Southern Inshore Fisheries and Conservation Authority

Pia Bateman – Chief Executive Officer

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16th August 2023

Dear Member,

ANNUAL GENERAL MEETING
OF THE TECHNICAL ADVISORY COMMITTEE – 24th August 2023

The Annual General Meeting (AGM) of the Technical Advisory Committee (TAC) will be held in the Southern IFCA conference room at Unit 3 Holes Bay Park, Sterte Avenue West, Poole Dorset BH15 2AA on **Thursday 24th August 2023 at 14:00** to discuss the business on the under mentioned Agenda.

Parking is limited at Southern IFCA so please consider other forms of transport, or share lifts. The nearby Holes Bay pub/restaurant allows parking if you partake of their refreshments and **ensure you enter your vehicle registration at the bar.** The Premier Inn also allow you to use their parking facilities, **please ensure you register your vehicle at their reception desk.** Poole railway station is approximately a 15-minute walk from the office.

Members of the public can request a guest telephone dial-in code from enquiries@southern-ifca.gov.uk.

Yours sincerely,

Sarah Birchenough
Deputy Chief Officer – Research & Policy

AGENDA

1. Election of Chairman and Vice Chairman for 2023-2024

To appoint a Chairman and Vice Chairman of the Technical Advisory Committee.

- **Nominations for Chairman are to be received via email by 12:00 midday on Monday 21st August via enquiries@southern-ifca.gov.uk.**
- **Nominations for Vice Chairman will be invited by the Chairman at the meeting.**

2. Apologies

To receive apologies for absence.

3. Declaration of Interest

All Members and Co-opted Members are to declare any interests in line with paragraphs (16) and (17) of the Southern IFCA Code of Conduct for Non-Council Members.

3. Minutes – 4th May 2023

To confirm the Minutes of the Technical Advisory Committee meeting held on 4th May 2023 (Marked A) and consideration of the following matters outstanding:

a. **Recommendation 189**: That officers consider options for the areas which are proposed to be reopened under the BTFG 2023 Byelaw and report back to the Authority.
b. **Recommendation 192:** That the CEO confirms whether the above Recommendations are to be upheld following exploration of the Southern IFCA Standing Orders and the Local Government Act 1972, regarding the definition of 'present' and its relation to the specified quorum and report back to the Authority.

GUEST SPEAKER

4. Cockle FMP – to receive a virtual presentation from Tim Smith of the Association of IFCAs (AIFCA) on the development of the Cockle FMP.

PROGRESS REPORTS

5. To consider the following:

a. **CEO updates** – to receive a verbal update on any matters of relevance, supported by a paper outlining Defra's Fisheries Policy Reform (Marked B).

ITEMS FOR DECISION

6. Bottom Towed Fishing Gear Byelaw 2023 – to consider the outcomes of the formal public consultation on the BTFG Byelaw 2023 (Marked C)

7. Black Seabream Management Development – to consider the summary conclusions of Part A MCZ Assessments and the Site Specific Evidence Package specific to black seabream (Marked D)

ITEMS FOR INFORMATION

8. Fisheries Management Plans – to receive a report from Project Officer Mullen (Marked E)

9. Southern IFCA Survey Reports – to receive a report on the Whelk Monitoring Survey and the Juvenile Fish Survey from IFCOs Parry and Condie (Marked F)

10. Marine Licencing Update – to receive a report from IFCO Condie (Marked G)

11. Date of Next Meeting

To confirm the date of the next meeting of the Technical Advisory Committee on the 2nd November 2023 at Southern IFCA, Unit 3 Holes Bay Park, Sterte Avenue West, Poole Dorset BH15 2AA.

Note: Item 12 below will involve the consideration of information which is exempt by virtue of Schedule 12A of the Local Government Act 1972 and therefore the public will be excluded during consideration of this item.

12. Poole Harbour Several Order – Requests to Amend Business Plans

To consider a confidential report from IFCO Griffiths (Confidential, Marked H)

Following the conclusion of business, Members are invited to attend a presentation by Defra:

Defra Consultation on Fisheries Management Plans – to receive a presentation from the Defra Fisheries Management Plans (FMPs) Team on the current consultation on the 6 Frontrunner FMPs.

SOUTHERN INSHORE FISHERIES AND CONSERVATION AUTHORITY

TECHNICAL ADVISORY COMMITTEE – 4th MAY 2023

MARKED A

Minutes of the Technical Advisory Committee (TAC) held in the meeting room at the Southern IFCA office in Poole at **14:00 on 4th May 2023**

Present

Dr Antony Jensen	(Chairman, MMO Appointee)
Mr Richard Stride	(Vice Chairman, MMO Appointee)
Ms Louise MacCallum	(MMO Appointee)
Mr Gary Wordsworth	(MMO Appointee)
Mr Neil Hornby	(MMO Appointee)
Ms Pia Bateman	Chief Executive Officer (CEO)

Deputy Chief Officers (DCOs) Ms Sarah Birchenough and Mr Sam Dell, Inshore Fisheries and Conservation Officers (IFCOs) Ms Emily Condie, Ms Liberty Cast and Mr Dominic Parry and Project Officers (POs) Ms Celie Mullen and Ms Chelsea Perrins were also present. Co-opted Member Ms Elisabeth Bussey-Jones was also in attendance.

Mr Gavin Black (Natural England) and Mr Edward Baker (MMO) attended the meeting virtually.

Dr A Jensen opened the meeting by inviting all attendees to introduce themselves. Members were informed that the meeting was being recorded for the purposes of producing the meeting minutes.

Apologies

179. Apologies for absence were received from Dr Simon Cripps (MMO Appointee), Mr Phil Rudd (Environment Agency), Ms Rachel Irish (MMO) and Mr Ted Legg (MMO Appointee).

Declarations of interest

180. The following pecuniary interests were declared: Mr G Wordsworth (7 and 8). The following non-pecuniary interests were declared: Mr Richard Stride (6), Mr Neil Hornby (7, 8 and 12).

Minutes

181. Members considered the Minutes of the meeting held on 2nd February 2023 and following an amendment to paragraph 5 of section 174, these were confirmed and signed. It was confirmed that Recommendation 175 was completed.

Guest Speaker: MMO, Lyme Bay Sole Fishery Consultation

182. Members received a virtual presentation from Mr Edward Baker of the MMO, on the MMO Lyme Bay Sole Fishery Consultation. DCO Dell provided Members with background on the involvement of the Southern IFCA in this matter to date including sitting on a steering group set up to investigate issues relating to Lyme Bay sole and involvement in joint patrols with the MMO.

Dr A Jensen thanked Mr E Baker for an interesting and informative presentation and invited any questions. Dr A Jensen commented that it appeared the fishery itself was quite healthy and it was more about being able to accommodate and balance different gear types to avoid conflict. Mr E Baker commented that the only area of concern for the stock was a low recruitment in 2021 in VIIe and the TAC for 2022 having decreased by 23% to account for this. He commented that this, combined with the decrease in the size of sole being caught by

trawlers may be an emerging issue but that it is very difficult to attribute causality to the data. The MCRS is one topic of the consultation with potential links to be made with the Channel Demersal Non-Quota Species FMP.

Mr R Stride raised that the original issue in Lyme Bay had stemmed from local boats having a code of practice to help limit individual fishing effort but that it was felt that visiting boats were not necessarily following that. He stated that it is hoped an outcome of the consultation would be protection for those local boats. He queried the increase in CPUE on the basis of an increase in effort and whether the quantity of nets fished could be obtained from catch data to better inform quantification of effort. Mr E Baker responded that catch data was only available for 2022 so there is no back reference which makes evaluation of net fishing activity more difficult, days per sea for trawlers makes this calculation possible for that gear type. He stated that the MMO were open to the outcomes of the consultation in terms of potential ways of moving forward.

Mr E Baker stated that the current voluntary code of conduct does not extend as far out to sea as the current extent of fixed net activity, with more activity outside of closed trawl areas due to closed areas being less productive for sole. He asked Members whether they were able to provide any insight on this, there was no information which Members could provide on this point.

Ms L MacCallum asked about the market for sole. Mr E Baker responded that the majority is taken abroad, sold through the Brixham Trawler Agents.

The CEO asked how the development of the consultation is considering the objective of equal access under The Fisheries Act 2020. Mr E Baker responded that the MMO have considered that they cannot limit access to the area to only local vessels, the same opportunity to fish in Lyme Bay must be afforded to all vessels. He stated that the objectives of The Fisheries Act 2020 needed to be balanced but that there wasn't currently direction on how to prioritise those objectives.

DCO Dell commented that IFCOs would be attending port drop-in sessions on the consultation. He also informed Members that any resulting management outcomes would be explored by the MMO through licence variations rather than via IFCA management or enforcement. DCO Dell reminded the Members that Southern are proposing gear marking regulations under the proposed Net Fishing Byelaw and that this has also been reflected in the consultation document.

Mr E Baker informed Members that the MMO has committed to undertaking a more detailed environmental assessment as well as a socio-economic assessment alongside the consultation. Natural England are helping with the environmental assessment, Mr E Baker asked what the Members opinions were on implementing management outside of MPAs as it was the impression that the majority of IFCA management focused on inside of MPAs. The CEO responded that the IFCA undertakes district-wide management, inside and outside of MPAs.

PROGRESS REPORTS

183. Chief Executive Officer Updates

The CEO informed Members that the updates provided at the TAC meetings going forward will be aligned with the scope of the TAC as given in the Standing Orders to avoid repetition between updates given at TAC meetings and the Authority meeting. Updates will relate to

matters regarding statutory and non-statutory interventions, fisheries management and policy, consultations, and aquaculture.

The CEO outlined that there would be a rolling agenda item on the TAC agenda for Fisheries Management Plans (FMPs) which will be delivered by the FMP Project Officer. Marine licensing updates have also moved to the TAC agenda from the Authority agenda.

The CEO covered the recent oil spill incident in Poole Harbour outlining the IFCA remit for the wild fisheries, aquaculture, recreational fisheries and hand gathering but emphasising that the IFCA is not the responsible authority for determining if these fisheries should be open or closed in response to a pollution incident. This duty sits with the Food Standards Agency (FSA). Southern IFCA worked closely with BCP Council Environmental Health Officers to provide their expertise on Poole Harbour to Cefas and the FSA. The priority following the incident was related to shellfish fisheries, with aquaculture as an active activity at the time being the main priority as the wild dredge fishery was closed at the time of the incident, fish species were of less concern due to their ability to more readily metabolise any contaminants. The incident underwent debate at the House of Lords and resulted in questions being raised at Parliament, the work of all agencies involved including Southern IFCA was recognised at that forum. The CEO emphasised the impact that the incident had on the business-as-usual function of the IFCA and extended thanks to the DCOs and the wider team, who worked long hours during a sustained two-week period.

The CEO outlined consultations that were taking place. Members were informed that the outcomes of the MMO consultation on a closed season for the VIId and Lyme Bay king scallop dredge fisheries had been published and concluded that for VIId for UK and EU vessels >10m the closed season would be from 1st July to 30th September and for Lyme Bay for vessels >12m in length for the same time period. The closure will be enacted through a licence variation. The CEO also covered that there had been an MMO consultation on bottom towed fishing gear in offshore MPAs, the outcomes of this consultation are yet to be published. The CEO also referenced the MMO Lyme Bay Sole Fishery Consultation which is to run until 28th May 2023. The Government is also currently consulting on proposed measures to ban industrial fishing for sand eels in UK waters which closes on 29th May 2023.

The CEO spoke about the recent Government launch of the Net Zero Growth Plan, it was outlined that the Plan is mainly related to terrestrial habitats but that there are two marine blue carbon habitats referenced; saltmarsh and seagrass, and their potential contributions to Net Zero ambitions. The CEO outlined how current workstreams are related to these habitats and how proposed management by Southern IFCA is aiming to contribute to their protection.

The CEO covered two species specific related matters. It was outlined that information relating to bass would be covered in a later agenda item. The second species was spurdog, which as of 1st April is now a species which is permitted to be caught. The species is not subject to a targeted fishery within the district but has been prohibited for the past five years with a determination that stocks have now recovered to the point where landings can be supported again.

The CEO informed Members of a project that the AIFCA were involved in called ‘Catchwise’, described as ground-truthing new survey for recreational sea fishing, taking place across England and Wales in 2023 and 2024. Developed by the Angling Trust and Cefas in conjunction with the recreational sea angling community, with the AIFCA sitting on the project steering group. The main aim is to improve the recognition of sea angling’s value to coastal communities and inform relevant fisheries management decisions as a result. The project is

asking for persons who work in the sector to be shore survey gatherers to help collect data for the project, positions are paid, and more detail is available on the project website.

Resolved
184. That Members note the updates.

185. Deputy Chief Executive Officer Updates

DCO Birchenough updated Members that on 3rd April 2023 the Net Fishing Byelaw has finished the MMO QA process and has been passed from the MMO to Defra for consideration by the Secretary of State. The MMO had reviewed the Byelaw and supporting documentation and had recommended that the Secretary of State confirms the Byelaw. There were no substantial changes made to the Byelaw as a result of the MMO QA process. Defra have indicated that the Byelaw has been received but there is not a timeframe for confirmation.

For the Pot Fishing Byelaw, Southern IFCA submitted a response to the first round of QA by the MMO on 10th January 2023. On 28th March 2023, the MMO sent correspondence that there is a delay in the MMO legal team which has prevented them sending us any further rounds of QA, as of 19th April 2023 this is still the case. It is understood that this is due to a capacity issue rather than the content of the Byelaw.

The DCOs have been working with IFCOs across both teams to develop a process and materials for the implementation of these byelaws to allow the team to be prepared ahead of any decisions to confirm either the Net Fishing Byelaw or Pot Fishing Byelaw.

Resolved
186. That Members note the update.

ITEMS FOR DECISION

187. Bottom Towed Fishing Gear Byelaw 2023

DCO Birchenough gave Members an overview of the development of the Bottom Towed Fishing Gear Byelaw 2023 (the Byelaw). It was explained that the background of the review started in 2020, primarily as a review of spatial management in response to the designation of Tranche 3 Marine Conservation Zones (MCZs), with bottom towed fishing gear (BTFG) being identified as a priority for management through the outcomes of MCZ Assessments on T3 sites. In addition, an updated evidence base was received in 2020 from Natural England providing updates on the location and extent of designated and supporting features of MPAs and wider sensitive habitats outside MPAs.

DCO Birchenough outlined that all required MPA Assessments had been completed for the sites covered by the Byelaw and that consultation on these assessments had been sought and received from Natural England. A BTFG review was formally commenced with a Members Working Group to consider management requirements on the basis of the assessment outcomes.

In August 2021 the TAC agreed to proceed the review to Stage 2 – draft measures, with three initial drivers. On this basis an informal consultation was held, and Members agreed to move to Stage 3 – draft byelaw. DCO Birchenough outlined that in 2023 the Government's Environment Improvement Plan 2023 was introduced which identified overall and interim goals for the Government to contribute to global aspirations for protection of the marine environment. For the IFCAs, as an appropriate regulator, this included an interim goal to strengthen MPA

protections by 2024 which required management measures for all Southern IFCA MPAs to be in place by this 2024 deadline. DCO Birchenough outlined that this had resulted in a prioritisation of workstreams and the proposal to adopt a phased approach to the management of BTFG which was agreed by Members on the adoption of the Research and Policy Team Plan for 2023-2024 at the Authority meeting in March 2023.

Members worked under the Phased Approach to develop a set of principles to underpin the definition of spatial closed areas under the Byelaw. DCO Birchenough provided an overview of these principles. DCO Birchenough outlined the byelaw package consisting of the Byelaw, an Impact Assessment and a Management Intentions Document and explained the contents of each including the differences in spatial area closed between the current BTFG Byelaw 2016 and the BTFG Byelaw 2023.

DCO Birchenough informed Members about the process following this meeting should Members agree to the recommendations and invited Members to consider the byelaw package and provide any comment.

Mr N Hornby queried areas in the Byelaw which currently closed under the BTFG Byelaw 2016 but were proposed to be re-opened and also asked for more clarity on the potential impact to the fishing industry including points of displacement and considering what fishing activity occurred where, what the level of pressure being alleviated and therefore environmental benefit being afforded would be from the proposed prohibited areas. DCO Birchenough responded that the principles which had been developed as part of the review were designed to ensure that management decisions were made consistently across the district without changes made on site-specific considerations. One of the principles, developed in line with the IFCAs legal duties, was that management is feature-based with the incorporation of buffers. It was discussed that this approach may not have been taken when previous iterations of the BTFG Byelaw had been developed in 2016. DCO Birchenough discussed the difficulty in valuing the BTFG fisheries based on the data that is available from MMO landings data and that as a result, displacement cannot be quantified. DCO Birchenough outlined the process that had been followed in order to make an estimation of the potential cost to the fishing industry, as captured in the Impact Assessment. Mr N Hornby identified that further information may be available through the consultation process.

Ms L MacCallum stated that there are currently areas within certain sites, using Langstone Harbour as an example, where not all the mapped designated features are covered by proposed prohibited areas. It was also queried how confident the Southern IFCA was that socioeconomics did not need to be taken into account. DCO Birchenough outlined that one of the principles defined that for SPAs and the Solent Maritime SAC the outcome of relevant assessments would be followed which was that not all of the designated features required protection in order to ensure site integrity but, good examples of those habitats would be included in prohibited areas, maintaining those areas which had been defined for the BTFG Byelaw 2016. The CEO directed Members to the relevant section of the Management Intentions document which outlined Southern IFCA's legal duties in relation to the consideration of socioeconomics under Phase 1 of the review.

Ms E Bussey-Jones queried whether any of the areas which were proposed to be re-opened from the BTFG Byelaw 2016 would be likely to be closed again following the considerations under Phase 2 of the BTFG review. DCO Birchenough explained that this was unlikely as there was no mapped feature present in those areas, and that if there was this would have been included under the current phase. It was explained that Phase 2 would also be looking at sensitive features therefore with no feature present it was unlikely that these areas would be identified for management under Phase 2. Mr N Hornby queried whether there was enough

of a benefit to warrant opening these areas and whether they could be left closed as there would be no additional loss to the industry from doing that as they are already closed. The CEO commented that under Phase 2 there would be an opportunity to consider the socioeconomic value of the areas under discussion, and therefore ascertain a benefit of having them opened or closed. It was raised that the potential of opening and closing these areas between the two phases could be problematic for any environmental protection afforded by those areas. Mr R Stride also added that it is likely that some of those areas had become areas which static gear fishers relied on in the absence of BTFG and by re-opening those areas there was the potential for conflict between gear types.

Ms E Bussey-Jones queried whether the BTFG Byelaw 2016 could be revoked only in part in so much as it affected any areas proposed to be managed under the BTFG Byelaw 2023 which would allow existing closed areas under the BTFG Byelaw 2016 that were proposed to be re-opened by the BTFG Byelaw 2023 to be maintained.

Ms E Bussey-Jones raised a point related to the review section of the Byelaw and what the intention of this provision in the Byelaw was. DCO Birchenough explained that part of the IFCA Byelaw Making Guidance provided by Defra was that byelaws should either contain a sunset clause or have the ability to be reviewed.

Mr R Stride queried the definition under the Byelaw of BTFG being 'inboard and above the sea' when a vessel is transiting through a prohibited area and asked whether it was necessary to have both 'inboard' and 'above the sea' in that definition. DCO Birchenough explained that this definition mirrored that in the current BTFG Byelaw 2016, that it had been discussed with the Compliance & Enforcement Team in terms of enforceability and that it was felt that, as the definition had been working there was not a need to change from what the fishers are currently used to.

Mr R Stride also raised a point in relation to the extension of a prohibited area outside of an MPA where a feature crosses a boundary. He queried that if the aim was to protect a feature, then are the MPA boundaries inaccurate. Using seagrass as an example, Dr A Jensen felt that an extension of that feature outside the boundary was a sign of successful conservation management inside the MPA and therefore that extended feature should be protected. Mr R Stride commented that for features which extend outside of an MPA, then management of that feature, outside the boundary should consider socioeconomics, with the main concern being around MCZ sites. Mr R Stride also commented that stakeholders are told that one of the benefits of MPAs is the ability for improvements spilling over to adjacent areas, however if those areas are then also not able to be accessed by fishers, then that benefit cannot be realised.

The MCZ designation process was discussed, with the point made that it had been the intention of this process that suitable areas would be identified which held certain features and habitats but also minimised the socioeconomic impact on stakeholders. It was raised that if the entirety of a feature had required protection, then it would have been assumed that the MCZ boundary would have been drawn to encompass the whole feature. The CEO commented that there may be a risk of not being able to meet the Conservation Objectives for a site if only part of the feature inside the boundary is protected and invited Natural England's view on this.

Mr G Black from Natural England outlined that in theory it is possible to alter an MPA boundary but that in practice it is a rare event, he commented that for features within an MPA to recover to a point where they are extending outside the boundary of the MPA is also not common. Mr

G Black provided information on different types of habitats and the difference between static and more movable habitats likely to require different considerations.

Mr G Black raised a point in relation to the best available evidence. He commented that Natural England are happy to provide the data that is available to them but raised the point that there may be additional evidence available which Natural England are unable to gather given resource constraints and that for other industries, the onus would be on the applicant/industry concerned to gather together that evidence. Dr A Jensen commented that in his view the IFCA was managing on behalf of the fishing industry rather than being the relevant industry itself and that the IFCA does not have the resources to gather the kind of data which is being discussed and the fishing industry does not have the financial resources to employ companies to undertake scientific work. He also commented that the fishing industry exists under a different legislative regime than for example terrestrial development. Members discussed the different approaches that could be taken in the development of evidence.

Members discussed the Government targets under the Environmental Improvement Plan 2023 and it was queried what the outcome would be if the Southern IFCA did not meet the 2024 target for MPA management. The CEO outlined that there would need to be a strong rationale which would need to be discussed with Defra as to the reasons why that deadline could not be met.

The CEO asked Members how they would like to proceed with areas under the BTFG Byelaw 2016 which are proposed to be re-opened, taking into account Members concerns with this aspect of the proposals. Mr N Hornby outlined that the approach needed to be transparent. The DCOs explained that the consultation which would occur if this Byelaw were made by the Authority would be a Formal Consultation therefore specific questions would not be posed but the Byelaw and all supporting documentation would be provided for stakeholders to consider and respond to. It was also confirmed that the outcomes of the Formal Consultation would come back to the TAC for consideration and that amendments could be made at that point.

The Chair invited Members to indicate if they were in favour of the recommendation; Dr A Jensen, Mr R Stride, Mr G Wordsworth, Ms L MacCallum and Mr N Hornby were all in favour.

Resolved

188. a) Provide comment on the draft Bottom Towed Fishing Gear Byelaw 2023 and Supporting Documentation:

i. The draft Bottom Towed Fishing Gear Byelaw 2023
ii. The draft BTFG 2023 Management Intentions Document
iii. The draft BTFG 2023 Impact Assessment

b) In accordance with IFCA Byelaw Guidance, Members agreed to formally notify Authority Members and the Secretary of State of the intention to make the Bottom Towed Fishing Gear Byelaw 2023 at the Authority meeting on 8th June 2023.

Recommend

189. That Officers consider options for the areas which are proposed to be reopened under the 2023 Byelaw and report back to the Authority.

190. Annual review of the Poole Harbour Several Order Management Plan (2023 update)

DCO Birchenough informed Members that the management associated with The Poole Harbour Fishery Order 2015 was required to be in line with a Management Plan which

accompanies the Order. The Southern IFCA is required to undertake an annual review of the Management Plan and publish an updated version on the website. If there are any significant changes required, then interested parties must be notified and take account of any representations received on that basis. The Management Plan takes into account the management of leases, the Habitats Regulations Requirements and the IFCAs duties under the Marine and Coastal Access Act 2009 and the Wildlife and Countryside Act 1981.

The 2023 review of the Management Plan, there were two inconsequential changes identified, therefore interested parties were not required to be notified. DCO Birchenough outlined that the updates were in relation to providing information on survey work on Pacific oysters and updates from Defra on their national position on Pacific oysters.

Due to a pecuniary interest, Mr G Wordsworth was unable to vote on the matter. All remaining Members were in favour of the Recommendation.

Resolved

191. a) That Members approve the 2023 updates to the Poole Harbour Several Order Management Plan

b) That Members approve the above-named document for publication on the Southern IFCA website.

Recommended

192. That the CEO confirm whether the above Recommendations is to be upheld following exploration of the Southern IFCA Standing Orders and the Local Government Act 1972, regarding the definition of 'present' and its relation to the specified quorum and report back to the Authority.

ITEMS FOR INFORMATION

193. Poole Harbour Oil Spill Incident

DCO Dell provided Members with an update on Southern IFCA's response to the Poole Harbour Oil Spill Incident, focusing on the operational response. On 26th March a leak was detected in a pipeline owned by Perenco and a major incident was declared with Southern IFCA contacted by Poole Harbour Commissioners requesting assistance including the use of FPV Endeavour and the drone. IFCO Officers worked with Oil Spill Response Ltd. personnel between 27th March and 30th March to help carry out Shoreline Cleanup Assessment Techniques (SCATs) using the drone for aerial surveillance and FPV Endeavour to reach remote parts of the Harbour.

Southern IFCA worked closely with BCP Council, Cefas and the FSA to help coordinate a shellfish sampling program to test multiple shellfish species to help inform the FSA position on harvesting and marketing of shellfish for aquaculture and the wild fisheries.

DCO Dell outlined the current situation and advice provided, in that fishing and netting for fish within the Harbour is able to take place providing that activities avoid any areas of the Harbour which are obviously contaminated with oil, which is now mainly contained to the spill site. Any fish found to be dead, dying or visibly contaminated with oil residue should not be consumed or marketed. Aquaculture areas have been open since 20th April, wild shellfish beds remain closed, sampling has been undertaken to inform advice on these areas with results expected this week. This advice will inform the dredge fishery activity, due to start on 25th May, and at this time hand gathering shellfish from the intertidal should not take place until the results have been received and advice issued.

MARKED A

DCO Dell informed Members that Southern IFCA has committed significant time and resource to date to support the initial and ongoing incident. An account of this is currently being prepared with a view of submitting as a claim to seek renumeration of costs. The DCOs thanked the IFCOs involved, their commitment shown has been exemplary and feedback from Poole Harbour Commissioners and other authorities was that the knowledge and assets held by the IFCA were key in helping the operation progress without delay. The Incident Commander passed on thanks to the IFCA.

Dr A Jensen added his thanks as Chair of the TAC to all those involved stating that there had been nothing but positive comments on Southern IFCA's work related to the incident. Mr G Wordsworth also extended his thanks and stated that the IFCA did an excellent job in relation to the incident along with other partners and commented that the oil spill response plan which was in place for the Harbour had worked and been implemented successfully. He commented that the efforts of Southern IFCA and BCP Council had helped initiate the FSA response in a timely manner. Ms L MacCallum and Mr R Stride echoed the thanks to the IFCA staff.

Mr R Stride queried whether costs could be recovered. DCO Dell informed Members that there is active work ongoing in this regard and that the IFCA had received the forms to submit such a claim.

Resolved
194. That Members note the update.

195. 2023 Survey Program

DCO Birchenough updated Members on the survey work which had been undertaken by the Southern IFCA in the spring, consisting of a bivalve and scallop survey in The Solent and a bivalve survey in Poole Harbour. The surveys were required to be completed over a tight time scale this year due to bad weather preventing them taking place when originally scheduled. DCO Birchenough extended her thanks to the IFCOs and POs for their flexibility and willingness to adapt to undertake the survey work in a short space of time.

The surveys which have been completed include the Solent Scallop Survey which looks at the population of King Scallop in the Solent, the spring surveying informing a post-fishing season view of the stocks, the Solent Bivalve Survey, which is conducted in Southampton Water, Portsmouth Harbour and Langstone Harbour to look at populations of commercially important bivalve species, again as a post-fishing season survey. Both surveys will be conducted again in the autumn to look at a pre-fishing season perspective. The annual Poole Bivalve Survey is one of the Southern IFCA's most established surveys with seven years of data under the current methodology. In all cases CPUE and length frequency data is collected and time series datasets are being built which will help inform management decisions for the fisheries.

A new survey was also undertaken looking at whelk populations across the district as part of the Whelk Monitoring Programme committed to in the development of the Pot Fishing Byelaw. Samples were collected from four areas across the district which are known to be important areas for whelk fishing, working with local fishers. Samples are awaiting processing and will be analysed for size frequency and CPUE. The aim is to build a dataset which, in the future, can be used to help inform management decisions.

196. Bass Guidance 2023

MARKED A

DCO Dell provided Members with an update on the rules and regulations for bass fishing as of 1st April 2023 and provided a copy of the recreational fishing poster developed to aid recreational fishers in understanding the relevant regulations.

Resolved
197. That Members note the report.

198. Review of Net Fishing Around Piers Code of Practice
IFCO Parry provided Members with background as to the development of the Code of Practice. At the point of implementation, a review date was set for the CoP of 31st December 2022.

A review of the CoP indicated that there had only been five reports of non-compliance with the CoP since its implementation with IFCOs engaging with persons involved in all cases. Engagement was sought with representatives from the South Coast Fishermen's Council and the Recreational Angling Sector Group as part of the review. Input from the RASG indicated that they felt the CoP worked well and were happy for it to continue in its current form, input from the SCFC also expressed no issues and that they were happy for the CoP to continue.

It is therefore the intention to maintain the CoP in its current form with no changes to the provisions contained within it. The Southern IFCA will continue to monitor compliance with the CoP and consideration will be given as to whether any future changes are required if the CoP is seen to not be meeting its objectives.

Ms L MacCallum queried whether all piers in the district were included, Dr A Jensen stated that the nine piers which had been included were not all but were the piers identified by the recreational angling sector as being most important to them.

Resolved
199. That Members note the report.

200. Fisheries Management Plans
PO Mullen provided an update to Members on the development of Fisheries Management Plans (FMPs). PO Mullen provided background information on what FMPs are and how they are being developed as well as outlining the 6 Frontrunner FMPs.

For shellfish FMPs (King Scallop, Whelk and Crab & Lobster), initial drafts were considered in February with comments from that process being reviewed ahead of the public consultation. The target for final publication of these FMPs is the end of October 2023. Proposed management measures being explored by these FMPs were provided to Members in an Annex to the report.

For the Channel Demersal Non-Quota Species FMP, PO Mullen provided Members with an overview of species to be included and updated that some species which had previously been considered for this FMP may be moving to the Southern North Sea and Eastern Channel Mixed Flatfish FMP, but this has yet to be confirmed and that smoothound had been added. Key engagement has been held in February and March this year both online and in-person for commercial and recreational sectors. Discussions on proposed management measures is currently taking place in the relevant working groups with public consultation in summer 2023 and aiming for publication at the end of December 2023.

For the Bass FMP the initial engagement took place in October 2022, since this time there has been little public information available but there is an intention for more engagement in the coming months with an aim for publication at the end of 2023.

For the Southern North Sea and Eastern Channel Mixed Flatfish FMP, PO Mullen outlined the species to be included. Engagement on this FMP is expected to begin in the coming months and it is being considered whether the lead for this FMP will change from Defra to the MMO.

PO Mullen outlined general feedback on FMPs which included a general support for them and an interest in the development of collaborative management. Effective engagement has been highlighted as key, continuing post implementation of the FMPs so that ideas can continue to be shared and avenues for input be maintained. There is support for increased and improved data to aid in decision making, particularly with data poor species such as non-quota species. FMP leads have indicated that there will be full transparency in decision making around FMPs.

PO Mullen outlined the FMPs which were intended for future tranches with the development process commencing in 2024 to 2025. Members were informed that Defra had developed information posters and copies were provided.

Mr R Stride commented that the port visits for the NQS FMP had not been well attended and it was felt this could be because the information provided was high level and not enough information had been provided on specific management measures for fishers to consider. It was also raised that there was concern over the Bass FMP as there had been a lot of engagement early on but updates since that time had been limited and fishers are concerned at what point they will be able to feed into the process again. The CEO informed Members that the first draft of the Bass FMP had been released to arm's length bodies from Defra which will come into the public forum in due course, the timelines for this FMP are being met but it is not as public facing as some of the other FMPs.

Dr A Jensen queried what the TAC role would be in consultation on the FMPs. DCO Birchenough stated that the aim would be to hold some Member workshops with information on proposals provided by PO Mullen and discussion with Members on these to help frame a Southern IFCA response.

Resolved
201. That Members note the report.

202. Marine Licencing Update

IFCO Cast updated Members that 14 marine licence applications had been received by the Southern IFCA for consultation in the period January to April 2023. One had been sent to Southern IFCA in error and information was provided to the MMO licencing team on the extent of the Southern IFCA district.

Four of the applications were deemed to require a response from Southern IFCA. An outline of the nature of these responses was provided to Members as part of the report. IFCO Cast provided detail on the relevant South Marine Plan policies which were taken into account when drafting any responses and also outlined that information had been sought from local fishers to help inform the response.

Points which were raised through the responses included sediment transport and smothering, release of contaminants, location of current Southern IFCA regulations and key fisheries, the need to include the most recent Southern IFCA survey data, the need to clearly identify how

works related to relevant Marine Plan policies and that applicants should seek direct liaison with representatives from commercial and recreational fisheries as appropriate in order to ensure that all relevant information is captured. In all cases Southern IFCA offers to help facilitate making connections between the applicant and relevant fishers.

Resolved
203. That Members note the report.

Date and time of Next Meeting
204. That the meeting of the TAC will be on the 24 August 2023 at Southern IFCA Offices, Unit 3, Holes Bay Park.

There being no further business the meeting closed at 17:00.

Chairman: **Date:**

Southern Inshore Fisheries and Conservation Authority

FOR INFORMATION

Marked B

PACKAGE OF MEASURES: DEFRAS FISHERIES POLICY REFORM & IT'S RELEVANCE TO SOUTHERN IFCAS' STAKEHOLDERS

Report by the CEO

A. Purpose of the Report

To provide Members with an update on the UK Government's proposed fisheries Policy reforms, released on the 17th July 2023, which seek to further develop a thriving, sustainable fishing industry and a healthy marine environment.

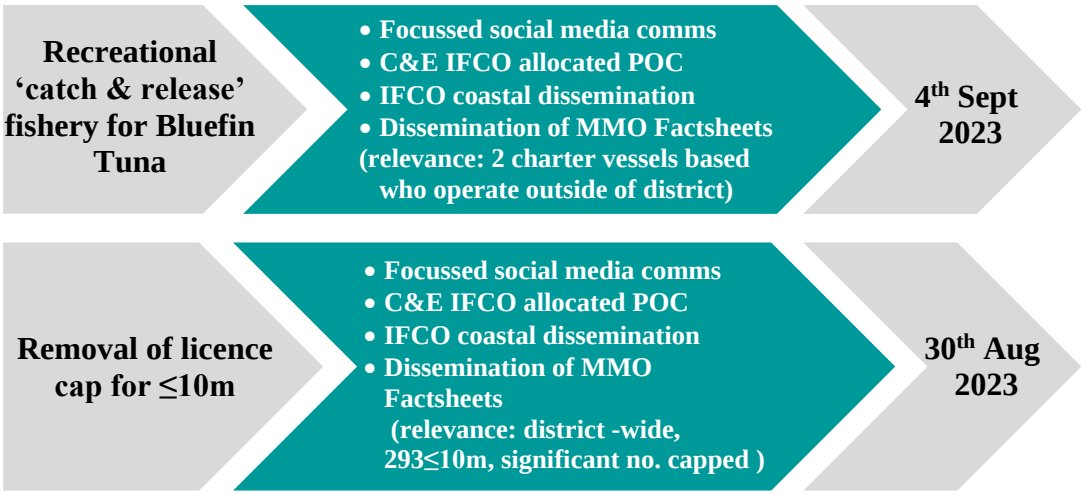
To consider the proposed reforms in the context of the Southern IFCA District, it's stakeholders and within the scope of Southern IFCA's legislative umbrellas.

