7 December 2018. In total the Authority received ten objections to the proposal, primarily in relation to the new maximum vessel length size for shell fishing of 10 m within the 3 nautical mile limit and the prohibitions on taking soft and mutilated lobsters. Copies of all the objections received and responses are attached for additional information. Prior to responding to the objections I contacted all members via email on 24 January 2019 outlining my intentions to strengthen some of the definitions contained within the byelaw, particularly relating to 'soft' lobsters and submit the byelaw proposal for formal confirmation. Whilst two members raised some

concerns regarding the potential economic impacts that the new proposed vessel size limit might cause, the majority of members indicated their support for progressing the regulation. Progression of the byelaw remains critical to ensuring the same level of continued protection for egg bearing lobsters, given that the Authority's emergency byelaw will expire on 16 April 2019. Following further consideration by the Chair a decision was taken to continue progression with the process with a full report coming back to the Executive Committee and Science Advisory Group on 14 March 2019.

- 1.1.3 The definition of 'soft lobster' was strengthened within the draft byelaw and it was submitted for formal confirmation on 8 February 2019. Following a preliminary review of the submission some minor changes were recommended to the wording of the draft regulation including removal of 'transporting' within the prohibitions. It was also suggested that consideration should be given to removing the deeming clause. Whilst the act of transporting prohibited shellfish was been removed from the draft the deeming clause has been retained as it is considered an important component of the regulation. A revised draft of both the regulation and supporting Regulatory Impact assessment were re-submitted for confirmation on 18 February 2019 and copies are attached to this report for member's information.

1.2 **XXXI Automatic Identification System (AIS) Byelaw 2016**

- 1.2.1 The proposed AIS byelaw was one of five regulations which were formally made by the Authority on 27 April 2016 which also included the following:

- XVIII Method and Area of Fishing (Netting) Byelaw 2016
- XXIX Humber Estuary Fishing Byelaw 2016
- XXXI Catch Returns Byelaw 2016
- XXII Shellfish Permit Byelaw 2016

- 1.2.2 Following informal review by the Marine Management Organisation the byelaws progressed to formal consultation which commenced on 21 December 2016 and terminated on 17 February 2017. During the formal consultation process 44 responses were received including two multi-signature petitions. Members considered the output from the formal consultation on 20 July 2017 and agreed to continue with the progression of the byelaws with the exception of the Shellfish Permit regulation which needed further consideration.

- 1.2.3 Since July 2017 the byelaws have passed through two further reviews by the Marine Management Organisation (MMO) and at one point had been signed and formally submitted to Defra but were sent back into the quality assessment process overseen by the MMO. Further delays have resulted from issues surrounding the supporting Regulatory Impact Assessments (RIAs). The RIAs were originally returned by the MMO because they had been submitted on an 'out-dated' version of the template. This issue was rectified but officers were subsequently advised by the MMO that they could not access the revised versions which were then re-submitted only to find that the same issue existed. Further versions were submitted culminating in a final submission of the supporting RIAs on 25 May 2018.

- 1.2.4 Since the 25 May 2018 officers have made further submissions and representations, regarding the byelaws, to the MMO IFCA byelaw team via the Authority's legal advisors. On 8 October 2018 the MMO advised officers that the quality assurance process had been completed on three of the four byelaws with the exception of the AIS Byelaw which carried a recommendation that it should be subject to a further period of formal consultation. The MMO considered that given the significant development of the national IVMS project since the original byelaw was made in 2016, necessitating subsequent changes to the supporting RIA, a further period of consultation was felt appropriate. To that end officers commenced a second period of formal consultation on the AIS byelaw alongside the Crustacea Conservation Regulation on 15 October 2018. This consultation period closed on 7 December 2018.

- 1.2.5 During the second period of formal consultation on the AIS byelaw proposal the Authority received eighteen objections and two letters of support for the measure. Sixteen of the eighteen objections came from representatives of the recreational rod fishing sector and two from the commercial fishing industry.
- 1.2.6 The objections from the recreational rod fishing sector raised a number of complex issues relating to the commercial classification of recreational charter fishing businesses many of which carried no clear or immediate answer. Copies of all the objections received and responses are attached for additional information. Prior to responding to the objections the Chief Officer contacted all members via email on 21 December 2018 indicating his intention to remove the recreational fishing sector from the scope of the byelaw provisions and re-submit the regulation for formal confirmation. All members were supportive and the AIS byelaw was re-submitted for formal confirmation on 24 January 2019 and alongside the three other outstanding byelaws, is now, finally, being considered by senior Defra officials.

Contact Officer

David McCandless, Chief Fishery Officer

Ext. 3690



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Wildlife Trust

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Yorkshire Wildlife Trust is registered
in England No. 409850 and is a
registered charity No. 210807
VAT No. 170 3214 73

Chief Executive Officer
North Eastern Inshore Fisheries & Conservation Authority,
Town Hall
Quay Road
Bridlington
YO16 4LP

Tuesday 4th December, 2018

RE: Byelaw changes – formal consultation

Yorkshire Wildlife Trust works across the Yorkshire and Humber region managing more than 100 nature reserves and with a membership of over 42,000. YWT is the second oldest of the 46 Wildlife Trusts which work in partnership to cover the whole of the UK. The Trust's principal vision is to work for a Yorkshire rich in wildlife, valued and enjoyed by people.

Yorkshire Wildlife Trust **welcomes and supports** the overall intent of the revisions of the byelaw proposed by North Eastern Inshore Fisheries and Conservation Authority and welcome this as an *interim* measure before development of a full potting effort limitation scheme is completed.

In order for the national Statutory Instrument (implemented in October 2017) banning the landing of egg bearing lobsters to be effective the legislation should be applied to *all* those licensed and unlicensed operators targeting this sea fisheries resource. This will create a level playing field across the sector and ensure egg bearing lobsters are fully protected within the District. We are further pleased to see and support the introduction of a mandatory standard sized pot to prevent technological creep which affects fishing capacity.

We understand from your Strategic Research and Evidence plan 2018-2022 that your intention is to develop an effort control scheme for potting activity and that informal consultation with stakeholders has been undertaken. Therefore, this is a management measure that will be later introduced, presumably through the Shellfish Permitting Byelaw. We question whether it would be more appropriate to develop and consult on the Crustacea Conservation Byelaw and the Shellfish Permitting Byelaw simultaneously in order for stakeholders to fully understand the effect that both of these instruments will have. However, we understand that the Authority does not wish to delay the process any further given the considerable time already taken to develop this byelaw. As the current available data (Cefas, 2016) suggests the North Sea stock status for both edible crab and European lobster is poor we would urge the Authority to prioritise implementation of management measures which regulate potting effort as soon as possible in order to promote sustainability of this fishery.

We would recommend a number of changes relating to the definitions provided. For example, the terms 'pot', 'escape gap', 'soft shelled lobster' and 'mutilated' should all be defined within the 'Interpretation' section of the byelaw both to aid stakeholder understanding and to provide a solid legal basis should any enforcement measures

www.ywt.org.uk

Love Yorkshire, Love Wildlife



Yorkshire Wildlife Trust

be necessary.

I hope you find these comments useful. Please do not hesitate to contact me if you require any additional information.

Yours sincerely,

Bex Lynam
North Sea Marine Advocacy Officer
North Sea Wildlife Trusts
Telephone: 01904 659570
Email: bex.lynam@ywt.org.uk

All enquiries should be directed to:

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Chief Officer

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Fax: 01482 393699

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Web Site www.ne-ifca.gov.uk

Your ref:

Our ref: neifca

08 February 2019

Bex Lynam
North Sea Marine Advocacy Officer
Yorkshire Wildlife Trust
1 St George's Place
York
YO24 1GN

Dear Bex,

RE: Byelaw XXVIII: Crustacea Conservation Byelaw 2018

Further to your letter dated 4 December 2018 commenting on provisions contained within the above draft byelaw regulation, I am writing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the Crustacea Conservation byelaw proposal concluded on 7 December 2018. In total the Authority received 10 objections to the proposal.

Having considered the content of your letter very carefully I would like to make the following points in response:

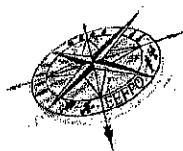
The support of the Yorkshire Wildlife Trust for the proposed byelaw regulation is very much welcomed. In terms of the development and future implementation of a potting effort management scheme, the intention is to advance that work this year through revisions to the existing shellfish permit byelaw regulation. During the last few years considerable work has already been completed in terms of scoping and identifying the mechanics of a suitable scheme that might work effectively across the industry so a good deal of progress has been made. Also to reassure it is a high priority work stream given the fact that crab and lobster stocks are not currently meeting MSY targets and effort continues to increase with no notable associated uplift in catches. To date we have prioritised the implementation of technical measures such as mandatory escape gaps and a larger minimum landing size for edible crab. This byelaw proposal represents the final phase of technical measures and also includes new provisions standardising the maximum size for potting vessels inside the 3 nautical mile limit, protections for soft lobster, a maximum pot size and further provisions to restrict the practice of manually stripping eggs from lobsters.

The comments relating to improving the definitions within the byelaw proposal are very welcome. Having considered them a revision has been made to the definition of soft lobsters as follows: *'Soft shelled lobster means a lobster that has recently cast its shell and is malleable under manual pressure'* this means that if the shell can be manipulated manually without breaking or cracking it would be considered soft for the purpose of the regulation. Other definitions are now considered long-standing and generally well understood by the fishing industry.

Following a careful review of all the submissions received during the consultation process, including those contained within your letter and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification other than that relating to the definition of 'soft shelled lobster'.

Yours Sincerely,

David Thomas McCandless
Chief Officer



Eastern England Fish Producers Organisation Ltd

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Chairman: A.R.Locker

C.E.O : David Winspear

04 12 18

The Eastern England Fish Producers' Organisation has been contacted by a number of its members expressing their concern over the proposed Crustacea Conservation Byelaw 2018.

Their concerns relate to the restrictions on vessel length within the 3nm area and the provisions relating to mutilated lobster.

Vessel Length Restrictions

The proposed Byelaw would restrict activities within the 3nm area to vessels of 10m or less, forcing vessels of more than 10m to confine their activities to areas beyond the 3nm area. Whilst it would appear that the provision regarding a "sunset list" for vessels of between 10m and 14 m would enable them to keep fishing, it in fact eventually results in a number of unintended consequences – both for vessels of more than 10m and less than 10m.

The present state of regulation enables all vessels to manage their activities flexibly within the margins of safety and stock conservation – activity by the slightly larger vessels may take place outside the 3nm limit but within reasonable safety parameters thus allowing the pressure on the inshore stocks to be dissipated. If the intention is to reduce the pressure on inshore stocks by limiting activity to existing levels these factors should be taken into account, otherwise the Byelaw risks creating a displacement of effort onto the inshore stocks – effectively defeating the conservation objective of the proposed Byelaw and at the same time threatening the continued activity of the larger vessels with economic and social consequences for the area.

Furthermore, as it stands the proposed vessel length restrictions amount to a de-commissioning scheme without compensation for over 10m vessel owners approaching retirement age: their vessels will no

longer be eligible to fish within the 3nm limit thus drastically reducing their economic sale value. The vessels concerned would be rendered virtually worthless to any potential buyer in the area.

My information is that there are 220 commercial shellfish permit holders and 649 limited shellfish permit holders within the NEIFCA district. 22 vessels would need to place themselves on the 'sunset list'. Our member vessels have both been potting in the area for approximately 40 years and it seems manifestly unfair to discriminate against them whilst new under 10 m applicants appear to be welcomed.

This restriction, in its current state, should be withdrawn.

Mutilated lobsters

The provisions relating to damaged/absent flaps in lobster tails, or missing pleopods, appear to be based upon a presumption of intentional non-compliance. The imposition of blanket bans without allowing time for any analysis of the impact of previous measures appears wrongheaded and is probably unenforceable given the resources that would be required to effectively police them. All berried hens are returned to the sea in any case. Checking the pleopods of each animal would be time consuming and vulnerable to human error.

The aggressive behaviour of lobsters, and their frequent fights, mean that there are other possible explanations for the damage than wilful concealment of V notches. In addition, whilst the desire to protect stocks is commendable, it risks creating a gender imbalance within the population which is likely to harm stock levels in the long run.

In the light of these objections, the Eastern England Fish Producers' Organisation, calls upon the NEIFCA to reconsider these provisions in its proposed Crustacea Byelaw.

Yours faithfully

David Winspear CEO

All enquiries should be directed to:

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Web Site www.ne-ifca.gov.uk

Your ref:

Our ref: neifca

08 February 2019

Mr D Winspear
Chief Executive Officer
Eastern England Fish Producers
Room F11
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Whitby
YO22 4ET

Dear Mr Winspear,

RE: Byelaw XXVIII: Crustacea Conservation Byelaw 2018

Further to your letter dated 4 December 2018, objecting to provisions contained within the above draft byelaw regulation, I am writing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the Crustacea Conservation byelaw proposal concluded on 7 December 2018. In total the Authority received 10 objections to the proposal.

Having considered the content of your objection very carefully I would like to make the following points in response:

The proposed vessel length restrictions for potting within the 3 nautical mile limit are designed to standardise the fleet structure across the NEIFCA district at a size and scale deemed appropriate to ensure the long terms sustainability of shellfish stocks. Grounds within the 3 nautical mile limit are considered more sensitive containing higher proportions of juveniles and more at risk from spikes in fishing effort during seasonal 'new shelling' in many areas. The structure of the current potting fleet has also been carefully considered in setting the proposed vessel size. The 'sunset' mechanism has been written into the proposed regulation to protect existing historical rights for operators to continue fishing up until the point of sale of the respective vessel. The inclusion of the 'sunset' mechanism allows for a prolonged re-adjustment of the fleet structure minimising economic impact. If a continuation of such rights were to be permitted beyond the first sale of the affected vessel this would completely negate the intentions of the proposed regulation.

The proposed length restrictions only apply to potting so other fishing activities would not be affected even after a vessel sale.

There are currently a number of vessel length restrictions in force throughout the NEIFCA district relating to trawling, dredging and potting which have been implemented over a number of years and which to my knowledge, have not impacted on the saleable value of the affected vessels.

The provisions contained within the proposed byelaw carry a number of long standing measures supporting the conservation of lobsters which include prohibitions on landing lobsters with mutilated tails. These were first introduced in 1999 and updated in 2012 and are clearly defined and understood by the local fishing industry. The provision relating to mutilated pleopods is a new addition but one considered necessary given existing levels of non-compliance experienced in relation to the egg bearing lobster prohibition. Since the beginning of 2018 the Authority's officers have reported over 30 offences resulting in 4 prosecutions, 8 fixed penalties, 13 cautions and 8 warning letters being issued with no sign of improvement in compliance. On occasions officers have found female lobsters which have had all their pleopods removed. It is hoped that the mutilated pleopod provision will improve the Authority's ability to enforce the existing legislation and significantly discourage the practice of manually stripping eggs from female lobsters.

Maximising the natural release of eggs back into the lobster fishery combined with protecting the brood stock and the survival rate of pre-recruits is key to ensuring the long term sustainability of the fishery.

Following a careful review of all the objections, including those contained within your letter and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification.

Yours Sincerely,

David Thomas McCandless
Chief Officer



STATEMENT OF OBJECTIONS TO THE NEIFCA'S PROPOSED CRUSTACEA CONSERVATION BYELAW

Introduction

The North East Inshore Fisheries and Conservation Authority, NEIFCA, has given notice of its intention to introduce a new Crustacea Conservation Byelaw and has invited those wishing to register objections to do so by midnight on the 5th. December 2018.

The NFFO, on behalf of its North East Coast Committee and individual members, wishes to register a number of objections to the byelaws as they currently stand and to raise a number of more general issues that underlie the management of shellfish in the North East. Nonetheless, it should be clear that both the NFFO and the NFFO's Committees believe that these fisheries should be managed sustainably and that it is the responsibility of all stakeholders to ensure that this is the case.

Policy Objectives

According to the Impact Assessment, the policy objectives are summarised as follows:

- 1. To ensure that the catching, retention and landing of all egg bearing lobsters by unlicensed and unregistered vessels and operators is prohibited throughout the NEIFCA District and that the Authority's Officers have a comprehensive suite of powers in place to enforce the supporting regulations.*
- 2. To take pro-active steps in the management of the lobster and crab fishery by reducing the vessel size limit within three nautical miles, introducing a maximum pot size to minimise risk to stocks from technology creep and prohibiting the taking of soft shelled lobster.*

3. *To rationalise the number of NEIFCA byelaws by consolidating V notched lobster provisions within a new regulation*

NFFO's Specific Objections

The NFFO objects to the portrayal of a reduction in the vessel size limit from 14 or 12.5 metres to 10 metres within the 3 nautical mile zone as pro-active management on the following grounds:

- The reduction in vessel size serves to increase pressure on the inshore zone since in the future vessels will inevitably concentrate their activities round the inshore zone – the displacement effect.
- There is a safety dimension which will mean that vessels will have less flexibility in their fishing activities (forcing them to concentrate activities outside the 3nm means that, apart from weather, there is potential conflict with navigation channels, large scallopers and more generalised gear conflict)
- Although there is provision for a “sunset list” that would allow vessels of up to 14 metres that currently fish within the 3nm zone to continue their activities, the Impact Assessment mistakenly assumes that there would be no costs involved in the way this provision is currently structured. Unfortunately, since the sunset permits are vested in the current owners, the right to continue activities within the 3nm zone would be lost when the vessel is sold on retirement thus considerably devaluing the vessel and reducing pension provision.

This clause should definitely be revisited.

The NFFO is puzzled by the reference to technological creep as a justification for restricting the maximum size of lobster pots and finds it unconvincing.

- Whilst there have been a number of studies of technological creep, it is noteworthy that they have chiefly been concerned with mobile gear and netting. In fact, the

concept appears to be singularly inappropriate for static gears¹ where there seems to be no relationship between technological creep and vessel capacity or size.

- In fact, it is difficult to find convincing examples of technological creep in the potting industry since the last major innovation occurred in the 1970s and 1980s when wooden pots began to give way to steel wire and plastic pots that required lower maintenance. If anything, recent requirements for escape hatches should, in principle, have rendered them less effective.
- Currently, the largest pots tend to pose a problem in inshore fisheries since their weight, and the time and manpower required to haul them, renders operations less productive and encourages a return to smaller pots.

The pre-occupation with technological creep would appear to be misplaced. There is definitely no justification for associating it with vessel size.

Although the ban on the landing of soft shelled lobsters may be chiefly directed at unlicensed and unregistered fishermen, the NFFO objects on the grounds that it is both unenforceable and also does nothing to improve conservation.