B. Recommendations

i. That Members note the report.
ii. That Members note the ongoing Southern IFCA outreach programme, which seeks to actively facilitate stakeholder input into the live DEFRA consultations.

1.1

DEFRA CONSULTATION	OUTREACH	DEADLINE
6 x Fisheries Management Plans	• Members Workshop to formulate Authority response to public consultation. • Focussed social media comms. • Designated FMP PO • IFCO coastal dissemination • Attendance at DEFRA FMP Roadshow • DEFRA attendance at TAC (relevance: district -wide)	1st Oct 2023
Remote Electronic Monitoring	• Focussed social media comms. • C&E IFCO allocated POC • IFCO coastal dissemination • Dissemination of MMO Factsheets (relevance: 10-12m gill net [*c.*17] & demersal trawl [*c.*18] fleet)	9th Oct 2023
Discards Reform	• Focussed social media comms. • C&E IFCO allocated POC • IFCO coastal dissemination • Dissemination of MMO Factsheets (relevance: district -wide)	9th Oct 2023



1.2 Overview of DEFRA Consultations

(Text taken from: UK Government seizes post-Brexit freedoms for fishing industry - GOV.UK (www.gov.uk))

(a) Fisheries Management Plans

The first six of 43 Fisheries Management Plans **(**FMPs) have been announced covering crab and lobster, whelk, king scallops, bass, channel non-quota demersal stocks and southern North Sea and Eastern channel mixed flat fish. The bass and king scallop FMPs have been developed jointly with the Welsh Government.

Each FMP proposes a series of short, medium and long-term actions to ensure the stocks are managed sustainably.

(b) Remote Electronic Monitoring

Remote Electronic Monitoring (REM) will allow for effective monitoring and better data on fishing activities through the use of integrated on-board systems that may include cameras, gear sensors and GPS, helping to make data-led fisheries management decisions.

Defra is consulting on the expansion of the use or REM in English waters, proposing a targeted approach and prioritising the following fisheries which would come online in stages over the next five years:

- Pelagic Trawls over 24m in length fishing in all English waters
- Demersal seines (flyseines) fishing in English waters of the Southern North Sea and English Channel
- Demersal trawls using mesh sizes of up to 120mm (targeting nephrops) fishing in English waters of the North Sea
- Fixed and drift nets (gill and trammel nets) fishing in English waters of the Celtic Sea and English Channel
- Demersal trawls, including beam trawls, fishing in English waters of the Celtic Sea and English Channel

(c) Discards Reform

A ban on discarding (the practice of throwing unwanted catches of fish back into the sea) was introduced by the EU in 2015, but evidence has shown it has not been as effective as hoped in changing fishing practices.

The proposals include the key principle of counting all fish catches against quota to keep fishing with agreed UK limits through better catch accounting. Defra will work with industry groups and stakeholders to develop measures to avoid and reduce unwanted catch, for example through more selective fishing gear.

(d) Recreational 'catch & release' fishery for Bluefin Tuna
Since 2021, the UK negotiated its own Bluefin Tune (BFT) quota through the International Commission for the Conservation of Atlantic Tunas (ICCAT). The UK has already taken advantage of leaving the EU to begin establishing bluefin tuna fisheries in our waters.

Defra is now consulting on plans to permit catch and release recreational fisheries for BFT in the UK, with the aim of having fishing taking place in UK waters from next summer (2024) – allowing recreational fishers, coastal communities and the wider economy to benefit from the presence of this iconic species in our waters while ensuring it remains sustainable in the long term.

(e) Removal of licence cap for ≤10m
More than 400 English small vessels (10-metre and under) are subject to a limit of 350kg on the amount of finfish quota species they can fish per annum. Given the increased quota now available to the small-scale fleet, Defra is now seeking views on the permanent remove of the licence cap from 1 January 2024, with the aim to open up more fishing opportunities to smaller operators.

Southern Inshore Fisheries and Conservation Authority

OFFICER'S REPORT

MARKED C

BOTTOM TOWED FISHING GEAR BYELAW 2023

Report by DCO Birchenough

A. Purpose of the Report

For Members to review the feedback from the formal consultation on the Bottom Towed Fishing Gear (BTFG) Byelaw 2023 ('the byelaw'), in order to determine whether they wish to consider amending the byelaw in light of these objections, prior to consideration by the Executive Sub-Committee in September.

B. Recommendations

(a) On reviewing the feedback from the formal consultation, it is recommended that no amendments are made to the Byelaw or supporting documentation.

(b) That a summary of the TAC discussion is provided to the Executive Sub-Committee in order to inform their subsequent decision to make recommendations to the Authority regarding the submission of the byelaw to the MMO for confirmation by the Secretary of State

1. Background

1.1 Following the decision to make the Byelaw at the Authority Meeting on the 8th June 2023, Southern IFCA undertook a period of formal consultation that concluded on the 28th July 2023.

1.2 In line with Defra's guidance on the IFCA Byelaw Making Process[1], the Byelaw and Impact Assessment were advertised for two consecutive weeks in relevant publications and media platforms across the District. These include the Fishing News, the Southern Daily Echo, the Dorset Echo, the Isle of Wight County Press and the Authority's website. Respondents had 28 days following the final advert in which to respond to the formal consultation.

1.3 A total of seven responses were received by the Authority, these consisted of one letter of support and six objections.

1.4 Guidance outlines how the Authority should *examine all timely objections before the byelaw is submitted for confirmation, respond in writing to objectors and, where appropriate, liaise with objectors with a view to resolving the objection. The IFCA may wish to consider amending the byelaw in light of those objections. Objections that cannot be resolved do not preclude confirmation but the IFCA must provide sufficient explanation as to why they have decided to disregard the objections. When responding to objectors, IFCAs should explain that their objections have been considered and why the byelaw has not been amended as they might have wished.*

2. Response Summary Table

2.1 The general themes raised in the objections are summarised in the table below. An overview of the proposed Southern IFCA response is provided, as well as any proposed changes to the byelaw or supporting documents highlighted.

[1] www.association-ifca.org.uk/Upload/About/ifca-byelaw-guidance.pdf

Southern Inshore Fisheries and Conservation Authority

OFFICER'S REPORT

General Theme	Sector	Nature of Objection	Proposed scope of IFCA response
Whole site management	Conservation	That the full extent of MPAs should be prohibited for BTFG activity it has the potential to adversely impact on the marine environment and biodiversity, with one response stating that bottom trawling and dredging are incompatible with MPAs with the byelaw falling short of adequately protecting and restoring habitats and promoting wider recovery.	To explain Southern IFCA's legal duties in the context of whole site/feature-based management in accordance with sections 1.5 to 1.11 of the Impact Assessment which accompanies the Byelaw. To discuss the Authority's intention to consider wider sensitive habitat/species management under Phase 2 of the BTFG review following the completion of Phase 1 in accordance with section 2.2.1 of the Management Intentions document which accompanies the Byelaw.
Extent of site-specific boundary	Industry	Objection to the southern boundary of the prohibited area for the Southbourne Rough MCZ, stating that the line is south of any known features of the site and that the southern part of the site is sand habitat. The same response also stated that with compulsory VMS there should be no need for buffer zones.	To discuss the feature designated for the Southbourne Rough MCZ (Black seabream [nesting]) alongside outcomes of the Tranche 3 MCZ assessments which determine that this feature is sensitive to the potential impacts from BTFG.
Evidence base & sensitive biotopes	Conservation	The data for Purbeck Coast MCZ and Studland to Portland SAC is incomplete and has not taken account of biotopes sensitive to BTFG. An 'Area of Concern' was identified by one response and supported by another as containing sensitive biotopes but is not subject to a prohibited area under the Byelaw and is not included in relevant MPA assessments.	To provide details of discussions between NE and Southern IFCA in 2022 & 2023 regarding this 'Area of Concern' (reef). The NE data layer is formed of mostly polygons with a few data points which represent Dorset Seasearch records and DORIS data. At a meeting in January 2023, NE informed Southern IFCA that the data for that particular area was deemed to be of low confidence due to the nature of the data being modelled data and therefore NE agreed that this area should remain open to BTFG. To provide outcomes of the relevant MPA Assessments for the areas in question.

Southern Inshore Fisheries and Conservation Authority

OFFICER'S REPORT

General Theme	Sector	Nature of Objection	Proposed scope of IFCA response
Non-designated features		That other, non-designated, biotopes and nationally scarce species, including those determined as potential MCZ Features of Conservation Interest, had been identified in the Purbeck Coast MCZ and Studland to Portland SAC as part of Seasearch studies. It was suggested that these sensitive habitats should also be afforded protection under the Byelaw in addition to designated features. That *Sabellaria spinulosa* reefs, recorded in 1998 and mapped in 2000 with further reports in 2013 east of Swanage as well as in the Southbourne Rough MCZ, had not been included in prohibited areas under the Byelaw.	To explain that Phase 1 of the BTFG review is defined to consider feature based management for designated features. Non-designated biotopes, scarce species and features of conservation interest are not included in this definition. In the MPAs in question S*abellaria spinulosa* is not a designated feature. To discuss the Authority's intention to consider wider sensitive habitat/species management under Phase 2 of the BTFG review following the completion of Phase 1 in accordance with section 2.2.1 of the Management Intentions document which accompanies the Byelaw.
Evidence base	Conservation	That a single evidence base should not be used as best available evidence to inform management and that there is other survey work available, namely multibeam echosounder data for Dorset's inshore waters, should also be used. ***For Members interest:*** *it is assumed that the evidence referred to is a recent multibeam echosounder survey, the data for which would require interpretation to be transferred into polygons illustrating extent and distribution of features. It is also indicated that the data is difficult to interpret for some features. On this basis, Southern IFCA do not have the expertise to interpret data in its raw format and would be reliant on those with the expertise to undertake this analysis and work*	To explain the role that NE have as the Government's Nature Conservation Advisors, who aid Southern IFCA in management development via the provision of advice and information on the location, extent and condition of designated features. To discuss where additional survey work may be considered by NE for inclusion in the evidence base if NE deem it to be compatible with recognised data standards. To discuss the Authority's intention to consider wider sensitive habitat/species management under Phase 2 of the BTFG review following the completion of Phase 1 in accordance with section 2.2.1 of the Management Intentions document which accompanies the Byelaw.

Southern Inshore Fisheries and Conservation Authority

OFFICER'S REPORT

General Theme	Sector	Nature of Objection	Proposed scope of IFCA response
		with those who can verify this data to provide a data source in a format and at a confidence level that could then be used by Southern IFCA in management development.	
Provision of wider protections	Conservation	That broadscale habitats should be included in prohibited areas and that sediment habitats in the Studland MCZ should be protected as it was deemed that lack of activity had been used as the reason not to protect this feature.	To provide outcomes of the relevant MCZ Assessments specific to sediment habitats.
Evidence Base	Conservation	That there was reef habitat shown in small areas to the east of Portland Bill in the Studland to Portland SAC which had not been included in prohibited areas.	The advice provided to Southern IFCA by NE is that this is modelled data of low confidence.
Evidence Base	Conservation	That a data layer identifies much of the sediment areas of the Chesil Beach and Stennis Ledges MCZ as potential oyster bed habitat with the MCZ having the native oyster as a 'recover' feature, it is felt that this potential oyster habitat should be protected from BTFG.	To explain that there are currently no mapped areas in the NE dataset which are identified as being potential oyster bed habitats within this MCZ. The rock features which provide a potential supporting habitat for native oyster have all been protected under proposed prohibited areas due to their designation as a feature in their own right. To discuss ongoing national work on Native oyster bed potential, as well as ongoing restoration projects in the context of Phase 2.

Southern Inshore Fisheries and Conservation Authority

OFFICER'S REPORT

MARKED D

DEVELOPMENT OF MANAGEMENT FOR BLACK SEABREAM IN MCZS

Report by DCO Birchenough

A. Purpose of the Report

For Members to consider the summary conclusions of the **Part A MCZ Assessments** and of the **Site Specific Evidence Package** specific to black seabream, which will be used to inform the development of Part B MCZ Assessments and the drafting of Management Principles.

B. General Summary

In accordance with the best available evidence it has been determined that Management Principles are to be developed taking into account the following gear types:

- **Pots/Traps**
- **Nets (Demersal and Pelagic)**
- **Lines (Demersal and Pelagic)**

C. Recommendations

1. That in accordance with the best available evidence, officers develop a set of draft Management Principles relevant to the three Dorset MCZs, for consideration at a subsequent TAC Working Group.
2. That the outcomes of this Working Group will inform the development of draft management measures prior to consideration at the November TAC.

D. Annexes

1. Site Specific Evidence Packages for Black Seabream Management

2. Outputs of Screening and Part A Assessment Process for the designated feature Black Seabream in Purbeck Coast, Poole Rocks and Southbourne Rough MCZs

1. Background

1.1 In accordance with Section 154 of the MaCAA, the Authority must seek to ensure that the conservation objectives of any MCZ in the district are furthered.

1.2 Black seabream (*Spondyliosoma cantharus*) are a designated species in three of the District's Marine Conservation Zones (MCZs); Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ.

MCZ	Designated Feature	General Management Approach
Purbeck Coast	Black seabream (nesting)	Recover to a favourable condition

Poole Rocks	Black seabream	Recover to a favourable condition
Southbourne Rough	Black seabream (nesting)	

1.3 The designations for this species for all three sites were introduced in 2019 under Tranche 3 (T3) of the MCZ designation process. For Purbeck Coast and Southbourne Rough MCZs, the designation of black seabream (nesting) was introduced at the point of site designation, for Poole Rocks MCZ, the species was added as a feature under T3.

1.4 In order to determine whether management measures are required to meet the duties of the Southern IFCA in relation to fishing activity occurring within an MCZ, an MCZ Assessment is undertaken.

1.5 The development of management for black seabream is currently in Stage 1 of the Byelaw Making Process.

3. Overview of Site Specific Evidence Packages

3.1 Evidence packages for black seabream have been produced to help inform the MCZ Assessment process, providing site specific evidence for each gear type within each site, cross referenced with the outcomes of two black bream projects, the first, a side-scan sonar survey for nesting sites, undertaken by CEFAS on behalf of NE in 2021 and the second a NE Project undertaken in 2022 which looked at the presence and extent of nesting sites.

3.2 The following summaries consider patterns of fishing activity, location of nesting sites and seasonality of black seabream within each MCZ:

- **Purbeck Coast**: Black Seabream are suggested to be 'most likely to be present' within the Purbeck Coast MCZ from the March to July which aligns with the peaks in rod and line fishing activity effort in Areas 1 and 3 and potting activity in Area 3, and suggested increase in rod & line CPUE throughout the summer months in Area 3 when compared to the rest of the year (taken from Section 1.7).
- **Poole Rocks:** The increase in rod and line fishing within the site over April to June aligns with months when the Black seabream are suggested to be present and most active in the area (taken from Section 2.7).
- **Southbourne Rough:** The increase in rod and line fishing and increase in CPUE within the site over April to June aligns with months when the Black seabream are suggested to be present and most active in the area (taken from Section 3.7).

4. Overview of Part A MCZ Assessments

4.1 Following initial submission to NE of Part A Assessment drafts in 2020, feedback was received from NE and incorporated into subsequent drafts. Given the time lapse since this point, the following subsequent updates have been made to the Part A Assessments (Annex 1):

What	Why
Inclusion of information related to the proposed Bottom Towed Fishing Gear Byelaw 2023	To outline how protection will be provided to black seabream in all three MCZs.

Inclusion of 'Removal of Non-Target Species' as a potential pressure for Pots/Traps	○ Cuttlefish traps have been identified as having the potential to occur in all three sites and there is evidence from literature of potential bycatch of black seabream by this gear type ○ Based on knowledge of the location of this gear type currently in relation to the three MCZs, the risk of this pressure for Pots/Traps is deemed to be low and this will be reflected in the Part B Assessment
Inclusion of Drift Nets (demersal and pelagic) to Part A Assessment for Purbeck Coast MCZ	○ Activity has been documented as occurring historically within the site through a review of Southern IFCA fishing vessel sightings data, therefore it is determined that there is the potential for the activity to occur again in the future ○ Inclusion of Drift Nets (demersal and pelagic) did not change the outcomes of the Part A Assessment as the gear type is already covered by the Advice on Operations used to inform assessment outcomes
Inclusion of Longlines (demersal and pelagic) to Part A Assessment for Southbourne Rough MCZ	○ Conclusion for Poole Rocks MCZ Screening was that these activities have the potential to occur and therefore require a Part A Assessment. Given the proximity of Poole Rocks MCZ and Southbourne Rough MCZ it was determined that the potential for these activities would also exist for Southbourne Rough MCZ and therefore a Part A Assessment was required ○ Inclusion of Longlines (demersal and pelagic) did not change the outcomes of the Part A Assessment as the gear type is already covered by the Advice on Operations used to inform assessment outcomes

4.2 Based on the outcomes of the Part A Assessment process, the activities determined as requiring a Part B Assessment specifically for the management of black seabream are:

- Pots/Traps
- Nets (Demersal and Pelagic)
- Lines (Demersal and Pelagic)

5. Next Steps

5.1 For draft Part B Assessments to be completed and submitted to Natural England, as informed by the Site Specific Evidence Packages, Part A Assessment outcomes and a Literature Review (currently under development as part of Part B Assessment process).

5.2 For a summary of Part B Assessments, Site Specific Evidence Packages and subsequent draft Principles for Black Seabream management to be considered at a TAC Working Group in October.

5.3 Draft Principles and resulting draft measures to be considered by the TAC in November.

MARKED D – ANNEX 1

Southern Inshore Fisheries and Conservation Authority

Site Specific Evidence Packages for Black Seabream Management

Supporting Document for the development of Black Seabream Management.

Contents

SECTION A: MCZ Assessments

Under Section 154 of the Marine and Coastal Access Act 2009 (the MaCAA), Southern IFCA has duties in relation to the Protection of Marine Conservation Zones (MCZs) to ensure that the Conservation Objections of any MCZ in the district are furthered, with nothing under Section 153(2) to affect the performance of this duty. Section 125 of the MaCAA requires that 'public authorities' (which includes the IFCA) exercise their functions in the manner which the authority considered best furthers the conservation objectives stated for the MCZ, or if not possible, in a manner which the authority considers least hinders the achievement of those objectives.

If the authority believes that there is or may be a significant risk of an act (in this case the act is anything for which the IFCA has a management remit) hindering the achievement of the conservation objectives for an MCZ, the authority must notify the appropriate statutory conservation body (Natural England). This requirement links to a determination by Southern IFCA as to whether management measures are required for specific fishing activities within MCZs in order to achieve the conservation objectives, that determination being made through conducting an MCZ Assessment.

For management of black seabream fishing in sites within the Southern IFCA District which are designated for this species, the Southern IFC Authority has conducted *MCZ Assessments for three sites: Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ. (Part B Assessments to be completed)*

This document provides site specific evidence for each of the three MCZs which has been used to inform the MCZ Assessment for each site for each relevant fishing activity. This document should be read in conjunction with 'MCZ Assessment Package for Black Seabream Management' (to be completed).

SECTION B: SITE SPECIFIC EVIDENCE

1. Purbeck Coast MCZ

1.1 General Description

Purbeck Coast MCZ was designated in 2019 and covers a stretch of the Dorset coast from Old Harry Rocks, Studland to Ringstead Bay in west Dorset. The site covers an area of approximately 282km^2 and protects a number of intertidal and subtidal habitats including sediment, intertidal rocks and maerl beds, all of which support a range of communities including seaweeds, sponges, bryzoans, hydroids, barnacles, sea cucumbers, tube worms and anemones. Specific species protected are Peacock's tail (*Padina pavonica*), Stalked jellyfish (*Haliclystus* sp.) and black seabream (*Spondyliosoma cantharus*)[1].

[1] Defra, 2019. Purbeck Coast Marine Conservation Zone - Purbeck Coast Marine Conservation Zone factsheet (publishing.service.gov.uk)

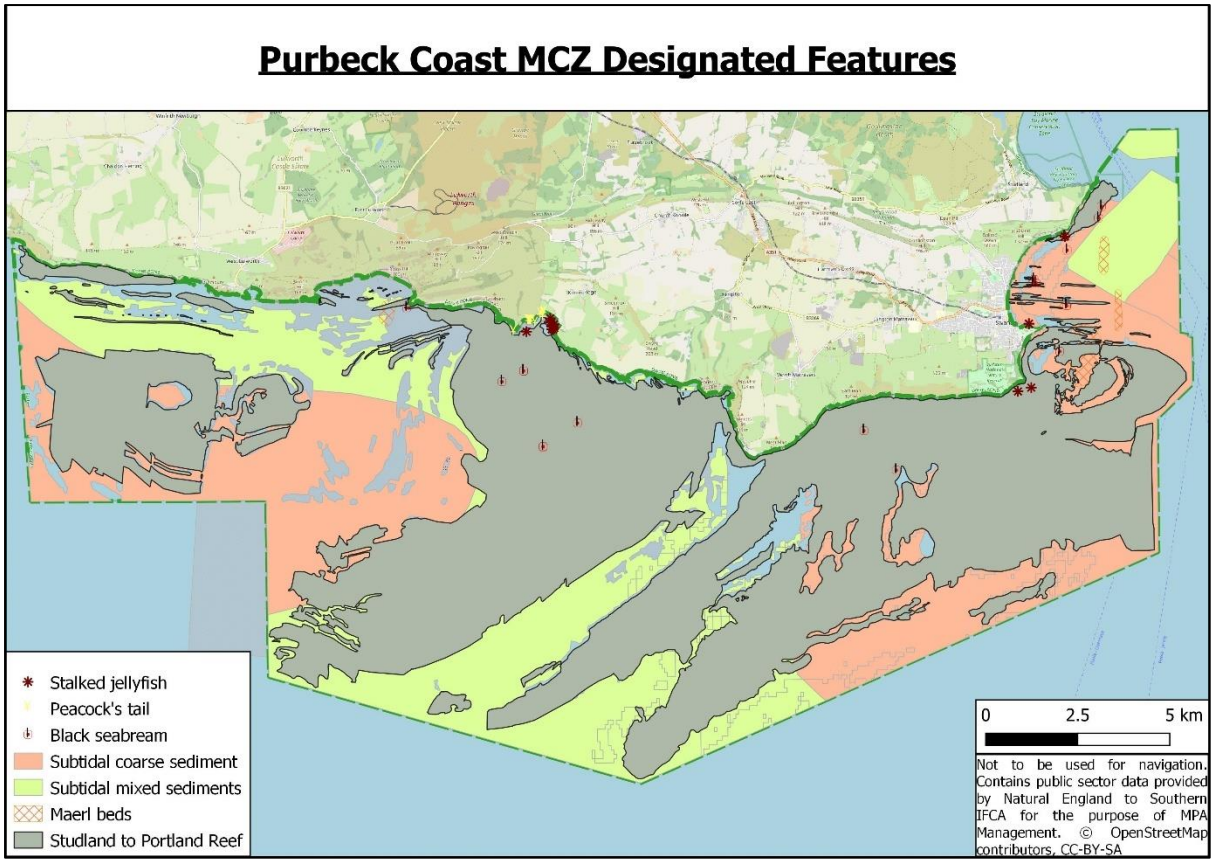


Figure 1. The Purbeck Coast MCZ (boundary shown by dashed green line) with location and extent of designated features.

Figure 1 shows a map of the boundary of the site and the location of designated habitats and species. Data on the extent and location of designated features is provided to Southern IFCA by Natural England as an evidence package. The most recent evidence package was received in 2020 and forms the current best available evidence. For black seabream however there is additional evidence available at a finer spatial scale, this evidence has been compiled to help inform MCZ Assessments for this species, see Section 1.6 for details of the evidence base.

1.2 MCZ feature under assessment

This assessment relates to the feature of Black seabream (*Spondyliosoma cantharus*) (nesting) which has a General Management Approach of 'Recover to a favourable condition'.

1.3 Fishing effort data – all gear types

Figure 2 displays the areas of congregation of fishing methods within the Purbeck Coast MCZ. The MCZ has been split into three distinct areas to accommodate easier discussion of fishing activity across the MCZ.

- Area 1, Ringstead Bay to the eastern edge of Worbarrow Bay, contains mostly potting activity and some historical sightings of rod and line fishing.
- Area 2, the eastern edge of Worbarrow Bay to St Albans Head, contains predominantly historical sightings of potting activity.
- Area 3, the east of the MCZ, St Albans Head to southern Studland Bay, contains largely rod and line fishing activities.

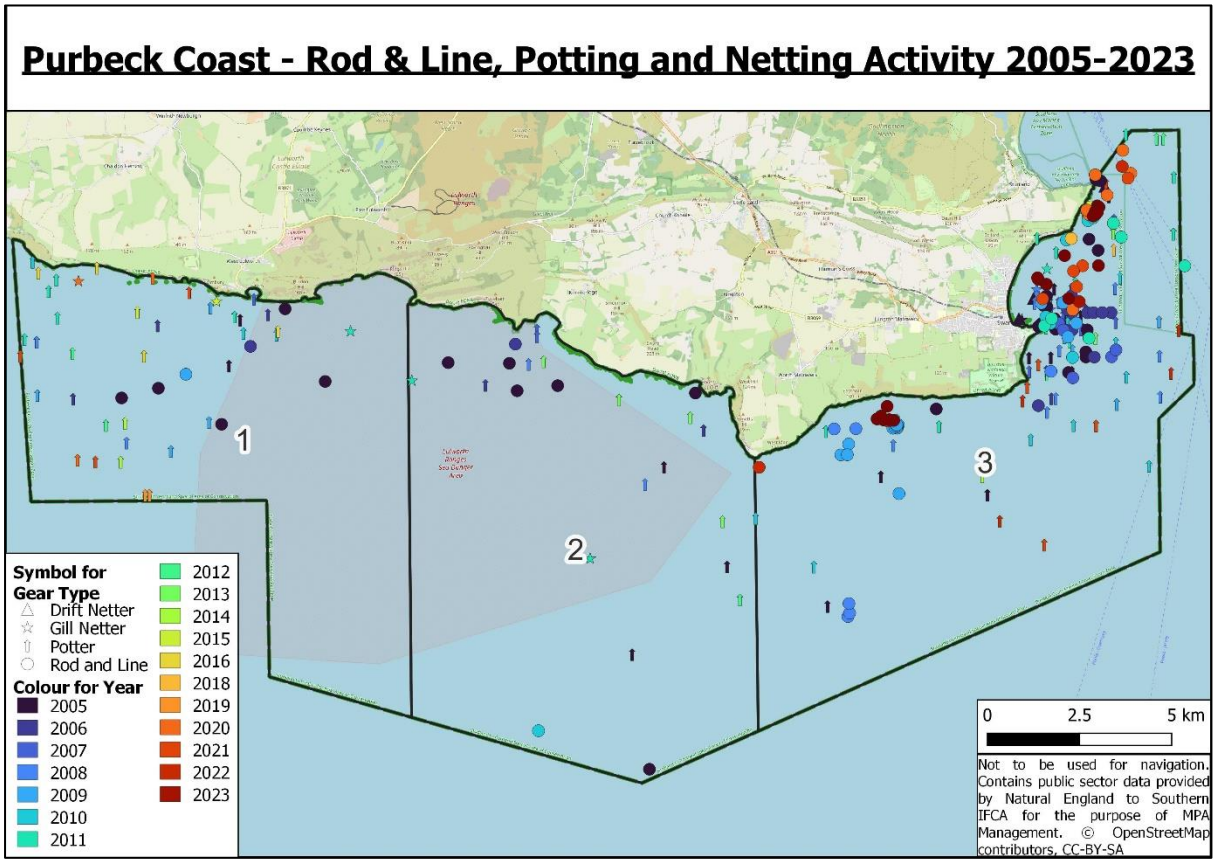


Figure 2. All Rod and Line, Netting and Potting activity recorded by Southern IFCA in the Purbeck Coast MCZ between November 2005 and July 2023.

The yearly contributions of each fishing method to SIFCA fishing vessel sightings[2] are summarised in Figure 3. Areas 1 and 2 have been predominantly potting since 2005; whereas Area 3 has a more significant proportion of rod and line sightings per year. Area 3 saw a peak in rod and line sightings in 2021 (30), which comprised 86% of sightings in Area 3 that year. Potting sightings peaked in 2010 (18) comprising 69% of all sightings and have stayed below 5 sightings per year since 2012.

[2] Note that sightings taken recorded by Southern IFCA is taken during patrols and is dependent on the location and duration of that patrol, this data therefore does not provide a full representation of fishing effort.

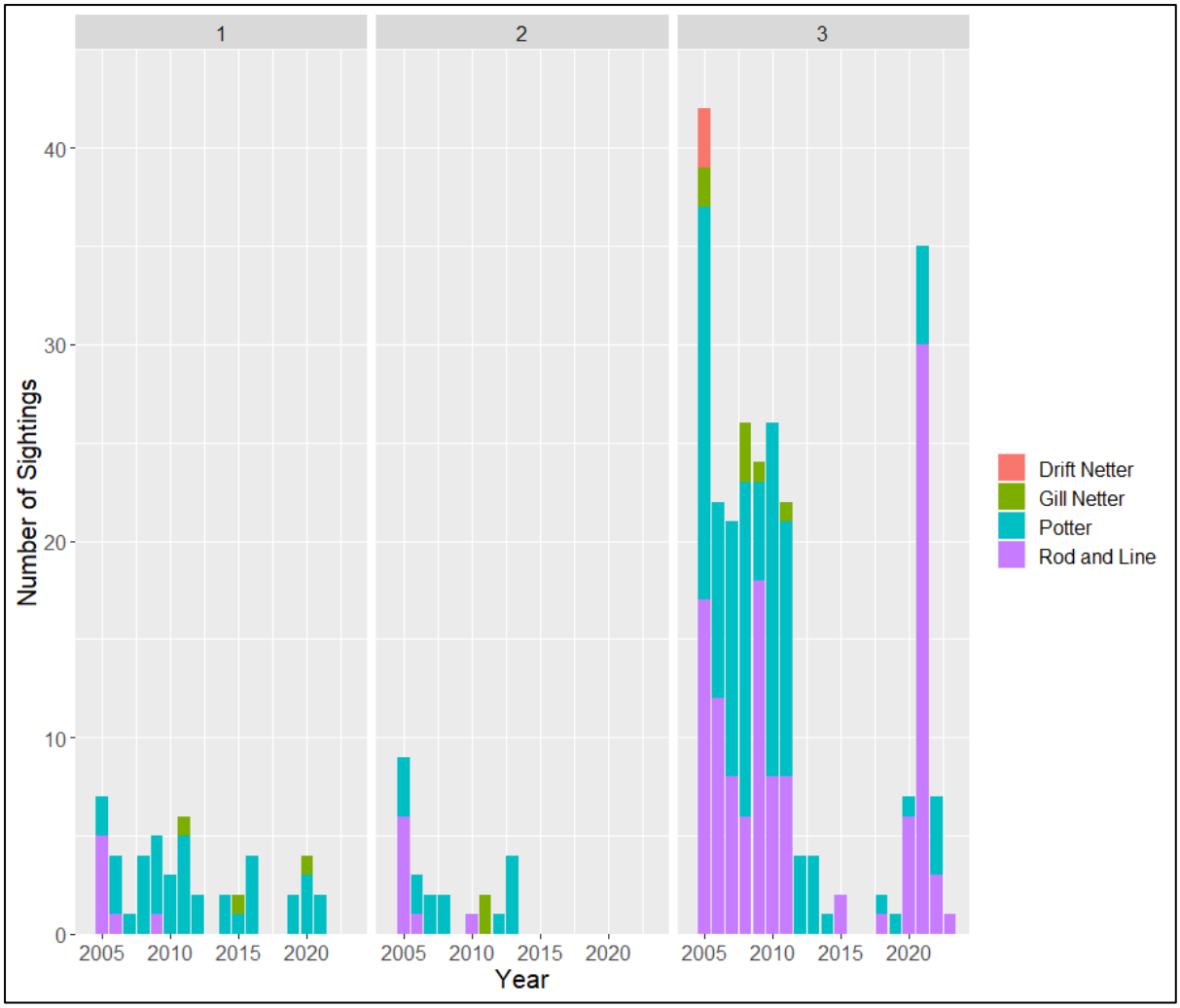


Figure 3. Sightings of fishing activity between 2005 and 2023 in each Bream Fishing Area (1-3) of the Purbeck Coast MCZ separated by fishing method.

In Figure 4, sightings data has been combined for all years (2005-2023) and then the occurrence of each activity has been analysed by month. Both Areas 1 and 3 display peaks in rod and line activity sightings in May however area 3 shows a larger level of rod and line activity in other months of the year than both area 1 and area 2.

Potting activity peaked in March and September in area 1 with an overall lower level of potting activity in the summer months than the autumn and winter months. Area 2 remained relativley constant from April to November however no potting sightings were reported between November and April. Area 3 shows a general rise and deciline in pottting activity throughout the year with a peak in June.

Across all three areas there are few sightings of either drift or gill netting. Neither area 1 nor 2 contain drift netting activity; area 3 contains only 3 sightings in June and October combined. Gill netting has been sighted more frequently than drift netting however commonly only one sighting in each month, asides from are 3 which displays a peak of 4 sightings in October. It is not possible to discern a pattern in netting activity from the data available.

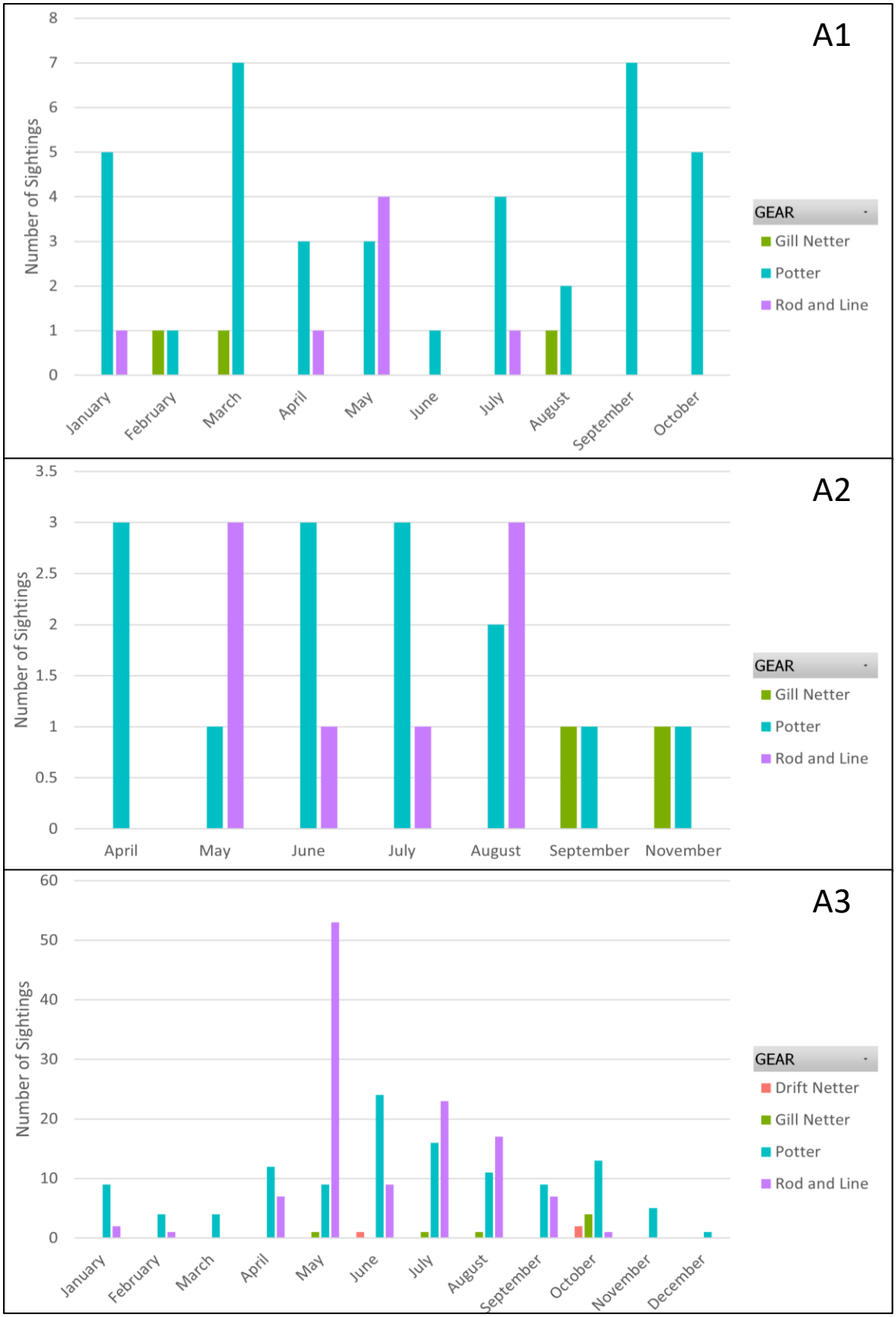


Figure 4. Total (all years combined) monthly fishing activity for all recorded gear types from November 2005 to July 2023 in A1: Area 1, A2: Area 2, and A3: Area 3 of the Purbeck Coast MCZ.

1.4 Fishing effort data – Southern IFCA data collection program for rod and line fisheries

In order to better understand the effort of black seabream fishing within the district, Southern IFCA carried out a targeted survey during the 2021 nesting season within the Dorset MCZs. The survey undertook repeated visits to the sites at key times to monitor seabream fishing patterns. Southern IFCA also received voluntary logbook data from charter fishers which contribute to the results of the survey. The voluntary logbook data was received through both the 2021 and 2022 nesting seasons. Data for the Purbeck Coast MCZ are summarised in Figure 5 and Table 1.

Table 1. Data summary from the Southern IFCA black seabream nesting period survey for the Purbeck Coast MCZ.

Area	Average % of Black Bream Caught that were Retained	Average % of overall catch that was Black Bream	Mean CPUE across the survey period
1	35.4%	n/a	n/a
2	15.4%	n/a	n/a
3	21.5%	46.2% (*)	1.47

(*) Note that the % of overall catch made up of Black Bream for Area 3 should be viewed with caution as it is only representative of a single recorded figure.

Catch Per Unit Effort (CPUE) is defined as '*the number of Seabream caught per rod per hour*', therefore CPUE can only be calculated when the number of rods and time spent fishing is provided. Figure 5 displays a peak CPUE at the end of May (7). The three days during the survey period with more than one data point (2nd May 2021, 31st May 2021 and 16th June 2022) had mean CPUEs of 0.85, 1.95 and 2.93 respectively. Whilst this may display an anecdotal increase from early May to mid-June, it should be noted that the June data points are from a different year to the May data points. All CPUE data within the Purbeck Coast MCZ was gathered in Area 3.

As summarised in Table 1, the percentage of seabream caught that were retained was highest in Area 1 (35.4%) and lowest in Area 2 (15.4%) however it is not known for what reasons the fish were returned, this may have been due to undersized species, the desired quantity of landings being fulfilled or some fishers only practicing catch and release.

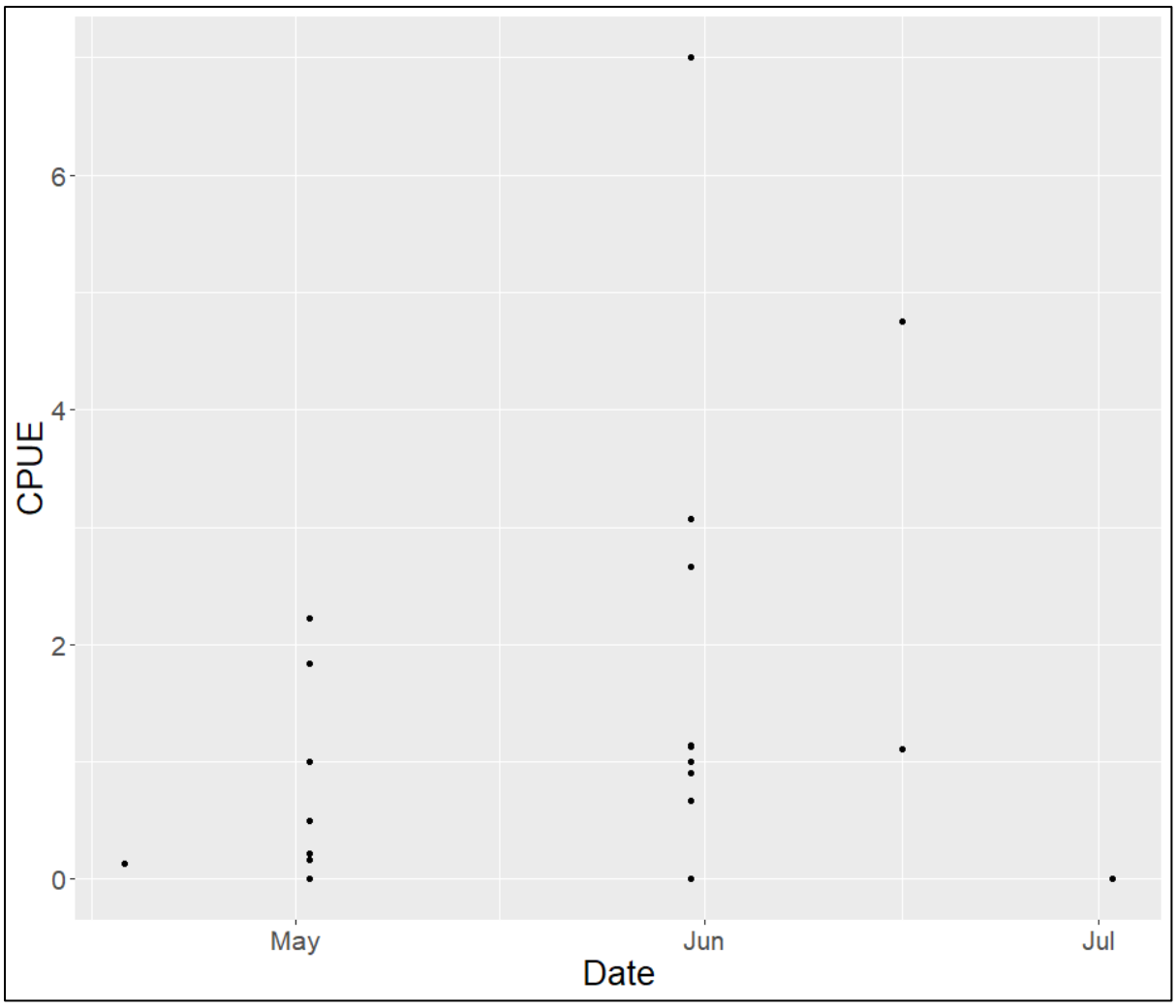


Figure 5. Trends in Catch Per Unit Effort (CPUE) of black seabream in the Purbeck Coast MCZ during the nesting season (data was collected in 2021 and 2022 with both years combined in this figure)

1.5 Existing restrictions on fishing relevant to black seabream

The Southern IFCA Minimum Conservation Reference Size Byelaw[3] defines a Minimum Conservation Reference Size (MCRS) for black seabream of 230mm under Schedule 1A. A person must not remove from the fishery, retain on board, tranship, land, transport, store, sell, display or offer for sale from a fishery within the District, any fish, mollusc or crustacean species specified in Schedule 1A which measures less than the MCRS specified. Any such fish, mollusc or crustacean must be returned to the sea immediately.

The Southern IFCA Bottom Towed Fishing Gear Byelaw 2016 states that a person must not use bottom towed fishing gear within a prohibited area or use a vessel carrying bottom towed fishing gear while transiting through a prohibited area unless all parts of that gear are inboard and above the sea. Area 35 – Studland to Portland creates a prohibited area within parts of the MCZ.

[3] SIFCA-MCRS-Byelaw.pdf (toolkitfiles.co.uk)

1.6 Evidence of black seabream using Purbeck Coast MCZ

Figure 6 summarises the location of Black Seabream Nesting sites as reported from a side scan sonar survey carried out by CEFAS and submitted to Natural England in 2021. The survey reported a high concentration of seabream nests from Worbarrow Bay to Kimmeridge and Swanage Bay to Old Harry Rocks. The reported postulated that the lack of nests in the central region could be a result of the south westerly winds at the start of the survey period[4].

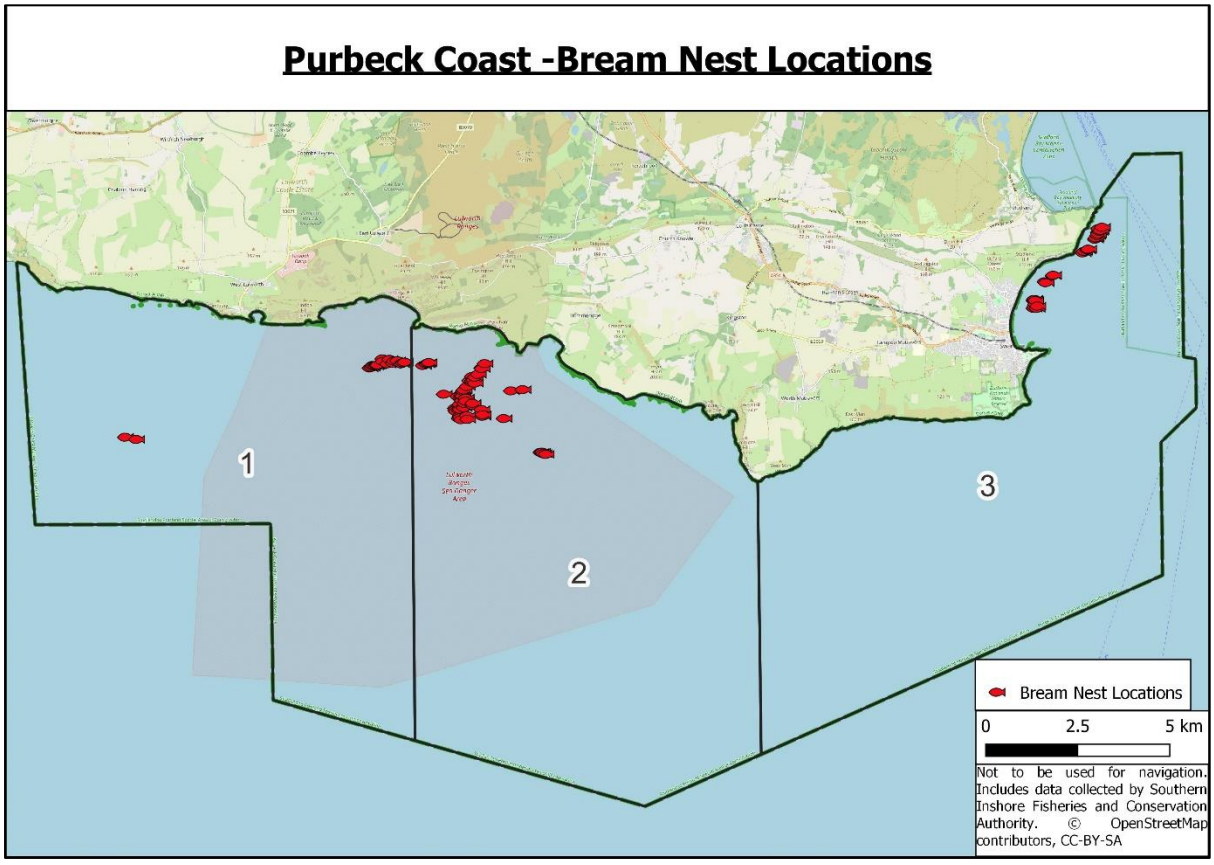


Figure 6. Black Seabream nesting locations as reported in the Cefas Black Bream Side-scan Survey - Purbeck Coast to Southbourne Rough, 2021[4].

Figure 7 displays the outcome of a 2022 Natural England project[5] to collate the existing evidence on the presence and extent of all known Black Seabream nesting sites in the UK. The report combines information from individuals and organizations around the UK and data identifying sites in Dorset includes a combination of diver observations, academic studies and also includes side scan sonar survey data provided by Southern IFCA from a 2016 survey conducted in the area of Chapman's Pool. The report only displays locations where there is evidence of use by black seabream.

[4] Sperry, J. (2021). Black Bream Side-scan survey – Purbeck Coast, 2021. Cefas Project Report for Natural England
[5] Doggett, M. & Baldock, L. 2022. Present knowledge of black bream (Spondyliosoma cantharus) nesting grounds in the English Channel and beyond. A report to Natural England.

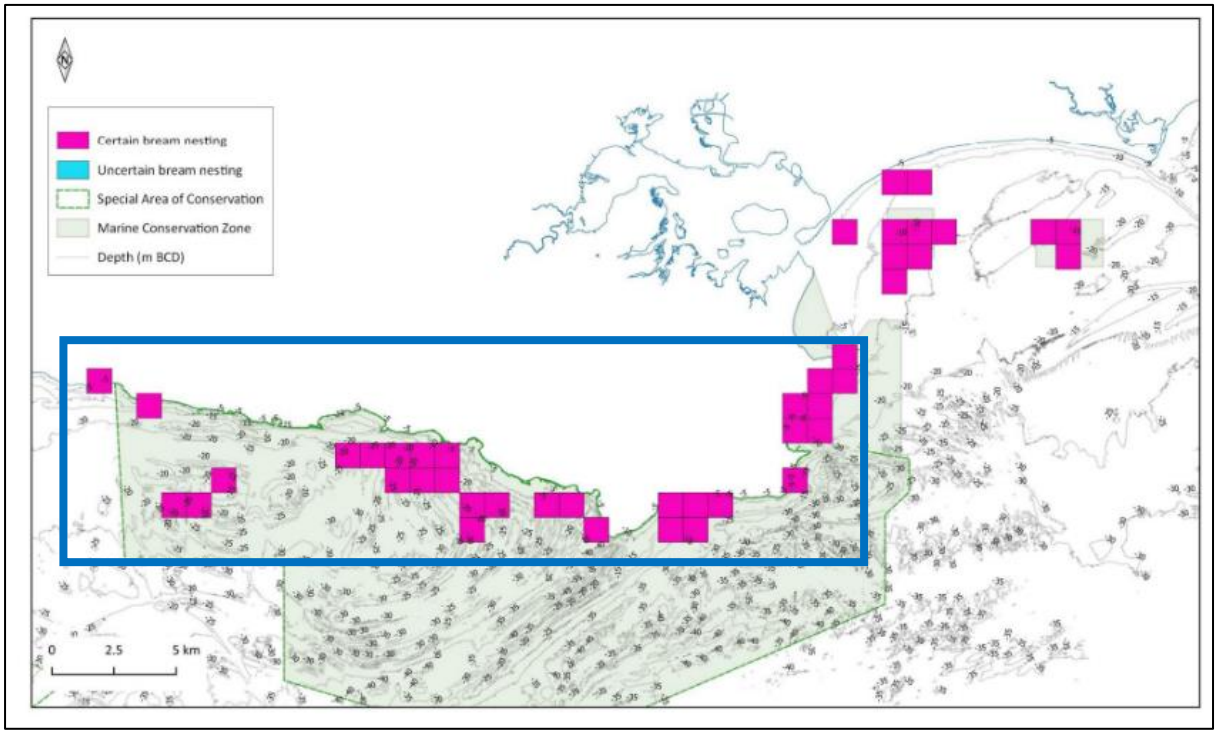


Figure 7. "Detailed distribution of known black bream nesting locations along the Dorset Coast. Contains OS data Crown copyright and database right 2021. Contains public sector information, licences under the Open Government Licence v3.0, from the Maritime and the Channel Coastal Observatory. Not to be used for navigation." – A figure taken from a Natural England Commissioned[5] report detailing the known bream nesting locations on the Dorset Coast. The blue box highlights the data around the Purbeck Coast MCZ.

Confidence levels in the location of Black seabream are designated using an assessment matrix for nest presence and nest site extent as described below. Figure 7 refers to areas of certain and uncertain bream nesting sites, however the report does not explain how the confidence matrix relates to certainty although it does state the confidence levels refer to confidence in the data rather than confidence in the presence of nests.

Nest site presence high confidence:

"Verifiable evidence of nest presence supported by single or multiple records up to six years old. Some records may be older but there must be some records less than six years old. Evidence can take the form of photographs, video, or remote-sensing data."

Nest site presence low confidence:

"Unverified evidence only to indicate nest presence e.g., anecdotal, one-off angling reports with no images or remote sensing. Or the only available data are over 20 years old. Note: reports of fishers targeting bream outside the breeding season of late March and mid-July should be discounted."

Nest site extent high confidence:

"Evidence exists on the distribution and/ or abundance of nests across a site AND data are less than 6 years old."

Nest site extent low confidence:

"There are no data to provide evidence of the distribution and/ or abundance of nests across a site. Or the only data are over 20 years old."

Data used within the Purbeck Coast MCZ, as stated in the report, has confidence levels ranging from Low to High, West to East[6].

1.6.1 Seasonality

The Purbeck Coast MCZ Factsheet developed by Defra in 2019[7] states that black seabream breed between April and July. The males are noted to remain at the nest site, guarding the nest until the eggs hatch and return to the same site to nest each year.

The Conservation Advice provided by Natural England[8] for the site includes advice on seasonality for Black seabream. A seasonality table is provided which shows months highlighted in green as months in which significant numbers of a mobile designated feature are most likely to be present at a site during a typical calendar year. Months with significant numbers are highlighted on the basis of generic information on seasonal patterns of occurrence in published sources or from additional site-specific surveys. It is stated that any potential impact on a feature must take account of population trends evident from both the data provided in the Conservation Advice and any other available information.

J	F	M	A	M	J	J	A	S	O	N	D

1.7 Patterns of fishing activity and black seabream occurrence

Analysing data from Sections 1.3, 1.4 and 1.6 the following points are noted in realtion to patterns between fishing activity and the nesting sites and seasonality of Black seabream in the Purbeck Coast MCZ:

- Black Seabream are suggested to be 'most likely to be present' within the Purbeck Coast MCZ from the March to July[7,8] which aligns with the peaks in rod and line fishing activity effort in Areas 1 and 3 and potting activity in Area 3, and suggested increase in rod and line CPUE throughout the summer months in Area 3 when compared to the rest of the year.

[6] Doggett, M. & Baldock, L. 2022. Present knowledge of black bream (Spondyliosoma cantharus) nesting grounds in the English Channel and beyond. A report to Natural England.
[7] Defra, 2019. Purbeck Coast Marine Conservation Zone - Purbeck Coast Marine Conservation Zone factsheet (publishing.service.gov.uk)
[8] Natural England Conservation Advice for Marine Protected Areas: Purbeck Coast MCZ

2. Poole Rocks MCZ

2.1 General Description

Poole Rocks MCZ was designated in 2013, with additional features added in 2019. The MCZ is an inshore site covering an area of 3.73km^2, lying to the east of the entrance to Poole Harbour and approximately 2-2.5km east of the beachfront at Sandbanks. The site protects an area of rocky outcrops within the sediment-dominated Poole Bay. The site is primarily comprised of silty sand and gravel and contains rocky outcrops which form patch reefs. The habitats support a variety of commercially important fish species, and named species Couch's goby (*Gobius couchi*), Native oyster (*Ostrea edulis*) and Black seabream (*Spondyliosoma cantharus*)[9,10].

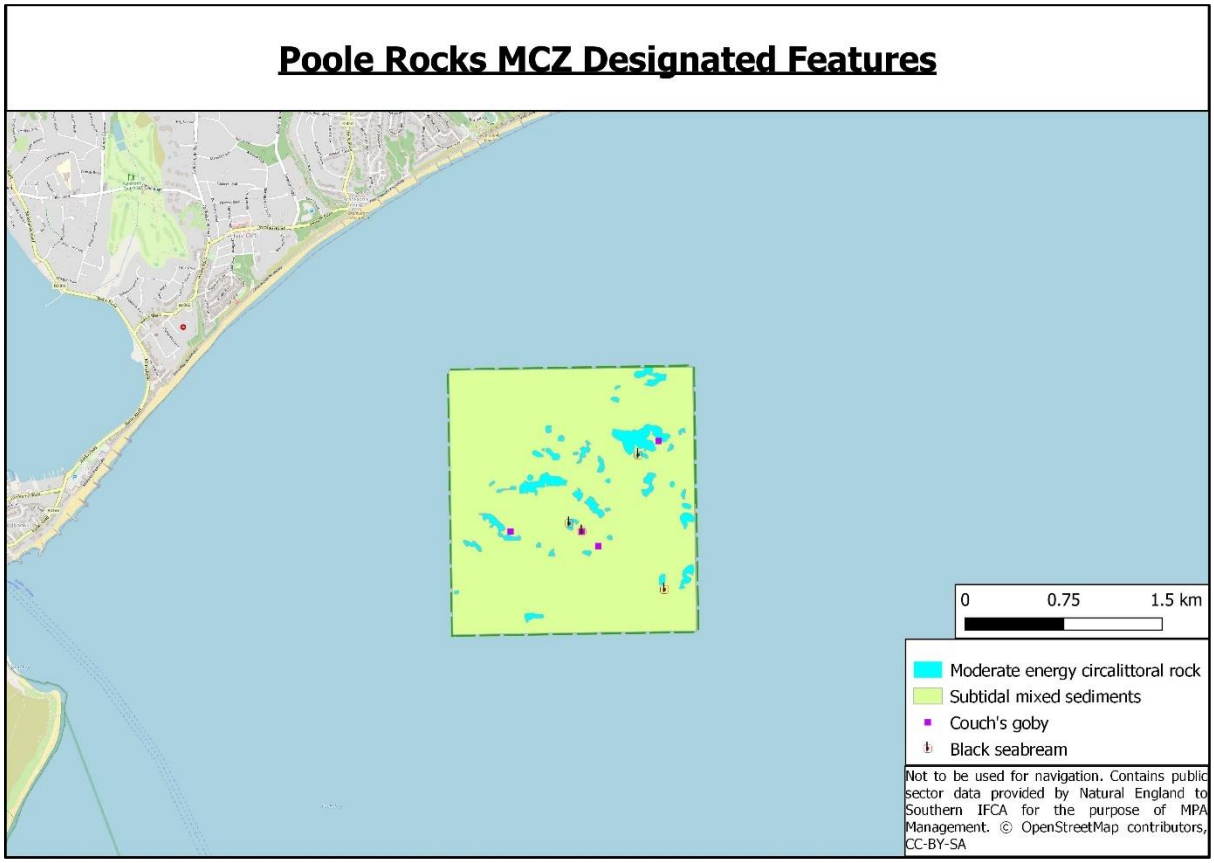


Figure 8. The Poole Rocks MCZ (boundary shown by dashed green line) with location and extent of designated features.

Figure 8 shows a map of the boundary of the site and the location of designated habitats and species. Data on the extent and location of designated features is provided to Southern IFCA by Natural England as an evidence package. The most recent evidence package was received in 2020 and forms the current best available evidence. For black seabream however there is additional evidence available at a finer

[9] Natural England. 2013. Poole Rocks Marine Conservation Zone factsheet v2 - Poole Rocks MCZ Factsheet - MCZ041 (naturalengland.org.uk)

[10] Defra, 2019. Poole Rocks Marine Conservation Zone - Poole Rocks Marine Conservation Zone factsheet (publishing.service.gov.uk)

spatial scale, this evidence has been compiled to help inform MCZ Assessments for this species, see Section 2.6 for details of the evidence base.

2.2 MCZ feature under assessment

This assessment relates to the feature of Black seabream (*Spondyliosoma cantharus*) which has a General Management Approach of 'Recover to a favourable condition'.

2.3 Fishing effort – all gear types

Figure 9 displays all SIFCA fishing vessel sightings[11] within the Poole Rocks MCZ between November 2005 and July 2023. Activity is predominantly rod and line with yearly contributions of each fishing method to the sightings data summarised in Figure 10. Activity in the Poole Rocks MCZ displays a clear peak of rod and line fishing in 2021. Sightings are likely higher in 2021 due to the targeted survey work carried out on seabream fishing activity during 2021 as discussed in Section 2.4.

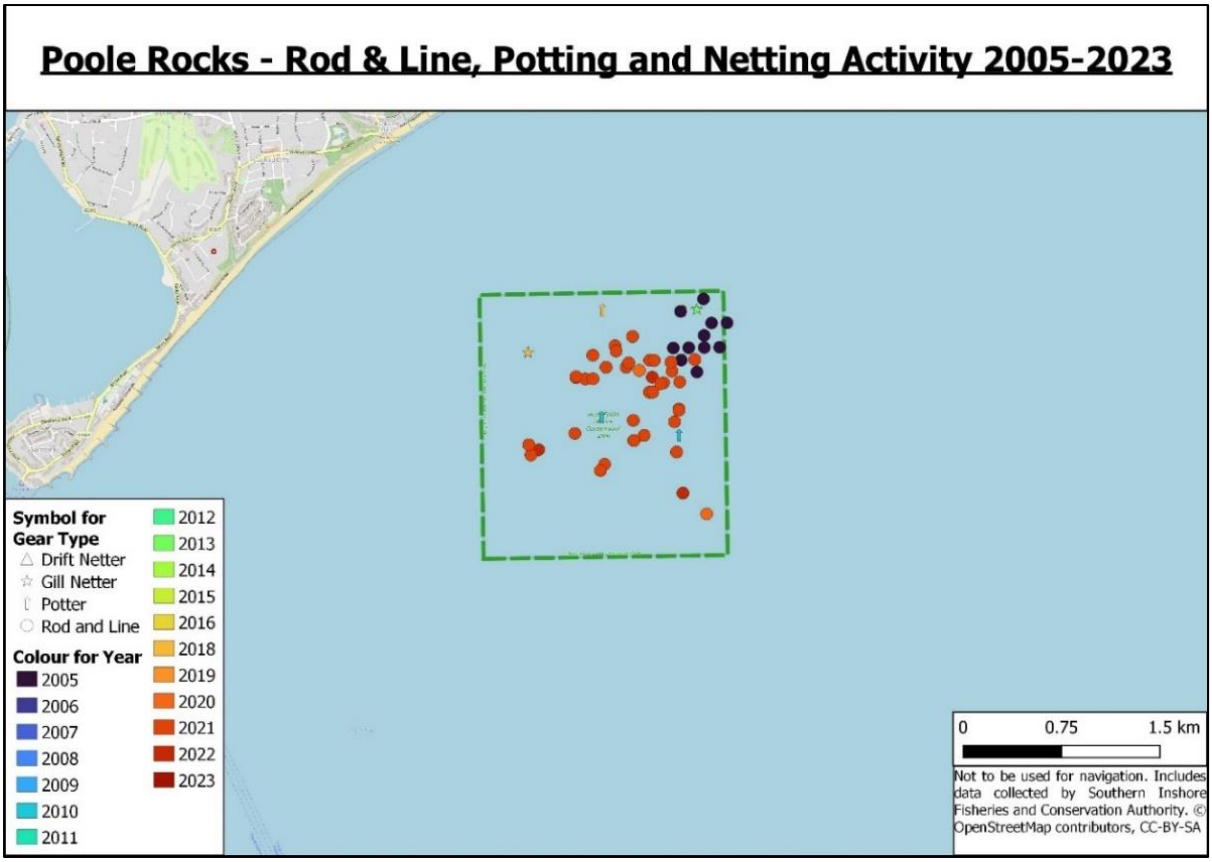


Figure 9. All Rod and Line, Netting and Potting activity recorded by Southern IFCA in the Poole Rocks MCZ between November 2005 and July 2023.

[11] Note that sightings taken recorded by Southern IFCA is taken during patrols and is dependent on the location and duration of that patrol, this data therefore does not provide a full representation of fishing effort.

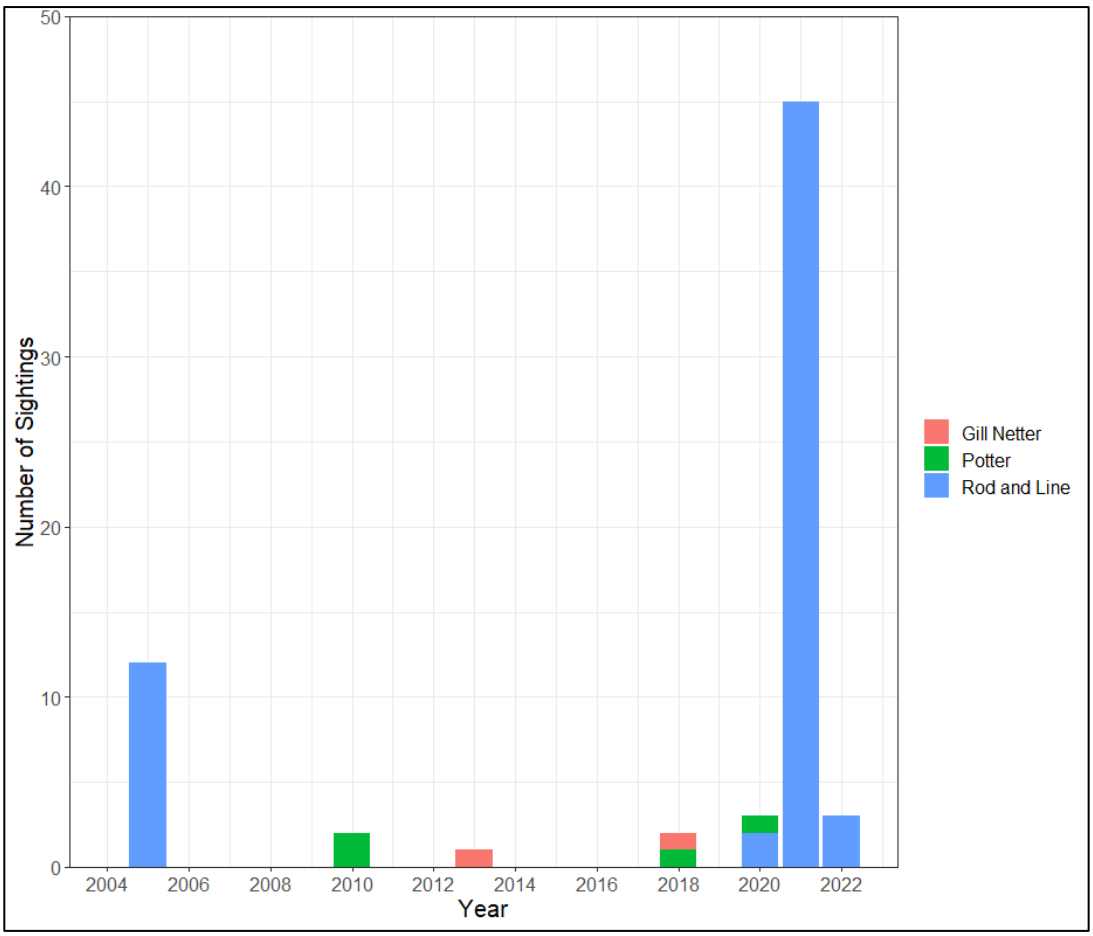


Figure 10. Sightings of fishing activity between 2005 and 2023 in the Poole Rocks MCZ separated by fishing method.

In Figure 11, sightings data has been combined for all years (2005-2023) and then the occurrence of each activity has been analysed by month. Rod and line fishing activity peaks from April to June however netting and potting display no distinct trends.

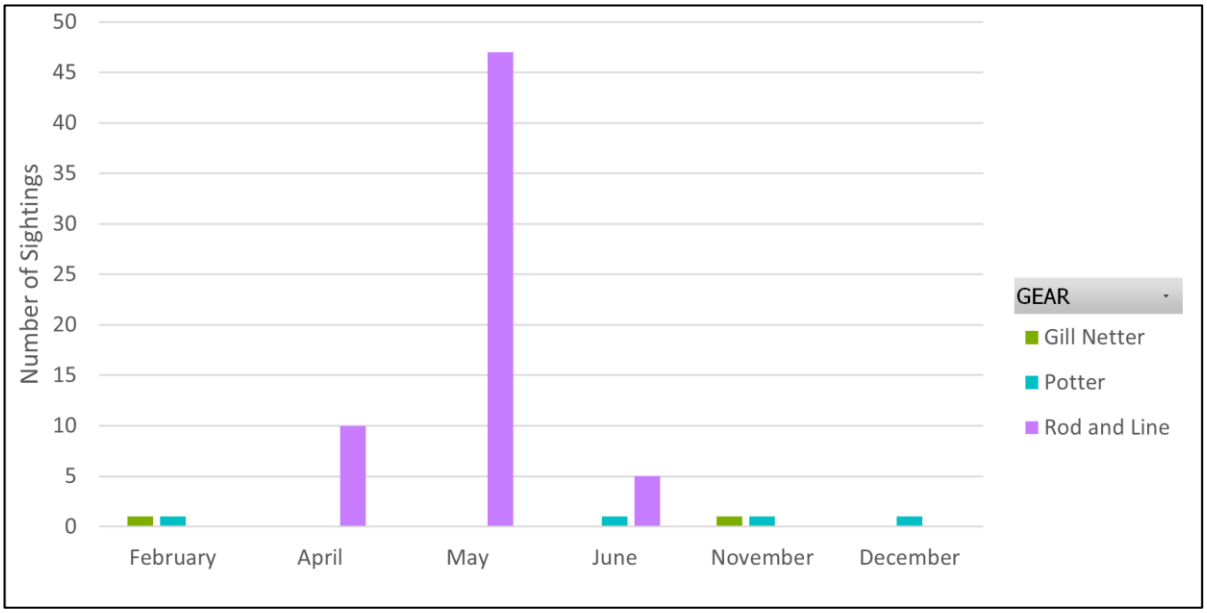


Figure 11. Total (all years combined) monthly fishing activity for all recorded gear types from November 2005 to July 2023 in the Poole Rocks MCZ.