- The difficulty in establishing that a lobster is to be regarded as soft shelled (the pressure required to pierce the carapace) means that the lobster will die if it is returned to the sea.
- The enforcement resources necessary to effectively police the 2,000 limited permits and the unregistered fishermen would require a substantial increase in NEIFCA costs – which is not reflected in the Impact Assessment.

The NFFO therefore believes that this measure should be withdrawn.

NFFO's General Comments

The Impact Assessment blithely assumes that the new Byelaw will involve no new costs. Such an outcome appears unlikely given its objectives which involve greater enforcement activities and their extension to unlicensed and unregistered vessels. Yet at the same time, it would appear that there is a potential problem with compliance.

¹ <http://archimer.ifremer.fr>. *Technological Development and Fisheries Management*. Eigaard Ole Ritzau 1, *, Marchal Paul 2, Gislason Henrik 1, Rijnsdorp Adriaan ...

Introducing regulations where there is likely to be a compliance problem without the necessary means to enforce them is not really a viable solution.

Summary

The NFFO believes that the Crustacea Conservation Byelaw as it currently stands should be reconsidered and that, at a minimum, Article 2 Prohibitions (a) Vessel Length Restrictions should be revised.

In addition, the NFFO would suggest that introducing measures, such as Article 2 Prohibitions (h) Soft Shelled Lobsters, that are likely to be ineffective are counter-productive and only bring the enforcement authorities into disrepute.

03/12/2018

The National Federation of Fishermen's Organisations

30 Monkgate

York

YO61 4RH

All enquiries should be directed to:

David McCandless BSc. MSc.

Chief Officer

Tel: 01482 393690

Fax: 01482 393699

E.Mail: david.mccandless@eastriding.gov.uk

Web Site www.ne-ifca.gov.uk

Your ref:

Our ref: neifca

07 February 2019

National Federation of Fishermen's Organisations
30 Monkgate
York
YO61 4RH

Dear Sirs,

RE: Byelaw XXVIII: Crustacea Conservation Byelaw 2018

Further to your letter received via email on 3 December 2018, objecting to provisions contained within the above draft byelaw regulation, I am writing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the Crustacea Conservation byelaw proposal concluded on 7 December 2018. In total the Authority received 10 objections to the proposal.

Having considered the content of your objection very carefully I would like to make the following points in response:

The proposed vessel length restrictions for potting within the 3 nautical mile limit are designed to standardise the fleet structure across the NEIFCA district at a size and scale deemed appropriate to ensure the long terms sustainability of shellfish stocks. Grounds within the 3 nautical mile limit are considered more sensitive containing higher proportions of juveniles and more at risk from spikes in fishing effort during seasonal 'new shelling' in many areas. The structure of the current potting fleet has also been carefully considered in setting the proposed vessel size. The 'sunset' mechanism has been written into the proposed regulation to protect existing historical rights for operators to continue fishing up until the point of sale of the respective vessel. The inclusion of the 'sunset' mechanism allows for a prolonged re-adjustment of the fleet structure minimising economic impact. If a continuation of such rights were to be permitted beyond the first sale of the affected vessel this would completely negate the intentions of the proposed regulation.

The proposed length restrictions only apply to potting so other fishing activities would not be affected even after a vessel sale. There are currently a number of vessel length restrictions in force throughout the NEIFCA district relating to trawling, dredging and potting which have been implemented over a number of years and which to my knowledge, have not impacted on the saleable value of the affected vessels.

The Authority contains collective local fisheries management experience spanning over forty years and during that time there have been very clear and notable advances in technologies associated with potting. The fleet itself has rapidly modernised from wooden cobs to purpose built GRP

cats and mono hull displacement vessels capable of working larger volumes of gear in shorter time periods and much more efficiently with associated developments in electronics including seabed mapping capabilities and satellite positioning. Alongside that pot designed has changed from single chambered to multi chambered steel framed parlours and frame sizes have notable increased, all increasing fishing capacity and fishing related mortality on associated stocks. Even in the short time that the Authority has been developing the proposed byelaw the maximum frame size has had to be increased to accommodate developing gear types so it is completely inaccurate to suggest that technological creep is not a major consideration in the effective management of the regions lobster fishery. Locally, alongside the technological creep, annual inshore 'shelling' of lobsters, has encouraged larger vessels to work heavy gear causing notable 'spikes' in fishing effort and significant gear conflict with smaller inshore fleet. Effective management of this activity can only be delivered by mandatory vessel size restrictions.

Throughout the region, particularly during the summer months, there are significant issues with the landing of soft shelled lobsters. These landings impact on both catch quality and price and offer no benefit to the local industry. To claim that this issue relates solely to the unlicensed sector is completely inaccurate, it relates primarily to licensed operators. For many years the Authority has considered a formal prohibition on landing soft lobsters and has now taken that step following the introduction of a similar measure in the Northumberland IFCA area. The enforcement issues raised within your letter are wholly recognised and do present some challenges. To that end the definition has been strengthened and now states '*Soft shelled lobster means a lobster which has recently cast its shell and is malleable under manual pressure*' meaning that the shell can be manually manipulated without cracking or breaking. Since 1967 a similar national measure has been in place to protect soft shelled edible crab and experienced fishermen can identify such crabs at the point of capture and return them immediately back to the sea.

All new regulatory measures are considered very carefully alongside the ability to enforce them effectively. The effective enforcement of the provisions presented within this new byelaw regulation will be accommodated into existing offshore and land-based inspection regimes and no additional resourcing is expected to be required.

Following a careful review of all the objections, including those contained within your letter and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification other than the revised definition of a soft shelled lobster.

Yours Sincerely,

David Thomas McCandless
Chief Officer



~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~

28 October 2018

Tel. 01287 642154

North Eastern IFCA
Town Hall
Quay Road
Bridlington
YO16 4LP

XXVIII CRUSTACEA CONSERVATION BYELAW 2018

I writing to object to the above proposed byelaw, as it stands.

Firstly, the stated intention if the byelaw is to conserve crustacea stocks within the District. From personal experience over many years, I know that stocks of crab and lobster within the District are not being depleted – in fact numbers are rising steadily, under current fishing regulations - which makes additional prohibitions (vessel length restrictions) unnecessary.

In any case, my own boat, Dominator A, is 10.29m in length – a mere 30cm longer than the 9.99m boats which would be permitted to fish within the 3-mile limit. How can a boat which is 30 cm longer be a threat to stocks? I accept that bigger boats, in future, might be such a threat. For the purposes of determining which boats propose a threat and which do not, I suggest that the length of permitted boats be **rounded to the nearest metre** -so that a vessel 10.29m is no more of a threat to stocks than a more modern, more powerful one of 9.99m.

I accept that current measures pertaining to such things as escape gaps, minimum sizes, v-notched; mutilated and berried lobsters, mutilated pleopods etc. are effective in maintaining stocks.

I understand that as long as I continue as owner of Dominator A, I would be permitted to carry on fishing within the 3-mile limit, once I had applied to be placed onto the 'sunset list'. However, I am 66 years old and have been potting from the port of Whitby for over forty years, as I approach retirement, and consider selling up, imposition of vessel length restrictions **upon change of ownership**, would render my boat almost worthless after years of maintenance and investment in it.

Please, therefore, note that I seriously object to point (v) of Prohibitions, Vessel length restrictions – that *there is no change of ownership affecting the major shareholding in the vessel concerned*. Surely a vessel that has been operating in these waters for over 40 years should be permitted to carry on doing so until it is decommissioned – regardless of ownership. Point (v) should therefore be deleted from your proposed byelaw, in my view.

I would also point out that pushing smaller boats, such as my own, out beyond 3-miles would be pushing them into the main, very busy, shipping lane – between 3 and 4 miles offshore – from Robin Hoods Bay to the Tees, putting crew and vessel in very real danger. In addition, large scallopers – of the order of 26m to 34m in length – operate beyond the 6-mile mark and any gear in this area would be in constant danger of being towed away by them.

I have a young crew, aged 30, 21 and 20 – all recently trained at Whitby Fishing School – who would be forced out of work should I find it impossible to sell my boat locally - as a result of your proposed restrictions.

I trust that my serious concerns about these proposed restrictions will be given due consideration and my recommendations for modifications to the same be acted upon.

Yours faithfully,

A handwritten signature, possibly "G. H. H.", is written in dark ink. The signature is somewhat stylized and appears to be written on a piece of paper that is slightly tilted or folded.

All enquiries should be directed to:

David McCandless BSc. MSc.

Chief Officer

Tel: 01482 393690

Fax: 01482 393699

E.Mail: david.mccandless@eastriding.gov.uk

Web Site www.ne-ifca.gov.uk

Your ref:

Our ref: neifca

08 February 2019

~~Mr. David McCandless~~
~~Chief Officer~~
~~East Riding of Yorkshire Council~~
~~5th Floor, 100, Victoria Road~~
~~Leeds LS2 9PL~~
~~01482 393690~~
~~01482 393699~~

~~Mr. David McCandless~~

RE: Byelaw XXVIII: Crustacea Conservation Byelaw 2018

Further to your letter dated 28 October 2018, objecting to provisions contained within the above draft byelaw regulation, I am writing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the Crustacea Conservation byelaw proposal concluded on 7 December 2018. In total the Authority received 10 objections to the proposal.

Having considered the content of your objection very carefully I would like to make the following points in response:

The current status of crab and lobsters stocks within the NEIFCA district is subject to detailed assessment and monitoring by both the Authority's officers and scientists from the Centre for Environment, Fisheries and Aquaculture Science (CEFAS). That collective monitoring work continues to indicate that neither edible crab or lobster stocks are currently meeting Maximum Sustainable Yield (MSY) targets which are set at 35% of spawning stock biomass left on fishing grounds to support replenishment of stocks. In addition to the health of both stocks monthly catch and effort data continues to indicate a picture of increasing potting effort with no corresponding increase in landings.

The proposed vessel length restrictions for potting within the 3 nautical mile limit are designed to standardise the fleet structure across the NEIFCA district at a size and scale appropriate to ensure the long terms sustainability of shellfish stocks. Grounds within the 3 nautical mile limit are considered more sensitive containing higher proportions of juveniles and more at risk from spikes in fishing effort during seasonal 'new shelling' in many areas. The structure of the current potting fleet has also been considered in setting the proposed size. Although I fully accept the fact that your vessel just exceeds the proposed maximum overall length, this will always be the case for some individual regardless of where the 'line is drawn'.

In recognition of that, a 'sunset' mechanism has been written into the proposed regulation to protect existing historical rights for operators such as yourself to continue fishing as you have done, up until the point of the sale of your vessel. The inclusion of the 'sunset' mechanism allows for a prolonged re-adjustment of the fleet structure minimising economic impact but permitting a continuation of such rights beyond the first sale of the affected vessel would completely negate the intentions of the proposed regulation.

The proposed length restrictions only apply to potting so other fishing activities would not be affected even after your vessel was sold. There are currently a number of vessel length restrictions in force throughout the NEIFCA district regarding trawling, dredging and potting which to my knowledge have not impacted on the saleable value of vessels.

Following a careful review of all the objections, including those contained within your letter and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification.

Yours Sincerely,

David Thomas McCandless
Chief Officer



(In Archive) Fw: Byelaw consultation response
NEIFCA to: David McCandless
Sent by: Yvonne Collinson

03/12/2018 14:19

History: This message has been replied to.
Archive: This message is being viewed in an archive.

North Eastern Inshore Fisheries and Conservation Authority Support Services
Town Hall
Bridlington
YO16 4LP
Telephone - 01482 393515

----- Forwarded by Yvonne Collinson/CR/ERC on 03/12/2018 14:19 -----

From: ~~"Monica Blomfield" <M.Blomfield@neifca.gov.uk>~~
To: "ne-ifca@eastriding.gov.uk" <ne-ifca@eastriding.gov.uk>
Cc: ~~"James Robertson" <J.Robertson@neifca.gov.uk>~~
Date: 03/12/2018 11:26
Subject: Byelaw consultation response

Good afternoon,

Please see below our response from the Holderness Fishing Industry Group (HFIG) with regards to the Automatic Identification System and Crustacea Conservation Byelaws.

Automatic Identification System

Mandatory AIS within the district will enhance safety within the fleet and also allow a more accurate estimation of effort of the fishery for more accurate stock assessments. However HFIG would recommend that the unit SUCCORFISH is not considered for this role (if it is under consideration) as the reliability and accuracy of the units we have purchased for our fishery in the past is not up to standard.

Crustacea Conservation

HFIG supports the extension of the national legislation with regards to berried lobsters, to prevent retention and landing by unlicensed vessels, ensuring that recreational fishers adhere to the same legislations as the commercial fleet.

Vessel length restrictions

The proposed maximum size of vessel permissible to fish inside of 3nm to 10m overall length has raised concern from our members. HFIG recognises this as a way to cap effort in the inshore zone at its current levels, and the allowance of current fishers to apply to be on the sunset list providing they meet the requirements of such does allow for fishers to still operate in the zone.

However there is no provision for transfer of this allowance between vessels of the same owner. For example if a fisher had to sell their vessel that is on the sunset list or a vessel was lost/damaged and they wanted to replace with a vessel of the same size they would not be able to put the new vessel on the sunset list. This could lead to a future economic loss to the fisher and displacement of effort to other regions in the district. This proposal also limits the inshore fleet in their capacity for growth,

it would prevent, for example a 7m boat upgrading to a 10m boat. HFIG would support a provision for the allowance to transfer 'sunset allowance' from vessels of the same owner providing the new vessel meets the same criteria of the sunset list. This would allow for growth within the inshore fleet and also prevent economic loss and effort displacement in the event of having to sell/damage/loss of a current vessel.

Clawless lobsters

The prohibition of landing clawless lobsters allows for an increase in biomass returned to the sea and also aids in the market value of the catch, maintaining quality.

Soft shelled lobsters

HFIG members have expressed concern with regards to the soft shelled lobster provision. The landing companies already screen their landings for soft shelled lobsters and return such to the sea (Huntress is involved in this process). The definition of 'soft shelled' is only defined as 'recently cast its shell'. This is interpretive by the individual testing the lobsters. HFIG would support a quantifiable methodology that accurately defined a soft shelled lobster. This should not be subjective to the individual sampling the catch. In the event of a breach of the provision, having a quantifiable methodology would be needed for further action. The definition provided within the byelaw would need clarification prior to coming into force.

Mutilated pleopods

There is no justification for this provision, a mutilated pleopod does not impact either the market value of the catch or the ecology of the lobsters once returned to the sea. If this is to aid in the detection of scrubbing lobsters and the enforcement of the berried ban it needs to be stated and part of that specific provision and this would be only applicable to female lobsters. Additionally this need to be quantified that the mutilation hasn't occurred during handling/transportation/storage of the lobster.

Maximum pot size

HFIG recognises this as a provision to cap effort inshore at its current level. Has any consideration been given to pot limitations? This received general consensus (although not unanimous) at a discussion between NEIFCA and HFIG members in 2017.

Deeming

This provision appears to be an attempt to enforce beyond the NEIFCA district. There needs to be a list of suitable evidence that NEIFCA would accept a fisher to present to show whether they have removed the resource within the district or not.

Your consideration of our responses is greatly appreciated,

Kind regards,

Mike Roach

Scientific Officer

t: 07794542066 | e: m.roach@hfig.org.uk | w: www.hfig.org.uk

Holderness Fishing Industry Group

The Former Harbour Master's Office | Harbour Road | Bridlington | YO15 2NR.



The Holderness Fishing Industry Group is a company registered in England and Wales, company number 08336875. All information contained in this email and any files transmitted with it is confidential and intended solely for the use of the individual or organisation to whom it is addressed

All enquiries should be directed to:

David McCandless BSc. MSc.
Chief Officer
Tel: 01482 393690
Fax: 01482 393699
E-Mail: david.mccandless@eastriding.gov.uk
Web Site www.ne-ifca.gov.uk
Your ref:

Our ref: neifca
08 February 2019

Mike Roach
Scientific Officer
Holderness Fishing Industry Group
The Former Harbour Masters Office
Harbour Road
Bridlington
YO15 2NR

Dear Mike,

RE: Byelaw XXVIII: Crustacea Conservation Byelaw 2018

Further to your email received on 3 December 2018, providing comment on the above draft byelaw regulation, I am writing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the Crustacea Conservation byelaw proposal concluded on 7 December 2018. In total the Authority received 10 objections to the proposal.

Having considered the content of your comments very carefully I would like to make the following points in response:

Your support for the proposed mandatory introduction of an Automatic Identification System within the Authority's district is welcomed and the comments on the issues surrounding the SUCCORFISH system have also been noted.

Your support for the formal inclusion of provisions within the byelaw proposal which will provide further protection for egg bearing lobsters is also very much welcomed.

The proposed vessel length restrictions for potting within the 3 nautical mile limit are designed to standardise the fleet structure across the NEIFCA district at a size and scale deemed appropriate to ensure the long terms sustainability of shellfish stocks. Grounds within the 3 nautical mile limit are considered more sensitive containing higher proportions of juveniles and more at risk from spikes in fishing effort during seasonal 'new shelling' in many areas. The structure of the current potting fleet has also been carefully considered in setting the proposed vessel size. The 'sunset' mechanism has been written into the proposed regulation to protect existing historical rights for operators to continue fishing up until the point of sale of the respective vessel.

The inclusion of the 'sunset' mechanism allows for a prolonged re-adjustment of the fleet structure minimising economic impact. If a continuation of such rights were to be permitted beyond the first sale of the affected vessel this would completely negate the intentions of the proposed regulation.

The proposed length restrictions will only apply to potting so other fishing activities would not be affected even after a vessel sale.

Once again your support for the continued prohibition on taking and landing clawless lobsters is also very welcome and as you state within your response, it will strengthen spawning stock biomass and improve catch quality.

As you will be very aware, throughout the region, particularly during the summer months, there are significant issues with the landing of soft shelled lobsters. These landings impact on both catch quality and price and offer no benefit to the local industry. For many years the Authority has considered a formal prohibition on landing soft lobsters and has now taken that step following the recent introduction of a similar measure in the Northumberland IFCA area. The enforcement issues raised within your email response are wholly recognised and do present some challenges. To that end the definition has been strengthened and now states *'Soft shelled lobster means a lobster which has recently cast its shell and is malleable under manual pressure'* meaning that the shell can be manually manipulated without cracking or breaking. Since 1967 a similar national measure has been in place to protect soft shelled edible crab and experienced fishermen can easily identify such crabs at the point of capture and return them immediately back to the sea.