2.4 Fishing effort data – Southern IFCA data collection program for rod and line fisheries

Data for the Poole Rocks MCZ from the Southern IFCA data collection survey detailed in Section 1.4 are summarised in Figure 12 and Table 2.

Table 2 Data summary from the Southern IFCA black seabream nesting period survey for Poole Rocks MCZ.

Area (*)	Average % of Black Bream Caught that were Retained	Average % of overall catch that was Black Bream	Mean CPUE across the survey period
4	15.4%	44.8%	0.72

(*) Note for the purposes of the survey, the Poole Rocks MCZ was referred to as Area 4.

The highest CPUE occurred on the 31st May 2021 (10) however when compared to the other data points this is an anomalously high CPUE for the area. The two days with more than 1 data point were May 2nd 2021, and May 31st 2021 with mean CPUEs of 0.93 and 0.83 respectively with the outlying point removed. In addition, seabream made up an average of 44.8% of the total catch of fish submitted in voluntary charter vessel logbooks and the mean CPUE across the survey was 0.72.

Table 2 displays the percentage of bream caught that were retained during the survey in the Poole Rocks MCZ (15.4%). It is not known for what reason fish were returned, this may have been due to undersized species, the desired quantity of landings being fulfilled or some fishers only practicing catch and release.

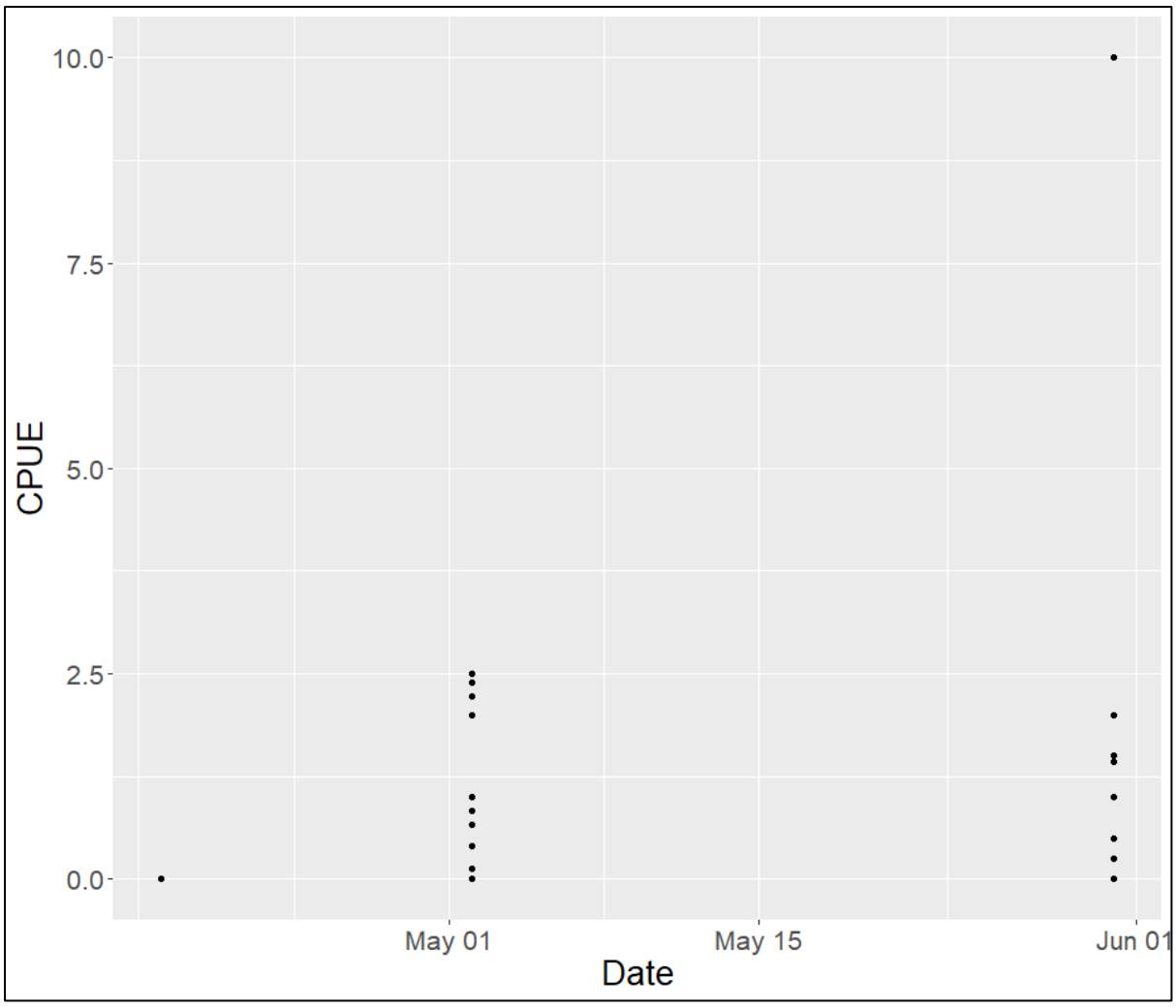


Figure 12. Trends in Catch Per Unit Effort (CPUE) of black seabream in the Poole Rocks MCZ during the nesting season (data was collected in 2021 and 2022 with both years combined in this figure).

2.5 Existing restrictions on fishing relevant to black seabream

See Section 1.5 for restrictions relevant to Minimum Conservation Reference Size (MCRS).

The Southern IFCA Bottom Towed Fishing Gear Byelaw 2016 states that a person must not use bottom towed fishing gear within a prohibited area or use a vessel carrying bottom towed fishing gear while transiting through a prohibited area unless all parts of that gear are inboard and above the sea. Area 34 – Poole Bay creates a prohibited area for the entirety of the Poole Rocks MCZ under this byelaw.

2.6 Evidence of black seabream using Poole Rocks MCZ

Figure 13 summarises the location of black seabream nesting sites as reported from a side scan sonar survey carried out by CEFAS and submitted to Natural England in 2021[12]. It is reported in the survey report that strong winds prior to the survey likely destroyed a quantity of nests within the MCZ boundary[12].

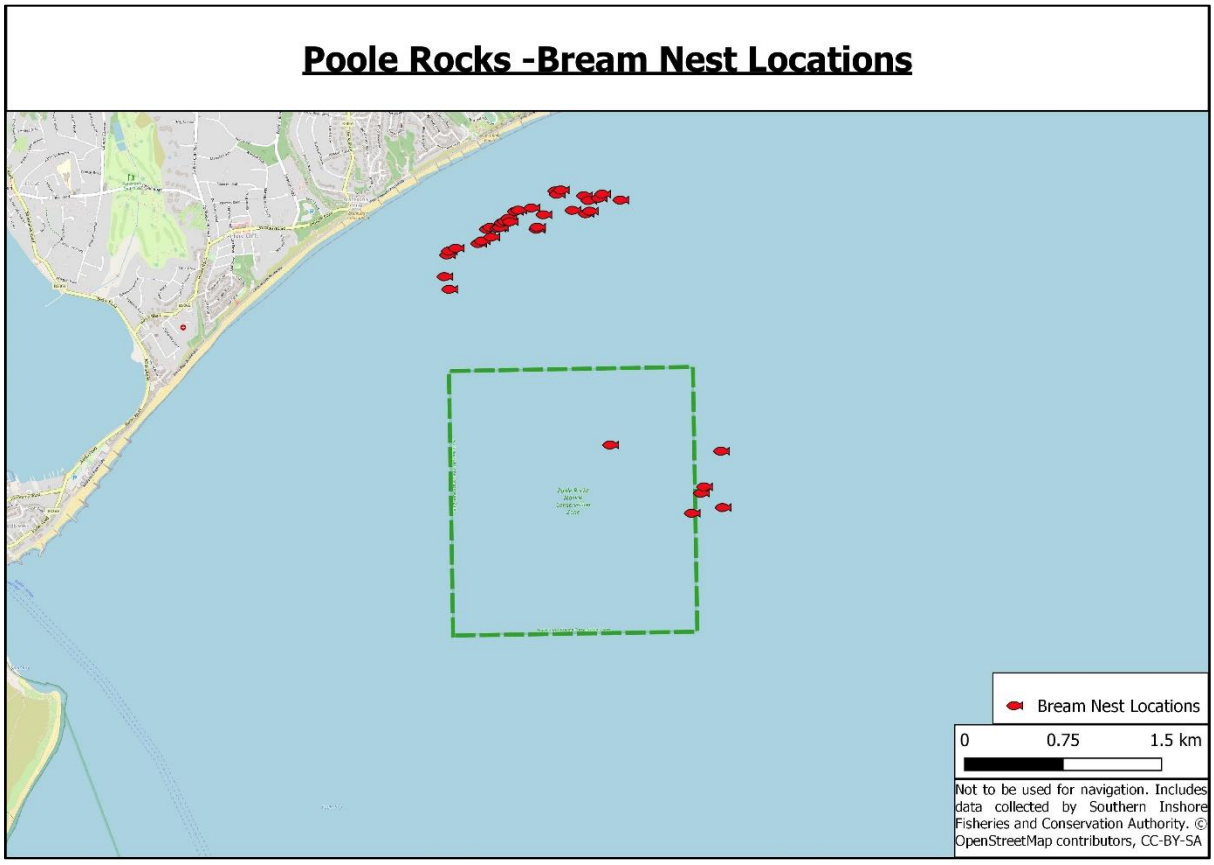


Figure 13. Black Seabream nesting locations displayed as red fish symbols, as reported in the Cefas Black Bream Side-scan Survey - Purbeck Coast to Southbourne Rough, 2021[13].

A 2022 Natural England project[13] to collate existing evidence on the presence and extent of all known black seabream nesting sites in the UK is discussed in Section 1.6. Figure 14 shows the map from this project for Poole Rocks MCZ. The data is designated with a confidence level using an assessment matrix for nest presence and nest site extent, details of the confidence levels are provided in Section 1.6.

Overall, there is high confidence in data for Poole Rocks MCZ. Evidence is provided that sport anglers target seabream within the site and divers have observed the nests[13].

[12] Doggett, M. & Baldock, L. 2022. Present knowledge of black bream (Spondyliosoma cantharus) nesting grounds in the English Channel and beyond. A report to Natural

[13] Sperry, J. (2021). Black Bream Side-scan survey – Purbeck Coast, 2021. Cefas Project Report for Natural England

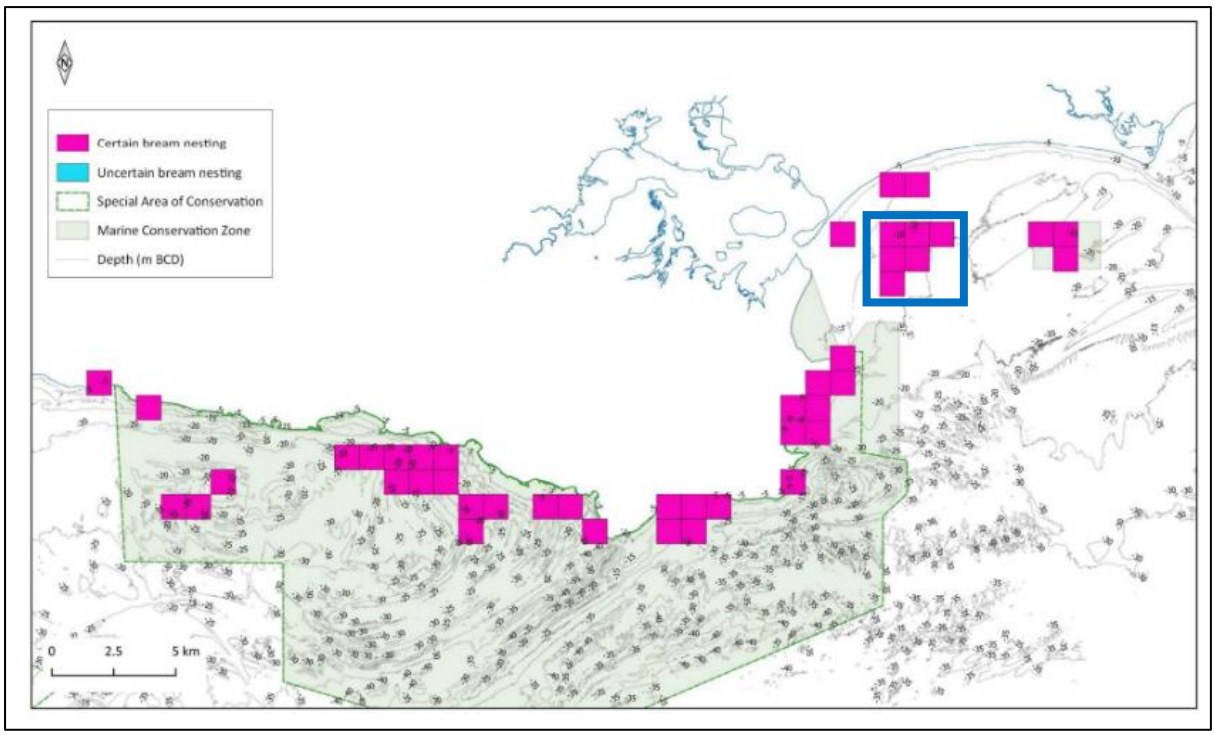


Figure 14. "Detailed distribution of known black bream nesting locations along the Dorset Coast. Contains OS data Crown copyright and database right 2021. Contains public sector information, licences under the Open Government Licence v3.0, from the Maritime and the Channel Coastal Observatory. Not to be used for navigation." – A figure taken from a Natural England Commissioned[15] report detailing the known bream nesting locations on the Dorset Coast. The blue box highlights the area around the Poole Rocks MCZ.

2.6.1 Seasonality

The Poole Rocks MCZ Factsheet developed by Defra in 2019[14] states that black seabream breed between April and July. The males are noted to remain at the nest site, guarding the nest until the eggs hatch and return to the same site to nest each year.

The Conservation Advice provided by Natural England[15] for the site includes advice on seasonality for Black seabream. For details of how this advice is formulated see Section 1.6.1.

A seasonality table for Poole Rocks MCZ is provided as follows:

J	F	M	A	M	J	J	A	S	O	N	D

[14] Defra, 2019. Poole Rocks Marine Conservation Zone - Poole Rocks Marine Conservation Zone factsheet (publishing.service.gov.uk)
[15] Natural England Conservation Advice for Marine Protected Areas: Poole Rocks MCZ

2.7 Patterns of fishing activity and black seabream occurrence

Analysing data from Sections 2.3, 2.4 and 2.6 the following points are noted in relation to patterns between fishing activity and the nesting sites and seasonality of Black seabream in the Poole Rocks MCZ:

- The increase in rod and line fishing within the site over April to June aligns with months when the Black seabream are suggested to be present and most active in the area.

3. Southbourne Rough MCZ

3.1 General Description

Southbourne Rough MCZ was designated in 2019 and covers an area of the Dorset inshore waters to the east of Poole Rocks MCZ, off of Southbourne and Hengistbury Head. The site is located in an area of patchy reefs and covers a rectangular area of 5km$^{2.}$ The site protects the mobile species Black seabream (*Spondyliosoma cantharus*) during the nesting stage of their lifecycle[16].

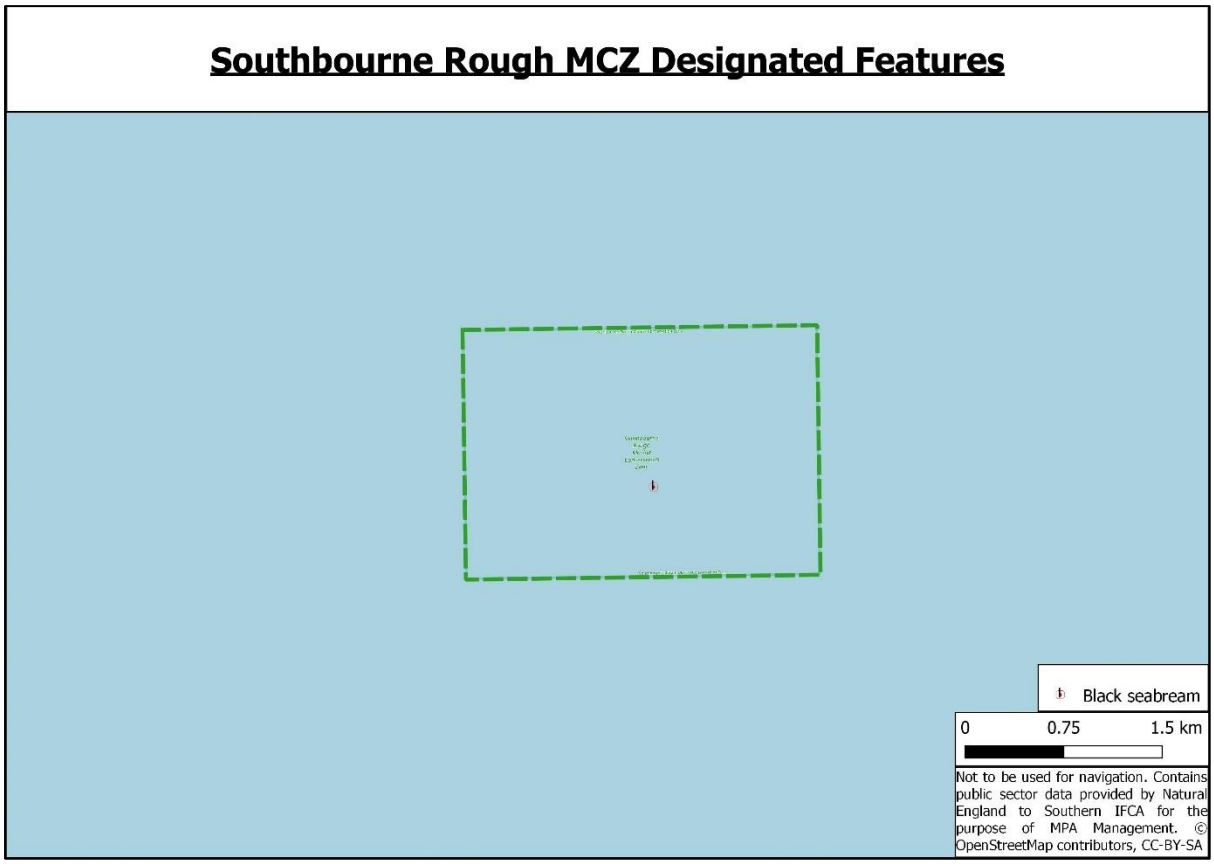


Figure 15. The Southbourne Rough MCZ (boundary shown by dashed green line) with location and extent of designated features.

Figure 15 shows a map of the boundary of the site and the location of designated habitats and species. Data on the extent and location of designated features is provided to Southern IFCA by Natural England as an evidence package. The most recent evidence package was received in 2020 and forms the current best available evidence. For black seabream however there is additional evidence available at a finer spatial scale, this evidence has been compiled to help inform MCZ Assessments for this species, see Section 3.6 for details of the evidence base.

[16] Defra, 2019. Southbourne Rough Marine Conservation Zone - Southbourne Rough Marine Conservation Zone factsheet (publishing.service.gov.uk)

3.2 MCZ feature under assessment

This assessment relates to the feature of Black seabream (*Spondyliosoma cantharus*) (nesting) which has a General Management Approach of 'Recover to a favourable condition'.

3.3 Fishing effort – all gear types

Figure 16 displays all SIFCA fishing vessel sightings[17] within the Southbourne Rough MCZ between November 2005 and July 2023. Activity is predominantly rod and line with contributions from gill netting and potting, noting that the last potting sighting was in 2013. Yearly contributions of each fishing method to the sightings data are summarised in Figure 17. Fishing activity appears to peak in 2021. Sightings are likely higher in 2021 due to the targeted survey work carried out on seabream fishing activity during 2021 as discussed in Section 3.4.

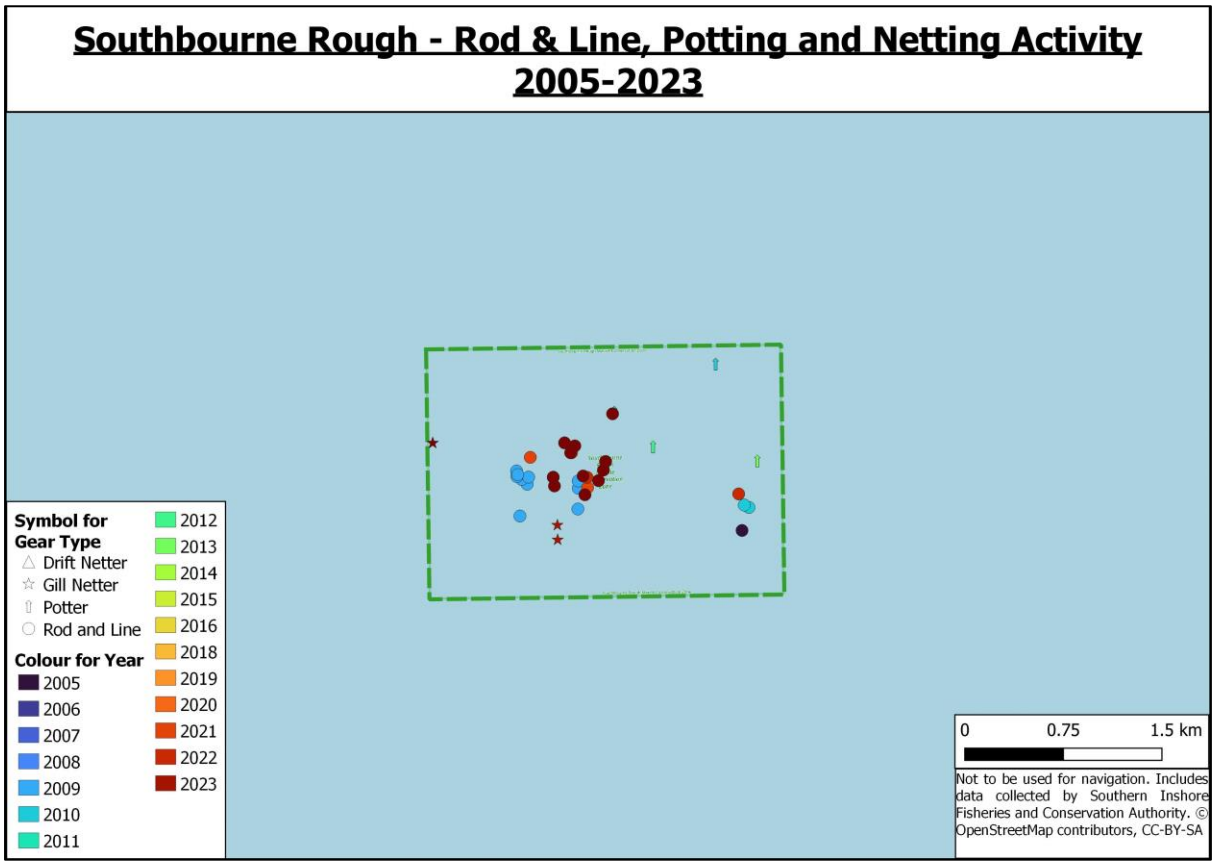


Figure 16. All Rod and Line, Netting and Potting activity recorded by Southern IFCA in the Southbourne Rough MCZ between November 2005 and July 2023.

[17] Note that sightings taken recorded by Southern IFCA is taken during patrols and is dependent on the location and duration of that patrol, this data therefore does not provide a full representation of fishing effort.

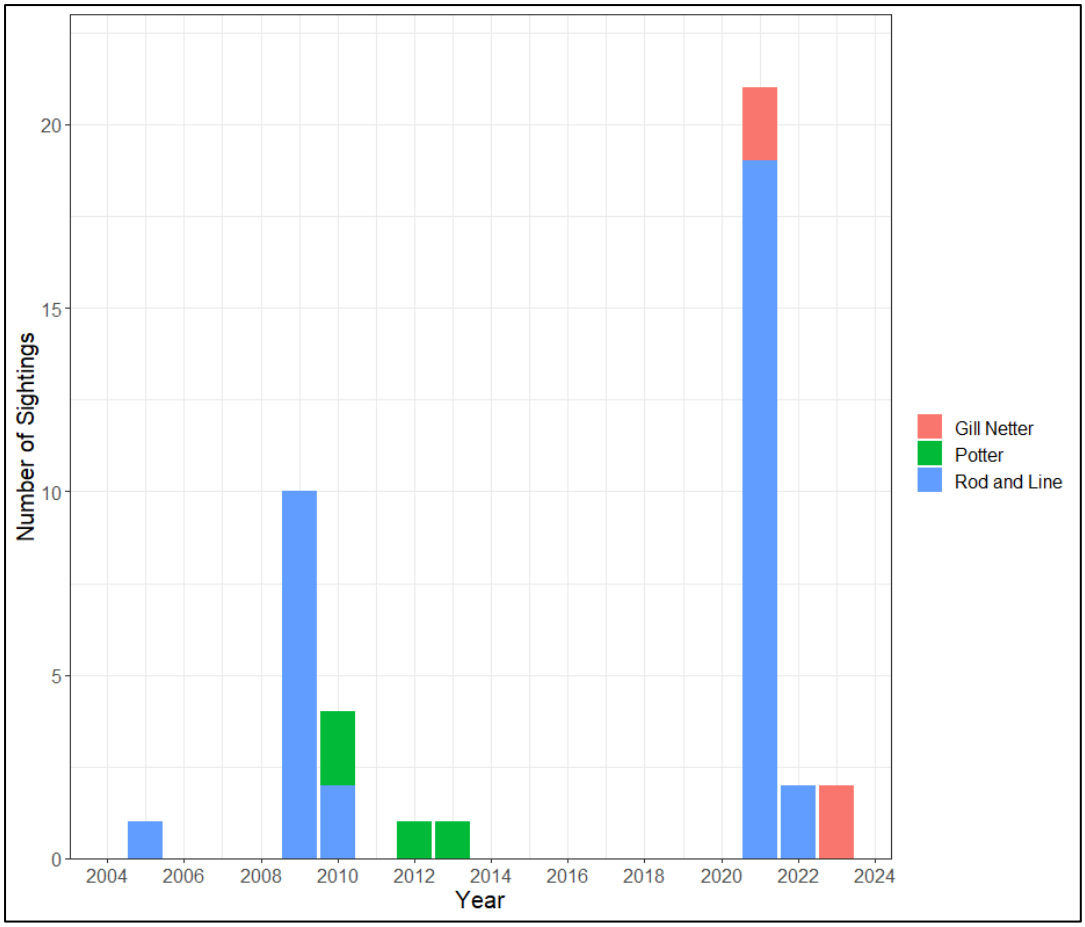


Figure 17. Sightings of fishing activity between 2005 and 2023 in the Southbourne Rough MCZ separated by fishing method.

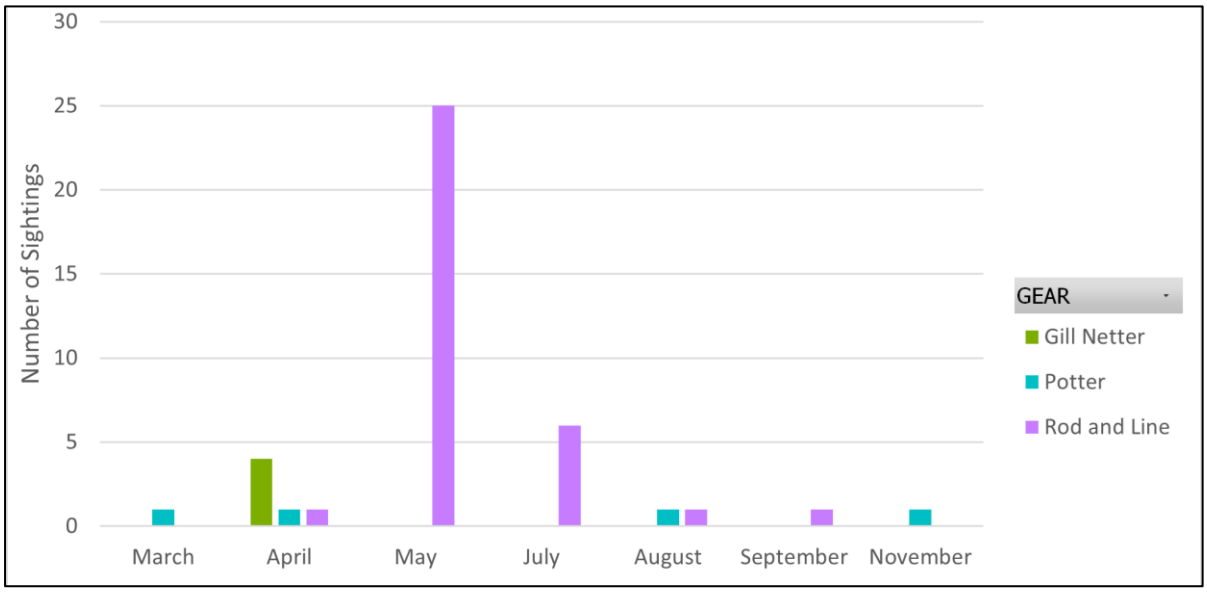


Figure 18. Total (all years combined) monthly fishing activity for all recorded gear types from November 2005 to July 2023 in the Southbourne Rough MCZ.

In Figure 18, sightings data has been combined for all years (2005-2023) and then the occurrence of each activity has been analysed by month. Rod and line fishing activity peaks from April to June, however, netting and potting display no distinct trends througout the year.

3.4 Fishing effort data – Southern IFCA data collection program for rod and line fisheries

Data for the Southbourne Rought MCZ from the Southern IFCA data collection survey detailed in Section 1.4 are summarised in Figure 19 and Table 3.

Table 3. Data summary from the Southern IFCA black seabream nesting period survey for Southbourne Rough MCZ.

Area (*)	Average % of Bream Caught That Are Retained	Average % of overall catch that are Bream	Mean CPUE across the survey period
5	21.5%	24.5%	0.86

(*) Note for the purposes of the survey, the Southbourne Rough MCZ was referred to as Area 5.

The highest CPUE occurred on the 2nd July 2021 (2.78). The three days surveyed with more than 1 data point were May 2nd 2021, May 31st 2021 and July 2nd 2021 with mean CPUEs of 0.41, 1.15 and 1.43. In addition, seabream made up an average of 24.5% of the total catch of fish submitted in voluntary charter vessel logbooks and the mean CPUE across the survey was 0.86.

Table 3 displays the percentage of seabream caught that were retained during the survey in the Southbourne Rough MCZ (21.5%). It is not known for what reason fish were returned, this may have been due to undersized species, the desired quantity of landings being fulfilled or some fishers only practicing catch and release.

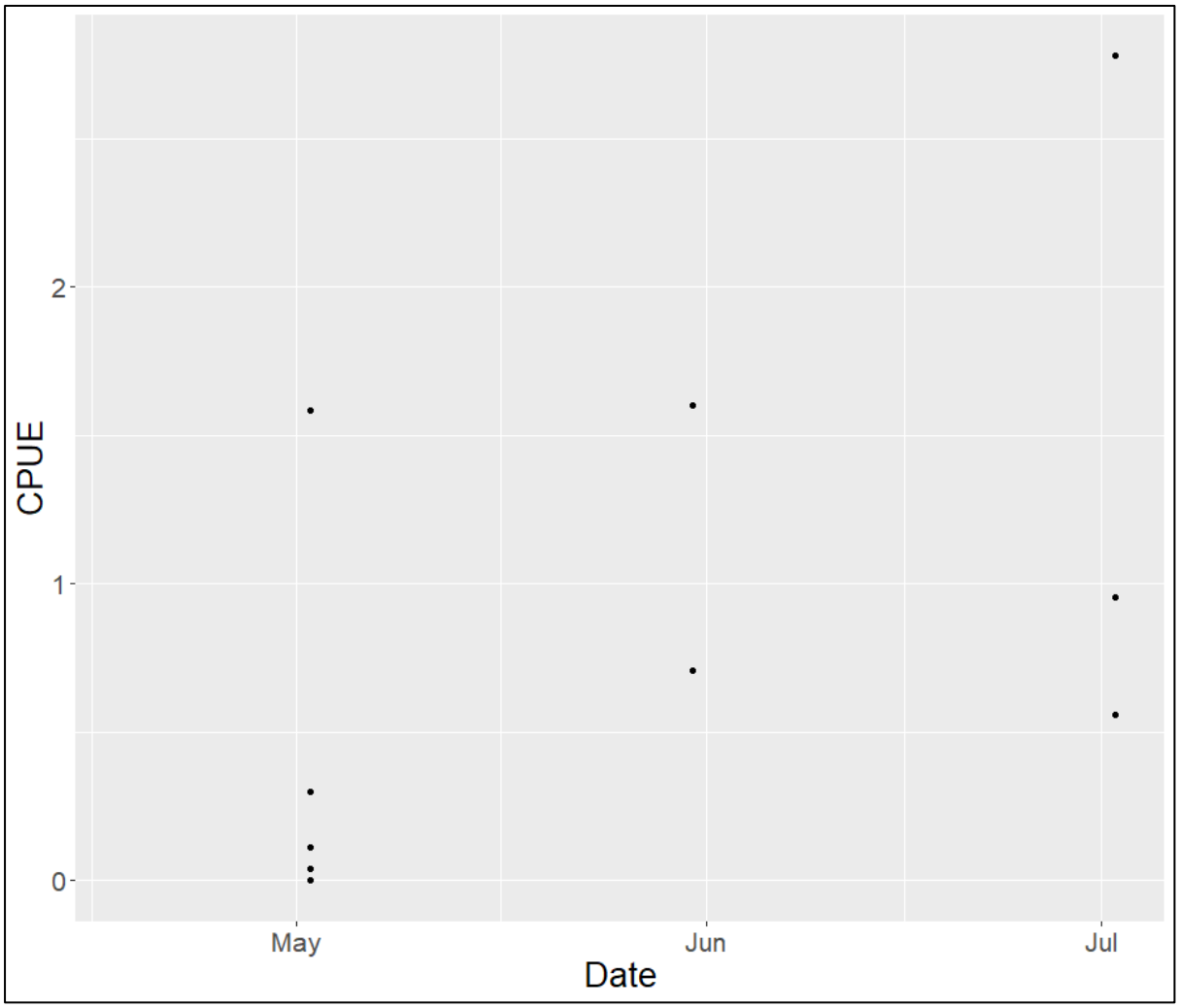


Figure 19. Trends in Catch Per Unit Effort (CPUE) of Black seabream in the Southbourne Rough MCZ during the nesting season (data was collected in 2021 and 2022 with both years combined in this figure).