The proposed provision relating to mutilated pleopods is a new addition but one considered necessary given existing levels of non-compliance experienced in relation to the egg bearing lobster prohibition. Since the beginning of 2018 the Authority's officers have reported over 30 offences resulting in 4 prosecutions, 8 fixed penalties, 13 cautions and 8 warning letters being issued with no sign of improvement in compliance. On occasions officers have found female lobsters which have had all their pleopods removed. It is hoped that the mutilated pleopod provision will improve the Authority's ability to enforce the existing legislation and significantly discourage the practice of manually stripping eggs from female lobsters. The current provision contained within the proposed byelaw, as you have quite rightly identified, is non-gender specific, this is deliberate and will support both stock conservation and improvements in catch quality. The broad principles around non-gender specific measures are to try and minimise the risks of measures actually increasing the pressures on one particular gender. An example of this is protection for 'V' notched lobsters.

HFIGs recognition of a need for greater control on potting effort is very much welcomed. In terms of the development and future implementation of a potting effort management scheme, the intention is to advance that work this year through revisions to the existing shellfish permit byelaw regulation. During the last few years considerable work has already been completed in terms of scoping and identifying the mechanics of a suitable scheme that might work effectively across the industry so a good deal of progress has been made. Also to reassure it is a high priority work stream given the fact that crab and lobster stocks are not currently meeting MSY targets and effort continues to increase with no notable associated uplift in catches.

The deeming clause has been in force in the same format as that contained within the proposal since 2015 and actually provides some protection for vessels working exclusively outside the six mile limit of the NEIFCA district, whilst still enabling officers to take enforcement action against those vessels that are not but might claim to be to circumvent the byelaw provisions.



{In Archive} Fw: Statement of Objection to Byelaw Revisions
NEIFCA to: David McCandless
Sent by: Yvonne Collinson

26/11/2018 16:50

History: This message has been replied to.
Archive: This message is being viewed in an archive.

North Eastern Inshore Fisheries and Conservation Authority Support Services
Town Hall
Bridlington
YO16 4LP
Telephone - 01482 393515

----- Forwarded by Yvonne Collinson/CR/ERC on 26/11/2018 16:50 -----

From: "NEIFCA" <ne-ifca@eastriding.gov.uk>
To: "IFCABylaws@marinemanagement.org" <IFCABylaws@marinemanagement.org>
Cc: "ne-ifca@eastriding.gov.uk" <ne-ifca@eastriding.gov.uk>
Date: 26/11/2018 16:35
Subject: Statement of Objection to Byelaw Revisions

A.I.S. BYELAW

If the NEIFCA requires all commercial fishing vessels within its area to be fitted with A.I.S., is the NEIFCA prepared to fund the cost of fitting this equipment?

Crustacea Conservation

2(a) Vessel Length Restriction

Having waited five years for a commercial fishing mooring to become available at Seaham, one became available this month and I put my charter boat up for sale. A commercial boat I am looking at is over 10m overall length, as the boat is outside the NEIFCA area it does not have track record and will therefore be unable to fish within three mile. I think this is unfair and would suggest a transition period to invoke this restriction.

2(h) Soft Shelled Lobster

The definition of this "a lobster which has recently cast it's shell" is pretty vague. How recent is recently and how soft is soft?

2(i) Maximum Pot Size

Does the NEIFCA expect fisherman with pots above this maximum size to just dump their pots and spend thousands replacing them?
Or will they be compensated?

~~NEIFCA~~
~~Statement of Objection to Byelaw Revisions~~

Following a careful review of all the objections, including the content of your email response and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification other than the revised definition of a soft shelled lobster.

Yours Sincerely,

David Thomas McCandless

Chief Officer



NEIFCA Crustacea Conservation Byelaw Consultation
David McCandless to: ~~XXXXXXXXXXXX~~

08/02/2019 13:31

Dear ~~XXXXXXXXXXXX~~,

Further to your email received on 26 November 2018 objecting to the byelaw proposals I am emailing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on both the AIS and Crustacea byelaw proposals concluded on 7 December. In total the Authority received 9 objections and 1 submission supporting the measures.

In terms of the AIS byelaw it is the Authority intention to provide units for affected vessels following the confirmation of the byelaw but this would be time limited. Vessel operators would be expected to meet the costs of installation.

The proposed vessel length restrictions for potting within the 3 nautical mile limit are designed to standardise the fleet structure across the NEIFCA district at a size and scale deemed appropriate to ensure the long terms sustainability of shellfish stocks. Grounds within the 3 nautical mile limit are considered more sensitive containing higher proportions of juveniles and more at risk from spikes in fishing effort during seasonal 'new shelling' in many areas. The proposed 10m restriction inside 3 miles would only apply to vessels working pots and other types of fishing activity such as netting and trawling would not be affected. Any new over 10m vessels wishing to enter the pot fishery and work inside 3 miles would need to do so prior to the confirmation of the byelaw proposal otherwise they would be excluded and would have to operate outside the 3 mile limit.

As you will be very aware, throughout the region, particularly during the summer months, there are significant issues with the landing of soft shelled lobsters. These landings impact on both catch quality and price and offer no benefit to the local industry. For many years the Authority has considered a formal prohibition on landing soft lobsters and has now taken that step following the recent introduction of a similar measure in the Northumberland IFCA area. The enforcement issues raised within your email response are wholly recognised and do present some challenges. To that end the definition has been strengthened and now states '*Soft shelled lobster means a lobster which has recently cast its shell and is malleable under manual pressure*' meaning that the shell can be manually manipulated without cracking or breaking. Since 1967 a similar national measure has been in place to protect soft shelled edible crab and experienced fishermen can easily identify such crabs at the point of capture and return them immediately back to the sea.

The maximum pot size has been set at an appropriate size to cover the use of all current steel pot frames within the Authority's district and should not currently cause any significant issues for commercial fishermen.

Following a careful review of all the objections, including the content of your email response and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification other than the revised definition of a soft shelled lobster.

Kind regards,

David McCandless

Chief Inshore Fisheries & Conservation Officer
North Eastern Inshore Fisheries & Conservation Authority
Town Hall
Quay Road
Bridlington
YO16 4LP
Tel: 01482 393 690
Web: www.ne-ifca.gov.uk



{In Archive} Fw: Neifca Bylaws consultation
NEIFCA to: David McCandless
Sent by: Yvonne Collinson

05/12/2018 09:00

History: This message has been replied to.
Archive: This message is being viewed in an archive.

North Eastern Inshore Fisheries and Conservation Authority Support Services
Town Hall
Bridlington
YO16 4LP
Telephone - 01482 393515

----- Forwarded by Yvonne Collinson/CR/ERC on 05/12/2018 09:00 -----

From: ~~"ne-ifca@eastriding.gov.uk" <ne-ifca@eastriding.gov.uk>~~
To: "ne-ifca@eastriding.gov.uk" <ne-ifca@eastriding.gov.uk>
Date: 04/12/2018 16:02
Subject: Neifca Bylaws consultation

Good afternoon

In respect of the latest round of consultations i must express my concerns on some matters:

The banning of over 10m vessels from inside 3 mile limit. Whilst I appreciate that if you have always fished in this area, have written so on your returns, and are under 12m you can be put on the "sunset" list, my concern is that this will not be transferable if you wish to change your vessel for one of the same size. If you wish to upgrade your vessel then your place on the "sunset" list should be transferred to the new vessel.

By not allowing it to be transferred it means that vessels cannot be upgraded without surrendering your place on the list, as the alternative would be to keep older and older vessels on the fleet instead of being able to change to more modern, efficient and safer boats, Or to change to a smaller boat that falls within the under 10m category but then shed jobs? Surely neither of these is beneficial to the harbour or its economy? I strongly hope that if you are on the sunset list but wish to change your vessel for one of equal size there will be a provision in place that means your place on the sunset list is retained.

Soft Shelled lobsters - How is this to be policed and defined? What is soft to one person is not soft to another. Is every vessel going to be provided with some kind of "tool", eg pliers with a pressure guage on? If it doesn't crack under x amount of pressure then its ok? This is a huge grey area that is going to vary from person to person depending on who is handling the lobsters, How is this going to be implemented so that everyone (everyone not only on the boats, but also on the pier checking) is working to the same grade and standard? Surely it should be down to the landing companys to decide if its soft or not?

Lobsters with mutilated pleopods - whilst i applaud this as a possible way to reduce the "scrubbing" of eggs (more policing is desperately needed of this as it would appear far too many boats are scrubbing eggs on a daily basis and getting away with it), how can it be proved, eg what if they become damaged in the holding tanks/ transit? Sometimes they do become damaged this way. Also surely it should just apply to females if its purpose is to stop "scrubbing"?

VMS/AIS - if there are other methods of tracking vessels - succorfish as one example, why

can this not be used instead of ais/vms which broadcasts your position to the world and also your fishing areas and patterns to the rest of the fleet!! If a vessel is willing to invest in other types of monitoring systems that are more private but still provide the information you require, then why can this not be supported by yourselves?

Lastly, I raise this point at almost every consultation, you are not giving the fleet time to recover from one round of bylaws before you are bringing in another, first it was the financial and time aspect of the escape gaps followed by the increase of crab size, then the banning of berried lobsters. With this constant battering of new regulations year after year the fishermen haven't recovered financially from one set of changes before another set are introduced, more time is needed between the introduction of new bylaws to allow the industry to recover. Perhaps more policing of the existing policies is needed before bringing in more.

Regards

~~Jonny Price~~



NEIFCA Crustacea Conservation Byelaw Consultation

David McCandless to: ~~XXXXXXXXXX~~

08/02/2019 13:59

Dear ~~XXXXXXXXXX~~,

Further to your email received on 4 December 2018 objecting to the byelaw proposals I am emailing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the Crustacea byelaw proposals concluded on 7 December. In total the Authority received 9 objections and 1 submission supporting the measures.

The proposed vessel length restrictions for potting within the 3 nautical mile limit are designed to standardise the fleet structure across the NEIFCA district at a size and scale deemed appropriate to ensure the long terms sustainability of shellfish stocks. Grounds within the 3 nautical mile limit are considered more sensitive containing higher proportions of juveniles and more at risk from spikes in fishing effort during seasonal 'new shelling' in many areas. The structure of the current potting fleet has also been carefully considered in setting the proposed vessel size. The 'sunset' mechanism has been written into the proposed regulation to protect existing historical rights for operators to continue fishing up until the point of sale of the respective vessel. The inclusion of the 'sunset' mechanism allows for a prolonged re-adjustment of the fleet structure minimising economic impact. If a continuation of such rights were to be permitted beyond the first sale of the affected vessel this would completely negate the intentions of the proposed regulation. The proposed length restrictions will only apply to potting so other fishing activities would not be affected even after a vessel sale.

As you will be very aware, throughout the region, particularly during the summer months, there are significant issues with the landing of soft shelled lobsters. These landings impact on both catch quality and price and offer no benefit to the local industry. For many years the Authority has considered a formal prohibition on landing soft lobsters and has now taken that step following the recent introduction of a similar measure in the Northumberland IFCA area. The enforcement issues raised within your email response are wholly recognised and do present some challenges. To that end the definition has been strengthened and now states '*Soft shelled lobster means a lobster which has recently cast its shell and is malleable under manual pressure*' meaning that the shell can be manually manipulated without cracking or breaking. Since 1967 a similar national measure has been in place to protect soft shelled edible crab and experienced fishermen can easily identify such crabs at the point of capture and return them immediately back to the sea.

The proposed provision relating to mutilated pleopods is a new addition but one considered necessary given existing levels of non-compliance experienced in relation to the egg bearing lobster prohibition. Since the beginning of 2018 the Authority's officers have reported over 30 offences resulting in 4 prosecutions, 8 fixed penalties, 13 cautions and 8 warning letters being issued with no sign of improvement in compliance. On occasions officers have found female lobsters which have had all their pleopods removed. It is hoped that the mutilated pleopod provision will improve the Authority's ability to enforce the existing legislation and significantly discourage the practice of manually stripping eggs from female lobsters. The current provision contained within the proposed byelaw is non-gender specific, this is deliberate and will support both stock conservation and improvements in catch quality. The broad principles around non-gender specific measures are to try and minimise the risks of measures actually increasing the pressures on one particular gender. An example of this is protection for 'V' notched lobsters.

The decision to proceed with proposed mandatory AIS across the NEIFCA district has been very carefully considered alongside the development of the national IVMS scheme. The Authority considers that the IVMS scheme will not provide the necessary required coverage of monitoring across its district and in particular, within existing MPA sites. The national system also has other weaknesses in terms of 'real time' offshore monitoring and across the smaller vessel fleet.

The majority of regulations contained within the crustacea byelaw proposal are now well established across the industry and it is the Authority's view that the additional provisions including the pot frame size, soft lobster, mutilated pleopods and the new 10m vessel size inside 3nm, supported by the 'sunset' provision, will not have significant economic impact but will add significant stock conservation

benefit and raise the quality of lobster landed across the area.

Following a careful review of all the objections, including the content of your email response and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification other than the revised definition of a soft shelled lobster.

Many thanks,

David McCandless

Chief Inshore Fisheries & Conservation Officer
North Eastern Inshore Fisheries & Conservation Authority
Town Hall
Quay Road
Bridlington
YO16 4LP
Tel: 01482 393 690
Web: www.ne-ifca.gov.uk



(In Archive) Fw: Byelaw
NEIFCA to: David McCandless
Sent by: Yvonne Collinson

05/12/2018 09:00

History: This message has been replied to.
Archive: This message is being viewed in an archive.

North Eastern Inshore Fisheries and Conservation Authority Support Services
Town Hall
Bridlington
YO16 4LP
Telephone - 01482 393515

----- Forwarded by Yvonne Collinson/CR/ERC on 05/12/2018 08:59 -----

From: ~~XXXXXXXXXXXXXXXXXXXX~~
To: ne-ifca@eastriding.gov.uk
Date: 04/12/2018 21:22
Subject: Byelaw

I object to the proposed bylaw about the damage to the underside of a lobster as this can happen by numerous means not just by scrubbing of the lobster and will yet again hurt the inshore boats financially due to loss of earnings. If it comes in that will mean me throwing back undersize/v notched/ soft / berried/ mutilated / underside damage so a 1 in 7 chance of having one to keep

Sent from my iPhone



NEIFCA Crustacea Conservation Byelaw Consultation
David McCandless to: ~~anonymised~~

08/02/2019 14:09

Dear ~~anonymised~~,

Further to your email received on 4 December 2018 objecting to the byelaw proposals I am emailing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the Crustacea byelaw proposals concluded on 7 December. In total the Authority received 9 objections and 1 submission supporting the measures.

The current status of crab and lobsters stocks within the NEIFCA district is subject to detailed assessment and monitoring by both the Authority's officers and scientists from the Centre for Environment, Fisheries and Aquaculture Science (CEFAS). That collective monitoring work continues to indicate that neither edible crab or lobster stocks are currently meeting Maximum Sustainable Yield (MSY) targets which are set at 35% of spawning stock biomass left on fishing grounds to support replenishment of stocks. In addition to the health of both stocks monthly catch and effort data continues to indicate a picture of increasing potting effort with no corresponding increase in landings.

Maximising the natural release of eggs back into the lobster fishery combined with protecting the brood stock and the survival rate of pre-recruits remains key to ensuring the long term sustainability of the fishery.

The proposed provision relating to mutilated pleopods is a new addition but one considered necessary given existing levels of non-compliance experienced in relation to the egg bearing lobster prohibition. Since the beginning of 2018 the Authority's officers have reported over 30 offences resulting in 4 prosecutions, 8 fixed penalties, 13 cautions and 8 warning letters being issued with no sign of improvement in compliance. On occasions officers have found female lobsters which have had all their pleopods removed. It is hoped that the mutilated pleopod provision will improve the Authority's ability to enforce the existing legislation, significantly discourage the practice of manually stripping eggs from female lobsters and strengthen the quality of lobster landed locally.

The majority of regulations contained within the crustacea byelaw proposal are now well established across the industry and it is the Authority's view that the additional provisions including the pot frame size, soft lobster, mutilated pleopods and the new 10m vessel size inside 3nm, supported by the 'sunset' provision, will not have significant economic impact but will add significant stock conservation benefit.

Following a careful review of all the objections, including the content of your email response and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification other than the revised definition of a soft shelled lobster.

Kind regards,

David McCandless

Chief Inshore Fisheries & Conservation Officer
North Eastern Inshore Fisheries & Conservation Authority
Town Hall
Quay Road
Bridlington
YO16 4LP
Tel: 01482 393 690
Web: www.ne-ifca.gov.uk



(In Archive) Fw: Proposed Byelaw
NEIFCA to: David McCandless
Sent by: Yvonne Collinson

03/12/2018 16:56

Archive: This message is being viewed in an archive.

North Eastern Inshore Fisheries and Conservation Authority Support Services
Town Hall
Bridlington
YO16 4LP
Telephone - 01482 393515

----- Forwarded by Yvonne Collinson/CR/ERC on 03/12/2018 16:56 -----

From: ~~David McCandless~~
To: IFCAbyelaws@marlinmanagement.org.uk, ne-ifca@eastriding.gov.uk
Cc: holdernesscoastfig@live.co.uk
Date: 03/12/2018 16:46
Subject: Proposed Byelaw

To whom it may concern,

Please find below my following views regarding byelaw proposals made by the NEIFCA.

NO GEAR TO BE WORKED INSIDE 3 NM BY VESSELS EXCEEDING 10M OVERALL LENGTH.

As I operate a vessel registered under 10M but slightly over 10M overall this proposal troubles me greatly. I had my vessel built over twenty years ago specifically to fish inshore waters and the introduction of such a rule would severely negatively impact my earnings. Being placed on a "sunset list", permitted to fish inside three miles for the duration of my ownership of the vessel would be of little compensation as I intend to sell the vessel and retire within the next five years, if I could not pass the "sunset" listing on it will wipe thousands of pounds off the value of my boat. I presume the ban will include the shooting of fixed nets inside three miles, this would finish our ability to catch white fish as virtually all netting takes place close to the shore. If I could no longer fish for white fish I will have to concentrate on pots all year thus increasing effort on shellfish. My major concern however is SAFETY. Many vessels, like mine, were built to fit the 10M registered length legislation specifically to fish inshore waters and the proposal will force these boats further out to sea and away from the sheltered coastal waters. This will inevitably lead to more accidents, injuries and possibly deaths. If such a byelaw were passed, and I strongly believe it should not, the cut of length should be 10M registered length and not overall.

NO CHANGE TO ESCAPE GAP PROVISIONS.

I am very much in favour of the enforcement of escape gaps in the parlour end of pots, however the continued insistence on having an escape gap in the non-parlour end seems unnecessary. Fishermen have given anecdotal evidence to the NEIFCA officers showing that the gap in the non-parlour end of the pot is not used and this has been backed up by studies conducted by CEFAS and HFIG. The provision of two escape gaps per pot gaps increases work and expense for fishermen but provides no advantage to conservation.



{In Archive} Fw: Proposed Byelaw

NEIFCA to: David McCandless

Sent by: Yvonne Collinson

03/12/2018 16:56

Archive:

This message is being viewed in an archive.

North Eastern Inshore Fisheries and Conservation Authority Support Services
Town Hall
Bridlington
YO16 4LP
Telephone - 01482 393515

----- Forwarded by Yvonne Collinson/CR/ERC on 03/12/2018 16:56 -----

From: Yvonne Collinson
To: David McCandless
Cc: Yvonne Collinson
Date: 03/12/2018
Subject: Proposed Byelaw

To whom it may concern,

Please find below my following views regarding byelaw proposals made by the NEIFCA.

NO GEAR TO BE WORKED INSIDE 3 NM BY VESSELS EXCEEDING 10M OVERALL LENGTH.

As I operate a vessel registered under 10M but slightly over 10M overall this proposal troubles me greatly. I had my vessel built over twenty years ago specifically to fish inshore waters and the introduction of such a rule would severely negatively impact my earnings. Being placed on a "sunset list", permitted to fish inside three miles for the duration of my ownership of the vessel would be of little compensation as I intend to sell the vessel and retire within the next five years, if I could not pass the "sunset" listing on it will wipe thousands of pounds off the value of my boat. I presume the ban will include the shooting of fixed nets inside three miles, this would finish our ability to catch white fish as virtually all netting takes place close to the shore. If I could no longer fish for white fish I will have to concentrate on pots all year thus increasing effort on shellfish. My major concern however is SAFETY. Many vessels, like mine, were built to fit the 10M registered length legislation specifically to fish inshore waters and the proposal will force these boats further out to sea and away from the sheltered coastal waters. This will inevitably lead to more accidents, injuries and possibly deaths. If such a byelaw were passed, and I strongly believe it should not, the cut of length should be 10M registered length and not overall.

NO CHANGE TO ESCAPE GAP PROVISIONS.

I am very much in favour of the enforcement of escape gaps in the parlour end of pots, however the continued insistence on having an escape gap in the non-parlour end seems unnecessary. Fishermen have given anecdotal evidence to the NEIFCA officers showing that the gap in the non-parlour end of the pot is not used and this has been backed up by studies conducted by CEFAS and HFIG. The provision of two escape gaps per pot increases work and expense for fishermen but provides no advantage to conservation.

THE LANDING OF CLAWLESS LOBSTERS TO BE PROHIBITED

Though I do not see this as a major issue such a byelaw seems unnecessary. I am not aware of any commercial market for such lobsters, so all this byelaw will do, is prevent us from taking an otherwise worthless lobster home for our tea. It is also worth noting that lobsters sometimes shed claws during the landing and weighing process, are we to be prosecuted if this happens?

THE LANDING OF SOFT SHELLED LOBSTERS

It is regrettable that some fishermen resort to landing soft shelled lobsters though from my experience it is only a very small minority and the quantities involved are very small. If such a ban was introduced who decides what is a soft lobster? The buyers, both local and continental vary on how soft a lobster they will accept depending on supply and demand. Some lobsters have weak parts of their shell that never hardens or can be hard on one side of their shell but not so hard on the other, these are readily accepted as hard by the buyers but will a fishery officer deem them to be soft? If only the hardest of lobsters were acceptable we would be forced to return over 90% of our catch during the summer months, not only would this lead to bankruptcy for fishermen but it would devastate the whole European lobster market infrastructure.

THE CONTINUATION OF THE PROHIBITION OF LANDING V NOTCHED LOBSTERS

I have supported the V notch scheme from the start and have voluntarily V notched hundreds of buried lobsters over the years but since the introduction of the ban on the landing of buried lobsters this bylaw seems to be redundant. The fact that it prevents us landing lobsters with damaged tails leads to us having to return a lot of lobsters, mostly male, that have fighting damage to their tails. This is nothing to do with V notching and as no one is now releasing freshly V notched lobsters the bylaw should be repealed.

LANDING OF LOBSTERS WITH MISSING OR MUTILATED PLEOPODS

I presume this is a measure to discourage buried lobster scrubbing though it appears to be taking a "sledge hammer to crack a nut" approach. The NEIFCA officers tell me that they already have the means to tell if a lobster has been scrubbed so why do we need another more draconian byelaw for the same purpose? It will take a lot of time to check every lobster for pleopod damage and there is every possibility that such damage could occur during the onboard storage, packing, landing and weighing process. The proposal doesn't specify that this would only relate to female lobsters, returning me to my earlier argument about fighting damage particularly among males, taking more lobsters out of the "OK to land" category.

I believe NEIFCA and its byelaw are essential to protect the fishing industry and the marine environment though it must be remembered that every new byelaw has a negative financial impact on fishermen. If the byelaw is sensible the negative impact will be small and short lived but the cumulative effect of a barrage of legislation we have experienced over the last few years, predominantly aimed at small vessels operating within six miles of the shore is becoming too much, too fast. If all the proposals are ratified into bylaws I will have to consider reducing crew size though this seems ridiculous if I also have to work further offshore!

~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~



Further to your email received on 3 December 2018 objecting to the byelaw proposals I am emailing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the Crustacea byelaw proposals concluded on 7 December. In total the Authority received 9 objections and 1 submission supporting the measures.

The proposed vessel length restrictions for potting within the 3 nautical mile limit are designed to standardise the fleet structure across the NEIFCA district at a size and scale deemed appropriate to ensure the long terms sustainability of shellfish stocks. Grounds within the 3 nautical mile limit are considered more sensitive containing higher proportions of juveniles and more at risk from spikes in fishing effort during seasonal 'new shelling' in many areas. The structure of the current potting fleet has also been carefully considered in setting the proposed vessel size. The 'sunset' mechanism has been written into the proposed regulation to protect existing historical rights for operators such as yourself to continue fishing up until the point of sale of the respective vessel. The inclusion of the 'sunset' mechanism allows for a prolonged re-adjustment of the fleet structure minimising economic impact. If a continuation of such rights were to be permitted beyond the first sale of the affected vessel this would completely negate the intentions of the proposed regulation. The proposed length restrictions only apply to potting so other fishing activities such as netting inside 3 nautical miles would not be affected even after your vessel was sold. There are currently a number of vessel length restrictions in force throughout the NEIFCA district regarding trawling, dredging and potting which have been implemented during the years and which, to my knowledge, have not impacted on the saleable value of the affected vessels.

In terms of escape gaps, given that the measure is now well established, it is not the Authority's intention to modify the existing provision at this point in time.

In terms of clawless lobster such animals will survive and establish new claws, so given that they carry no economic value it would seem to make sense to return them and support the established brood stock of lobsters on the ground.

As you will be very aware, throughout the region, particularly during the summer months, there are significant issues with the landing of soft shelled lobsters. These landings impact on both catch quality and price and offer no benefit to the local industry. For many years the Authority has considered a formal prohibition on landing soft lobsters and has now taken that step following the recent introduction of a similar measure in the Northumberland IFCA area. The enforcement issues raised within your email response are wholly recognised and do present some challenges. To that end the definition has been strengthened and now states '*Soft shelled lobster means a lobster which has recently cast its shell and is malleable under manual pressure*' meaning that the shell can be manually manipulated without cracking or breaking. Since 1967 a similar national measure has been in place to protect soft shelled edible crab and experienced fishermen can easily identify such crabs at the point of capture and return them immediately back to the sea.

Despite the prohibition on landing egg bearing lobsters 'V' notching still plays a crucial role in the conservation of lobster stocks. Since the measure was first introduced in 1999 the definitions of mutilation have been strengthened to provide clarity and in terms of the mutilation of lobster tails protection is only applied to the two flaps located either side of the telson. It should also be borne in mind that 'V' notching also protects both male and female stock in supporting the breeding population of lobsters.

The proposed provision relating to mutilated pleopods is a new addition but one considered necessary given existing levels of non-compliance experienced in relation to the egg bearing lobster prohibition. Since the beginning of 2018 the Authority's officers have reported over 30 offences resulting in 4 prosecutions, 8 fixed penalties, 13 cautions and 8 warning letters being issued with no sign of improvement in compliance. On occasions officers have found female lobsters which have had all

their pleopods removed. It is hoped that the mutilated pleopod provision will improve the Authority's ability to enforce the existing legislation and significantly discourage the practice of manually stripping eggs from female lobsters. The current provision contained within the proposed byelaw is non-gender specific, this is deliberate and will support both stock conservation and improvements in catch quality. The broad principles around non-gender specific measures are to try and minimise the risks of measures actually increasing the pressures on one particular gender. An example of this is, as already stated within this response, the protection for 'V' notched lobsters.

The majority of regulations contained within the crustacea byelaw proposal are now well established across the industry and it is the Authority's view that the additional provisions including the pot frame size, soft lobster, mutilated pleopods and the new 10m vessel size inside 3nm, supported by the 'sunset' provision, will not have significant economic impact but will add significant stock conservation benefit and raise the quality of lobster landed across the area.

Following a careful review of all the objections, including the content of your email response and in full consultation with the Authority members, it remains the Authority's intention to progress the byelaw proposal to formal confirmation without modification other than the revised definition of a soft shelled lobster.

Kind regards,

David McCandless

Chief Inshore Fisheries & Conservation Officer
North Eastern Inshore Fisheries & Conservation Authority
Town Hall
Quay Road
Bridlington
YO16 4LP
Tel: 01482 393 690
Web: www.ne-ifca.gov.uk

North Eastern Inshore Fisheries and Conservation Authority

Marine and Coastal Access Act 2009 (c. 23)

XXVIII CRUSTACEA CONSERVATION BYELAW 2018

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

1. Interpretation

In this byelaw:

- (a) 'Area A', 'Area B' and 'Area C' are defined in the schedule;
- (b) 'the Authority' means the North Eastern Inshore Fisheries and Conservation Authority as defined in articles 2 and 4 of the North Eastern Inshore Fisheries and Conservation Order 2010 (S.I. 2010 No. 2193);
- (c) 'the baselines' means the 1983 baselines as defined in S.I 2010;;
- (d) 'berried lobster' means a lobster with eggs or spawn attached to the tail or other exterior part of the lobster, or in such a condition as to show that at the time of capture it had eggs or spawn so attached;
- (e) 'carapace width' means the width of the carapace measured across the widest point;
- (f) 'clawless lobster' means any lobster which is displaying the total absence of any fully formed and functioning claws or chelae. Functioning is defined as the ability of the animal to open and close the claw;
- (g) 'cooked crab offal' means edible crab which has been cooked;
- (h) all coordinates are derived from World Geodetic System 1984 datum;
- (i) 'crab' means either edible crab or velvet crab;
- (j) 'crustacea' means any species of lobster, edible crab, velvet crab or Norway lobster;
- (k) 'the District' means the North Eastern Inshore Fisheries and Conservation District as defined in articles 2 and 3 of S.I 2010;
- (l) 'edible crab' means a crab of the species *Cancer pagurus*;
- (m) 'fishing' means searching for sea fisheries resources, shooting, setting, towing, hauling of fishing gear and taking sea fisheries resources on board;
- (n) 'fishing trip' means the entire period between leaving and returning to port;

- (o) 'flap' means any part of the five flaps of the tail fan of a lobster;
- (p) 'lobster' means lobster of the species *Homarus gammarus*;
- (q) 'mutilated lobster' means any lobster with any damage likely to obscure a 'v' notch mark or absence of either one or both inner flaps of the tail fan either side of the main tail flap. Any other damage or mutilation to, or absence of, any other tail flap, excluding the two inner flaps, is not classed as mutilation for the purpose of this byelaw regulation;
- (r) 'mutilated pleopod' means any visible damage, abrasion, mutilation or absence of any pleopods;
- (s) 'Norway lobster' means a lobster of the species *Nephrops norvegicus*
- (t) 'overall length' means the overall length of the vessel as detailed on its official certificate of registry;
- (u) 'pleopod' means the small abdominal leg of a lobster attached to the abdomen used for swimming and brooding eggs;
- (v) 'pot' means a pot, creel or trap used for catching sea fish or crustacea;
- (w) 'pot size' means the dimensions of the pot at its maximum size;
- (x) 'soft shelled lobster' means a lobster which has recently cast its shell and is malleable under manual pressure;
- (y) 'sunset list' means a list of vessels who possess a track record of fishing for crustacea using pots in 'Area A' or 'Area B' since January 2016 and have registered catches of lobster and crab with the Authority;
- (z) 'v' notched lobster' means a lobster with a notch in the shape of the letter 'V' with a depth of at least 5 mm in at least one of the inner flaps of the tail fan either side of the main tail flap. The depth of the 'v' notch is measured vertically from the distal edge of the flap (not including the setae) to the apex of the 'v';
- (aa) 'Velvet crab' means a crab of the species *Necora puber*.

2. Prohibitions

(a) Vessel length restrictions

A person must not use a pot from a vessel exceeding 10 meters overall length in Area A or Area B unless the following criteria have been met:

- (i) the vessel is on a 'sunset list' maintained by the Authority;

- (ii) the vessel does not exceed 14 metres overall length;
- (iii) the vessel owner has applied to be placed onto the 'sunset list' within six months of the confirmation of this byelaw;
- (iv) there is no change of ownership affecting the major share holding in the vessel concerned.

(b) **Escape gaps**

A person must not use a pot within Areas A and C for the purpose of fishing for crustacea unless the following criteria have been met:

- (i) the pot has at least one unobstructed escape gap located in its exterior wall or, in the case of a multiple chambered pot, each individual chamber has an unobstructed escape gap located in its exterior wall;
- (ii) each escape gap is of sufficient size that there may be easily passed through the gap a rigid box shaped gauge 80 mm wide, 46 mm high and 100 mm long; and
- (iii) the escape gap is located within the pot in such a way that the longitudinal axis is parallel to the base of the pot and is located in the lowest part of the parlour as is practically possible and within 50 mm of the base.

(c) **Minimum size for edible crab**

A person must not remove, take, retain, store, carry or land any edible crab which has not attained a carapace width of 140 mm but shall return the same to the sea immediately in a position as near as possible to that part of the sea from which it was taken.

(d) **Parts of edible crab**

A person must not remove, take, retain, store, carry, or land any edible crab or part thereof which is detached from the body of the crab, and/or which does not comply with the minimum size but shall return the same to the sea immediately unless the following criteria have been met:

- (i) the total of such parts is not more than 10% of the total weight of all species subject to a statutory minimum landing size other than crustacea, landed by the same person on one occasion; and

- (ii) the edible crab was caught in a trammel, gill, tangle or other enmeshing net and the part became detached from the crab in the course of clearing the net.

(e) **Use of edible and velvet crab for bait**

A person must not use any edible crab or velvet crab for bait with the exception of the following:

- (i) the use of any cooked crab offal as bait; and
- (ii) The use of edible crab, above the statutory minimum landing size as bait for recreational rod fishing.
- (iii) The use of velvet crab, above the statutory minimum landing size as bait.

(f) **Parts of lobster (*Homarus gammarus*)**

A person must not remove, take, retain, store, carry, or land, the tail, claw or any other detached part of a lobster.

(g) **Clawless lobsters (*Homarus gammarus*)**

A person must not remove, take, retain, store, carry, or land any clawless lobster. Any clawless lobster shall be returned immediately to the sea in a position as near as possible to that part of the sea from which it was taken.

(h) **Soft shelled lobsters (*Homarus gammarus*)**

A person must not remove, take, retain, store, carry, or land any soft shelled lobster. Any soft shelled lobster shall be returned immediately to the sea in a position as near as possible to that part of the sea from which it was taken.

(i) **'V' notched or mutilated lobsters (*Homarus gammarus*)**

A person must not remove, take, retain, store, carry, or land any 'V' notched lobster or mutilated lobster. Any 'v' notched lobster or mutilated lobster shall be returned immediately to the sea in a position as near as possible to that part of the sea from which it was taken.

(j) **Berried lobsters (*Homarus gammarus*)**

A person must not remove, take, retain, store, carry, or land any berried lobster. Any berried lobster shall be returned immediately

to the sea in a position as near as possible to that part of the sea from which it was taken.

(k) **Mutilated pleopods (*Homarus gammarus*)**

A person must not remove, take, retain, store, carry, or land any lobsters displaying mutilated pleopods. Any lobster displaying mutilated pleopods shall be returned immediately to the sea in a position as near as possible to that part of the sea from which it was taken.

(l) **Maximum pot size**

A person must not use any pot with a size exceeding 50 cm high x 60 cm wide x 110 cm long.

3. **Deeming**

(a) With the exception of the provisions contained within paragraphs 2(f), 2(i) and 2(j) during each singular fishing trip, vessels fishing exclusively outside the District and transiting through the district will not be subject to the provisions of this byelaw.

(b) It is to be presumed that a vessel has taken or removed any sea fisheries resources to which this byelaw relates from within the District if, at any time, during any singular fishing trip –

(i) it is proved that –

(a) the vessel was found within the District, and

(b) when so found, the vessel was in possession of any of the things mentioned in paragraph (c); and

(ii) it is reasonable to infer from those facts (either by themselves or taken together with other circumstances) that the vessel was, or had been, taking or removing sea fisheries resources in contravention of this byelaw.

(c) The things are –

(i) such equipment, vehicle, apparatus or other gear or paraphernalia (including clothing) as may be used for the purpose of taking or removing sea fisheries resources in contravention of this byelaw; and

(ii) sea fisheries resources, the taking and removing of which is prohibited by this byelaw.

(d) The presumption in paragraph (b) does not apply where sufficient evidence is adduced to raise an issue as to whether the fisheries resources on board the vessel were taken and or removed from within the District. Such evidence must include electronic charting information or vessel positional data.

4.

Revocations

- (a) The byelaw with the title 'XXI Protection of 'V' Notched Lobsters' made by North Eastern Inshore Fisheries and Conservation Authority on 8 December 2011 in exercise of its power under section 155 and 156 of the Marine and Coastal Access Act 2009 and confirmed by the Secretary of State on 12 October 2012, in force immediately before the making of this byelaw is revoked.
- (b) The byelaw with the title 'XXVIII Crustacea Conservation Byelaw' made by North Eastern Inshore Fisheries and Conservation Authority on 6 December 2013 in exercise of its power under section 155 and 156 of the Marine and Coastal Access Act 2009 and confirmed by the Secretary of State on 17 November 2015, in force immediately before the making of this byelaw is revoked.
- (c) The emergency byelaw with the title 'Emergency Byelaw Berried Lobsters' made by North Eastern Inshore Fisheries and Conservation Authority on 16 October 2017 in exercise of its power under section 157 of the Marine and Coastal Access Act 2009 in force immediately before the making of this byelaw is revoked.

I hereby certify that the above Byelaw was made by the Authority at its meeting on 14 June 2018.