3.5 Existing restrictions on fishing relevant to black seabream

See Section 1.5 for restrictions relevant to Minimum Conservation Reference Size (MCRS).

3.6 Evidence of black seabream using the Southbourne Rough MCZ

A 2022 Natural England project[18] to collate existing evidence on the presence and extent of all known black seabream nesting sites in the UK is discussed in Section 1.6. Figure 20 shows the map from this project for Southbourne Rough MCZ. The data is designated with a confidence level using an assessment matrix for nest presence and nest site extent, details of the confidence levels are provided in Section 1.6. Overall, there is high confidence in the presence of Black Seabream nesting sites Southbourne Rough[18].

[18] Doggett, M. & Baldock, L. 2022. Present knowledge of black bream (Spondyliosoma cantharus) nesting grounds in the English Channel and beyond. A report to Natural

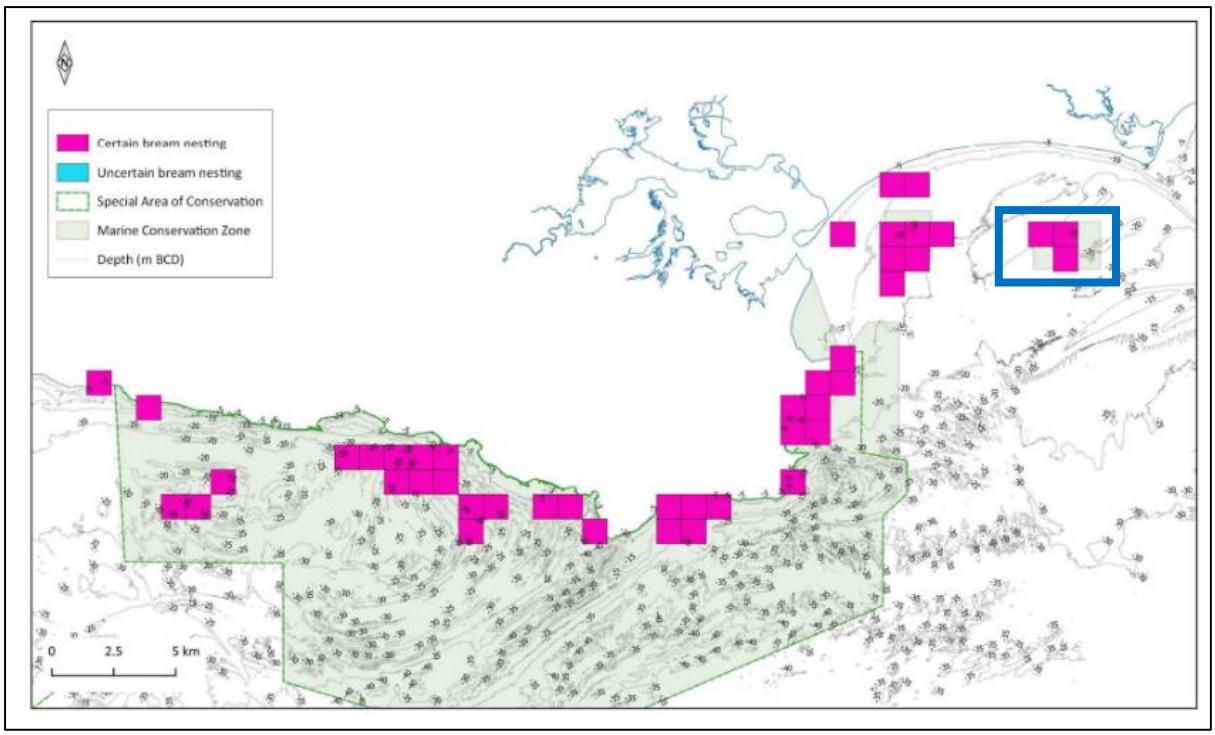


Figure 20. "Detailed distribution of known black bream nesting locations along the Dorset Coast. Contains OS data Crown copyright and database right 2021. Contains public sector information, licences under the Open Government Licence v3.0, from the Maritime and the Channel Coastal Observatory. Not to be used for navigation." – A figure taken from a Natural England Commissioned[18] report detailing the known bream nesting locations on the Dorset Coast. The blue box highlights the data for Southbourne Rough MCZ.

3.6.1 Seasonality

The Southbourne Rough MCZ Factsheet developed by Defra in 2019[19] states that black seabream breed between April and July. The males are noted to remain at the nest site, guarding the nest until the eggs hatch and return to the same site to nest each year. The factsheet states that there is evidence that black seabream have been returning to the site to breed for approximately 14 years.

The Conservation Advice provided by Natural England[20] for the site includes advice on seasonality for Black seabream. For details of how this advice is formulated see Section 1.6.1.

A seasonality table for Southbourne Rough MCZ is provided as follows:

J	F	M	A	M	J	J	A	S	O	N	D

[19] Defra, 2019. Southbourne Rough Marine Conservation Zone - Southbourne Rough Marine Conservation Zone factsheet (publishing.service.gov.uk)
[20] Natural England Conservation Advice for Marine Protected Areas: Poole Rocks MCZ

3.7 Patterns of fishing activity and black seabream occurrence

Analysing data from Sections 3.3, 3.4 and 3.6 the following points are noted in relation to patterns between fishing activity and the nesting sites and seasonality of Black seabream in the Southbourne Rough MCZ:

- The increase in rod and line fishing and increase in CPUE within the site over April to June aligns with months when the Black seabream are suggested to be present and most active in the area.

MARKED D – ANNEX 2

Outputs of Screening and Part A Assessment Process for the designated feature Black Seabream in Purbeck Coast, Poole Rocks and Southbourne Rough MCZs

Contents

Static Gear – Pots/Traps

1. Screening

The screening of Static Gear – Pots/Traps was undertaken using broad gear type categories. Sightings data collected by the Southern IFCA, together with officers' knowledge, was used to ascertain whether activities under this heading occur within the site or have the potential to occur/are anticipated to occur in the foreseeable future.

For Static Gear – Pots/Traps, the following broad gear categories were assessed as part of the screening stage.

- Pots/creels (crustacea/gastropods)
- Cuttle pots
- Fish traps

1.1 Purbeck Coast MCZ

- The screening concluded that the use of pots/creels was known to occur in the site, occurring closer inshore due to the rocky substrate type. The number of pots within the area is unknown. There is also the potential for whelk potting in the outer area of the site where subtidal sediments exist, however the level to which this may be occurring is unknown.
- For fish traps it was concluded that the activity has the potential to occur, but any current levels of activity are unknown.
- For cuttle pots it was concluded that it is not currently known if potting for cuttlefish takes place within the site, however there is the potential for the activity to take place and it is anticipated that it may already be occurring.

On the basis of the screening, all gears falling under static gear – pots/traps were screened in for a Part A Assessment.

1.2 Poole Rocks MCZ

- The screening concluded that the use of pots/creels was known to occur in the site, but the exact number of vessels was unknown. It was determined that the activity level was likely to be light to moderate with fishing for crab and lobster over rocky areas and fishing for whelk over subtidal sediments.
- For fish traps it was conclude that the activity does not occur, nor does it have the potential to occur. The activity has not historically occurred within the site and, under the Southern IFCA Wrasse Fishery Guidance, fishers are advised that all forms of wrasse fishing (including traps) should not take place in the site, therefore it is anticipated that the activity will not occur in the future.
- For cuttle pots it was concluded that vessels may deploy cuttle pots within the surrounding area of Poole Bay and therefore it is possible that the activity may occur within the site. It is noted that the site is relatively far from shore which may make it a less suitable area for cuttlefish potting.

On the basis of the screening, the use of pots/creels and cuttle pots were screened in for a Part A Assessment.

1.3 Southbourne Rough MCZ

- The screening concluded that the use of pots/creels was known to occur in the site. It was also noted that whelk pots are placed in the vicinity of the site and therefore the placing of pots may cross into the site itself.
- For fish traps it was conclude that the activity does not occur in the site or the wider area and does not have the potential to occur.
- For cuttle pots it was concluded that vessels have placed cuttle pots on the outskirts of the site historically, therefore there is the potential for this activity to occur within the site boundary.

On the basis of the screening, the use of pots/creels and cuttle pots were screened in for a Part A Assessment.

2. Part A Assessment

For activities which were identified in the screening process as occurring or having the potential to occur within the site, a Part A Assessment was completed, assessing the pressures upon the MCZ designated feature of Black Seabream. In order to assess the potential pressures, Natural England's Advice on Operations (AoO) was used[1], which is provided for each site alongside Supplementary Advice on Conservation Objectives[2].

Advice on Operations:
The Advice on Operations identifies pressures associated with the most commonly occurring marine activities and provides a detailed assessment of the feature sensitivity to these pressures. The information is presented in a sensitivity assessment matrix.

The Advice on Operations provides a broad scale assessment of the sensitivity of designated features to different activity-derived pressures, using nationally available evidence on their resilience (an ability to recover) and resistance (the level of tolerance) to physical, chemical and biological pressures. The assessments of sensitivity to these pressures are measured against a benchmark. It should be noted that these benchmarks are representative of the likely intensity of a pressure caused by typical activities, and do not represent a threshold of an 'acceptable' intensity of a pressure. It is therefore necessary to consider how the level of fishing intensity observed within each site compares with these benchmarks when screening individual activities.

Due to the broad-scale nature of the sensitivity assessments provided in Natural England's Advice on operations, each pressure is assigned a risk profile based upon the likelihood of the pressure occurring and the magnitude of the impact should that pressure occur. These risk profiles have been used, together with site-specific knowledge, to identify those pressures which could significantly affect designated features.

For Static Gear – Pots/Traps, the AoO is given for 'Traps' with this category being relevant to all gear types falling within the Static Gear – Pots/Traps category.

The outcome of the Part A Assessment for Static Gear – Pots/Traps, using the AoO for 'Traps' was the same for all three sites, Table 1 shows the pressures which were screened in for a Part B Assessment for all three sites, the justification is common across all three sites so the information has been provided once.

[1] Marine Conservation Advice - Component Toolbox (arcgis.com)
[2] Marine Conservation Advice - Component Toolbox (arcgis.com)

Table 2: Summary of fishing pressure-feature screening for black seabream and Static Gear – Pots/Traps using the AoO for 'Traps'. The information provided in the table is the same for Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ. Please note only pressures screened in for the Part B Assessment are presented here.

Potential Pressure	Sensitivity	Considered in Part B Assessment?	Justification	Relevant Attributes (effected by identified pressures)
Abrasion/disturbance of the substrate on the surface of the seabed	S	Y	The activity is known to cause abrasion through contact of the gear with the seabed during deployment/retrieval and any movement of the gear, including ground rope from tidal currents and storm action. Therefore, further assessment is required.	Nest abundance; population: recruitment and reproductive capability
Removal of non-target species	S	Y	Black bream have been documented as potential bycatch species in cuttlefish traps. Whilst cuttlefish traps are not currently known to occur in the sites, it has been identified that the potential exists. It is noted that the current lack of use of the sites by this activity despite a well develop fishery in the Southern IFCA District makes the likelihood of future use low.	Population: age/size frequency, Population: populations size, Population: recruitment and reproductive capability, Presence and spatial distribution of the species, Structure and function: biological connectivity

Demersal Nets/Lines and Pelagic Nets/Lines

1. Screening

The screening of Demersal Nets/Lines & Pelagic Nets/Lines was undertaken using broad gear type categories. Sightings data collected by the Southern IFCA, together with officers' knowledge, was used to ascertain whether activities under this heading occur within the site or have the potential to occur/are anticipated to occur in the foreseeable future.

For Demersal Nets/Lines & Pelagic Nets/Lines, the following broad gear categories were assessed as part of the screening stage.

- Static – fixed nets
    - Gill nets
    - Trammel nets
    - Entangling nets
- Passive – nets
    - Drift nets (pelagic)
    - Drift nets (demersal)
- Lines
    - Longlines (demersal)
    - Longlines (pelagic)
    - Handlines (rod/gurdy etc.)
    - Jigging/trolling
- Seine nets and other
    - Purse seine
    - Beach seine/ring net
    - Shrimp push nets

The final category 'seine nets and other' was screened out for all three MCZs due to activity not having occurred historically, not being anticipated to occur and not being able to overlap with the feature.

1.1 Purbeck Coast MCZ

- For static – fixed nets (all three types) it was concluded that these activities should be screened in for a Part A Assessment. It is anticipated that static fixed nets are used within the site in areas of shallow water, although effort is likely to be low with an estimated 1-2 vessels engaging in this activity. The activity is unlikely to occur in deeper water due to the rushing tide in the outer reaches of the site.
- Passive – nets (both types) were screened in as sightings data collected by Southern IFCA showed a historic occurrence of drift net fishing in the site therefore there is the potential for that activity to occur again.
- For Longlines (demersal and pelagic) it is anticipated that demersal longlines are used within the site, although effort is likely to be low and limited to 1-2 vessels. For pelagic longlines the activity has not occurred historically and is not anticipated to occur, however for longlines in general this activity type has been screened in for a Part A Assessment.
- For handlines (rod/gurdy etc.) it was concluded that this should be screened in for a Part A Assessment as the activity is known to occur and may be conducted by commercial, recreational and charter vessels. Black seabream may be the target for this activity as well as a bycatch species.

- For jigging/trolling, it was concluded that this activity should be screened in for a Part A Assessment as the activity is known to occur.

On the basis of the screening, gill, trammel and entangling nets, passive nets, longlines, handlines (rod/gurdy etc.) and jigging/trolling were screened in for a Part A Assessment.

1.2 Poole Rocks MCZ

- For static – fixed nets (all three types) it was concluded that these activities should be screened in for a Part A Assessment. It is anticipated that these activities occur in the site but the level of activity and exact locations is not known.
- Passive – nets (both types) were screened out as although the activity is known to occur within the surrounding area of Poole Bay, the nature of the area of seabed within the site (circalittoral rock) means it is unlikely that the gear type would be compatible due to snagging. For pelagic drift nets, there is very limited if any interaction with the designated features of the site due to the pelagic nature of the net.
- For Longlines (demersal and pelagic) both types have been screened in for a Part A Assessment as although the activities are not currently known to occur within the site or the surrounding area of Poole Bay there is the potential for these activities to occur.
- For handlines (rod/gurdy etc.) there are large number of anglers operating in this site, potentially up to 10/15 at any one time. Activity is known to occur throughout the site and all year round therefore this activity is screened in for a Part A Assessment.
- For jigging/trolling, it was concluded that this activity should be screened in for a Part A Assessment as the activity has the potential to occur in the site.

On the basis of the screening, gill, trammel and entangling nets, longlines, handlines (rod/gurdy etc.) and jigging/trolling were screened in for a Part A Assessment.

1.3 Southbourne Rough MCZ

- For static – fixed nets, for entangling and trammel nets the activity is known to occur. For gill nets the activity is determined as having the potential to occur and therefore all three activities under this gear type have been screened in for a Part A Assessment.
- Passive – nets (both types) were screened out as the activity is not known to occur and no sightings of this activity have been made in the vicinity of the site.
- For Longlines (demersal and pelagic) both types have been screened in for a Part A Assessment as although the activities are not currently known to occur within the site or the surrounding area of Poole Bay there is the potential for these activities to occur.
- For handlines (rod/gurdy etc.), activity is known to occur throughout the site and all year round therefore this activity is screened in for a Part A Assessment.
- For jigging/trolling, it was concluded that this activity should be screened in for a Part A Assessment as the activity is known to occur within the site.

On the basis of the screening, gill, trammel and entangling nets, longlines, handlines (rod/gurdy etc.) and jigging/trolling were screened in for a Part A Assessment.

2. Part A Assessment

For activities which were identified in the screening process as occurring or having the potential to occur within the site, a Part A Assessment was completed, assessing the pressures upon the MCZ designated feature of Black Seabream. In order to assess the potential pressures, Natural England's Advice on Operations (AoO) was used[3], which is provided for each site alongside Supplementary Advice on Conservation Objectives[4].

For a definition of AoO and how it is developed and used please see Section 2 under Static Gear – Pots/Traps.

For Demersal Nets/Lines and Pelagic Nets/Lines, the AoO is given for two categories; anchored nets/line and pelagic fishing (or fishing activities that do not interact with seabed)

The outcome of the Part A Assessment for Demersal Nets/Lines and Pelagic Nets/Lines, using the AoO, in terms of the pressures screened in for a Part B Assessment, was the same for all three MCZs, namely: Abrasion/disturbance of the substrate on the surface of the seabed, Removal of non-target species and Removal of target species. Tables 2 provides the outcomes of the Part A Assessments for these pressures for each of the three sites, the justification is common across all three sites so has only been provided once.

Table 2: Summary of fishing pressure-feature screening for black seabream and Demersal Nets/Lines and Pelagic Nets/Lines for Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ using the AoO for Anchored Nets/Lines and Pelagic Fishing. Please note only pressures screened in for the Part B Assessment are presented here.

Potential Pressure	Advice on Operations - Sensitivity		Considered in Part B Assessment?	Justification	Relevant Attributes (effected by identified pressures)
	Anchored Nets/Lines	Pelagic Fishing			
Abrasion/ disturbance of the substrate on the surface of the seabed	S		Y – demersal nets/lines	Potential for a significant effect on the feature. Abrasion may occur when anchors or lead lines drag over the seafloor. Process could disturb bream nest sites. Netting is known to occur in the sites. No sightings of longlining have been made but potential for activity to occur. Anchored handline activity from a vessel occurs within the sites at varying intensity levels depending on the day.	Population: age/size frequency, Population: population size, Population: recruitment and reproductive capability, Nest abundance, Presence and spatial distribution of the species

[3] Marine Conservation Advice - Component Toolbox (arcgis.com)
[4] Marine Conservation Advice - Component Toolbox (arcgis.com)

Removal of non-target species	S	S	Y – for pelagic nets/lines and demersal nets/line	Possible for a significant effect on the feature due to net and line fishing occur within the sites and that black seabream are likely to be caught as non-target species. Black seabream are caught as a bycatch species in nets and retained by fishers for sale. Recreational anglers fish throughout the sites, mostly in summer, at varying intensity levels dependant upon water and in some cases retain a proportion of bream caught. All Black seabream must be returned to the sea if they are below MCRS. Sightings of net fishing activity and rod and line fishing have been made in the sites. No sightings of longlining activity have been made in the sites but potential for activity to occur.	Population: age/size frequency, Population: population size, Population: recruitment and reproductive capability, Presence and spatial distribution of the species, Structure and function: biological connectivity
Removal of target species	S	S	Y – for pelagic nets/lines and demersal nets/line	It is possible that a significant effect could be seen on the feature. This is due to knowledge that net and line fishing targets Black seabream within the sites.	Population: age/size frequency, Population: population size, Population: recruitment and reproductive capability, Presence and spatial distribution of the species, Structure and function: biological connectivity

Additional Assessments Relevant to Black Seabream Management

Note that there are additional gear types which have been subject to the MCZ Assessment Process for black seabream in the three relevant MCZs. The details of these including outcomes are provided in Table 3. On the basis of the outcomes described, these gear types will not be included in Part B Assessments which are specific for the development of black seabream management.

Table 3: Details of MCZ Assessments carried out for other fishing gear types and the outcomes of those assessments

Site Name	Fishing Activity	Assessments Completed	Outcomes
Purbeck Coast MCZ	Bottom Towed Fishing Gear	Screening and Part A Assessment	Protection to black bream nest sites identified as having been achieved through management of BTFG under BTFG Byelaw 2016 and proposed BTFG Byelaw 2023, therefore all proposed impacts screened out at Part A stage
	Diving	Screening and Part A Assessment	Activity screened out at Part A stage
	Shore Gathering	Screening	No potential for overlap between activity and feature, screened out
Poole Rocks MCZ	Bottom Towed Fishing Gear	Screening, Part A Assessment, Part B Assessment	Part A and Part B Assessments were carried out in 2016 under a review of BTFG. Although Black Seabream was not a designated feature of the site at this time and therefore was not specifically assessed, the outcome was a full site closure to BTFG which has been proposed to be maintained through the 2023 review of BTFG, therefore it is determined that no Black seabream specific assessments are required.
	Diving	Screening and Part A Assessment	Activity screened out at Part A stage
	Shore Gathering	Screening	No potential for overlap between activity and feature, screened out
Southbourne Rough MCZ	Bottom Towed Fishing Gear	Screening, Part A Assessment, Part B Assessment	Part A and Part B Assessments were carried out for impact of BTFG on Black seabream as part of the 2023 review of BTFG. The proposed BTFG Byelaw 2023 proposes a site-wide prohibited area for BTFG.
	Diving	Screening and Part A Assessment	Activity screened out at Part A stage
	Shore Gathering	Screening	No potential for overlap between activity and feature, screened out

Southern Inshore Fisheries and Conservation Authority

OFFICER'S REPORT

FISHERIES MANAGEMENT PLANS

MARKED E

Report by PO Celie Mullen

A. Purpose of the Report

For Members to receive updates on the development of Fisheries Management Plans.

B. Recommendation

1. That Members note the report.

C. Annexes

Recognition and thanks are given to the MMO for supplying FMP consultation summary documents which are provided to Members as annexes to this report.

i. Crab and Lobster FMP Summary Document
ii. Whelk FMP Summary Document
iii. King Scallop FMP Summary Document
iv. Bass FMP Summary Document
v. Southern North Sea and Eastern Channel Mixed Flatfish FMP Summary Document
vi. Channel Demersal Non-Quota FMP Summary Document.

1. Background

1.1 Fisheries Management Plans (FMPs) are evidence-based action plans set in place under the Joint Fisheries Statement (JFS, *Joint Fisheries Statement link*) to carry out objectives of the Fisheries Act 2020. They will ensure the continued provision of a shared natural resource for future generations, through the management of fish stocks, geographical area, and fishing methods. To ensure the plans are effective, stakeholder engagement is crucial. Throughout preparation and publication steps, there will be collaborative engagement between the delivery partners and interested parties which includes but is not limited to, conservation bodies, fishing communities, researchers and leading authorities. Once implemented, FMPs will be monitored, reviewed and adapted every 6 years, using statutory review cycles. This ensures the objectives of the plans are continually effective. Throughout this process, research surveys and reports are produced to note the progress of implementation to species stock levels.

1.2 6 Frontrunner FMPs have been prioritised for delivery in 2023, to act as a baseline framework for the future development of 43 FMPs listed in the JFS.

Plans may be developed by 2 or more fisheries policy authorities while others may be developed by a singular lead.

1.3 The Southern IFCA FMPs website page provides informative updates surrounding the planning, preparation and publication of FMPs. This is a source of information for each of the frontrunner FMPs and any upcoming stakeholder engagement opportunities (*Fisheries Management Plans: Southern IFCA (southern-ifca.gov.uk)*.

2. Fisheries Management Plans – Update to end of August 2023

2.1 Progress and Timeline

Defra are currently holding a public consultation on the 6 Frontrunner FMPs, which will run through till **1st October 2023.**

Southern IFCA are currently collecting all relevant information regarding the 6 Frontrunner FMPs, provided as part of the consultation packages, to inform the drafting of responses.

Southern IFCA are holding a Members workshop on **7th September 2023** to enable a Members forum for reviewing and discussing the consultation information, including how the information for each Frontrunner FMP relates directly to the specific fisheries in the Southern IFCA District. Officers will be guided by Members as to using the information gathered and discussions had via the workshop to inform consultation responses. The workshop day will be split into two sessions, with a session on the shellfish species FMPs and one on the fish species FMPs.

2.2 Engagement

All stakeholders can provide responses to the consultation on the 6 Frontrunner FMPs using the individual consultation forms (links provided on the Southern IFCA FMP webpage) or through emailing FMPconsultations@defra.gov.uk.

Defra are hosting a series of engagement events titled 'Future Fisheries Management LIVE!' across England (Future Fisheries Management LIVE! | Eventbrite). To date there has been an online event, which was attended by representatives of Southern IFCA, and a number of in-person events outside the District.

Defra have released dates for the next set of in person events within the District as follows:

Date	Location	Time
22nd Aug 23	**Gosport** *Gosport and Stokes Bay Golf Club*	16:30 – 20:00
23rd Aug 23	**Weymouth** *Best Western Hotel Rembrandt (The Garden Room)*	14:00 – 17:00
24th Aug 23	**Poole** *Poole Quay Hotel (Purbeck Suite)*	10:00 – 13:00

The Southern IFCA FMP webpage has been updated to provide links to each of the Frontrunner Consultations as well as the relevant FMP documentation (Fisheries Management Plans : Southern IFCA (southern-ifca.gov.uk) and links to the engagement events. The webpage will continue to be updated with upcoming events and relevant information. Southern IFCA have also disseminated the relevant information through social media platforms and emails to stakeholder groups.

2.4 Any Additional Information

Please see the Annexes to this report for summary documents on each of the 6 Frontrunner FMPs, which have been developed and kindly provided to Southern IFCA by the MMO. These cover the rationale, current management measures, goals and potential implementations of each FMP.

2.5 Next Steps and Key Dates

22/08/23: Defra engagement event, Gosport
23/08/23: Defra engagement event, Weymouth
24/08/23: Defra engagement event, Poole
07/09/23: Southern IFCA FMP Members workshop
01/10/23: Public Consultation concludes
Late 2023: Proposed date for final publication of Frontrunner FMPs

3. Future timelines

The tranche 3 FMPs have been released which include (delivery partner in italics):

- Queen Scallop FMP (*tbc*)
- Cockles FMP (*AIFCA*)
- North Sea and Channel Sprat FMP (*Cefas*)
- Southern North Sea and Channel Skats and Rays FMP (*MMO*)
- Southern North Sea Non-Quota Species Demersal FMP (*MMO*)

As information on these FMPs becomes available, Southern IFCA will update the FMP webpage accordingly.

FACTSHEET: Crab and lobster Fisheries Management Plan (FMP)

Why an FMP for crab and lobster?

Crab and lobster have been prioritised due to the vulnerability of these stocks to over-exploitation, the economic value of the fisheries, and a lack of evidence to properly assess and monitor the state of the stocks.

Crab and lobster fisheries contribute culturally, socially, and economically to coastal communities through employment and recreational fishing interests. Improved management action is therefore needed to protect these stocks and secure their future and the future of the industry that depend on them.

What does the FMP do?

The FMP was developed by Seafish (the Sea Fish Industry Authority) in partnership with Defra and in collaboration with the shellfish industry's Crab Management Group

The FMP collates evidence to assess the status of crab and lobster stocks and fisheries around England, identifies existing management measures, and sets out short- and long-term actions for the sustainable management of English crab and lobster fisheries.

Summary ----------

Current Management

The management landscape for crab and lobster in England is highly fragmented with a range of national and regional measures variously applied across differing jurisdictions. These include shellfish entitlements, minimum landing sizes, pot limitations, permitting schemes, vessel length restrictions, and specific conservation regulations.

The existing management is largely based on administrative boundaries (for example Inshore Fisheries and Conservation Authority (IFCA) jurisdictions or borders between devolved administrations) which does not necessarily reflect the biological boundaries between stocks.

Goals for the FMP

To embed suitable management based on better species and fishery data to ensure the long-term sustainability of these important fisheries.

Proposed Actions in the FMP

- Establish a fit for purpose evidence base by improving data collection approaches

- Introduce initial management measures to protect stocks whilst the evidence base improves. The key proposals are exploring opportunities to standardise or

increase lobster and crawfish minimum landing sizes across English waters to harmonise with existing IFCA measures, prohibiting the landing of soft brown crab for bait, and piloting management regimes for brown crab and European lobster in certain areas.

- Develop and embed long-term targeted management measures to manage fishing effort. Measures under consideration include seasonal closures, pot limitations, effort limitations, catch limits, and assessing the impact of latent capacity within the fleet.

Environmental Impacts of crab and lobster fisheries

All FMPs are subject to legal obligations for environmental protection arising from legislation. The Crab and Lobster FMP identifies two potential environmental risks; a) bycatch, b) marine litter. Both risks are currently considered low.

What does this consultation mean for me?

This is an opportunity for you to have your say in the future of crab and lobster management in English waters. We want to receive your input and views throughout the consultation and beyond.

Give us your views

Find the consultation online at:

https://consult.defra.gov.uk/fisheries-management-plans-1/crab-lobster-fmp-consultation/

or scan the QR code to visit the page.

The consultation is open to 23:59 on 1 October 2023.

What happens next?

Your feedback will be analysed and considered as part of the consultation process.

Following this the Crab and Lobster FMP will be updated as appropriate.

The aim is to have the final Crab and Lobster FMP published by the end of 2023.

FACTSHEET: Whelk Fisheries Management Plan (FMP)

Why an FMP for whelk?

Whelk has been prioritised due to the vulnerability of these stocks to over-exploitation, the economic value of the fisheries, and a lack of evidence to assess and monitor properly the state of the stocks.

Whelk fisheries contribute culturally, socially, and economically to coastal communities through employment and recreational fishing interests.

Improved management action is therefore needed to protect these stocks and secure their future and the future of the industry that depend on them.

What does the FMP do?

The Whelk FMP was developed by Seafish (the Sea Fish Industry Authority) in partnership with Defra and in collaboration with the shellfish industry's Whelk Management Group.

It collates evidence to assess the status of whelk stocks and whelk fisheries around England, identifies existing management measures, and sets out short- and long-term actions for the sustainable management of English whelk fisheries.

Summary ----------

Current Management

Whelk is a non-quota species (NQS) meaning that fishing for this species is not subject to catch limits. A national minimum landing size of 45mm applies. Within 0-6 nautical miles whelk fishing is regulated by Inshore Conservation Authorities (IFCAs). Several IFCAs enforce additional whelk specific measures including larger MLS, permitting schemes, flexible byelaws with conditions, and pot limits.

Goals for the FMP

To have appropriate regional or local based management, together with better species and fishery data to ensure the long-term sustainability of these important fisheries.

Proposed Actions in the FMP

- Improve the evidence base by highlighting where knowledge and evidence gaps exist and what is required to fill those gaps. These evidence gaps include the development of data collection programmes, defining stock boundaries, and developing stock assessments so that management is driven by a consistent, ongoing data collection and research programme.
- Introduce a permit scheme or licence entitlement with conditions. The purpose will be to allow adaptive management to reflect the local characteristics of the whelk stocks and fleets. Explore options around seasonal closures to protect spawning stocks.

- Long term measures will focus on minimum landing size variations, pot, and catch limits, and gear design measures. These will be explored as both the evidence base, and monitoring of management effectiveness improves.

Environmental Impacts of whelk fisheries

All FMPs are subject to legal obligations for environmental protection arising from legislation. The Whelk FMP identifies two potential environmental risks- bycatch and marine litter. Both risks are currently considered low.

What does this consultation mean for me?

This is an opportunity for you to have your say in the future of whelk management in English waters.

Defra recognise that we cannot do this alone; we want to receive your input and views throughout the consultation and beyond.

Give us your views

Find the consultation online at:

https://consult.defra.gov.uk/fisheries-management-plans-1/whelk-fmp-consultation/

or scan the QR code to visit the page.

The consultation is open to 23:59 on 1 October 2023.

What happens next?

Your feedback will be analysed and considered as part of the consultation process. Following this the plans will be updated as required.

The aim is to have the final plan published by the end of 2023.

FACTSHEET: King scallop Fisheries Management Plan (FMP)

Why a king scallop FMP?

King scallop has been prioritised due to the stock's vulnerability to over-exploitation, the economic value of the fishery and a lack of evidence to assess and monitor the state of the stock properly. King scallop fisheries contribute culturally, socially, and economically to coastal communities through employment and recreational fishing interests. Better management action is needed to ensure scallops are fished sustainably to secure the future of this important stock and the future of the industry that depend on them.

What does the FMP do?

The plan collates the evidence on king scallop stocks and the king scallop fishery around England and Wales, identifies existing management measures and sets out short and long-term policies and actions to manage the king scallop fishery. The Scallop Industry Consultation Group Working Group (SICGWG) have developed this FMP in partnership with Defra and Welsh Government.

Summary ----------

Current Management

King scallop fisheries have a range of management measures in place to protect stocks and the environment. Management in England and Wales is currently applied at national, regional, and local levels through fisheries licensing, legislation and byelaws.

The current measures include technical gear specifications, Minimum Conservation Reference Sizes (MCRS) of 100mm round shell length, except for in the Irish Sea and Eastern Channel where MCRS is 110mm, king scallop licences or permits with conditions, seasonal closures to protect spawning stocks, closures to protect seabed features and days at sea fishing limits for vessels of 15m and over length, fishing in certain areas (Western Waters (WW) effort regime).

Goals

Regional based management is needed, together with improved species and fisheries data to ensure long-term sustainability of these important fisheries.

Proposed Actions

- Improve the evidence base
- Seek opportunities for strengthening existing measures, such as extending the scope of seasonal and area-based closures to protect spawning animals and if beneficial to localised sustainability and management, broad alignment of

measures where it is appropriate, such as gear requirements, to avoid unnecessary differences in measures applying across management borders.
- Exploring and developing science-based output controls, which would limit the proportion of stock that can be removed, and/or input control measures which would limit fishing effort.

Environmental Impacts

The king scallop FMP identifies three potential environmental risks; a) risk to seafloor integrity, b) bycatch c) marine litter. Based on current evidence, bycatch and marine litter are considered low risk while seafloor integrity is considered a higher risk issue.

What does this consultation mean for me?

This is an opportunity for you to have your say in the future of king scallop management in English and Welsh waters. Defra and Welsh Government we want to receive your input and views throughout the consultation and beyond.

Give us your views

Find the consultation online at:

https://consult.defra.gov.uk/fisheries-management-plans-1/kingscallop-fmp-consultation/

or scan the QR code to visit the page.

The consultation is open to 23:59 on 1 October 2023.

What happens next?

Your feedback will be analysed and considered as part of the consultation process. Following this the plans will be updated to reflect as appropriate. The aim is to have the final plans published by the end of 2023.

FACTSHEET: Bass Fisheries Management Plan (FMP)

Why a Bass FMP?

Bass is of substantial social, cultural and economic importance to local coastal communities.

The Bass FMP seeks to ensure stocks in English and Welsh waters are maintained at sustainable levels, and the full benefits of bass fishing can be realised by the communities that depend on them.

What does the Bass FMP do?

The Bass FMP collates the evidence on bass stocks and the bass fishery around England and Wales. It identifies existing management measures and sets out short and medium-long term policies and actions needed to manage the bass fishery.

Summary ----------

Current Management

Joint UK/EU management measures were implemented in 2015. These include a Minimum Conservation Reference Size (MCRS), domestic authorisations system, seasonal closures and catch/bycatch limits for commercial and recreational fishers.

Three gear types are authorised for landing bass. Regional byelaws provide inshore (<6 nautical mile) management, and a network of nursery areas also provide protection for juvenile bass.

Bass is currently fished within sustainable limits aligned with ICES advice.