Caroline Lacey

Clerk

North Eastern Inshore Fisheries and Conservation Authority

Town Hall

Quay Road

Bridlington

East Yorkshire

The Secretary of State for Environment, Food and Rural Affairs in exercise of the powers conferred by section 155 (4) of the Marine and Coastal Access Act 2009, confirms this byelaw made by the North Eastern Inshore Fisheries and Conservation Authority on 14 June 2018.

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

Date:

Schedule
Definition of areas

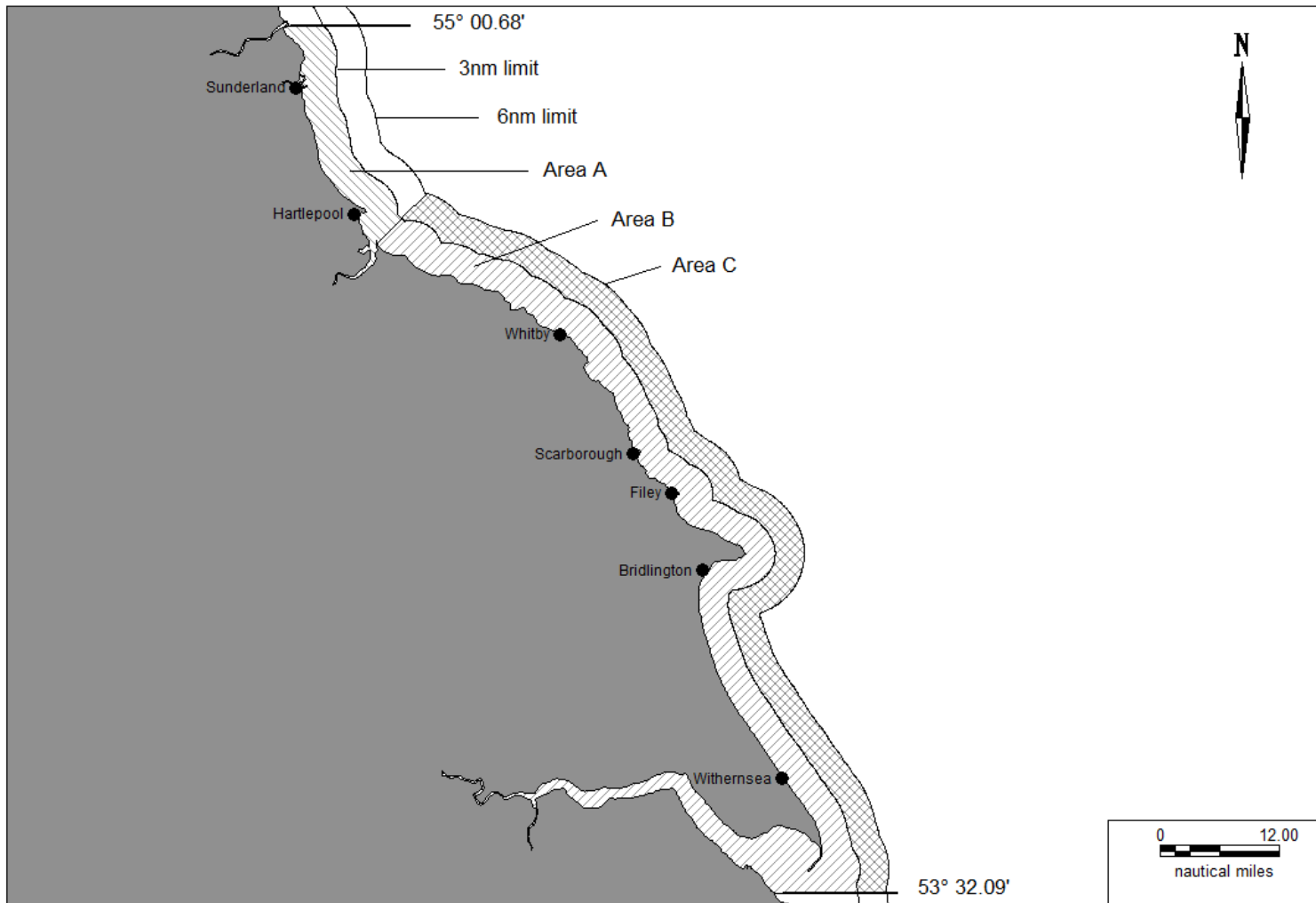
1. Area A means those tidal waters and parts of the sea bounded by the following:
 - (a) to the North by the boundary of the District, to the South by a line drawn 045°T from the light on the South Pier at the mouth of the Tees Estuary (position Lat 54°38.847'N Long 001°08.251'W) to the three nautical mile limit and to the East by the three nautical mile limit;
2. Area B means those tidal waters and parts of the sea bounded by the following:
 - (a) to the South by the boundary of the District, to the North by a line drawn 045°T from the light on the South Pier at the mouth of the Tees Estuary (position Lat 54°38.847'N Long 001°08.251'W) to the three nautical mile limit and to the East by the three nautical mile limit;
3. Area C means those tidal waters and parts of the sea bounded by the following:
 - (a) to the North by a line drawn 045°T from the light on the South Pier at the mouth of the Tees Estuary (position Lat 54°38.847'N Long 001°08.251'W) to the boundary of the District, to the East by the boundary of the District and to the South by the boundary of the District;

Explanatory note

(This note is not part of the byelaw)

The intention of this byelaw is to provide a comprehensive suite of management provisions to conserve crustacea stocks within the District. These provisions include restrictions on the size of vessel which can work pots inside the 3 nautical mile limit, a mandatory requirement for all pots to carry escape gaps, a minimum landing size of 140 mm for edible crab and further restrictions on the removal of parts of crab and lobster, 'berried', 'soft shelled', 'V' notched, clawless lobster, lobsters displaying mutilated pleopods and the use of edible as bait.

‘Area A’, ‘Area B’ and ‘Area C’.



Title: Byelaw XXVIII: Crustacea Conservation Byelaw 2018 IA No: NEIFCA_18_1 Lead department or agency: North Eastern Inshore Fisheries & Conservation Authority (NEIFCA) Other departments or agencies: N/A	Impact Assessment (IA)
	Date: 18/02/2019
	Stage: Final
	Source of intervention: Domestic
	Type of measure: Secondary legislation
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 2018 prices)	In scope of One-In, Three-Out?	Measure qualifies as
£0	£0	£0	Not in scope	Non-qualifying regulatory provision

What is the problem under consideration?

On 1 October 2017, 'The Lobsters and Crawfish (Prohibition of Fishing and Landing) (Amendment) (England) Order 2017' (SI 2017 No 899) prohibited the fishing for and landing of all egg bearing lobsters and crawfish caught in English waters and landed at English ports. The legislation does not apply to individuals taking egg bearing lobsters who are not using vessels. Under its shellfish permitting schemes, during 2018, NEIFCA issued 1464 permissions to individuals to take two lobsters per day from the shore. During 2018 over thirty offences were detected relating to the taking and landing of egg bearing lobsters across the NEIFC District. Four of these offences were successfully prosecuted and eight financial administrative penalties, thirteen formal cautions and eight warning letters were issued in response.

Why is government intervention necessary?

Without intervention NEIFCA could not apply the national legislation protecting egg bearing lobsters to individuals working without vessels within its District. Intervention also provides an opportunity to amend existing vessel size restrictions within three nautical miles, introduce a maximum pot size, prohibit the taking of lobsters which have recently cast their shells and rationalise the existing number of NEIFCA byelaws by consolidating 'v' notched lobster provisions within a new regulation.

What are the policy objectives and the intended effects?

To ensure that the catching, retention and landing of all egg bearing lobsters by unlicensed and unregistered vessels and operators is prohibited throughout the NEIFC District and that the Authority's Officers have a comprehensive suite of powers in place to enforce the supporting regulations.

2. To take pro-active steps in the management of the lobster and crab fishery by reducing the vessel size limit within three nautical miles, introducing a maximum pot size to minimise risk to stocks from technology creep and prohibiting the taking of soft shelled lobster.
3. To rationalise the number of NEIFCA byelaws by consolidating 'v' notched lobster provisions within a new regulation.

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

The following policy options have been considered:-

Option 0 - Do nothing - would result in the continued removal of berried lobsters by individuals under a weaker regulatory framework.

Option 1 - Regulatory management – would support the application of the SI to all sectors targeting lobsters.

Option 2 - Use of non-regulatory measures –voluntary measures to achieve the stated objectives are not considered to be feasible as compliance with such measures is anticipated to be low.

Option 1 is preferred. Regulatory management would allow for the full protection of egg bearing lobsters and the application of the SI to all sectors targeting lobsters. In combination with the other measures proposed this byelaw will help to ensure the long term sustainability of crustacean stocks exploited within the NEIFC District.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date** 12/2023

Does implementation go beyond minimum EU requirements?			Yes		
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 Chief Officer:



Date: 18/02/2019

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2018	PV Base Year 2018	Time Period Years 10	Net Benefit (Present Value (PV))		
			Low: Optional	High: Optional	Best Estimate: £0

COSTS	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant	Total Cost (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£0		£0	£0

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

The prohibition on taking lobsters which have recently cast their shells would reduce some direct selling to the public at some ports and locations via secondary markets. This is limited to a short four week period during the summer months and cannot be quantified. All shellfish merchants tend to reject any soft shelled lobsters at the point of landing. No other monetised costs have been identified.

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

The prohibition on retaining and landing egg bearing lobsters would potentially reduce the catching capacity of recreational fishers.

BENEFITS	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant	Total Benefit (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£0		£0	£0

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

None identified.

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

The proposed byelaw will increase the spawning stock biomass of lobsters within the District with benefit to areas outside of NEIFCA jurisdiction.

Key assumptions/sensitivities/risks	Discount rate
Assumes 100% compliance.	3.5%

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual):			In scope of OI30?	Score for business impact target:
Costs: £0	Benefits: £0	Net: £0	Not in scope	N/A

Evidence Base (for summary sheets)

1. Introduction

- 1.1. NEIFCA is charged with the sustainable management of fisheries within its jurisdiction, authorised through section 153 of the Marine and Coastal Access Act (2009). The provisions in this byelaw relating to egg bearing lobsters are intended to complement the provisions of SI 2017 No 899 by ensuring that egg bearing lobsters captured by all fishing sectors are returned to the sea to preserve spawning stock biomass.
- 1.2. Reduction of the vessel size limit within three nautical miles, the introduction of a maximum pot size and a prohibition on taking lobsters which have recently cast their shells are seen as proactive, forward thinking measures to ensure the continued sustainability of lobster and crab stocks within the NEIFC District.
- 1.3. In addition to the introduction of the new conservation measures detailed in 1.2 the proposed regulation also incorporates a number of measures which have been transferred and updated from the existing Crustacea Conservation byelaw XXVIII confirmed in 2015. In order to rationalise and consolidate the number of IFCA byelaws, an opportunity was also identified to transfer existing 'v' notched lobster provisions contained in 'Byelaw XXI Protection of 'V' Notched Lobsters' into the new proposed byelaw.

2. Rationale for intervention

- 2.1. Inshore Fisheries and Conservation Authorities have duties to ensure that fish stocks are exploited in a sustainable manner by implementing appropriate management measures. Implementing this byelaw will ensure that fishing activities are conducted in a sustainable manner and that the marine environment is suitably protected.
- 2.2. Fishing activities can potentially cause negative outcomes as a result of 'market failures'. The failures in this case relate to public goods and services, negative externalities and common goods.
 - 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, means 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.
- 2.3. IFCA byelaws aim to redress these sources of market failure in the marine environment through the following ways:

- Measures will support continued existence of public goods in the marine environment, for example conserving the spawning stock biomass of lobsters in the sea of the IFCA District.
- Measures will ensure that negative externalities are either reduced or suitably mitigated.
- Measures will support continued existence of common goods in the marine environment, for example ensuring the long term sustainability of lobster stocks in the IFCA District.

3. *Policy objectives and intended effects*

3.1. The key objectives of the proposed management are;

- To introduce restrictions on taking egg bearing lobsters by recreational fishers.
- To reduce the length of vessels targeting lobster and crab stocks within the three nautical mile fisheries limit of the NEIFC District.
- To introduce a maximum pot size to address technology creep; observed as an increase in the size of pots being utilised by the commercial potting sector.
- To introduce a prohibition on the taking of lobsters which have recently cast their shells which tend to impact on local markets in terms of price and quality of product.
- To introduce a prohibition of taking of lobsters with mutilated pleopods to restrict the practice of mechanical stripping of eggs.
- To rationalise the number of NEIFCA byelaws by incorporating provisions for 'v' notched lobsters within this byelaw.
- To rationalise the number of NEIFCA byelaws by incorporating provisions contained within the 2015 crustacea byelaw.
- To retain a deeming clause which strengthens the Authority's ability to effectively enforce those provisions which are specific to the NEIFC District but permits vessel working exclusively outside that District to legitimately transit through and land their catch.

3.2. The intended effect of these management measures is to ensure the long term sustainability of lobster and crab stocks within the NEIFC District.

4. *Background*

4.1. Egg bearing lobsters

- 4.1.1. On 1st October 2017, 'The Lobsters and Crawfish (Prohibition of Fishing and Landing) (Amendment) (England) Order 2017' (SI 2017 No 899) prohibited the fishing for and landing of all egg bearing lobsters and crawfish caught in English waters and landed at English ports. The legislation only applies to 'relevant British fishing boats' or 'Scottish fishing boats' and has no application for individuals working without vessels.
- 4.1.2. The capture and removal of lobsters by recreational fishers within the NEIFC District is regulated by 'Byelaw XXII Permit to fish for lobster, crab, velvet crab and whelk'. Under provisions in this byelaw recreational fishers are issued with Limited Shellfish Permits (LSP) which permits fishers to take no more than two lobsters per day. In 2018 NEIFCA issued over 1,464 LSPs. It is considered critical to support the application of the new SI that enforcement provisions can be applied to all sectors including individuals operating without vessels, to ensure the full protection of egg bearing lobsters within local stocks.
- 4.1.3. While the SI legislates for the landing of berried lobsters, there is also significant concern over retention in keep pots at sea until they have shed their eggs which would not be consistent with the overall aim of the SI in preserving those animals in the wild. The additional inclusion of protection for egg bearing lobsters with the byelaw regulation will significantly strengthen enforcement capabilities at sea.

4.1.4. There are no monetary costs associated with these provisions as recreational fishers do not generate income from the capture of lobsters.

4.2. 'V' notched lobsters

In review of the proposed byelaw, an opportunity was identified to rationalise the number of NEIFCA byelaws by including the provisions contained within 'Byelaw XXI Protection of 'v' Notched Lobsters' into this byelaw. No costs are associated with this measure as regulations already exist prohibiting the landing of 'v' notched lobsters.

4.3. Vessel length restrictions

4.3.1. The current regulations regarding maximum overall length of vessels using pots within 3 nautical miles within the NEIFC District are 14 meters overall length between the north of the District and the River Tees, and 12.5 meters overall length between the River Tees and the south of the District. The proposed byelaw aims to reduce and standardise the maximum length of vessel that may use pots within three nautical miles within the District to 10 meters overall length.

4.3.2. Of the 211 commercial permit holders active in 2018, 29 have an overall length above 10 meters. Many of these vessels operate beyond the three nautical mile fisheries limit and often beyond the 6 nautical mile limit. There is no anticipated cost to current permit holders as it is proposed that vessels that have reported landings to the Authority in the past two years will be placed on a 'sunset list' and retain access under current provisions up to the point of sale of the vessel.

4.4. Maximum pot size

4.4.1. Observations from the Authority's Officers have noted a trend of increasing pot size as more operators move from smaller, traditional, hand-made pots to larger, commercially produced steel framed pots. The size of pot proposed has been set at the largest size currently observed in use and available from commercial pot manufacturers. It is not believed that any vessels are currently using pots above this size, therefore there will be no monetary cost associated with this measure. This is considered to be a pro-active measure to halt the observed trend of increasing pot size.

4.5. Lobsters which have recently cast their shells

4.5.1 During a short period of four weeks, typically during June following mating, quantities of lobsters will be caught which have recently cast their shells and are in a soft state. The shells of such lobsters will move when light pressure is exerted on them. Whilst commercial merchants will reject these lobsters when presented for sale, at some ports there is a secondary market supported by direct selling to the public or cafes and restaurants. This impacts on market prices and catch quality and a general prohibition on taking such lobsters is deemed as a positive pro-active conservation measure.

4.6. Mutilated pleopods

4.6.1 Since the beginning of 2018 the Authority's officers have reported over 30 offences resulting in 4 prosecutions, 8 fixed penalties, 13 cautions and 8 warning letters being issued with no sign of improvement in compliance. On occasions officers have found female lobsters which have had all their pleopods removed. It is hoped that the mutilated pleopod provision will improve the Authority's ability to enforce the existing legislation and significantly discourage the practice of manually stripping eggs from female lobsters.

4.7. Deeming clause

4.7.1 Given that a significant proportion of the commercial shell fishing fleet operates on grounds both within and beyond the 6 nm limit and a number of conservation measures only apply within the NEIFC District, the inclusion of a 'Deeming' clause within the current XXVIII Crustacea Conservation byelaw regulation was agreed with Defra in 2015. At the time it was considered essential in supporting the effective application and enforcement of the District specific measures whilst at the same time, still enabling vessels operating exclusively outside the District to transit through and legitimately land their catches. The

same issues identified in 2015 remain and therefore the retention of such a clause within a new regulation is still considered extremely important.

5. Policy Options

- 5.1. Option 0: Do nothing - This option would see the continued retention and landing of berried lobsters by recreational fishers with associated impacts on spawning stock biomass, the continuation of current vessel size restrictions within three nautical miles, continued creep in terms of increasing pot frame sizes and the continued landing of soft shelled lobsters, all increasing fishing related mortality on stock and negative impacts on spawning stock biomass.
- 5.2. Option 1: Regulatory management – The proposed byelaw would provide comprehensive protection for berried lobsters within the NEIFC District and support the application of the SI. It will also limit the size of vessel capable of operating pots within three nautical miles to 10 meters in length, arrest the increasing trend in pot size and limit the sale of lobsters which have recently cast their shells.
- 5.3. Option 2: Use of non-regulatory measures – It is thought that voluntary measures to preserve egg bearing lobsters would not achieve the desired objective as compliance would be low. Voluntary measures relating to vessel size, pot size and soft lobsters are similarly not expected to achieve the desired outcome.

Option 1 is preferred. Regulatory management would allow for the full protection of egg bearing lobsters and the application of the SI to all sectors targeting lobsters. In combination with the other measures proposed this byelaw will help to ensure the long term sustainability of crustacean stocks within the NEIFC District.