Goals of the FMP

The overarching aim of the FMP is to ensure stocks are harvested sustainably whilst benefiting a diverse range of environmental, commercial, recreational, and social interests. There are nine detailed goals:

1) Inclusive stakeholder engagement structures to inform management of the bass fishery.
2) Equitable access to the bass fishery, while prioritising stock sustainability.
3) Minimise discarding of bass bycatch where survival rates are low.
4) Encourage and facilitate full compliance with bass regulations.
5) Maximise the benefits of bass fishing for local coastal communities.
6) Sustainable harvesting of the bass stock in line with scientific advice.
7) Protecting juvenile and spawning bass.
8) Minimise the impact of bass fishing on the wider marine ecosystem.
9) Mitigate against and adapt to the impact of climate change on bass fishing.

Proposed Actions in the FMP

Key elements of the plan include:

a) **Improving the evidence base:** Gaps identified include data on commercial discarding, recreational removals, and the social, cultural and economic benefits of bass fishing to local coastal communities.

b) **Initial management measures:** The FMP identifies actions to build on the existing bass management framework via:

- The establishment by government of bass management group(s) with balanced stakeholder representation.
- A review of existing management measures to determine whether alternative approaches better align with FMP goals (priority measures for early consideration include the current bass authorisation system and the timing/duration of the closed seasons).
- The development of adaptive management systems (e.g. making more use of licence conditions rather than legislation).

c) **Longer term measures:** Additional measures proposed for review as evidence and monitoring improve include appropriate size limits, the regulation of shallow inshore and shore-based netting, and alignment of Inshore Fisheries and Conservation Authority and Marine Management Organisation powers to ensure consistency in enforcement.

Environmental Impacts

The bass fishery has an impact on the marine environment primarily through bycatch of marine mammals, seabirds, and fish, as well as climate change related issues and cultural heritage.

What does this consultation mean for me?

This is an opportunity for you to have your say in the future of bass management in English and Welsh waters. We want to receive your input and views throughout the consultation and beyond.

Give us your views

Find the consultation online at:

https://consult.defra.gov.uk/fisheries-management-plans-1/seabass-fmp-consultation/

or scan the QR code to visit the page.

The consultation is open to 23:59 on 1 October 2023.

What happens next?

Your feedback will be analysed and considered as part of the consultation process. Following this the Bass FMP will be updated as appropriate.
The aim is to have the final Bass FMP published by the end of 2023.

FACTSHEET: Southern North Sea and Eastern Channel mixed flatfish Fisheries Management Plan (FMP)

Why an FMP for flatfish?

Flatfish fisheries in the Southern North Sea and Eastern Channel are a commercially important group of species in the English Waters. They contribute socially and economically to the coastal communities. However, there is currently a variety of evidence levels across all the stocks and a need to ensure that the stocks are continuously fished within sustainable limits.

What does the Flatfish FMP do?

The FMP collates evidence to assess the status of flatfish stocks and fisheries around in English waters of the Southern North Sea and Eastern Channel. It identifies existing management measures and sets out short- and long-term actions for the sustainable management of these fisheries.

Summary ----------

Current Management

The flatfish within this plan are a mixture of quota and non-quota stocks. The quota stocks are subject to international negotiations with other coastal states and managed through Total Allowable Catches (TAC).

There are no technical measures specifically designed for the stocks within this FMP except for common sole and plaice. However, directed fisheries for flatfish in areas 4b and 4c should have a mesh size of at least 90 mm for fixed nets. Directed fisheries for flatfish in area 7d should have a mesh size of at least 100 mm for fixed nets.

Goals for the FMP

This FMP sets out objectives to deliver sustainable fishing of flatfish, for which a number of approaches to management have been proposed. The plan also addresses the wider environmental impacts of the fishery on the marine environment and sets out plans to mitigate impacts.

Proposed Actions in the FMP

The FMP proposes precautionary management measures in the short-term whilst more evidence is gathered, to protect the stocks that are potentially not being fished sustainably at present.

- Set out principles for TAC setting

- Improve evidence base
- Short- and long-term measures focusing on non-quota stocks in ICES area 7d. MCRS for lemon sole, turbot and brill and exploring gear-based measures.
- Recommendation of 7d sole survey

Environmental Impacts

The flatfish FMP identifies three potential environmental risks a) seafloor integrity b) bycatch and c) marine litter. The FMP sets out national objectives and schemes to address these risks and layouts long term goals to mitigate these.

What does this mean for me?

This is an opportunity for you to have your say in the future of flatfish management in the Southern North Sea and Eastern Channel. We want to receive your input and views throughout the consultation and beyond.

Give us your views

Find the consultation online at:

https://consult.defra.gov.uk/fisheries-management-plans-1/flatfish-fmp-consultation/

or scan the QR code to visit the page.

The consultation is open to 23:59 on 1 October 2023.

What happens next?

Your feedback will be analysed and considered as part of the consultation process. Following this the plans will be updated as appropriate.

The aim is to have the final plan published in early 2024.

FACTSHEET: Channel Demersal Non- Quota Species (NQS) Fisheries Management Plan (FMP)

Why a Channel Demersal NQS FMP?

NQS are of significant economic value, and the fisheries are of huge importance to local communities. However, NQS are largely data poor compared to quota species. Many of these demersal NQS have radically different biology to most quota species, with a mix of very short-lived species (for example, cuttlefish and squid), as well as slow growing long lived finfish.

What does the FMP do?

The Channel Demersal NQS FMP establishes a road map to achieve long-term sustainable management of demersal NQS in the English Channel. The FMP applies to demersal NQS fished by all methods and all vessels operating in English waters of the ICES areas 7d and 7e. The species in scope are cuttlefish, squid, octopus, bib, turbot, brill, lemon sole, red gurnard, grey gurnard, tub gurnard, red mullet, john dory, lesser spotted dogfish and smoothhound.

Summary ----------

Current Management

The level of management applied is variable, due primarily to the diverse nature and location of NQS fisheries. These species are considered to be data poor - the majority are subject to limited data collection regimes (i.e., landings data only), and only seven are assessed by ICES within the English Channel.

Goals of the FMP

- **Sustainable fisheries**:
  1) Deliver effective management of demersal NQS in the English Channel,
  2) Deliver wider biological sustainability.
- **Social and economics**:
  1) Better understand and optimise economic and social benefits, and
  2) Build capacity for the industry to be able to input into matters effecting NQS fisheries management.
- **Evidence**:
  1) Better understand wider NQS evidence gaps, and
  2) Develop the NQS evidence base.

Proposed Actions in the FMP

a) **Building collaborative capacity**: Creating a NQS management group, which will act as a forum for addressing management concerns and needs.
b) **Restricting flyseining effort**: Following Defra's consultation on this issue in 2022, it is recommended to introduce a standard net mesh size of 100mm for all

flyseine vessels operating in English waters of the Channel. It is also recommended to restrict effort by engine power to 221 kilowatts (kW) for flyseine vessels within 12 nautical miles (nm) of the English Channel.

c) **Minimum Conservation Reference Sizes (MCRS)**: Cuttlefish, lemon sole, turbot, and brill were highlighted as key FMP species requiring protection during the juvenile life stages of their development. The proposed MCRS are cuttlefish – 23cm; lemon sole – 25cm; turbot – 30cm; and brill – 30cm. These sizes have been identified to align with the MCRS in Inshore Fisheries Conservation Authorities (IFCAs) in the short term and will be evidenced further to determine the appropriate size based on maturity sizes for these species. Considering an MCRS for other flyseine targeted species, such as red mullet, bib and gurnards is recommended as a medium-long term measure.
d) **Cuttlefish**: The FMP recommends considering temporary seasonal closures for cuttlefish trawlers to protect pre-spawn juvenile cuttlefish, or egg-laying habitat, pending further evidence for longer term management approaches.
e) **A monitoring programme**: The initial recommendation is to focus on an early adopter scheme for flyseining vessels alongside a holistic monitoring programme, subject to the outcomes of the consultation on REM in summer 2023.
f) **Education**: Through partnership working, the FMP proposes to develop voluntary guidelines, education, and codes of conduct for both commercial and recreational fishers.

Environmental Impacts of the Channel Demersal NQS fisheries

Given the comparative lack of data on the direct impacts of Channel demersal NQS fisheries further work is required and the assessment is at high-level and based on best available science.

What does this consultation mean for me?

This is an opportunity for you to have your say in the future of Channel Demersal NQS management in English waters. We want to receive your input and views throughout the consultation and beyond.

Give us your views

Find the consultation online at:

https://consult.defra.gov.uk/fisheries-management-plans-1/channel-demersal-nqs-fmp-consultation/

or scan the QR code to visit the page.

The consultation is open to 23:59 on 1 October 2023.

What happens next?

Your feedback will be analysed and considered as part of the consultation process. Following this the Channel Demersal NQS FMP will be updated as appropriate.

The aim is to have the final FMP published by the end of 2023.

Southern Inshore Fisheries and Conservation Authority

OFFICER'S REPORT

MARKED F

SOUTHERN IFCA SURVEY REPORTS

Report by IFCOs Parry and Condie

A. Purpose of the Report

To provide members with reports from the district-wide Whelk Survey for 2023 and the biannual juvenile fish surveys from 2017 to the most recent survey in Spring 2023.

B. Recommendation

That Members note the report.

C. Annex

i. The Southern IFCA Whelk Survey Report 2023

ii. Southern IFCA Juvenile Fish Survey Data Summary – To Spring 2023

1. Background

1.1 The Southern IFCA survey program is run annually and consists of multiple surveys looking at stocks of commercially important species and use of areas by different species. The program includes bivalve stock surveys in The Solent and Poole Harbour, scallop stock surveys in The Solent, an oyster stock survey in The Solent (run every other year), juvenile fish surveys in estuaries across the district and a survey to monitor whelk populations across the district.

1.2 This paper provides reports on the Southern IFCA Whelk Survey analysing the data collected in spring 2023 and a summary report of data form the Southern IFCA biannual juvenile fish surveys from 2017 to spring 2023.

2 The Southern IFCA Whelk Survey 2023

2.1 This is the first report on a new survey, first carried out in 2023, to assess the population of the common whelk (*Buccinum undatum*) across the Southern IFCA District, sampling areas important for whelk fisheries; Lyme Bay, Weymouth Bay, Poole Bay and The Solent. The survey was carried out during early April 2023 using local commercial fishers from each area and their site-specific whelk pots.

2.2 The aim is to undertake an annual survey to create a timeseries dataset for whelk stocks and to monitor trends in abundance and density between different areas. This survey forms part of the Southern IFCA Whelk Monitoring Programme, committed to through the development of the Pot Fishing Byelaw (PFB), and outcomes from this first survey can be used as a baseline on which to monitor future changes, and how these may relate to current and proposed management measures for the whelk fishery.

2.3 The results from this report (and future surveys) will form one source of evidence, in conjunction with other available evidence sources, to help in potential future reviews of pot fishing management, for example under the PFB (in line with paragraphs [35] and [36]). In addition, the Whelk Monitoring Program will provide contributing evidence

for the Southern IFCA review of Minimum Conservation Reference Size (MCRS) and/or the introduction of a national Whelk Fisheries Management Plan under The Fisheries Act 2020. Additional information will also be available from other district specific whelk studies, such as the collaboration with the University of Southampton to investigate size of maturity (SOM).

2.4 The delivery of this survey showed that the methodology was appropriate for providing samples of whelks, in line with currently used fishing methods, which could be analysed to provide information on CPUE and size frequency for different areas of the district identified as being important for whelk fisheries. It is recognised that the method of sampling is inherently size selective due to methods employed by fishers to reduce the quantity of whelk <MCRS which is retained in pots and thus the level of post-capture sorting required, and that there is likely to be an element of variation introduced by using subtly different pots in each location. However, this risk was weighed up against the need to use pots which are adapted to the conditions of each site and have been optimised by the fisher in each case to maximise capture potential in line with specific environmental considerations. The methodology is repeatable which will allow for comparisons to be made between sites over time to ascertain any changes in CPUE or length frequency. As a time-series dataset is developed the analysis of this data can begin to be explored in relation to potential influencing factors including management measures for whelk fisheries, however a suitable number of years' worth of data would be required before such analysis can be undertaken.

2.5 There have been many benefits of working with the fishing industry to facilitate this data collection. Officers have been able to engage with fishers on the local knowledge of particular fishing sites and variations in fishing methods which will aid understanding of whelk fishing in the district. In addition, fishers have been able to gain an understanding of why the data is being collected and its potential uses. The officers thank the fishers involved for their participation and help with the sample collection.

2.6 The aim is to repeat this survey again in early spring 2024 using local fishers in the four survey areas.

3 Juvenile Fish Surveys – A Data Summary from 2017 to June 2023

3.1 Southern IFCA's Juvenile Fish Survey has records dating back to Spring 2017 at a range of sites across the Southern IFC District. As time has progressed, the sites surveyed have changed and the number reduced with the most recent round of spring surveys being carried out in The Fleet, Christchurch Harbour, the River Hamble and the River Yar. These estuarine/harbour sites contain examples of habitats which provide nursery areas for juvenile fish as well as for fish species throughout their lifecycle for feeding, spawning and refuge.

3.2 As part of the Southern IFCA Inshore Netting Review, Southern IFCA determined to enhance the environmental, socio-economic and sustainability of fisheries within the district by supporting the use of harbours and estuaries by fish populations for these purposes, collectively referring to the areas as Essential Fish Habitats (EFH). Of the four areas currently surveyed three are identified through the netting review as requiring management, which is linked, in part, to their importance as EFH. The River Yar is not identified as being specifically managed due to EFH as netting regulations already exist under other authorities, however it provides examples of known EFH, the understanding of which will contribute to wider understanding of EFH across and

District. In addition, continued surveying at this site allows for the creation of a time-series dataset which can contribute more valuable information than ad-hoc surveys.

3.3 Collecting data through the Juvenile Fish Surveys allows Southern IFCA to improve understanding of the use of EFH by commercial and recreational fish species. Building a time-series dataset will allow any changes in fish communities to be observed to help in developing this understanding, contributing to a database that can then be used, in conjunction with other evidence, when reviewing fisheries management and determining suitable management interventions.

3.4 Data collected is added to the time-series database and this year, analysis has been carried out on the database to summarize the total species abundance, relative species abundance, species richness and Shannon Diversity Indices for each survey up to Spring 2023.

3.5 Partnership Working

Carrying out the Juvenile Fish Surveys requires permissions and access from a variety of organisations and provides a platform for collaborative working with partners across a range of sectors. In Spring 2023 organisations involved with the surveys included: The Environment Agency; Bournemouth, Christchurch and Poole Council; Yarmouth Harbour; Isle of Wight Council; The Ilchester Estate and The Hamble Universal Marina.

3.6 The surveys offer opportunities to work in collaboration with research establishments and organisations with interests in fisheries and associated management. In Spring 2023 we were joined by:

- a representative from the Solent Seascape Project who will be using the data collected to compare any differences in communities from the survey sites with restoration areas under the project.
- a research student from the University of Plymouth, one of our FISP project partners, with a specialized underwater camera, looking to build an artificial intelligence fish monitoring system and compare the validity of using camera techniques to capture information on the usage of EFH by fish species against traditional techniques such as the seine netting method used in our surveys.
- a student from the University of Southampton who collected juvenile mullet (with any required permissions in place through the University) as part of a study into parasite communities on this species.

3.7 The Juvenile Fish Surveys provide a networking platform for officers and partner organisations, with representatives from The Association of IFCAs, The Blue Marine Foundation and the Environment Agency being present across the surveys in addition to local harbour authorities and local councils. This provides contacts for future work and ensures that the local community is aware of the work carried out by the Southern IFCA and how our survey work contributes to management development.

3.8 Officers will be undertaking the next round of Juvenile Fish Surveys in Autumn 2023, aiming to maintain and, where possible, expand the partnership working and offer a platform for continued research and networking. Each round of surveys will contribute to the time-series database with the aim of reporting annually on results.

Southern IFCA District - Whelk Survey 2023

This report has been produced by the Southern Inshore Fisheries and Conservation Authority.

A copy of this report is available on our website at www.southern-ifca.gov.uk or from the Southern IFCA Office at:

Unit 3, Holes Bay Park, Sterte Road West, Poole, Dorset, BH15 2AA

Tel: 01202 721373, email: enquiries@southern-ifca.gov.uk

Table of Contents

1. Introduction

This is the first report on a new survey, first carried out in 2023, to assess the population of the common whelk (*Buccinum undatum*) across the Southern IFCA District, sampling; Lyme Bay, Weymouth Bay, Poole Bay and The Solent, UK. The survey was carried out during early April 2023 using local commercial fishermen from each area and their site-specific whelk pots. The aim is to repeat this survey annually to create a dataset on the stocks of whelk, as a commercially important species, and to monitor trends in abundance and density between different areas and over time. This survey forms part of the Southern IFCA Whelk Monitoring Programme (see S1.3) and outcomes from this survey will provide data on the whelk population which can be used as a baseline on which to monitor future changes and trends, and how these relate to current and proposed management measures for the whelk fishery. The results from this survey program will be reviewed in conjunction with other available evidence as part of future management reviews, a review of MCRS by Southern IFCA and/or the introduction of a national Whelk Fisheries Management Plan under The Fisheries Act 2020. This work will be used along-side further studies within the area; such as the collaboration with the University of Southampton that is investigating size of maturities (SOM) for whelks across the District.

1.1 The Fishery

Over the past two decades, whelks have rapidly become one of the UK's most economically important fisheries, sitting as the fourth most valued species landed in England by UK vessels (Blue Marine Foundation, 2022). Landings into English ports, by UK vessels, increased six-fold from 3,500 tonnes in 1998 (UK Sea Fisheries Annual Statistics, 1998) to 22,100 tonnes in 2020 (MMO, 2021). Over the same period, the value of whelk landings rose from ~£400 per ton (UK sea fisheries annual statistics 1998) to £1,235 per tonne (MMO, 2020) with the fishery total UK landings valued at a high of £27 million in 2020 (£19.8m in England) (BLUE, 2022). Now, post disruptions from the pandemic, the total UK landings value is similar to 2018 at £22 million (MMO 2018, 2020, 2021).

The species is of considerable importance to vessels of ≤10 metres in length that make up a large part of the UK's inshore fishing fleet (MMO, 2018). Vessels in this size category predominantly work the 0-12 nautical mile inshore zone where whelk populations are found in high abundances between depths of 5 and 100m (Nielson, 1974; Morel & Bossy 2004). In 2018, whelks made up nearly a quarter of all shellfish landed by ≤10 metre vessels (MMO, 2018), providing an important source of local income to coastal communities. The whelk fishery typically takes place from March to July, with landings peaking in May (BLUE, 2022). However, some fishermen do fish as early as December, depending on demand, sale price and weather conditions.

2021 UK Whelk landings value

£22 million

Currently, the UK whelk fishery is managed under a minimal number of regulations. Whelks are not subject to EU total allowable catch (TAC) as they are a non-quota species (BLUE, 2022) and in England, national measures currently only include a Minimum Conservation Reference Size (MCRS) of 45mm. In addition, an increase in demand from abroad, near year-round availability of stock, low start-up costs and the decline in alternative fisheries have made it a popular displacement fishery (Haig et al., 2015; McIntyre et al., 2014). Whelk also provide a valuable alternative to fishers on off-seasons for crab and lobsters. As a result, the industry has expanded rapidly and raised concerns that whelk populations are at risk of unsustainable exploitation.

The whelk potting fishery uses a specific type of pot designed for capturing whelk (Figure 1.1), often using discarded 25 litre plastic containers. One side of the container is removed and replaced with a section of netting with a hole in the centre to act as an entrance. This entrance forms the top of the trap. This allows the whelks an easy entry to the pot, but then it is almost impossible to get out. The bottom of the pot is weighted with a block of cement to ensure that the pot lands upright on the seabed and remains

Figure 1.1 – Typical whelk pot (Seafish, 2015).

this way when it's fishing. Inside, there will be some method of fixing the bait and numerous holes are made around the pot to allow the water to drain from it as the pot is hauled. Multiple whelk pots are attached to a string with each end being indicated by surface buoys. Pots are left for anywhere between 6 – 48 hrs to 'soak' before being retrieved. By-catch is negligible, due to the design of the pots, most other fish and shellfish can easily escape before the gear is hauled. Any unwanted by-catch is typically returned to the sea alive. Within the district bycatch commonly includes dog whelk and crabs.

1.2 The Common Whelk

The common whelk (*Buccinum undatum*) is a boreal, neogastropod mollusc native to the subtidal waters of the UK and north Atlantic continental shelf (Golikov, 1968), typically preferring sandy bottom areas. Whelks are opportunistic feeders, scavenging on carrion (Nasution et al., 2004), polychaetes, molluscs, echinoderms and a variety of smaller crustaceans (Nielsen, 1975; Taylor, 1978; Hamel and Himmelman, 1993). Individual whelk can grow up to 150mm in length.

Studies indicate Whelk populations in Europe are autumnal and winter breeders (Fretter and Graham, 1984; Kideys et al., 1993) with egg deposits thought to occur in winter and on into early spring (Thorson, 1946; Fretter and Graham, 1962).

Whelks have several life-history characteristics that make them vulnerable to fishing pressure (Shrives et al., 2015). The species lack a planktonic larval phase and are relatively sedentary as adults, limiting their dispersal potential and gene flow, resulting in local variations and adaptations (Weetman et al., 2006; Shelmerdine et al., 2007; BLUE, 2022). Subsequently, they are known to form discrete sub-populations named stocklets and demonstrate significant variation in the size-at-maturity, even over small spatial scales (Haig et al., 2015). Sexual maturity is not reached for several years and is dependent on geographical location. Up to 2,700 eggs may be laid in one mass with only 1% of eggs hatching, as individuals who hatch first typically eat the remaining unhatched eggs (BLUE, 2022).

1.3 The District and Current Management

The Southern Inshore Fisheries and Conservation Authority (SIFCA) are responsible for the management of the commercial whelk fishery within the 0-6 nautical miles of coastal waters in the Southern District.

The whelk fishery in England is dominated by fisheries along the south coast, with large volumes of whelk being removed from the SIFCA district each year. The weight of whelk landings in English ports from 2009-2019 are highlighted in an AIFCA/NEFC report, 2022 (Figure 1.3). Given the commercial importance of this species, it is important that the District's whelk populations are assessed in order to provide data that will help inform sustainable management approaches.

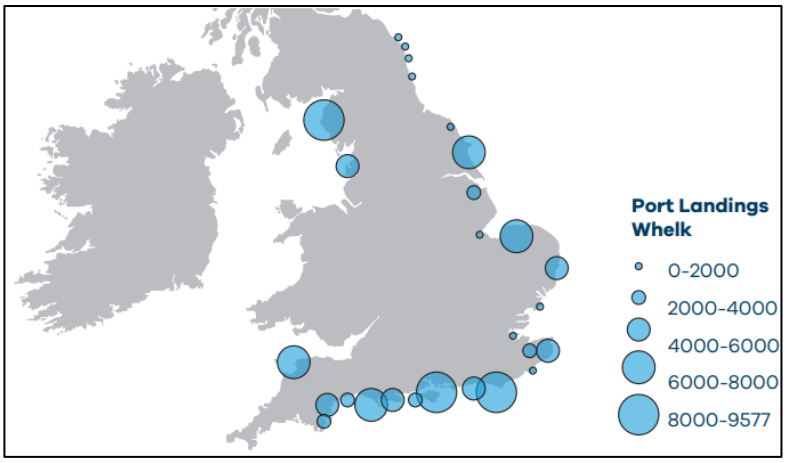


Figure 1.3 - English port landings of whelk from 2009-2019.

Southern IFCA currently have a proposed Pot Fishing Byelaw, which includes a permitting element and associated conditions. For commercial whelk fisheries, fishers would be required to hold a permit, to have all pots marked with tags issued by Southern IFCA and for strings of pots to be marked clearly using marker buoys at each end. In developing this management approach, SIFCA committed to implementing a Whelk Monitoring Program.

2. Materials and Methodology

Areas for the survey were chosen to sample all four main fishing areas within the SIFCA district, to aim identify any variation within the whelk population. Current fishing areas were selected in conjunction with fishers, using their knowledge and experience of the areas commonly used by the fishery (Figure 2.1). The areas sampled were: the Solent, Poole Bay, Weymouth Bay and Lyme Bay.

Data was collected in early April around the start of the fishing season, currently suggested at March to July (BLUE, 2022), with some fishers targeting whelk as early as January. Local fishers were requested to undertake their normal fishing practice, using their own site-specific whelk pots; as the height of whelk

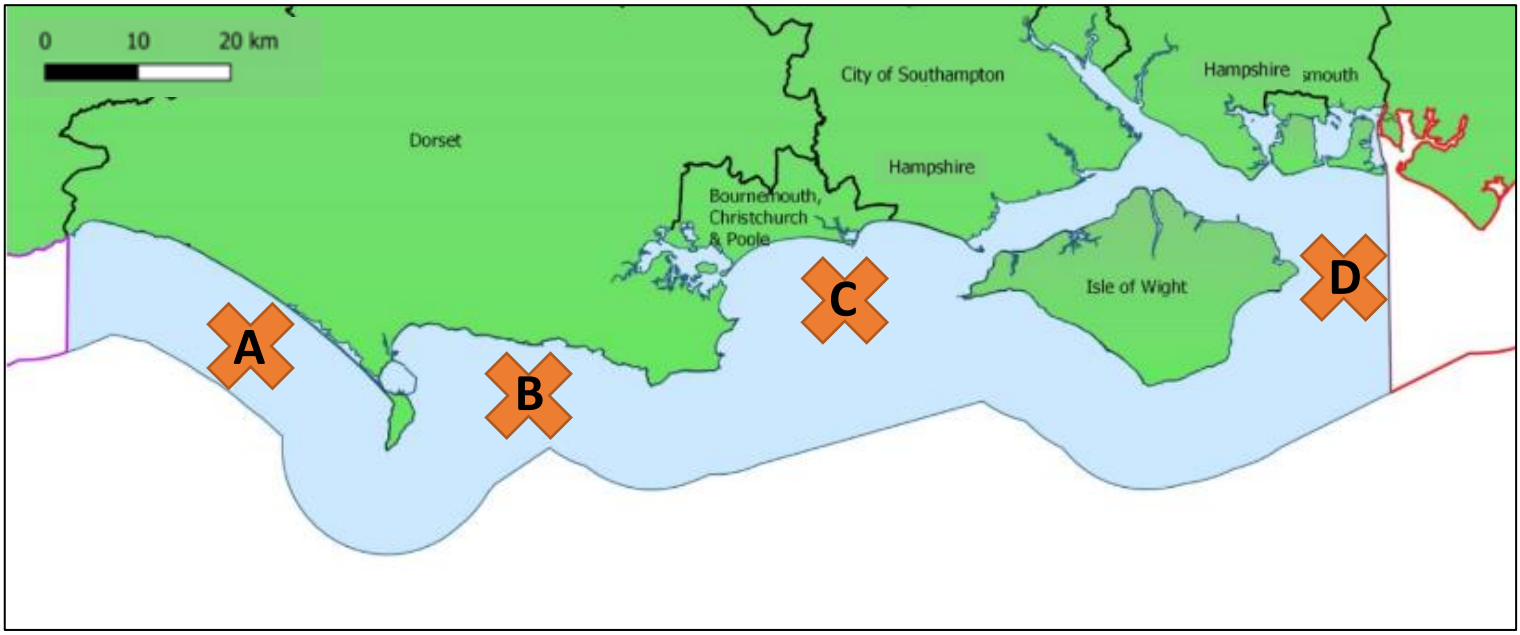


Figure 2.1 – Southern IFCA district, with orange crosses indicating the different survey areas. A as Lyme Bay, B as Weymouth Bay, C as Poole Bay and D as The Solent

pots are typically altered due to sea conditions, tidal ranges and water flow. This allowed for a more representative sample of what would normally be caught in each area allowing data to be relevant to fishing practice in each area, it is recognised that data analysis will need to be considered in light of this variation in pot set up.

Date, gear type, bait type, soak time and location (latitude and longitude) were collected on the day of retrieval. Three strings with five whelk pots were used at each site according to the following methodology:

- Whelk pots were baited and deployed between 12 and 48 hours before retrieval, dependant on weather windows.
- The GPS position, using the vessel GPS system, were recorded upon retrieval of the first pot.
- A waypoint was created at the position of the pot once out of the water using the GPS and the waypoint number recorded
- The pots were recovered in-board and all whelks from each pot emptied directly into sample bags and labelled according to area, string number and pot number.

The whelks retained were measured for the total length and widest width of the first 50 individuals, total length being from the base of the aperture to the tip of the whorl (mm), using Vernier callipers (Figure 2.2).

Individuals were separated into above or below the minimum size of 45mm and the weight (kg) of each size class was recorded (<45, 45-50, 50-55, 60-65, >65).

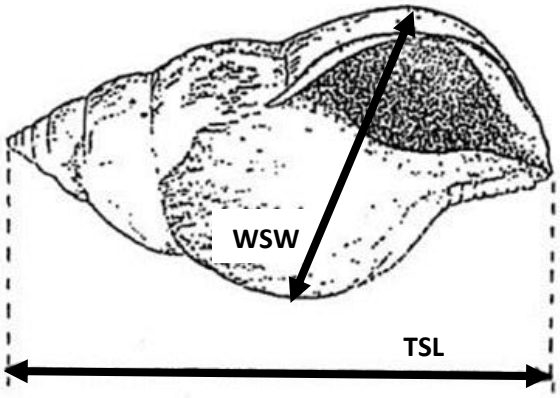


Figure 2.2 – The Total Shell Length (TSL) and the Widest Shell Width (WSW) of a whelk is determined as above. (Eastern IFCA website).

Other bycatch species were present whilst sorting whelk samples; such as the netted dogwhelk (*Tritia reticulata*). These were removed from any CPUE and TSL values. The image below shows the visual identification between the two species (Figure 2.3).

Figure 2.3 – Four netted dogwhelk (*Tritia reticulata*) to the left and four common whelk (*Buccinum undatum*) to the right.

3. Results

3.1 Catch Per Unit Effort (CPUE)

The weight data collected was analysed to provide a value for Catch Per Unit Effort (CPUE), defined as kilograms of whelk per pot (kgs/pot). CPUE was calculated for total kg of whelk, kg of whelk over the MCRS and kg of whelk under the MCRS (MCRS = 45mm). The caveat of CPUE under MCRS is that the potting method used to obtain data for this survey is size selective due to the escape holes for drainage, which also minimize catches of whelk under the MCRS.

On this basis the data for CPUE under MCRS will not be representative of this size class as it cannot be guaranteed that all whelk under MCRS have been sampled. However, comparisons can be made between sites and over time to look for changes, in the knowledge that the sampling method is consistent.

3.1.1 Total CPUE

The site with the greatest mean average total CPUE was Lyme Bay at 4.33kgs/pot, whereas Weymouth Bay had the lowest average total CPUE at 1.54kgs/pot. The mean average for the Solent and Poole Bay were 3.12kg/pot and 2.91kg/pot, respectively.

All Shapiro-Wilks tests ($\alpha = 0.05$) indicated that the CPUE data was not normally distributed ($p < 0.05$). Therefore, non-parametric analysis of the median values were used (Figure 3.1).

A Kruskal-Wallis test showed a significant difference in the median CPUE of pots in different areas ($x^2 = 32.951$; df = 3; $p = 0.001$). The median CPUE in Weymouth Bay was 1.65kg/pot, Lyme Bay was 4.20kg/pot, the Solent was 3.30kg/pot and Poole Bay was 2.70kg/pot.

A Kruskal-Wallis multiple comparison post-hoc Dunn test (1964)(p-values adjusted with the Bonferroni method) showed a significant difference in the median total CPUE between; Lyme Bay and Poole Bay ($p = 0.043$); Lyme Bay and Weymouth Bay ($p < 0.001$); Poole Bay and Weymouth Bay ($p = 0.016$); the Solent and Weymouth Bay ($p = 0.002$). No significant differences in total CPUE were seen between Poole Bay and the Solent ($p = 1.000$) and Lyme Bay and the Solent ($p = 0.180$).

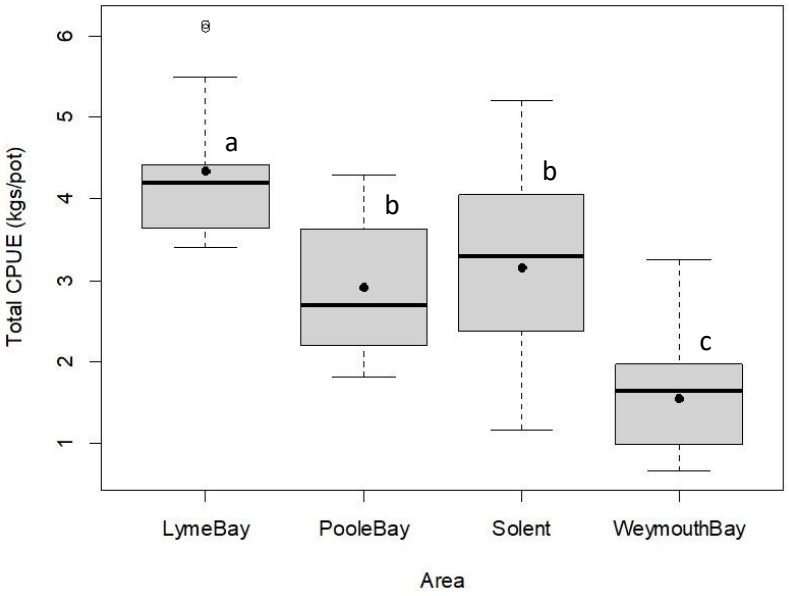


Figure 3.1 - Total Catch per Unit Effort (CPUE, kg/pot) box plots from the Survey. Stripe shows median value from samples (n=15) from each area, boxes show inter-quartiles, whiskers show range and black dots show mean.

3.1.2 Over MCRS CPUE

The site with the greatest mean average Over MCRS CPUE (O.MS.CE) was Lyme Bay (Figure 3.2) at 3.55kg/pot, whereas Weymouth Bay had the lowest average O.MS.CE at 1.53kg/pot.

All Shapiro-Wilks tests ($\alpha = 0.05$) indicated that the CPUE data was normally distributed ($p > 0.05$). A Levene's test ($\alpha = 0.05$) indicated that the data shows homogeneity of variance ($p = 0.438$).

A One-way ANOVA test ($\alpha = 0.05$) showed a significant difference in the mean O.MS.CE of pots in different areas ($F=13.07$; $p < 0.001$).

A Scheffe post-hoc test ($\alpha = 0.05$) indicated that O.MS.CE per pot from Lyme Bay (mean = 3.55kgs/pot), were significantly greater than all sites. The Solent and Poole Bay showed no significant differences between each other and had a similar mean O.MS.CE (2.59kgs/pot and 2.49kgs/pot, respectively). Weymouth Bay had a significantly smaller O.MS.CE than all sites, with a mean of 1.53 kgs/pot.