6. Summary of Option 1 impacts on fishery

- 6.1. The only identified impacts of the proposed measure would be reduced lobster catching capacity by recreational fishers and a loss of the secondary market for soft shelled lobsters. No reduction in current daily catch limits is being proposed and impacts are not considered to be significant.

7. Conclusion

- 7.1. The proposed measures will make a positive contribution to the existing suite of management to protect crustacean stocks within the NEIFC District and ensure their long term sustainability

Annex A: Policy and Planning

One in Three Out (OI3O)

OI3O is not applicable for byelaws implemented for the management of sea fisheries resources within IFC Districts as they are local government byelaws introducing local regulation and therefore not subject to central government processes.

Small firms impact test and competition assessment

No firms are exempt from this byelaw. It applies to all firms who use the area. This measure 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.

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

The proposed byelaw will include management areas in the East inshore plan area and the North East inshore plan area.

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

If so, please give details of the assessments completed:

- In the East inshore plan area the byelaw is in accordance with the following objectives and policies from the East Marine Plans:
 - Objective 6: To have a healthy, resilient and adaptable marine ecosystem in the East marine plan areas.
 - Objective 7: To protect, conserve and, where appropriate, recover biodiversity that is in or dependent upon the East marine plan areas.
 - Policy BIO1: Appropriate weight should be attached to biodiversity, reflecting the need to protect biodiversity as a whole, taking account of the best available evidence including on habitats and species that are protected or of conservation concern in the East marine plans and adjacent areas (marine, terrestrial).
 - Policy MPA1: Any impacts on the overall marine protected area network must be taken account of in strategic level measures and assessments, with due regard given to any current agreed advice on an ecologically coherent network.
- In the North East inshore plan area no marine plan is currently in place. Therefore for management areas in this plan area consideration has been given to the Marine Policy Statement. 3.8.3 Decision makers must therefore have regard to the provisions of the CFP in developing any plans or proposals affecting fisheries. The CFP is currently being reviewed. The view of the UK Administrations is that the overall aim of the reformed CFP should be to attain ecological sustainability whilst optimising the wealth generation of marine fish resources and their long term prospects

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5th December 2018

Dear Sir or Madam,

Byelaw XXX: Automatic Identification System Byelaw Consultation

The following is offered in response to a consultation on the above byelaw requiring all vessels in the NEIFCA district to carry and operate an AIS system outside of port. In light of wider proposals to require all <12m vessels in England to carry IVMS the proposal is presented as having additional marginal benefits described as:

- Providing real-time information when IVMS units are not in range of the GPRS network and so not transmitting for the operational purposes to initiate responses to potential non-compliance issues.
- Providing a means of detection for the North Eastern Guardian III that currently does not have an offshore internet connection.
- Covering vessels such as charter angling vessels that would unlikely be covered under the IVMS proposals.

The original concept of VMS and by connection IVMS that is aimed at fisheries management and enforcement purposes was predicated on the principle that businesses had the right to commercial confidentiality over personal identification. Given that AIS is an open public data transmission system in effect its use for management and enforcement purposes rides a coach and horses through that principle. It also risks encouraging an undesirable "vigilantism" by third party actors not involved in fisheries regulation.

AIS was intended as a navigational safety tool, not a tool for fisheries enforcement. The appropriate authority on safety matters, the MCA, has not recommended that it should be used beyond the purposes for which it is assigned and not for fishing vessels below 15m in length. It is not under the jurisdiction of NEIFCA to implement measures

for safety applications. While the impact assessment argues that safety would be improved on account of many more vessels operating AIS, it will still, in our view, undermine good safety practice by encouraging the switching off of units by those wishing to transcend regulations, and by creating confusion over the primary purpose of AIS. Furthermore, there are inherent practical difficulties in policing whether or not malpractice is occurring due to switching off a unit. How would NEIFCA be able to determine whether or not an operator has stitched off its AIS unit as opposed to some other form of communication outage or lapse?

We consider that in implementing this proposal there are also a number of negative impacts that have been overlooked. These include:

- There are practical considerations over whether it is feasible to fit such a device on small craft, in addition to the IVMS device.
- Aside from the installation costs, once introduced there is an ongoing cost of replacing units that have not been accounted for.
- The requirement will capture vessels that may need only to transit through the NEIFCA district.
- Vessels will be vulnerable to being tied up in port awaiting repairs or replacement not only if the IVMS equipment stops functioning but also on account of the AIS device.

Against all of these issues, the marginal benefits of requiring AIS for enforcement purposes over above the IVMS system are also diminished by the fact that NE Guardian presumably carries a radar to detect vessels, which negates the purpose of utilising AIS. If it does not have radar then that option would come at considerably less cost than the costs associated with the whole fleet adopting AIS. If indeed access to IVMS data is a practical advantage then it would undoubtedly be more cost effective to have an offshore internet connection installed on the vessel.

Furthermore, the advantages of AIS rest on assumption that the district does not have good coverage of GPRS – has GPRS range and coverage in the district been determined in informing the proposal? In contrast and particularly for land based enforcement, as AIS is a line of site communication system from vessel to vessel, it is also likely that shore side reception will be limited.

For all of these reasons we consider the proposal to be inappropriate and accordingly object to the introduction of the byelaw.

Yours faithfully,



Dale Rodmell
Assistant Chief Executive

All enquiries should be directed to:

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Your ref:

Our ref: neifca
23 January 2019

Mr D Rodmell
Assistant Chief Executive
NFFO
30 Monkgate
York
YO31 7PF

Dear Dale,

RE: Byelaw XXX: Automatic Identification System Byelaw Consultation

Further to your letter dated 5 December 2018 and submitted on behalf of your members, commenting on proposals for the mandatory introduction of AIS on board commercial fishing vessels operating within the Authority's district, I am writing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the AIS byelaw proposal concluded on 7 December 2018. In total the Authority received 18 objections and 2 submissions supporting the proposed byelaw regulation. 16 of the 18 objections were received from representatives of the recreational rod fishing sector and 2 from the commercial fishing sector including your response submitted on behalf of the NFFO. This is the second time that this particular byelaw proposal has been subject to formal consultation and extensive informal consultation across the commercial fishing fleet within the Authority's district has previously drawn broad support for the measure.

Having considered the content of your objection very carefully I would like to make the following points in response:

When officers were originally examining the concept of utilising the AIS framework to monitor fishing activities they sought the views of both the MCA and the ICO on the potential implications for both maritime safety and the transmission of personal data. No concerns or issues were raised by either national regulator and options exist to offer encrypted AIS units if requested.

Your concerns surrounding potential 'vigilantism' are unclear but one of our current byelaw regulations carries a mandatory AIS requirement for all vessel's engaged in scallop dredging activity which has encouraged 'positive' behaviours particularly in relation to reducing fishing gear conflict.

Although development work is ongoing, currently only an AIS vessel monitoring device offers a tried and tested solution for small unpowered or low-powered vessels with minimal interventions required.

Unlike IVMS devices, which carry an ongoing operational fee, functioning AIS units do not carry such charges other than the 'one off' capital cost for purchase and installation. NEIFCA is committed to supporting this burden on all affected vessel operators. The anticipated life span of an AIS unit is fifteen years.

In potentially carrying both an AIS and IVMS system on board within the Authority's District the likelihood of mandatory tie up should actually be much more reduced.

NEIFCA has extensive historical experience of utilising a wide and varied range of mobile networks and suppliers across its District both onshore and at sea. Particular issues exist at a number of MPA sites and locations along the Holderness Coast of East Yorkshire, Flamborough Head and the North Yorkshire coast. We know from experience that a mandatory AIS system will alleviate these issues in terms of GPRS coverage. As you have stated the principles of AIS work on 'line of sight' coverage but there is a network of elevated receiving masts located across the NEIFCA District which provide comprehensive signal coverage.

The Authority's main patrol vessel North Eastern Guardian III (NEG III) carries the latest radar and electronic charting systems available. Radar will detect vessels and provide positional information but no identification information over limited distances. AIS transmissions provide both positional, identification and further vessel information over a much greater distance and would be captured directly onto existing on board systems. NEIFCA could utilise its existing on board satellite communication systems to access IVMS data, subject to sufficient download speeds, but this would cost in the region of £1000s per month on an ongoing basis.

In summary, utilising the existing AIS platform to strengthen the remote monitoring of vessel activity across the Authority's District represents a 'tried and tested' method in fisheries management globally. Locally it has proven to be an effective tool in monitoring scallop dredging activity. It is cost effective with no ongoing charges for the industry and can capture the whole spectrum of the fleet without significant modifications for smaller craft. Based on comments received during two formal periods of consultation there appears to be broad support for the measure across the commercial fishing industry and over 30% of operators are already utilising the system within the Authority's District.

For all of the above reasons it is the Authority's intention to seek final Ministerial confirmation of the AIS byelaw proposal.

Yours Sincerely,

David Thomas McCandless
Chief Officer

RESPONSE

I would like to register an objection to the mandatory AIS proposed bylaw.

1. INTERPRETATION OF COMMERCIAL GAIN

My strongest objection is your interpretation of Commercial Gain. You stated in your email of 30th November that your interpretation of Commercial gain is only IFCA perspective. That is not true; that is NE-IFCA perspective. Is that legally accepted? Has NE-IFCA taken legal advice on this interpretation, or is it, as you say your own perspective? And under what authority can IFCA classify boats? If a legal precedent is set by your interpretation, this would have wide reaching ramifications for our business.

We would be excluded from no-take zones as we are taking a commercial gain, we may have to collect VAT, and pay back VAT that we have not collected over a number of years, as it has previously been accepted by HMRC that we are engaged in public transport which is zero-rated. The reason I point out this distinction between IFCA and NE-IFCA interpretations is that I have approached other IFCAs, through the PBA, for their opinion and the feedback is that this would not fall within their interpretation of commercial gain.

Furthermore, your hypothetical analogy in paragraph 4 of the email you sent on Friday, is a poor analogy indeed. I certainly understand the working in joint enterprise laws, but your analogy has no bearing on your interpretation. The better analogy is lots of businesses get a commercial gain from Fish stocks, Fish transporters, Fish Market auctioneers, Fishing vessel agents, Fish and Chip Shops, Sea food Restaurants, Fish processors (including Whitby Scampi Factory). Under your interpretation, they get a commercial gain from Fish stocks, so you would have some jurisdiction over them!

I could half accept that we get a *secondary* commercial gain from Fish stocks, in the exactly same way as the other businesses mentioned above, but I cannot accept your interpretation that we are getting a primary direct commercial gain from Fish stocks. We get paid whether the passengers on board catch fish or not.

In the event that anyone does catch any fish, that catch is their property and it is entirely up to them what they do with it; I have no control over that whatever.

As an experienced Chief Officer, you are well-placed to know that this interpretation is inaccurate, but for the benefit of your Executive Committee members, in the early days most of what you refer to as Charter Angling Boats were registered at Cardiff, with an RSS number and Fishing Vessel Port numbers painted on the side.

They were dual purpose, and they were permitted to land fish caught by rod at Whitby Fish Market for commercial gain. Dual purpose boats; all but one have disappeared. There is one I know of in Whitby that has Port numbers and holds a pressure stock license. There was nothing in law at the time to stop what you refer to as Charter Boat owners selling off their pressure stock license when they became valuable and

resulted in them not being able to fish commercially but could continue as what you refer to as a Charter Boat. So why wasn't that stopped at the time?

There was another boat in the Whitby Fleet that was dual purpose, up until maybe 3/4 yrs ago, and this was operating as an under 10m fishing boat as well as a Charter Angling Boat. During that time, I was owner of the Fishing vessel *Crimond H*. For a number of months in the year, the under 10m were not permitted to catch Cod commercially. But the boat I refer to was allowed to continue catching Cod with no commercial gain whilst Chartered for angling. If your interpretation was valid, then this would have been illegal and would have resulted in prosecution.

2. BASIC HUMAN RIGHTS

Has NE-IFCA considered or taken any legal advice regards our Human Rights? I am certain we must have a right to privacy. These kinds of vessels are not under any License or permit agreement with NE-IFCA which wavers these rights as a permit or license condition. We have no business with NE-IFCA whatsoever. We are licensed by the MCA and agreed to the terms of their License from the up-take of the license. Had it stated in the License that we would be monitored by Government agencies, then by taking up the license we would have been agreeing to waiver our rights.

But we have no such licensing or permit terms with NE-IFCA.

3. DATA PROTECTION

Has NE-IFCA considered or taken any legal advice on the Data Protection Act 1998 and the General Data Processing Regulation August 2018. I strongly object that an amendment has not been made to the original by-law proposal, which was drafted in 2016, in relation to the August 2018 General Data Processing Regulation when the whole by-law is set out to make it mandatory to broadcast Personal Data about my location, position and whereabouts to a world-wide audience.

More importantly, to broadcast what is commercially sensitive data about our position to our competitors.

You mention encrypting of data in your email of Friday 30th November, as an option, then surely an amendment to the proposal should be made in respect of this, too. The statement relating to safety as a benefit in the proposal would need excising, as an encrypted system would offer no safety benefits, and would be a 'big brother' surveillance device only.

4. PSYCHOLOGY

Has NE-IFCA considered or taken any legal advice regarding the psychological effect on individuals who are placed under state surveillance?

5. PROBLEM UNDER CONSIDERATION - DATA DEFICITS

You claim to have data deficits. If that is the case, what has the regulatory decision-making process been based on historically? On the MMO's website, under data collection, the MMO proclaims that its data gathering is accurate. This data, proclaimed to be accurate, is reported to the EU on a monthly basis. How can one Government agency recognise or admit they have data deficiencies when another Government agency is proclaiming accuracy?

It also effectively states that this deficiency is hampering the effective assessment and management of Fish stocks within IFCA jurisdiction. Again, this can not be accurate because, of all the wide-reaching regulations that IFCA has already brought into effect, unless other regulations were passed and based on prior source data that contained inaccuracies, gaps and were incomplete. The two independent reviews (referred to in the document) were, in part, conducted before the Marine & Coastal Access Act 2009, and relate mainly to shellfish. Charter Boats have no impact on shellfish. Although I have this report in my possession, I only received it 1 and 1 part working day before the close of the public consultation. As it comprises over 600 pages, I will have no time to read (never mind digest) them before the closing date. (Supply of information and engaging with industry will be mentioned later).

6. POLICY OBJECTIVES AND THE INTENDED EFFECTS

I strongly object to this. You refer to identifying the accurate location of all commercial fishing activities. It is not legally proven that commercial fishing applies to our activity, which you name as Charter Boats. Thus, there is no rationale or justification to remotely monitor, in real time, Charter Boat fishing activities in your district. Let me assure, you AIS does not do that. It only records your track and position automatically, and if information such as fishing activities were required to be monitored in real time, then it would have to be constantly monitored manually, as this information is not collated or broadcast automatically.

It goes onto say it is to quantify all seasonal fishing intensity across all gear types. The same objection refers to this, AIS does not do this automatically. Item 4 - to support safe navigation - is no longer valid if AIS is encrypted to get round the data protection laws. Furthermore, I would estimate that 90% of Charter Fishing activity of boats that are operated from Ports within the jurisdiction is carried out outside the 6-mile IFCA jurisdiction and to the North and South of the jurisdiction. No information of any value would be gained from these vessels. Despite your safety benefit claims, I think it would have a negative impact on safety because operators would head beyond the 6-mile jurisdiction, to avoid the regulations.

7. POLICY OPTIONS

You chose Option 1: to make AIS mandatory on all commercial fishing vessels. Let me reiterate that what you refer to as Charter Boats are not commercial fishing vessels, they are small coded commercial vessels, licensed by the MCA or there agents, to carry 12 passengers for Sports & Leisure purposes; that is there class and distinction. Most long term operators (to my knowledge, barring 1) have sold off their commercial fishing status sometime ago, but have being allowed to continue as what you refer to as

Charter operations without commercial status. People who have entered the industry more recently (like me) have had no requirement to comply with fishing vessel regulations which I know a good deal about, having been a commercial fishing vessel owner previously, and it is what the most recent addition to the fleet in Whitby did last February.

I must vehemently oppose Option 1, as it is an authoritarian measure. Option 2 is just as good a measure, more friendly, workable in partnership with the authorities.

8. THE FULL ECONOMIC ASSESSMENT

I must voice my opposition to these details as they can only be 'ball park' figures. I know there are lots of people who never replied to what you refer to as a Consultation with Operators. This was certainly not a Consultation. This was a 'choose what type of AIS you want before a certain date' letter or you will have to pay for it yourself. I think you have grossly under-estimated £103,350; this could grow very rapidly. The cost of installation to the operator would be well in excess of £100, as it is specialised work. I know an operator who recently had a GPS chart plotter fitted to his boat, which involves the exact same work (mount the equipment, connect it to the ships electrics, mount a VHF aerial, route the cable to the equipment and connect it and install the MMSI number). This cost £300.

As you are probably aware, the MMO are proposing mandatory vessel monitoring through a dedicated VMS on all boats, surely your/our money that you are spending on AIS would be better spent on equipment for your patrol boat to receive VMS, which is going to be paid for by the MMO. In other key non-mentioned benefits, you claim that the by-law will be sufficient to deliver a statutory responsibility. If this is a statutory responsibility under the 2009 Marine and Coastal Access Act, then why has it taken so long to implement, nearly 10 yrs, and why is NE-IFCA the only IFCA introducing this bylaw? Is it that the other IFCAs are not delivering on there statutory responsibilities or consider it not necessary for the purpose of performing its duties under section 153 of the Act to which you refer?

9. RATIONAL FOR INTERVENTION

I am sure the Charter fleet are well aware of negative outcomes from fishing activities that you refer to in this section, after having to watch the unique reefs and habitats off the Yorkshire Coast be destroyed by Nomadic Scallopers, and other activities in the commercial sector recently. You make a generalisation in this section saying *"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"*.

So for the benefit of your Executive Committee, or anyone else further up the line who will be reading this proposal, this is not the intention of anybody involved in Charter Fishing. As we are only mentioned once in this whole report, section 7.2 third paragraph, it constitutes a generalisation. I will reiterate that it is not our intention. This is a damaging and dangerous comment.

I would just like to take this opportunity to express my concern regarding the estimates that have been peddled regarding the amount of fish you refer to as being caught by Charter Fishing vessels. 50 to 150 tons has been mentioned to my parliamentary representative Robert Goodwill MP and to my Borough and County local authority representative Councillor Tony Randerson. Again this is damaging, dangerous and a 'ball park' figure. It is scaremongering, to say the least.

Let us get the 3rd equation involved here. We keep getting this 46 Charter Boats catch estimated amount peddled, which is wrong. The thousands of anglers who visit our coast should also be in the equation.