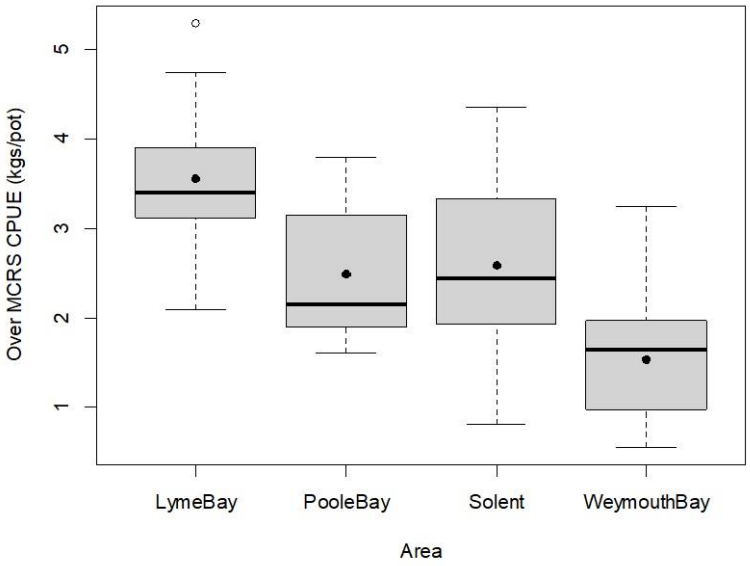


Figure 3.2 - Bar chart with black dots showing mean Over Minimum Conservation Reference Size Catch Per Unit Effort (Over MS.CE) in kilos per pot (kg/pot) in each area (n=15). Stripe shows median, boxes show inter-quartiles, whiskers show range.

3.1.3 Under MCRS CPUE

The site with the greatest average Under MCRS CPUE (U.MS.CE) was Lyme Bay (Figure 3.3) at 0.79kgs/pot, whereas Weymouth Bay had the lowest average U.MS.CE at 0.01kg/pot. The mean average for the Solent and Poole Bay were 0.56kg/pot and 0.42kg/pot, respectively

A Shapiro-Wilks tests ($\alpha = 0.05$) indicated that the U.MS.CE data for Weymouth was not normally distributed ($p < 0.001$). The other sites (Solent, Lyme Bay and Poole Bay) were normally distributed ($p>0.05$). A log+1 transformation of the data did not alter the distribution. Therefore, non-parametric tests were used.

A Kruskal-Wallis test showed a significant difference in the median U.MS.CE of pots in different areas ($x^2 = 36.217$; df = 3; $p < 0.001$). The median U.MS.CE in Weymouth Bay was 0kgs/pot, Lyme Bay was 0.75kgs/pot, the Solent was 0.45kgs/pot and Poole Bay was 0.4kgs/pot.

A Kruskal-Wallis multiple comparison post-hoc Dunn test (1964) (p-values adjusted with the Bonferroni method) showed a significant difference in the median U.MS.CE between; Lyme Bay and Weymouth Bay ($p < 0.001$); Poole Bay and Weymouth Bay ($p = 0.004$) and finally the Solent and Weymouth Bay ($p < 0.001$). No significant differences in Under MCRS CPUE were seen between Lyme Bay and Poole Bay ($p = 0.088$); Lyme Bay and the Solent ($p = 0.507$) and Poole Bay and the Solent ($p = 1.000$).

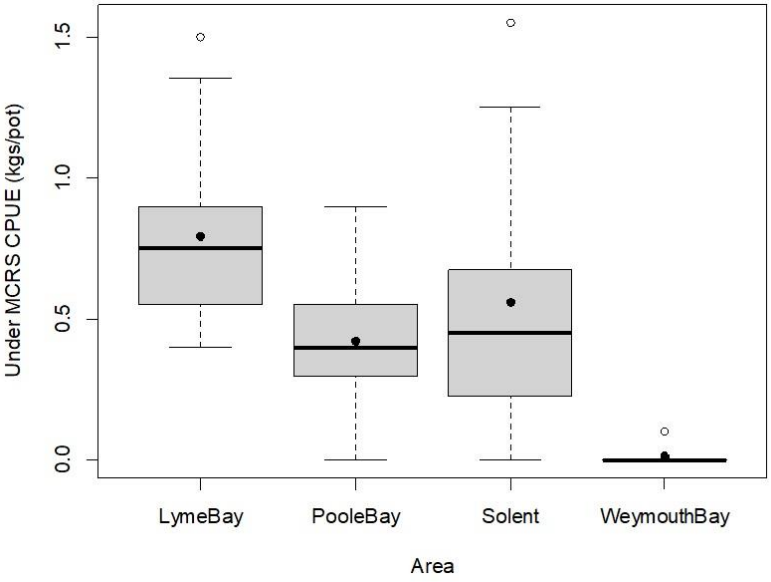


Figure 3.3 - Under Minimum Conservation Reference Size Catch per Unit Effort (Under MS.CE, kg/pot) box plots from the Survey. Stripe shows median value from samples (n=15) from each area, boxes show inter-quartiles, whiskers show range and black dots show mean.

3.1.4 Total Catch by Weight descriptives

From looking at the average weight per pot, between 1 - 18% of the haul was under the MCRS (Figure 3.4). With the largest average percentage of undersize per haul located at Lyme Bay and the Solent (18%) and the smallest at Weymouth Bay (1%).

Figure 3.4 – Percentage weight of catch above and below the MCRS of 45mm across the different sites within the survey.

Poole Bay had a longer soak time than any of the other three sites with 48 hours compared to 24 and 20 hours seen at other sites (Table 1). However, this had no notable effect on the number of undersize whelk, with the number of undersize remaining lower than the Solent or Lyme Bay. Weymouth Bay had the shortest soak time and also had the lowest percentage of undersize whelk present.

Hole width varied between fishers from 13mm to 25mm. Drainage holes may affect the total number of undersize individuals within each pot due an increasing number of whelk being able to escape with an increase in the size of the drainage holes. Therefore, the drainage holes effectively act as an escape gap, a strategy used in other IFCAs (Eastern, Kent & Essex and Sussex).

Table 1 - Comparison of soak time and drainage-hole width across all areas.

	Lyme Bay	Poole Bay	Solent	Weymouth Bay
Soak Time (hrs)	24	48	24	20
Hole width (mm)	20-22	13	25	25

3.2 Total Shell Length Frequency data

A visual analysis of the total shell length (TSL) frequency data from all four areas showed that Weymouth Bay had a wider range of TSL data than any other area (Figure 3.5).

All Shapiro-Wilks tests ($\alpha = 0.05$) indicated that the TSL data is not normal ($p < 0.05$).

Comparing the median TSL of whelks (mm) (all strings combined) between each area (Poole Bay, Weymouth Bay, Lyme Bay and the Solent) using a Kruskal-Wallis test and post-hoc Dunn's Method showed that there was a significant effect of area on TSL ($x^2 = 253.63$; df = 3; $p = 0.001$).

The median TSL in Poole Bay was 52mm, Weymouth Bay was 63mm, Lyme Bay was 53mm and the Solent was 52mm.

"In all areas, the mean and median

were greater than the MCRS

of 45mm"

A Kruskal-Wallis multiple comparison post-hoc Dunn test (1964)(p-values adjusted with the Bonferroni method) showed a significant difference in the median TSL between; Lyme Bay and Poole Bay ($p < 0.001$); Lyme Bay and the Solent ($p = 0.012$); Lyme Bay and Weymouth Bay ($p < 0.001$); Poole Bay and Weymouth Bay ($p < 0.001$) and finally the Solent and Weymouth Bay ($p < 0.001$). No significant differences between TSL were seen between Poole Bay and the Solent ($p = 1.000$).

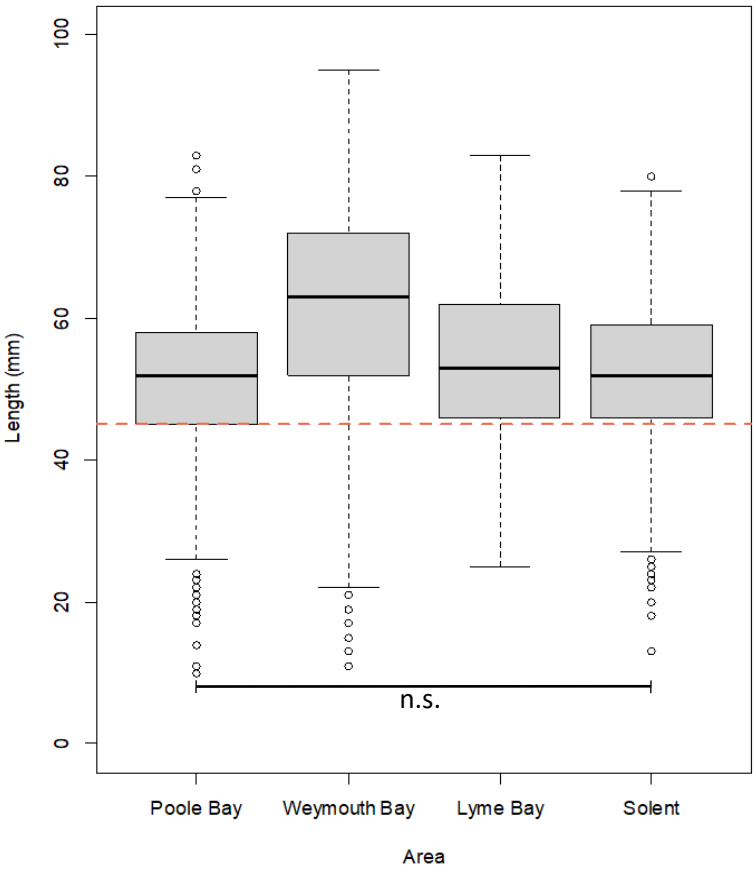


Figure 3.5 – Comparison of the TSL of whelks measured (mm). The thick black line shows the median TSL, the red dotted line represents the minimum conservation reference size of whelk of 45mm.

In all areas, the mean and median TSL were greater than the MCRS for the district of 45mm. In all areas the inter-quartiles were more than or equal to the MCRS.

The largest individual was found in Weymouth Bay at 95mm.

3.2.1 Poole Bay size distribution

The distribution follows a bell-shaped curve (Figure 3.6). The greatest number of whelk were seen in the 45-50mm class (n=157) with the next highest number in the 50-55mm size class (n=154). Of the

number of individuals caught 74.7% were above the MCRS while the remaining 25.3% were undersize.

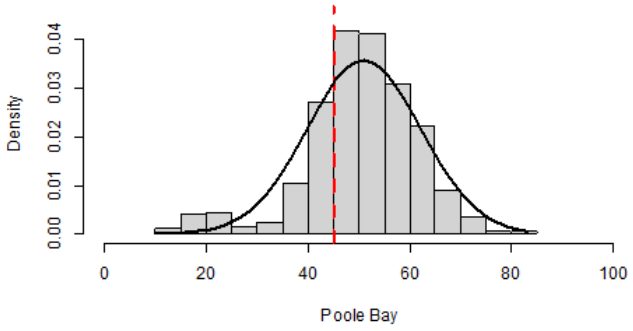


Figure 3.6 – Density of whelk caught in the Poole Bay in 5mm size classes.

3.2.2 Weymouth Bay size distribution

The distribution follows a bell-shaped curve (figure 3.7). The greatest number of whelk were seen in the 60-65mm class (n=100) with the next highest number in the 70-75mm size class (n=84). Of the number of individuals caught 86.8% were above the MCRS while the remaining 13.2% were undersize.

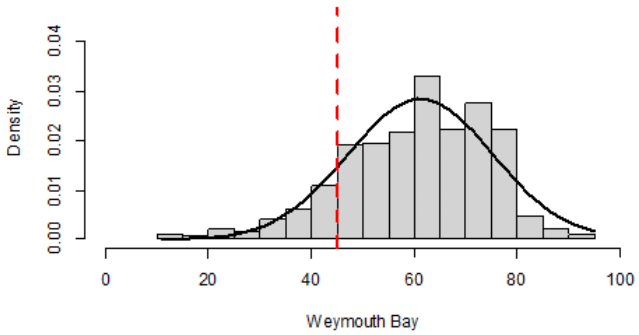


Figure 3.7 – Density of whelk caught in the Weymouth Bay in 5mm size classes.

3.2.3 Lyme Bay size distribution

The distribution follows a bell-shaped curve (Figure 3.8). The greatest number of whelk were seen in the 45-50mm class (n=130) closely followed by the next highest number in the 50-55mm size class (n=111). Of the number of individuals caught 76.9% were above the MCRS while the remaining 23.1% were undersize.

"the common whelk (Buccinum undatum) is abundant with the average size in all areas above the 45mm MCRS"

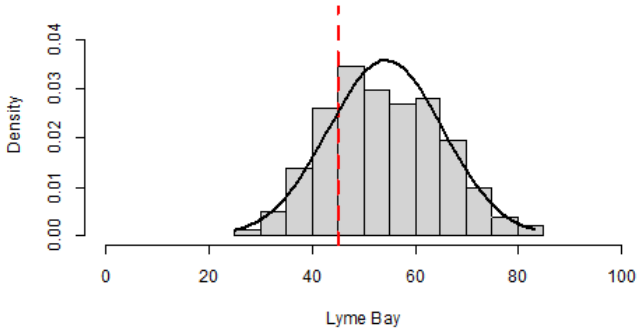


Figure 3.8 – Density of whelk caught in the Lyme Bay in 5mm size classes.

3.2.4 Solent size distribution

The distribution follows a bell-shaped curve (Figure 3.9). The greatest number of whelk were seen in the 55-55mm class (n=168) with the next highest number in the 45-50mm size class (n=139). Of the number of individuals caught 76.3% were above the MCRS while the remaining 23.7% were undersize.

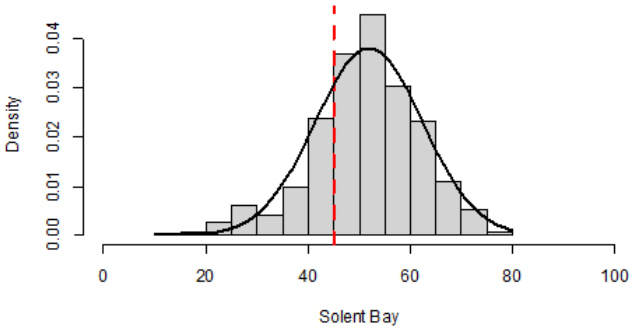


Figure 3.9 – Density of whelk caught in the Solent in 5mm size classes.

4. Discussion

This was the first survey of whelk populations carried out across the Southern IFCA district, as part of the Whelk Monitoring Programme, which has provided a baseline for population structure and catch rates that can be monitored through repeated survey work over time. The aim is to continue to repeat the methodology outlined in this report on an annual basis to build up a time series dataset on the populations of the whelk and to determine trends and patterns of abundance and density between the different areas sampled and between years. Site co-ordinates have been retained to ensure consistency and CPUE in particular will provide a useful metric for monitoring trends in whelk populations. With a single year of data, no conclusions can be drawn on the relationship between the whelk populations and potential influencing factors. As the time-series is developed the data will be able to be analysed in light of any changes in management measures to determine if any changes can be identified

or, if trends in the data emerge, what external factors could be contributing to the patterns seen.

In general, the data from this survey shows that the common whelk (*Buccinum undatum*) is abundant with the average size in all areas above the 45mm MCRS. In all cases, the mean, median and both upper and lower interquartile rangers were greater than the current MCRS. At present 75% (and higher) of all catch are above the MCRS in all areas. The MCRS for whelk is subject to much debate with a view that the current national size of 45mm is not in line with biological data. This is supported by a recent University of Southampton study which suggested that 50% of the whelk population across the SIFCA district reaches sexual maturity at a size of 56mm (Hadley & Jensen, 2023). It is likely that discussions on MCRS, and other management for whelk, will be forthcoming at a national level with the Whelk FMP, one aim of this survey was to collect data that would help inform those discussions from a Southern IFCA District perspective and ensure that site-specific evidence was available as part of the wider evidence base.

When comparing Over MCRS CPUE across different sites within the district significant differences were seen. The weight of whelk caught in Lyme Bay (3.55kg/pot) were significantly higher than those caught in any other area; while the weight of whelk caught in Weymouth Bay (1.53kg/pot) were significantly lower than in any other area. This could be indicative of a number of factors, with known influences on whelk populations in other areas including fishing pressure or genetic variation and ecological and environmental conditions, such as: depth, predation pressure and availability of food sources (Olabarria and Thurston, 2003; Fahy *et al*. 2006; McIntyre *et al*., 2015). Although, Weymouth Bay had a significantly lower Over MCRS CPUE on average, the individual whelk from Weymouth Bay had a greater weight per individual. On average in Weymouth Bay each whelk weighed 33.4g compared to 18.1g in Lyme Bay, 17.8g in the Solent and 13.7g in Poole Bay. This is related to Weymouth Bay showing a greater number of larger individuals with fewer under MCRS (1% of total catch) than any other site.

The average length comparison showed that the only sites that weren't significantly different were between Poole Bay and the Solent. Three of the sites' medians and interquartile ranges only differed by small amounts (Poole Bay, Lyme Bay and Solent) with only 1mm difference between median values. Weymouth Bay had a noticeably larger range of TSL with the largest recorded reaching 95mm and the smallest at 6mm. The median and interquartile ranges were also increased at this site. However, it should be noted that the total number of organisms sampled in Weymouth Bay was not as high. This is because on average Weymouth Bay had only 46.2 individual whelk per pot, compared to 238.8 in Lyme Bay, 212.6 in Poole Bay and 177.2 in the Solent. It is noted that smaller sample sizes can skew results and decrease statistical power. This could explain the wider range and higher values on the box and whisker pot of TSL for the Weymouth Bay area.

5. Summary

In summary, the data presented provides a baseline for comparisons with future whelk studies. The methodology used has allowed the collection of data which, over time, will contribute to an evidence base that will help contribute to future reviews of management, with relevance to the proposed Pot Fishing Byelaw that is currently in draft with Southern IFCA and other reviews including MCRS and outcomes of the Whelk FMP.

Additional data collected over the years will be analysed against this baseline providing a quantified assessment on the population of whelks across the main commercial areas of the Southern IFCA District.

The survey demonstrates that there is a variable size range for whelk in the district, which also includes those yet to enter the fishery (<45m), although quantifying the smaller size classes is difficult as they would not have been sampled effectively by the fishing gear.

The number of whelk caught in size ranges >65mm decreased, however the results from Weymouth Bay indicated that large whelk are still present in the district and individually weigh more than those of a smaller size.

6. Acknowledgements

The successful completion of the survey was due to assistance provided by local members of the fishing community engaged in the fishery.

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Juvenile Fish Survey
Data Summary
To Spring 2023

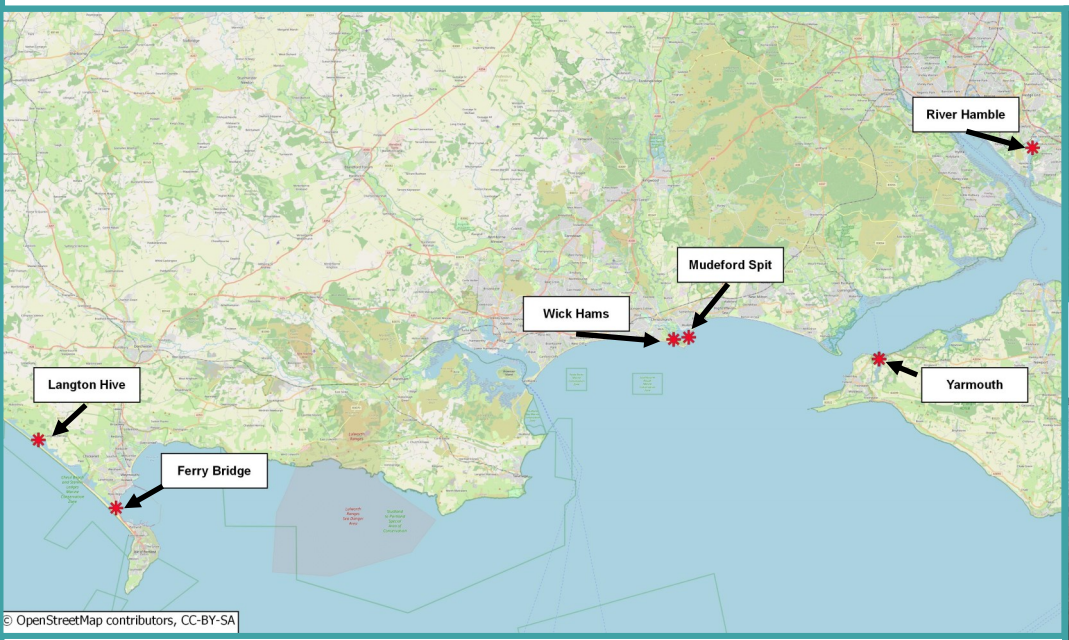
Purpose

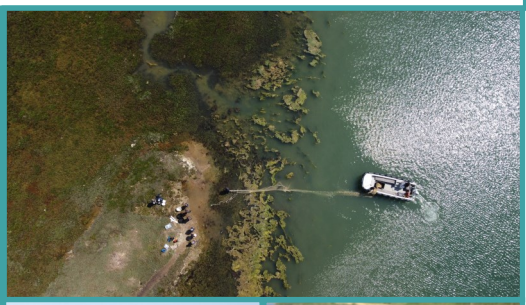
Estuaries and sheltered coastal habitats provide a range of ecosystem services and are known for their high productivity and biodiversity. They offer suitable habitats for juvenile fish as nursery areas as well as species throughout their lifecycle for feeding, spawning and refuge. As part of the Southern IFCA Inshore Netting Review, Southern IFCA determined to enhance the environmental, socio-economic and sustainability of fisheries within the District by supporting the use of harbours and estuaries by fish populations for these purposes, collectively referring to the areas as Essential Fish Habitats (EFH).

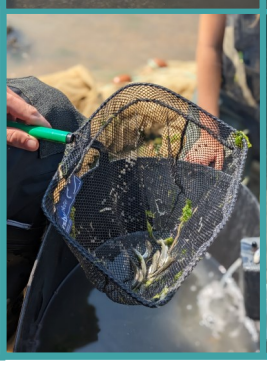
As part of the Southern IFCA's Fish Monitoring Programme, surveys are carried out at a range of sites across the District in order to understand the use of these EFH by commercial and recreational fish species. Building a time-series dataset will allow any changes in fish communities to be observed to help understanding of EFH, contributing to a database that can be used for reviewing fisheries management.

Method

1. Southern IFCA Carry out Juvenile Fish Surveys in Spring and Autumn each year.
2. A 43 meter seine net is used to sample fish, deployed either by hand or using a vessel depending on location.
3. The net is set in a semi-circle from the shore and is recovered to the shore with any fish retained placed in aerated buckets.
4. The length of the first 50 fish of each species is measured (tail length) and carefully returned to the sea as quickly as possible.
5. Any remaining fish of each species are counted and returned to the sea.
6. The net is shot and hauled twice at each survey site.





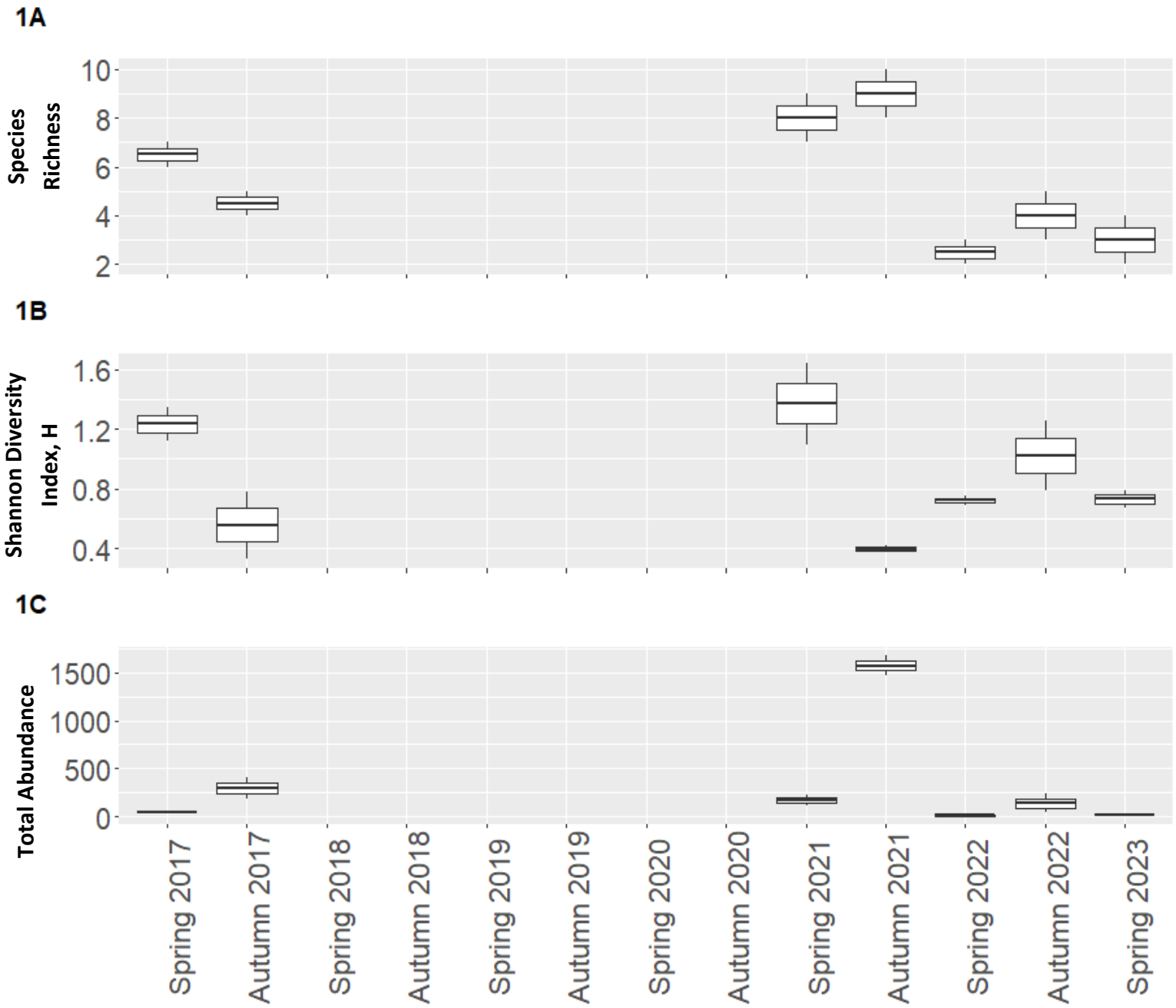


- Data was used to calculate the total species abundance, relative species abundance, species richness and Shannon Diversity Index (H).
- It should be noted that for species richness and H; where difficulties in identifying species occurred, all variations were combined as one species. Therefore, the species richness and H should be viewed as conservative.
- H considers both the abundance of each species and the balance of abundance between all species, also known as the species evenness. A larger H represents a more diverse community.

Partnership Working

Southern IFCA's juvenile fish surveys would not be possible without the help, permissions, resources and knowledge of multiple organisations. Thank you to the representatives of the following organisations for their help with the 2023 Spring surveys.

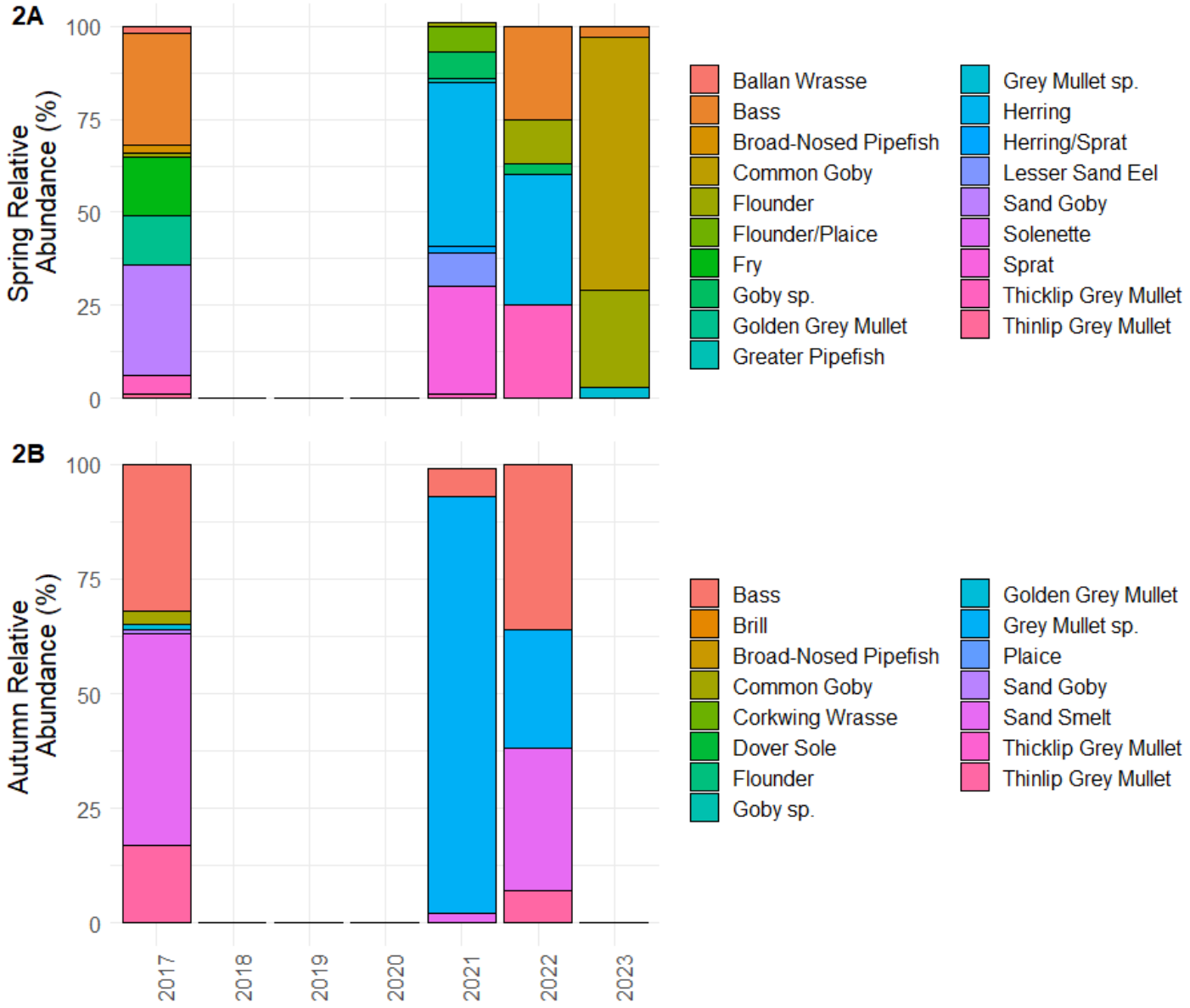
Mudeford Spit (Christchurch Harbour)



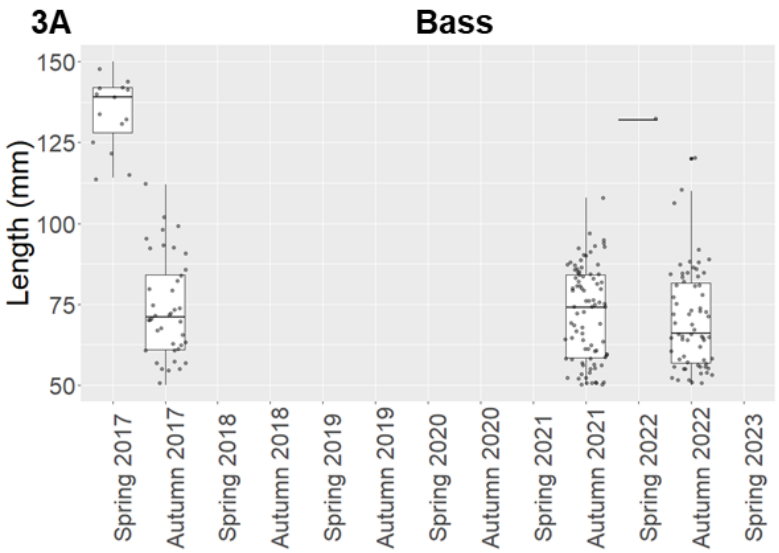
- Figures 1A,1B and 1C display the Species Richness, Shannon Diversity Index (H) and total abundance in each survey for the Mudeford Spit (Christchurch Harbour) site carried out between Spring 2017 and Spring 2023.
- Species richness was highest in Autumn 2021 (9) and Spring 2021 (8) and lowest in Autumn 2022 (4) and spring 2022 (2.5). No survey has a significantly different species richness to another ($p > 0.05$).
- Autumn 2021 displayed a lower Shannon Diversity index (H) than Spring 2021 due to the high dominance of Grey Mullet sp (Figures 2A & 2B). No survey has a significantly different H to another ($p > 0.05$).
- Of the spring surveys, 2021 had the highest total abundance of fish (173) and 2023 the lowest (14). Of the autumn surveys, 2021 had the highest total abundance of fish (1575) and 2022 the lowest (11). No survey has a significantly different total abundance to another ($p > 0.05$).
- There is no statistical difference between the species richness, Shannon Diversity Index or total abundance between spring and autumn (table to the right).