Take my own boat, for instance. My peak operations are for around 12 weeks per year. I can get up to 4 trips a day in 6 weeks of that, weather and available clientele permitting. If each and every angler caught 2kg of fish, which doesn't sound a lot, it adds up to 96 kg a day. So let us round that off, for ease, to 100kg a day. So every 10 days, my anglers would have caught a ton of fish. In the 12 weeks, that would be 8.4 ton x by 46 vessels in your area. This equals 386 ton in the 12 week peak. This is ridiculous; anyone can juggle figures. In reality, it would be nowhere near a ton in the whole year that anglers catch on my boat. However many Kgs are caught, each Kg is worth a 100 time more per Kg to the community than a commercially caught fish.

Industrial fishing off NE Coast of Scotland and Shetland in the North Sea, where catches have been in excess of 750,000 ton in 2017 landed at Lerwick, Peterhead and Scrabster, the amount that fish anglers catch should not even be questioned. It is infinitesimal. The landings at the 3 Scottish Ports mentioned would last the Charter boat industry in the NE-IFCA district 7,500 years if you take an average of your estimate 100 ton.

This is for the benefit of your Executive Committee. If the amount of Fish anglers catch is of any concern, the value to the community of an angler-caught fish must be considered, fishing effort should be redistributed but I think we are a long way off that, considering the fact that Cod have been put on the sustainable list and have made a recovery. What is the problem? Is it just regulation for regulation's sake? The hot air and rhetoric is worrying. This misinformation is not fair. NE-IFCA has a duty to fairness.

It is my opinion that there has been a deliberate attempt to villainise the Charter Boat operations in order to create and justify some regulatory powers over them. One size does not fit all on this occasion, there is no need to regulate our industry alongside commercial fishing regulations. We have a completely different attitude to that of the commercial fishing industry. I have no worries with voluntary work with NE-IFCA and I do not think anyone in the industry has. But it is generally felt, across the Charter Boat industry, that if this was passed it would be the thin end of the wedge; we would be regulated out of our sustainable business in the same manner that I have already experienced with my under 10 m fishing business, for no environmental reason or benefit whatsoever.

I do not like calling anyone a liar or dishonest, but I do think that in order for people who give their time up on Councils, Executive Committees and people who work as civil servants, put themselves up at elections to represent others, need to be armed with the correct information in order to make the right decisions. I think this by-law proposal has been drafted with a predetermination, just going by the hot air and rhetoric that has been peddled, the 150-ton scaremongering comment to my elected representatives, and the

villainisation of us in your generalised comment which makes us sound like desperadoes wrecking the North Sea.

10. ECONOMIC IMPACT ON OUR INDUSTRY

If this bylaw is passed and administered to our industry it would put Charter Boats in the NE-IFCA area at a significant commercial disadvantage as compared with the rest of the country. When anglers are choosing there destination to go fishing, there is no doubt they would choose a unregulated area. Particularly if catch restrictions were ever introduced as a result of the information gathered. Has this been considered?

I know I have seen somewhere in the documentation that you claim no commercial disadvantage because the by-law would be administered across the district, but again on this occasion one size does not fit all.

We are in competition with all the ports around the British Coast line, including the Islands of Scotland, and further afield including Ireland and Norway. It is my opinion that within 5 years of this by-law being introduced there will be no anglers or charter boats on the NE COAST. A survey some 15 years ago found that this industry was worth 5 million to the community in Whitby alone. Has the economic impact on the Charter fishing fleet being assessed individually, or have we just being rounded up and lumped in with the commercial fishing industry?

My final comment is that the Charter Boat fleet should be removed from the proposal because you will not get much information from them. As I said, one size does not fit all in this case. I know most of the people involved in the Charter Boat industry are very environmentally aware, and take offence that they have been included in a by-law proposal along with commercial fishing . I have no doubt that the industry would be more than willing to voluntarily work with IFCA and form a better relationship with them and it would squash all the hearsay, estimates, allegations, villainisation etc of our businesses. You could come out on my boat anytime to see what is going on but I do not want to be subject to an inappropriate by-law.

Please accept this as my formal response to the public consultation and make sure that it is passed to the Executive Committee. Where I have posed questions, answers would be much appreciated.

I will send a copy each to Robert Goodwill MP and County Councillor Tony Randerson.

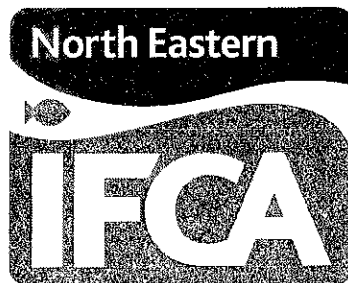
~~Antony Randerson~~

Joint owner of Vessel ~~Antony Randerson~~
Signed:- ~~Antony Randerson~~
DATE:- 4/12/18

Clerk
Caroline Lacey
County Hall, Beverley
East Riding of Yorkshire, HU17 9BA

Chief Fishery Officer
David McCandless, BSc, MSc
Town Hall, Bridlington
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Inshore Fisheries and
Conservation Authority

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Web Site www.ne-ifca.gov.uk
Your ref:

Our ref: neifca
23 January 2019

~~XXXXXXXXXX~~
Via email

Dear ~~XXXXXXXXXX~~,

RE: Byelaw XXX: Automatic Identification System Byelaw Consultation

Further to your letter dated 4 December 2018 and objecting to proposals for the mandatory introduction of AIS within the Authority's district, I am writing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the AIS byelaw proposal concluded on 7 December 2018. In total the Authority received 18 objections and 2 submissions supporting the proposed byelaw regulation. 16 of the 18 objections were received from representatives of the recreational rod fishing sector and 2 from the commercial fishing sector.

Your very detailed objection raises a number of complex issues and concerns, particularly surrounding the potential application of the byelaw proposal on the unlicensed recreational fishing sector and the commercial classification of such, many of which I have no full answer to and have caused me to re-consider the position.

Having further consulted Authority members there is collective agreement that the recreational rod fishing sector will not now be subject to the formal provisions of this particular byelaw regulation. There still remains, however, a need for the regulation to strengthen the Authority's ability to monitor commercial fishing vessel movements throughout its district and on that basis the byelaw will still be recommended for formal ministerial confirmation.

Outside the decision to remove the recreational fishing sector from the application of this byelaw proposal your objection also highlights the challenges of assessing the levels of catch taken by the sector and presently only broad average guesstimates can be made and as you stated 'anyone can jiggle figures'. We still need some way of improving our knowledge and understanding of levels of exploitation within the recreational fishing sector. To that end I would like to approach this informally and will be seeking to arrange a series of meetings later this spring to discuss further options and solutions.

Yours Sincerely,

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David Thomas McCandless
Chief Officer

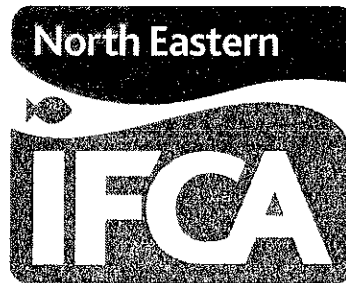


INVESTORS
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23 January 2019

~~Mr. [Name]~~
Via email

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Yours Sincerely,

A handwritten signature in black ink, appearing to read "David Thomas McCandless".

David Thomas McCandless
Chief Officer



AIS

Professional Boatman's Association

Objection to Mandatory compliance of AIS in the NE IFCA area to passenger carrying vessels operating under the MCA MGN280 certification guidelines.

To start with I wish to point out that the MGN 280 is the operational guideline to which small passenger carrying vessels operate too.

This is taken from the RYA Commercial Craft regulations and is a defining statement = Commercial broadly means engaged in activities on a commercial basis, even if not for payment, carrying passengers or cargo. It does not define operations or mention fishing.

Section 1 in the MGN280 states the operational guidelines to which coded (licensed) 12 or less passenger carrying vessels must adhere to and the relevant authorities that can impose regulations upon them and further within the MGN it states what mandatory equipment they must carry and to date it does not include Radar or AIS. NE IFCA are not included within the recognized authorities within the MGN either.

The MCA certification allows for the transportation of passengers without designating what purpose they are transported for so if the AIS proposal was to be implemented it would have to include ALL CODED VESSELS as they all have the ability to carry the general public out angling for pleasure and would then have to be rolled out throughout the UK and anywhere a UK Coded vessel operated to avoid discrimination. Nowhere in any documents can I find where it states that an IFCA has any remit for Safety or Navigational issues.

Data collected would be so flawed it would be impossible to identify who is doing what and the time involved be meaningless.

Comments to the Proposed AIS Bye Law by NE IFCA -

Explanation Notes

Passenger carrying vessels operating under the MCA are by law not allowed to sell any fish unless they have a registered boat of which if it were a commercial operation everyone onboard would have to have attended compulsory training sessions for Sea Survival, 1st Aid, Fire Fighting as required on a commercial fishing boat this training only applies to the captain and crew of a passenger carrying vessel not his passengers. Throughout the document it refers to commercial fishing for gain yet no mention is made to platforms where the public angler pays a fee to the owner / operator to fish from it exactly the same as a boat taking the public fishing these platforms would include piers/ jetties etc. These piers can have over 100 anglers on each pursuing their hobby of angling far in excess of the 12 a boat can carry.

It does not mention how any data will be collected or who will be expected to collect it. GDPR dictates privacy agreements so if data were to be recorded on people, catches etc it would have to be with their written permission and who would store this safely - paperwork nightmare.

It is not the responsibility of the passenger boat captain / operator to record fish, sizes weights etc as unlike IFCA officers we by law do not have powers to search any personnel equipment, bags etc onboard. The responsibility of the passenger boat captain / operator is Safety, Navigational duties and the safety of his passengers.

Interpretation

Commercial fishing vessel as registered with the Merchant Shipping act that holds a current fishing license - Passenger carrying vessels coded under the MCA licensing scheme are not required by law to hold a fishing license whilst carrying out their duties of taking the public to sea to allow them to fish for their own gains not the boat as it is an offence to sell fish without the appropriate license.

Impact Assessment

What is the problem under consideration = *improved information on vessel activity* / AIS is designed to show a vessel on the water not what it is doing at sea (diving, pleasure, survey, workboat, etc) so much of the data collected would be inaccurate anyway and NO mention of how the data will be collected or by whom.

What are the policy objectives and intended effects = *commercial fishing* / Charter boats are not recognised by the MMO as commercial fishing boats (boats who sell fish for profit) they are passenger and light work boats as classified by the MGN280 who transport people angling just like every shore, pier and pleasure boat angler who also take common resources from the seas around the UK.

To support navigation / AIS is not a navigational tool and does not come under IFCA remits, it could only be workable if EVERY vessel and we mean EVERY vessel were to be AIS compliant and fully visible which if it were encrypted as the NE IFCA are offering this would not be possible so the argument challenges itself within the proposal.

Full Economic Assessment

The assessment shows a value of £100 to fit and set up the unit does this include all the added extras (2 x aerial mounts, cable glands wiring, fuses, switches etc or are they in the original costing per unit), this seems to be an averaged out figure not reflecting the variety of boats that could be caught up in this (yachts, large pleasure craft who charter etc) and it assumes there is no further ongoing maintenance costs yet further on in section 6.1 it states the owner would be expected to cover any further costs = I operate AIS and have had to replace my aerial and I know of at least 4 other boats locally that have had issues.

Evidence Base

1.2 = AIS shows a boat at sea not what it is doing unless you re programmed the unit every time and many operators are not capable of that.

2.2 = I am surprised at the statement were you state 'each individual to catch as much as possible as quickly as possible so that competitors do not take all the benefits' it can only be made as a reference to commercial fishery operations as that style of angling went out in the dark ages, but to a committee / council members who do not understand it can be very misleading and totally out of context in today's angling culture, it shows how far away you are from understanding what today's angling is all about. It is a very dangerous comment to make and TOTALLY UNSUPPORTED by any data shown in the proposal.

3 = Policy Objectives = *remotely monitor in real time* / Implementation of AIS would not achieve this unless programmable from the dash not a computer daily depending on the operation of the vessel.

4 = Policy objectives and intended purposes = *identify commercial activities* – VMS already does this and if AIS were to be introduced it would also mean that every MCA coded passenger carrying vessel that could fish ie yachts, dive boats just to name a few that transit your area would have to have AIS fitted at who's expense, this would corrupt any data gathered on locations of boats etc as AIS does not distinguish unless preset what it is doing on a daily basis.

To support navigation / Good watch keeping is mandatory and if all and I mean EVERY vessels were to be AIS compliant then it could support an argument towards aiding navigation, **navigation is not within the NE IFCA remit.**

6.2 = This will lead to any boat with AIS in operation being classed as a fishing vessel not reflecting its true operation unless it is programmed for another role and then could be fishing without the data being captured.

8 = Conclusion = will only be valuable if AIS were to reflect the actual purpose of the vessel on the day. Funding conclusions are inaccurate as many more boats will be captured under the scheme if it were not to

be discriminatory ,if passed it will have to be copied across every IFCA creating an absolute funding nightmare, I do not know how many MCA compliant passenger carrying boats there are that would be affected but it would not be cheap and as NEIFCA could set a precedent by 'funding it' then it would be expected to be free by all other IFCA's.

Overview = The feeling of the Professional Boatman's Association is that we are against the Bye Law for the reasons listed above and would like to see a better communication line with all those working in the NE IFCA area. We as an association have worked very hard with our local IFCA's to build what was from a very difficult start to what we have now an excellent working relationship including supporting officers in their work, something I think would help in the NE IFCA area.

Philip Higgins

Director

Professional Boatman's Association

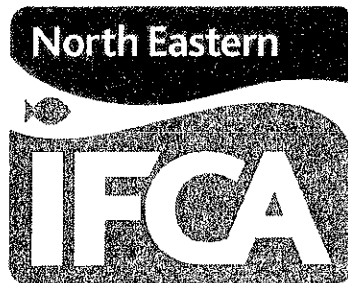
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Web Site www.ne-ifca.gov.uk

Your ref:

Our ref: neifca

23 January 2019

Mr P Higgins
Professional Boatman's Association
Via email

Dear Mr Higgins,

RE: Byelaw XXX: Automatic Identification System Byelaw Consultation

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The formal consultation process on the AIS byelaw proposal concluded on 7 December 2018. In total the Authority received 18 objections and 2 submissions supporting the proposed byelaw regulation. 16 of the 18 objections were received from representatives of the recreational rod fishing sector and 2 from the commercial fishing sector.

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Outside the decision to remove the recreational fishing sector from the application of this byelaw challenges remain in terms of assessing the levels of catch taken by the sector and presently only broad average guesstimates can be made. We still need some way of improving our knowledge and understanding of levels of exploitation within the recreational fishing sector. To that end it is my intention to approach this informally and will be seeking to arrange a series of meetings later this spring to discuss further options and solutions with the sector in my IFCA region. You would be very welcome to attend those

Yours Sincerely,

A handwritten signature in black ink, appearing to read "David Thomas McCandless".

David Thomas McCandless
Chief Officer



**INVESTORS
IN PEOPLE**



HOUSE OF COMMONS

LONDON SW1A 0AA

Mr David McCandless
Chief Inshore Fisheries & Conservation Officer
North East Inshore Fisheries & Conservation Authority
Town Hall
Quay Road
Bridlington
YO16 4LP

7 November 2018

Dear Mr McCandless

Re: NEIFCA AIS Byelaw,

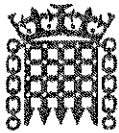
I have been approached by one of my constituent's Mr ~~XXXXXX~~, who has informed me that NEIFCA are currently engaged in a public consultation over a proposed byelaw for the introduction of an automatic identification system for all vessels currently exploiting sea fisheries resources for commercial purposes.

I am aware that you have been in correspondence with Mr ~~XXXXXX~~, and are therefore familiar with his argument that the byelaw should not apply to charter boats as they are not commercial fishing vessels by definition.

There are eight registered charter boats in Hartlepool and dozens more throughout the North East operating within a 6 mile radius out to sea. The concerns these small businesses have is that, even though the amount of fishing by charter boat passengers will have a minimal environmental impact on stock etc. the introduction of compulsory IAS on fishing grounds could in fact mean that the impact could be made far worse.

This is because unlicensed recreational fishing could increase in areas of high stock density, because IAS would allow recreational vessels to track the movement of the charter boats. To put this into perspective there are 500 private boats in Hartlepool, meaning that the charter fleet represents 1.6% of vessels capable of being used for fishing purposes.

Mr ~~XXXXXX~~ is unaware of the scope of your current consultation, which I understand will end on 4th December 2018. He informs me that few charter boat providers are even aware of it.



Could you please therefore let me know who you have engaged with and what measures you are taking to ensure the opinions of these small businesses are taken into account.

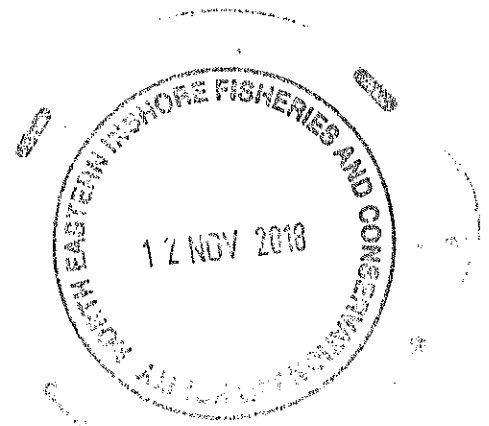
I also understand that such a byelaw is exclusive to our region, and that no other byelaw's of a similar nature exist elsewhere. Can you therefore please advise me whether or not this is a pilot scheme sponsored or supported by the government.

For information purposes it would be also useful to have a list of your board members, as that information is not readily available on your website. I look forward to your reply.

Yours sincerely,

Mike Hill
Member of Parliament for Hartlepool

Cc: Mr Mike Hill



All enquiries should be directed to:

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Web Site www.ne-ifca.gov.uk
Your ref:

Our ref: neifca
23 January 2019

Rt Hon Mike Hill MP
Member of Parliament for Hartlepool
House of Commons
SW1A 0AA

Dear Mr Hill,

RE: NEIFCA AIS Byelaw

Further to my letter dated 30 November 2018 I am writing to update you on the current position regarding the above byelaw proposal.

The formal consultation process on the AIS byelaw proposal concluded on 7 December 2018. In total the Authority received 18 objections and 2 submissions supporting the proposed byelaw regulation. 16 of the 18 objections were received from representatives of the recreational rod fishing sector and 2 from the commercial fishing sector.

Most of those objections raised a number of complex technical issues and concerns, particularly surrounding the potential application of the byelaw proposal on the unlicensed recreational fishing sector and the commercial classification of such, many of which I had no full answer to and have given me cause now to re-consider the position.

Having further consulted Authority members there is collective agreement that the recreational rod fishing sector will not now be subject to the formal provisions of this particular byelaw regulation. There still remains, however, a need for the regulation to strengthen the Authority's ability to monitor wider commercial fishing vessel movements throughout its district and on that basis the byelaw will still be recommended for formal ministerial confirmation.

Outside the decision to remove the recreational fishing sector from the application of this byelaw challenges and concerns still remain in terms of assessing the levels of catch taken by the sector and presently only broad average guesstimates can be made. We still need some way of improving our knowledge and understanding of levels of exploitation within the recreational fishing sector.

5th November 2018

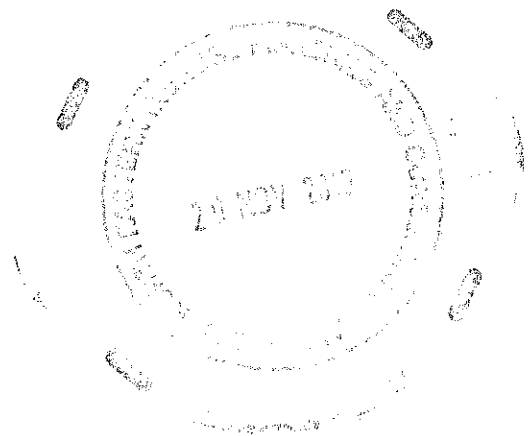
**Chief Inshore Fisheries & Conservation Officer
North Eastern Inshore Fisheries & Conservation
Authority**

Town Hall

Quay Road

Bridlington

YO16 4LP



Dear Mr Mcandless,

**I am writing to you on behalf of all the charter boat
skippers in Sunderland and would like to take this
opportunity**

**To lodge our objections to charter boats being included
in your AIS byelaw 2016.**

**I would like to point out that charter boats DO NOT
exploit sea fisheries resources we are actually a
transport facility for passengers. It is the passengers
who exploit the resources in the same way that they can
do from a pier, beach cliff or pleasure boat – completely
unregulated. Beside the commercial trawlers this is
where the majority of the fish is caught.**

The actual positions that we go to during our days at sea are specific to each skipper and are the result of the development of local knowledge over decades. This cannot be shared! It is our unique selling point and is key to our business. This may even be construed as an act of industrial espionage. Any vessel could follow us. Some computer programmer could track and collate the data making it available to everyone owning a boat. This would not only make our businesses obsolete and put us out of business. This would increase the amount of pleasure boats at the same positions and therefore as a direct result of your byelaw - more fish would be caught. Furthermore if the areas we use become more congested the risk of collision will be greater which would have the exact reverse affect of your said increased safety in your impact assessment section 3.1 (point 4).

If it is better safety you require then what is wrong with using an epib.

There are approximately 200 private vessels just in Sunderland which can have an impact on exploitation of your resources and targeting 4 charter vessels which is just 8% of the total vessels seems to be a very low resolution of data which you are to achieve.

Then take into account all the shore/pier fishing activities which happen on a daily basis and an activity which is ongoing over 24 hours probably presents a bigger impact on resources than any vessel could ever

do as this activity isn't affected by weather in fact is increased by bad weather when vessel cannot even go to sea. This can be seen by simply looking at the social media sites.

This makes your efforts to include charter vessels seem expensive, fruitless and unfounded

Perhaps the data you require to give an improvement to the resolution you require on your resources could be gained by having formal regular meetings with vessels and asking all vessels and shore type anglers to volunteer information in the assistance of securing a sustainable future for all users of this resource.

Please could you inform me of any outcomes that arise during or after the consultation of this byelaw.

Yours Sincerely
SR53BS

~~Jeff Ayres~~

Singed



All enquiries should be directed to:

David McCandless BSc. MSc.
Chief Officer

Tel: 01482 393690

Fax: 01482 393699

E.Mail: david.mccandless@eastriding.gov.uk

Web Site www.ne-ifca.gov.uk

Your ref:

Our ref: neifca
23 January 2019

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Dear [REDACTED]

RE: Objections to AIS Byelaw 2016

Further to your letter dated 5 December 2018 and objecting to proposals for the mandatory introduction of AIS within the Authority's district, I am writing to update you on the outcome of the consultation process and proposed next steps.

The formal consultation process on the AIS byelaw proposal concluded on 7 December 2018. In total the Authority received 18 objections and 2 submissions supporting the proposed byelaw regulation. 16 of the 18 objections were received from representatives of the recreational rod fishing sector and 2 from the commercial fishing sector.

Your very detailed objection raises a number of complex issues and concerns, particularly surrounding the potential application of the byelaw proposal on the unlicensed recreational fishing sector and the commercial classification of such, many of which I have no full answer to and have caused me to re-consider the position.

Having further consulted Authority members there is collective agreement that the recreational rod fishing sector will not now be subject to the formal provisions of this particular byelaw regulation. There still remains, however, a need for the regulation to strengthen the Authority's ability to monitor commercial fishing vessel movements throughout its district and on that basis the byelaw will still be recommended for formal ministerial confirmation.

Outside the decision to remove the recreational fishing sector from the application of this byelaw we still need some way of improving our knowledge and understanding of levels of exploitation within the recreational fishing sector. To that end I would like to approach this informally and will be seeking to arrange a series of meetings later this spring to discuss further options and solutions.

Yours Sincerely,

David Thomas McCandless
Chief Officer

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Your ref:

Our ref: neifca

23 January 2019

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Dear Mr. [REDACTED]

RE: Objections to AIS Byelaw 2016

Further to your letter dated 30 November 2018 and objecting to proposals for the mandatory introduction of AIS within the Authority's district, I am writing to update you on the outcome of the consultation process and proposed next steps.

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Web Site www.ne-ifca.gov.uk

Your ref:

Our ref:

24 January 2019

Rt Hon Robert Goodwill MP
Constituency Office
6 Albermarle Crescent
Scarborough
North Yorkshire
YO11 1XS

Dear Robert,

RE: NEIFCA Vessel Monitoring (AIS) Byelaw proposal

I hope you are keeping well. I am writing to update you on the above byelaw proposal.

Since my last letter, dated 25 October 2017 and following advice and guidance from the Marine Management Organisation, the above byelaw was subjected to another period of formal consultation. That formal consultation process concluded on 7 December 2018. In total the Authority received 18 objections and 2 submissions supporting the proposed byelaw regulation. 16 of the 18 objections were received from representatives of the recreational rod fishing sector and 2 from the commercial fishing sector.

Most of those objections raised a number of complex technical issues and concerns, particularly surrounding the potential application of the byelaw proposal on the unlicensed recreational fishing sector and the commercial classification of such, many of which I had no full answer to and have given me cause now to re-consider the position.

Having further consulted Authority members there is collective agreement that the recreational rod fishing sector will not now be subject to the formal provisions of this particular byelaw regulation. There still remains, however, a need for the regulation to strengthen the Authority's ability to monitor wider commercial fishing vessel movements throughout its district and on that basis the byelaw will still be recommended for formal ministerial confirmation.

Outside the decision to remove the recreational fishing sector from the application of this byelaw challenges and concerns still remain in terms of assessing the levels of catch taken by the sector and presently only broad average guesstimates can be made. We still need some way of improving our knowledge and understanding of levels of exploitation within the recreational fishing sector.

To that end it is my intention to now approach this informally and will be seeking to arrange a series of meetings later this spring to discuss further options and solutions with the recreational fishing sector in my IFCA region. You would be very welcome to attend those

Yours Sincerely,

David Thomas McCandless
Chief Officer

North Eastern Inshore Fisheries & Conservation Authority

Email responses to AIS byelaw Consultation.

Consultation summary – 13 email objections, 5 written objections & 2 emails outlining support – Of the 18 objections received 16 came from recreational charter fishing interests and 2 from commercial fishing interests.

The following response was sent out to each of the respondents below:

I am writing to update you on the outcome of the consultation process regarding the AIS byelaw proposal. Formal consultation concluded on 7 December 2018. In total the Authority received 18 objections and two letters of support for the proposal. 16 of the 18 objections were submitted by the recreational fishing sector and 2 from the commercial fishing industry. Having considered the content of the objections and in consultation with Authority members there is collective agreement that the recreational rod fishing sector will not now be subject to the formal provisions of this byelaw regulation. There still remains, however, a lack of information on the levels of exploitation within the sector and I will be looking at how we might improve that on an informal basis during the spring of this year.

Many thanks for taking the time to respond to the consultation.

Kind regards,

David McCandless

~~XXXXXXXXXX~~ - I am writing to object about your proposal for ais on all pleasure boats. It's very rare I fish inside of 6 mile so ais would only be switched on while steaming to and from grounds. I would also like to know how you would be able to police us as I would object to the north east guardian boarding us if I had my 12+2 on board, you would be breaking our licence and insurance. I have spoken to all other skippers in Hartlepool and everybody agrees with my opinion.

~~XXXXXXXXXX~~ - Dear mr McCandless I am writing to you to object to the AIS proposal you have put forward to the charter boats in the north eastern district. Also i am not a charter angling vessel am a public transport. I dont make any profit on fish stocks.

~~XXXXXXXXXX~~ - Could you please add this email to the list of objections to the proposed AIS. Being a keen angler both shore and boats I cannot understand how a charter boat, which in essence is, by the role it undertakes is for the want of a better word a bus/taxi for transporting paying anglers to fishing grounds. The anglers themselves are the ones physically catching the fish. Once on the grounds the skipper of the charter boat then takes on a second and possibly third role.

1. Safety officer. Ensuring that all under his/her supervision are operating in safe conditions and not rendering themselves to danger or endangering other paying anglers.
2. The gatekeeper acting on behalf of the fishing industry, the fisheries agencies and IFCA by overseeing what fish are being kept by the anglers and ensuring any undersized are returned.

Having used many different charter boats from all around the country for pleasure for well over 10 years I have never seen any actions by either the skipper or the crew that would in my opinion render themselves to be included under the commercial fishing banner. Non have caught fish, kept fish or even sold fish. The boat duties are purely a means of transportation.

Having recently retired from 30 years as a police officer, my retirement goal was to become a charter boat skipper. Therefore I am going through many boat courses and boat related courses to allow me to join the ranks of the charter boat skippers. On hearing of the planned AIS introduction and on reading all the issues surrounding it, I'm now wondering if I am making the right choice in career? I understand the need to follow rules and regulations and the laws of this land but I would hope that better publicity and advertising of the AIS introduction be made public and get the opinions of all anglers. There are many media routes that this could be done through. Let's get the general publics opinions first.

I also understand that at the recent meeting a vote was taken and one member voted for AIS. How can someone who is personally involved in IFCA actually vote? Sure there is a conflict of interests. All involved in the process should be open and transparent in their position and if clear conflicts of interest are uncovered then they should and I hope would abstain from voting.

~~Peter Rose~~ - from peter rose [sea fishing 5 whitty] i have just returned from a weeks holliday 12.30 today to be informed that some charter boats have been aproached about fitment of ais systems i thought that this had been cleared up in the past as we do not conply for this as we are part of the leisure industry and dont require this because we are not in it for comercial gain only for transport of anglers .

~~Michael Jordan~~ - I would like to oject to this proposal first and foremost i must complain to the lack of engagement and consultation with the industry.Ihave only just found out about this today 6th december, from a colleague who is in the same charter boat industry. I don't think it has being in an open and transparent manner,andwe have bundled up with regulations mainly aimed at the fishing industry.Imust object to your interpretation of commercial gain,as i havebeing in the charterboat industry for 50 years working under the DTI and MCA as public transport providers.Onno occasion have we made any commercial gain from fish stocks,any fishcaught remain the property of the passengers. Imust also as i have being aware our personnel data protection has not being considered,we matbe forced bylaw to broadcast this personnel data in the public domain and to other competitors.Which is commercially sensitive data.I think we should be taken out of the proposal and treated as a completely separably.

Sea Fishing Scarborough Group - I would like to express my corncerns over the new bylaws which include angling vessels as commercial boats which they are not. This would be hugely damaging to a allready declining industry where they teach young anglers to fish and get them away from games consoles or other issues with youngster nowadays. Tackle shops would see a massive hit in sales and they are allready struggling in this industry. Concentrate on the damage and carnage scallerpers and beam trawlers do this should be banned

~~Walter Cough~~ - i am part owner of ~~skylink~~ a passenger vessel from scarborough. i would like to object against the new proposed ais bylaw, as it has no purpose for charter vessels as you call them.

~~XXXXXXXXXX~~ - Hi chief officer I own and operate ~~skiff~~ a passenger vessel out of Scarborough. We run angling, wildlife trips and safely boat cover as well as many other trips for our customers. My business activity is public transport. The catching of fish has no bearing on the money we get, we get paid anyway. So i dont see why we are included in the bylaw which is under consultation which is very hidden. When i first saw the bylaw i didnt think it had anything to do with me as im not a commercial

~~XXXXXXXXXX~~ - I ~~am the skipper~~ of the angling vessel ~~XXXXXX~~ based in Bridlington, would like to register an objection to the mandatory AIS and catch return forms proposed bylaw for which you refer to as Charter Angling Boats.

I would not be happy to have my location made available to other charter boats and all the hundreds of small private boats that fish on the East coast.

As a charter skipper I can make sure all fish retained by my anglers meet minimum landing sizes, can be caught and released where appropriate and bans on retaining fish such as bass can be enforced. Who is enforcing these rules on all the private boats all carrying at least two anglers plus the growing number of kyaker's.

We are not commercial fishing vessels. We are small coded commercial vessels licenced by the MCA for sports and leisure purposes, so why are we included in documents aimed at the commercial fishing sector.

I would have thought any measures aimed at charter boats carrying AIS and catch return forms should be aimed at all boats around the country not just in our area. A lot of anglers are based inland and could easily opt to fish the south and west coast potentially putting the East coast fleet out of business particularly if catch restrictions were ever introduced.

Thank you for taking the time to read this email,

~~XXXXXXXXXX~~ - Morning,

I would just like to make an objection to your proposed AIS bylaw. Which I was unaware of until my Father informed me. My Father is ~~XXXXXX~~ and runs a Charter Fishing business in Whitby. He is expanding his business to a 2 boat operation which I and my 2 brothers will be helping with and will take over the business in later life.

So I have an interest in our Family business, and strongly object to the proposed bylaw. In particular the commercial gain interpretation. Prior to my Father buying his second boat Sea Mist, the plan was to buy a commercial fishing boat and make it dual purpose for carrying passengers, the idea was to take advantage of the quite generous and lucrative Mackerel quota. We were told by the MCA that if it was a commercial proposition ie; landing Mackerel on Whitby Fish Quay, then anybody engaged in commercial fishing would need to be adequately trained to the Sea Fish standard.

So having said that your interpretation cannot be right , this is from MCA advice. Everybody on board a commercial vessal has to be trained.

I have read my fathers response and agree entirely with it.

Please acknowledge receipt.

~~Signature~~

Skipper for vessal ~~Friday 20th Oct~~

~~Allan Skinner~~ - charterboats ~~and other fishing boats and pleasure boats~~

we would like to register are objection to the proposed mandatory ais byelaw.

we haven't even heard of these proposals until 5 days ago when we got a phone call from a Hartlepool

skipper. as there has been nothing. in any local newspapers no letters, not eve to individuals or even the marina.

leaving us no time for a decent response. we object to you trying to reclassify our boats as we dont operate as vessels of fishing for commercial gain all other authority's class us as water transport. we get paid even if we catch no fish. surely mandatory ais is against the data protection laws. brought in to protect both individuals and business alike.

as we would soon be out of business. if all our top marks. were made public, even encrypted ais can be compromised and would offer nothing towards boat safty [as encrypted ais cant be seen by other boats] there's no doubt charterboats take very little fish. even on your own figures the 40 to 50 charterboats working in your area take less than 2 to 4 under 10 meter trawlers do with there 20boxs of cod 60 boxs whiting unlimited mackrel etc every month

yet we have no impact on the seabed, we dont kill all the small fish and seabed life in the area

yet we bring in large amounts of anglers to the area.who spend money whilst here.contributing greatly to local econmyns as several reports have concluded.

is not one of your mandates to help small business. we are very enviornmentally aware and want or business to succeed by doing all we can to look after fish stocks. but not by compulsory legislation.

i am sure if you dropped this propsal we would be happy to voluntary work with ne-ifca same as we do with or local northhumberland ifca

could you please see that this letter is passed onto the excecutive commitee

many thanks allan skinner on behalf of charterboats ~~and other fishing boats and pleasure boats~~

~~Signature~~
~~Signature~~

~~_____~~
Well done on organising and chairing a pleasantly civilised meeting yesterday.

I am writing to clarify my stance on the proposed introduction of the AIS bylaw and the catch and effort returns bylaw, both approved by the full NE-IFCA back in 2016.

I would be opposed to any other management measures targeting recreational sea angling such as bag limits without overwhelming evidence to prove that they were essential for the survival of finfish stocks.

At present, unlike commercial fisheries, recreational sea angling is not monitored and the two proposed bylaws are an attempt to capture data so that any problems with declining fish stocks are foreseen and appropriate management measures implemented.

As you are already aware the sustainable exploitation of all stocks within the NE-IFCA district is mandatory under the 2009 marine act.

Regarding the suggestion that bag limits would be imposed on sea anglers, that idea is still preferable to a complete closure which would be essential if there was a complete collapse of the cod stock. Bag limits and catch and release are common place on inland fisheries and not unknown to sea anglers (bass, tope, shark)

Catch returns are mandatory for anyone purchasing an environment agency migratory fish rod licence and are routinely used on trout fisheries.

Before I would support restrictions on recreational boat angling there would have to be overwhelming evidence that they were necessary.

I would also want to see a seal management policy introduced together with an immediate and sizeable reduction in the current population by the use of humane methods. Seals are now the biggest cause of fish mortality, particularly gadoids and salmonids, within the district.

The UK has the second largest grey seal population in the world!

The grey seal is also host to the adult stage of the cod worm which ultimately causes muscle wastage and premature death. How many 20lb. plus cod are caught these days?

Additionally I would like the trawling bylaw updated. At present it is permissible for a pair team with a combined engine power in excess of 1000hp. to tow a huge trawl right up to the shoreline throughout a large part of the district. This needs to be amended restricting mobile gear use to vessels under 10m. overall length with a grandfather clause to allow any larger inshore prawn trawlers to continue operating in the north of the district.

To conclude, restrictions on sea anglers, because of their very low impact, would have to be a final and desperate course of action but in the absence of robust data you are inviting the introduction of management measures purely as a precautionary approach.

Best regards and good luck with your objection.

~~_____~~
(Whitby charter skippers association secretary)

PS. The above is my personal opinion and not necessarily the opinion of the association. The majority were not present at the meeting.

Contact: David McCandless
Chief Officer

North Eastern IFCA
Tel: 01482 393690
Email: david.mccandless@eastriding.gov.uk