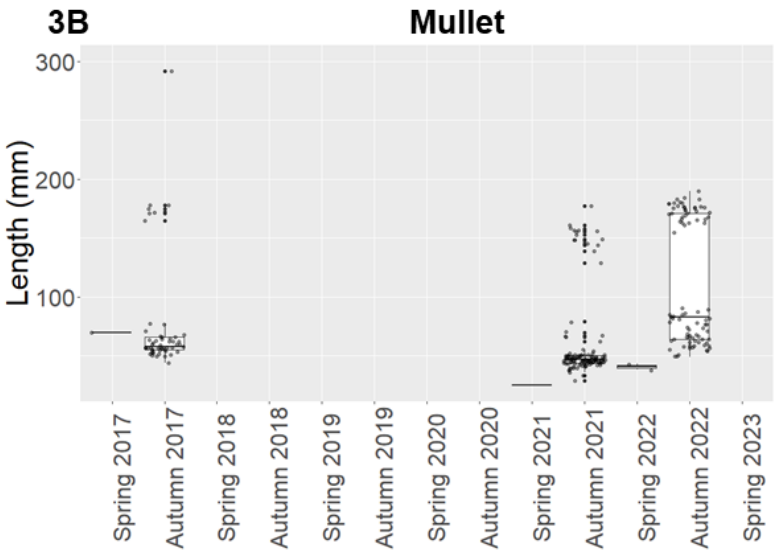
	Spring	Autumn	P<0.05
Mean Species Richness	5	5.8	No
Mean Shannon Diversity Index	1.01	0.66	No
Mean Total Abundance	61	670	No

Mudeford Spit (Christchurch Harbour)



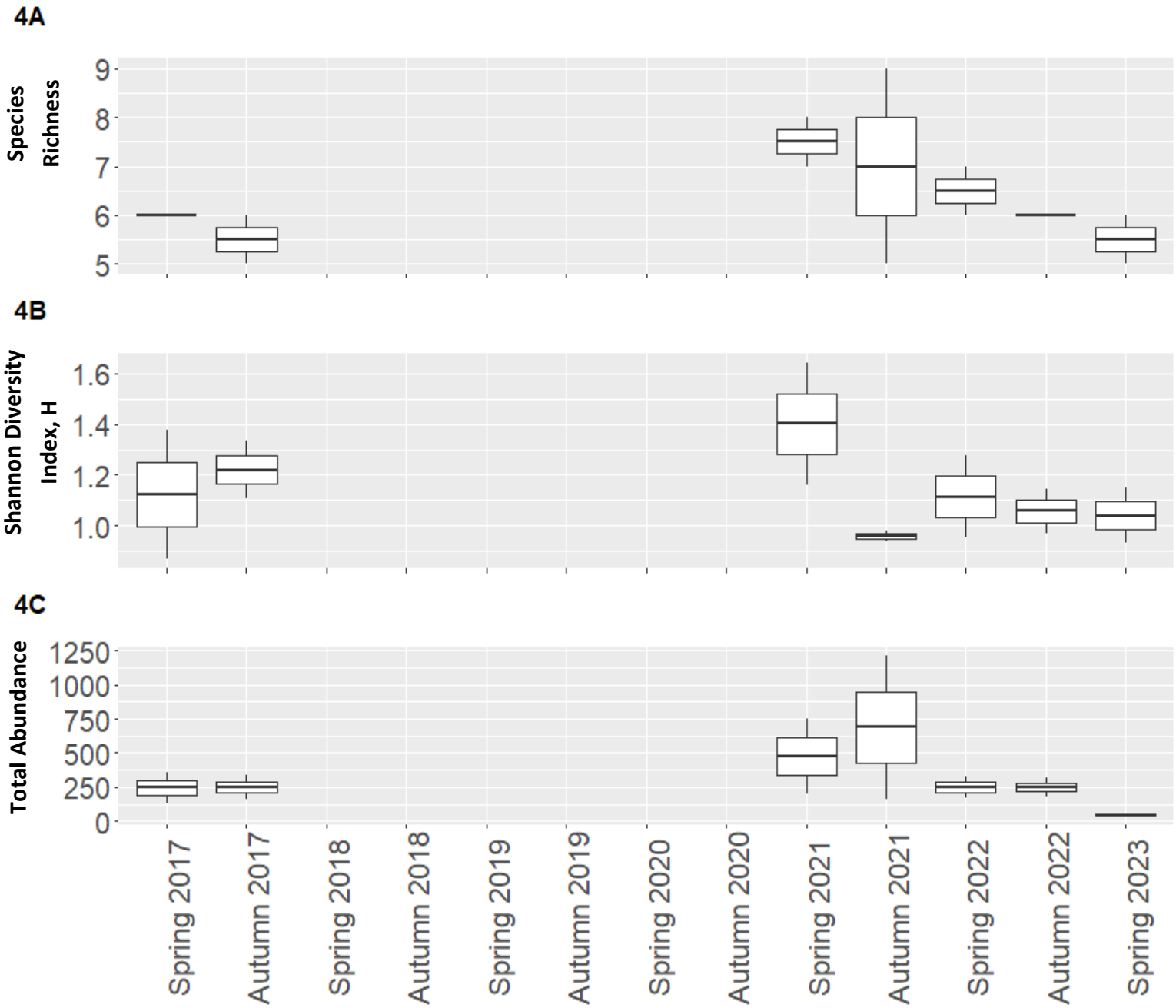
- Figures 2A (spring) and 2B (autumn) display the percentage relative abundance of each species during each survey.





- Figure 3A and 3B display the measured length of Bass and all Mullet species, only Bass and Mullet are displayed due to their commercial importance within the Southern IFCA district.
- All Grey Mullet sp. have been combined for Figure 3B due to difficulties in identifying the species as juveniles, however 3B displays distinct groups of sizes, which could be related to the presence of the different species.

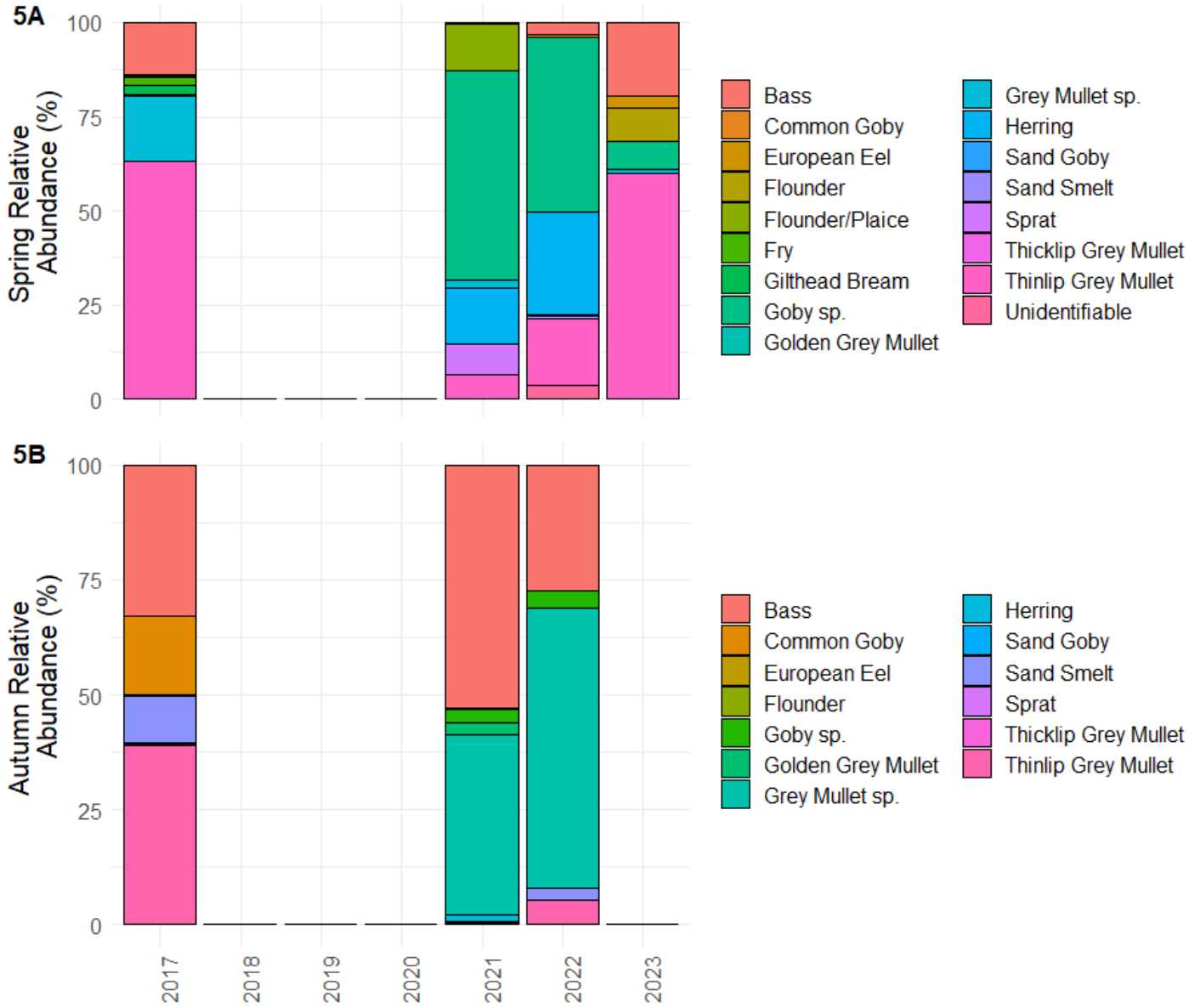
Wick Hams (Christchurch Harbour)



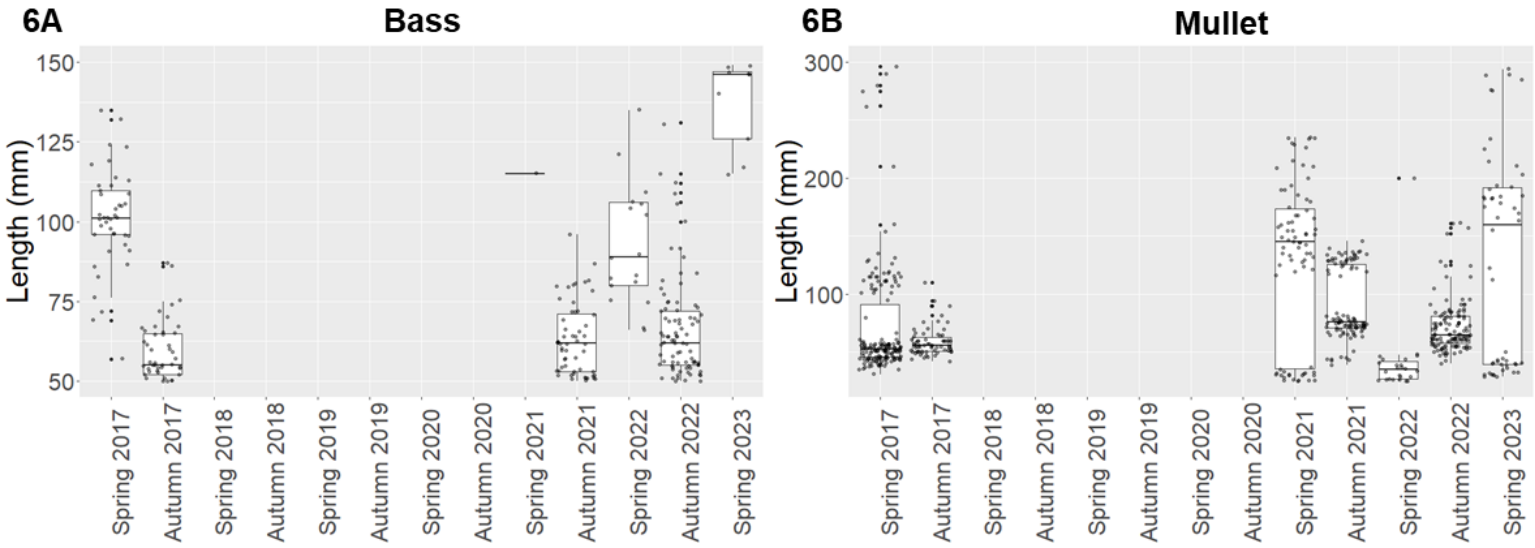
- Figures 4A,4B and 4C display the Species Richness, Shannon Diversity Index (H) and total abundance in each survey for the Wick Hams (Christchurch Harbour) site carried out between Spring 2017 and Spring 2023.
- Mean species richness was highest in Autumn 2021 (7) and Spring 2021 (7.5) and lowest in Autumn 2017 (4) and Spring 2023 (4). No survey has a significantly different species richness to another ($p > 0.05$).
- No survey has a significantly different H to another ($p > 0.05$). Of the Spring Surveys, 2021 had the highest mean H (1.40) and of the Autumn surveys, 2017 had the highest mean H (1.22).
- Of the spring surveys, 2021 had the highest mean total abundance of fish (476) and 2023 the lowest (46). Of the autumn surveys, 2021 had the highest total abundance of fish (687) with 2017 and 2022 equal lowest (250) .No survey has a significantly different total abundance to another ($p > 0.05$).
- There is no statistical difference between the species richness, Simpsons Diversity Index or total abundance between spring and autumn (table to the right).

	Spring	Autumn	P<0.05
Mean Species Richness	6.4	6.2	No
Mean Simpsons Diversity Index	1.17	1.08	No
Mean Total Abundance	254	396	No

Wick Hams (Christchurch Harbour)

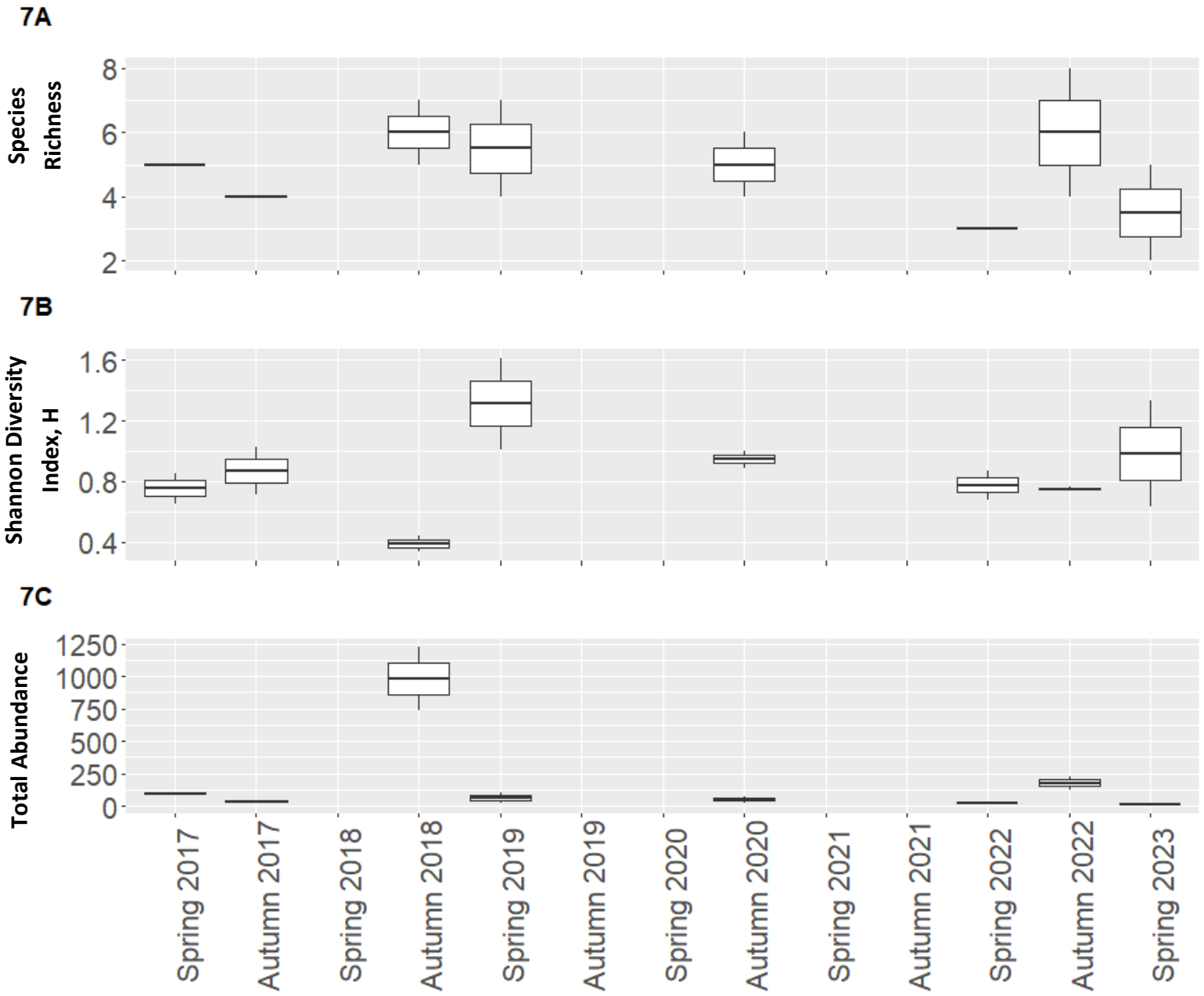


- Figures 5A (spring) and 5B (autumn) display the percentage relative abundance of each species during each survey.



- Figure 6A and 6B display the measured length of Bass and all Mullet species; only Bass and Mullet are displayed due to their commercial importance within the Southern IFCA district.
- All Grey Mullet sp. have been combined for Figure 6B due to difficulties in identifying the species as juveniles. Similarly to Mudeford Spit, Wick Hams displays distinct groups of sizes for Mullet sp. (figure 6B), which could be related to the presence of the different species.

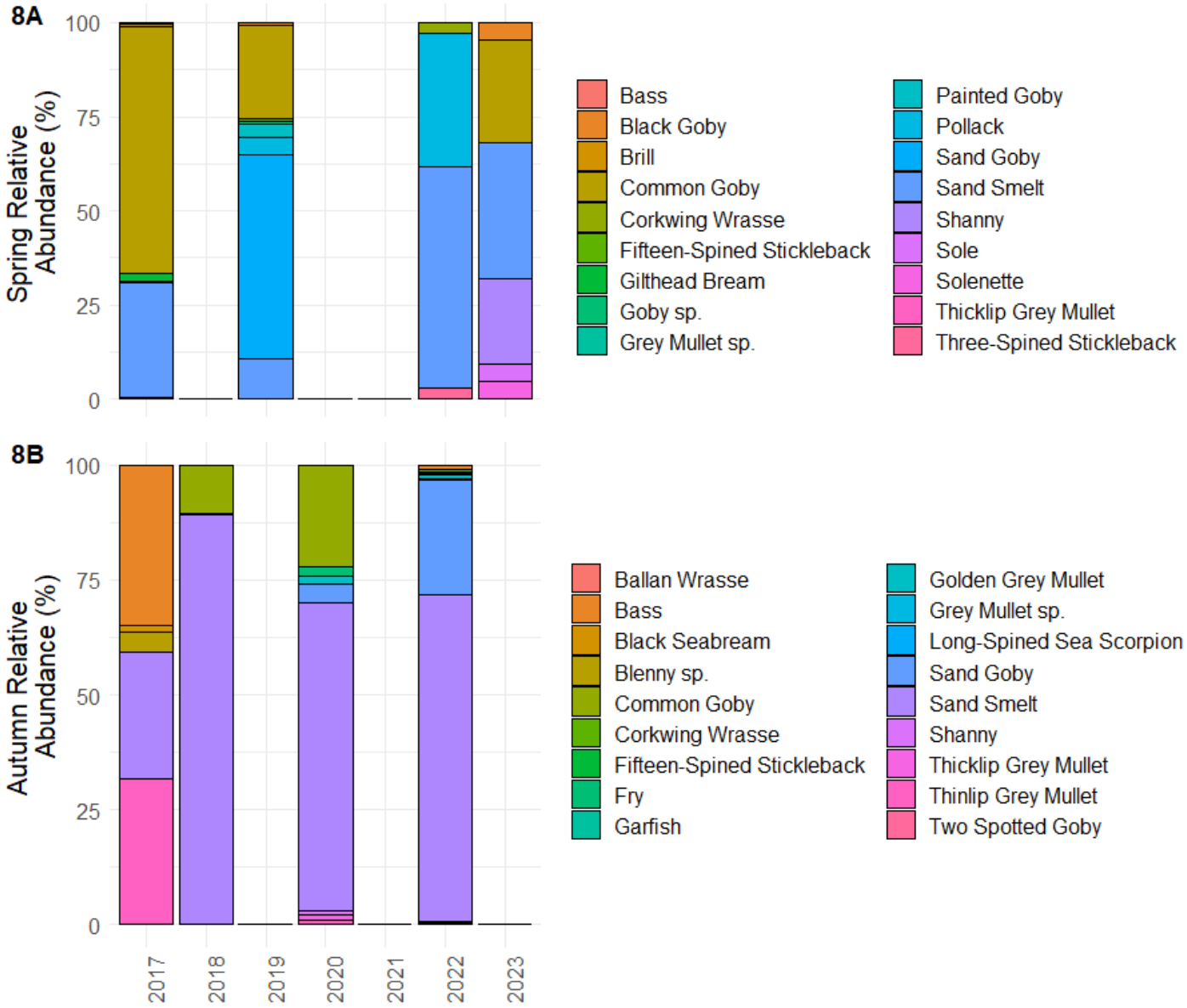
Ferry Bridge (The Fleet)



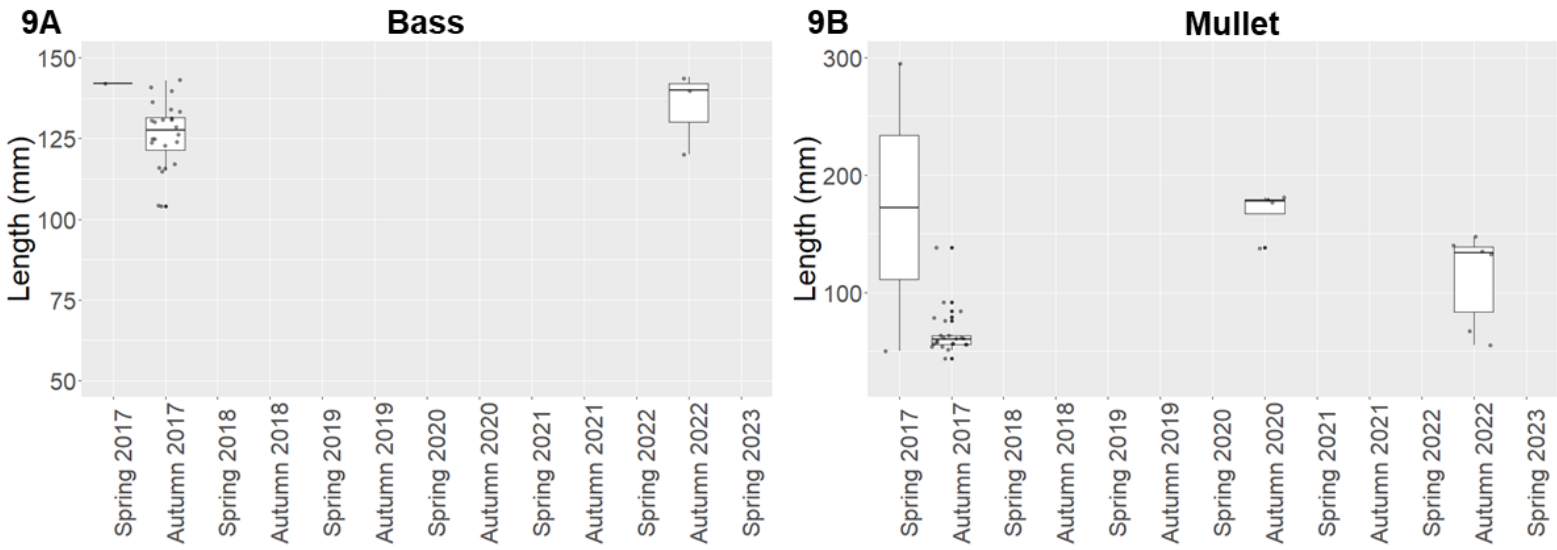
- Figures 7A,7B and 7C display the Species Richness, Shannon Diversity Index (H) and total abundance in each survey carried out for the Ferry Bridge (The Fleet) site between Spring 2017 and Spring 2023.
- Of the Autumn surveys mean species richness was equal highest in Autumn 2018 and 2022 (6) and lowest in Autumn 2017 (4). Of the Spring surveys 2019 (5.5) was highest and lowest in 2022 (3). No survey has a significantly different species richness to another ($p > 0.05$).
- No survey has a significantly different H to another $p > 0.05$. Of the Spring Surveys, 2019 had the highest mean H (1.31) and of the Autumn surveys, 2020 had the highest mean H (0.94)
- Of the spring surveys, 2017 had the highest mean total abundance of fish (98) and 2023 the lowest (11). Of the autumn surveys, 2018 had the highest total abundance of fish (980) and 2020 the lowest (35). The Autumn 2018 survey had a significantly higher mean total abundance of fish than all other surveys ($p>0.05$).
- There is no statistical difference between the species richness, Simpsons Diversity Index or total abundance between spring and autumn (table to the right).

	Spring	Autumn	P<0.05
Mean Species Richness	4.25	5.25	No
Mean Simpsons Diversity Index	0.96	0.74	No
Mean Total Abundance	47	311	No

Ferry Bridge (The Fleet)

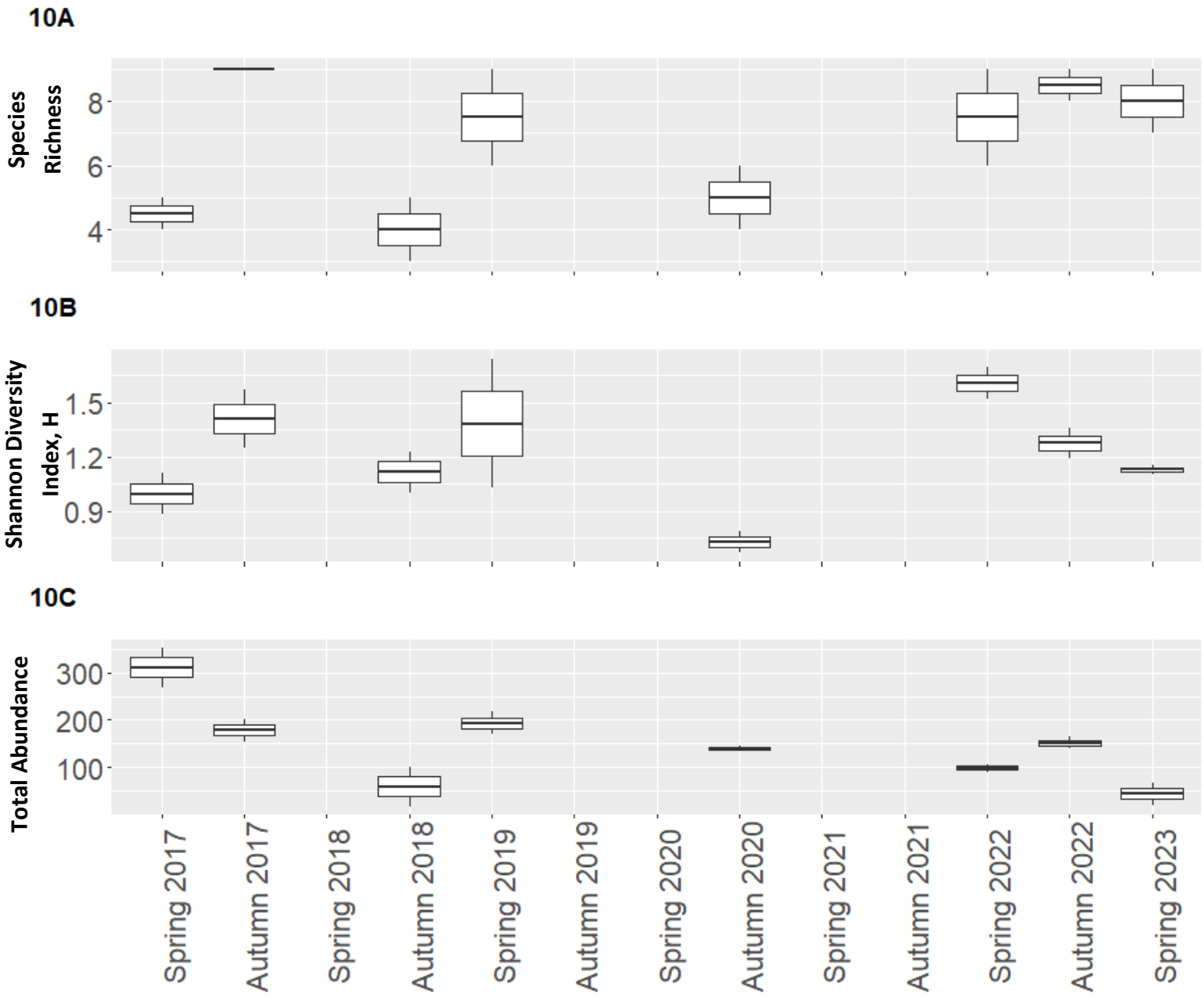


- Figures 8A (spring) and 8B (autumn) display the percentage relative abundance of each species during each survey.



- Figure 9A and 9B display the measured length of Bass and all Mullet species; only Bass and Mullet are displayed due to their commercial importance within the Southern IFCA district.
- All Grey Mullet sp. have been combined for Figure 9B due to difficulties in identifying the species as juveniles.

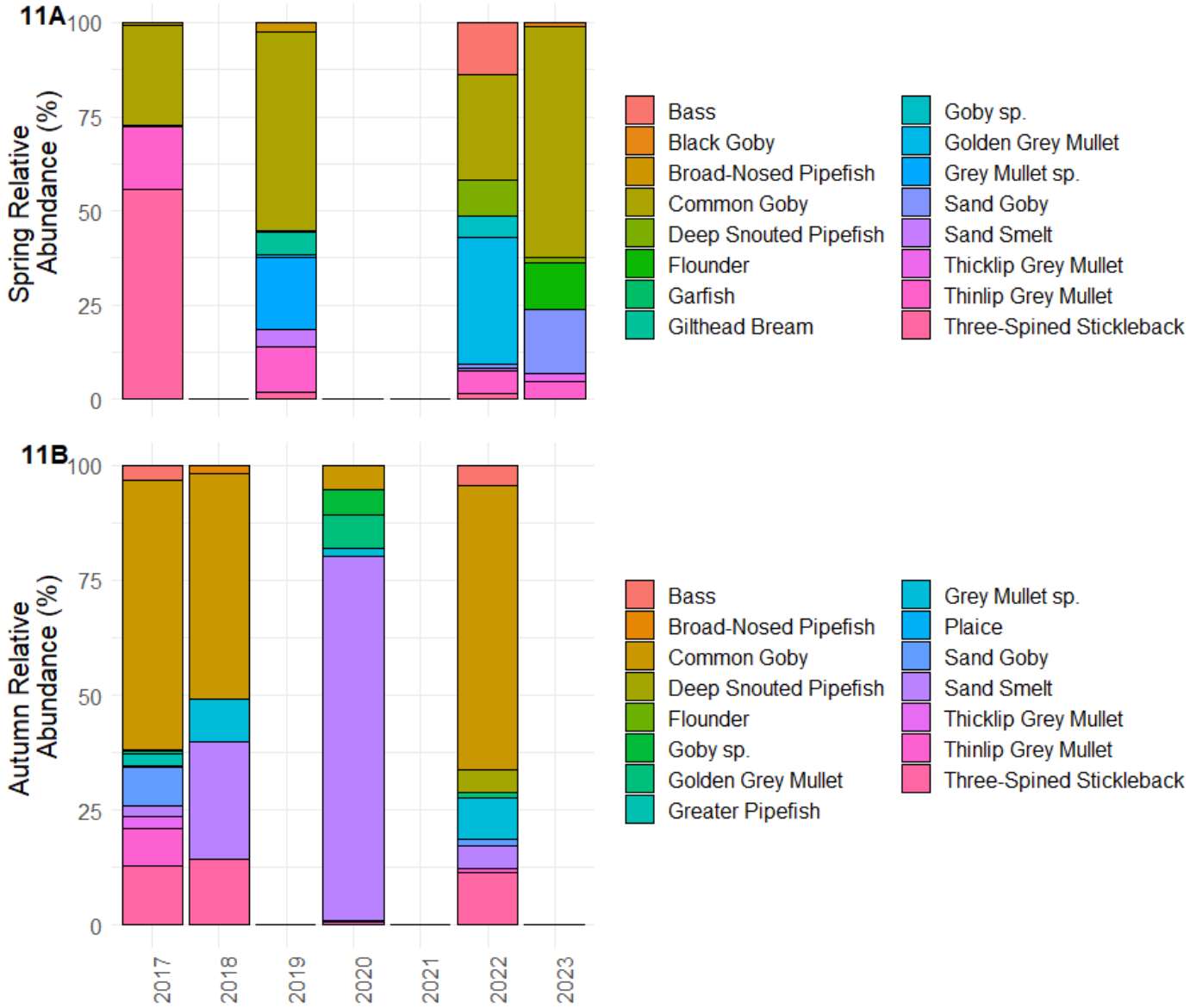
Langton Hive (The Fleet)



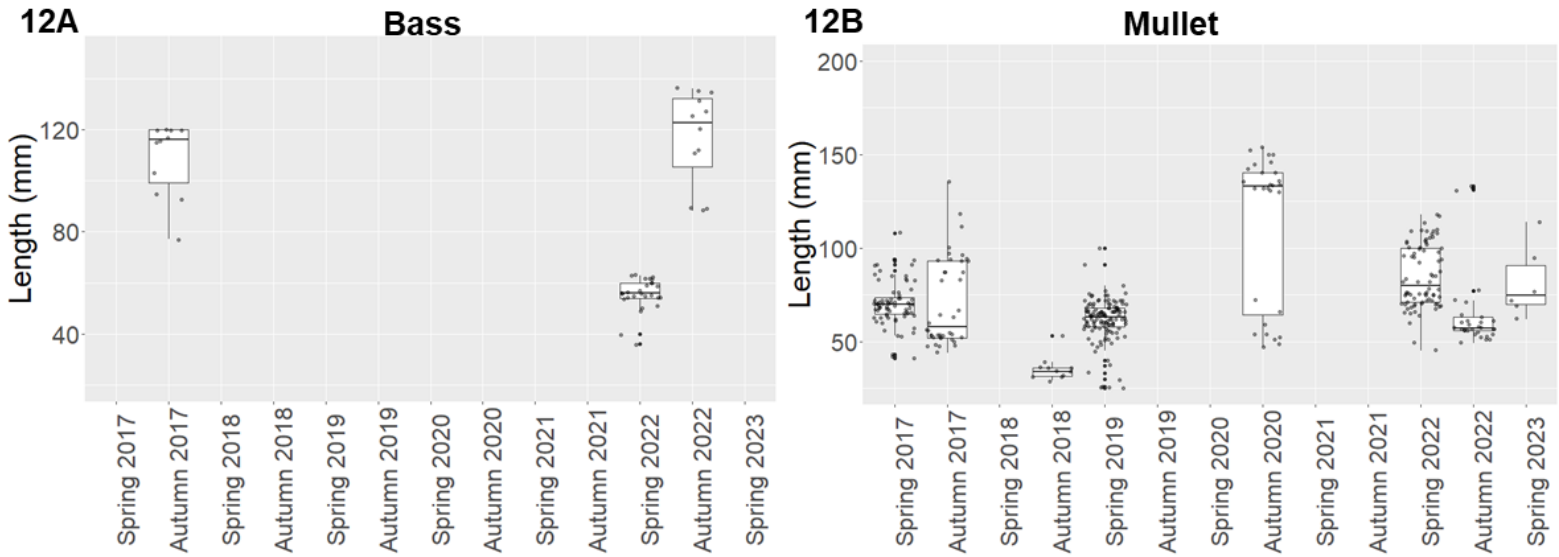
- Figures 10A,10B and 10C display the Species Richness, Shannon Diversity Index (H) and total abundance in each survey for the Langton Hive (The Fleet) site carried out between Spring 2017 and Spring 2023.
- Of the Autumn surveys mean species richness was equal highest in Autumn 2017 (9) and lowest in Autumn 2018 (4). Of the Spring surveys 2023 (8) was highest and lowest in 2017 (4.5). An ANOVA found a significant difference ($p<0.05$) between the surveys however the following post-hoc Tukey test did not show a difference indicating there is more variation within each survey than between surveys.
- No survey has a significantly different H to another $p > 0.05$. Of the Spring Surveys, 2022 had the highest mean H (1.61) and of the Autumn surveys, 2017 had the highest mean H (1.41).
- Of the spring surveys, 2017 had the highest mean total abundance of fish (311) and 2023 the lowest (44). 2017 for the Autumn surveys had the highest total abundance of fish (178) and 2018 the lowest (59). There is no significant difference in total abundance between any surveys.
- There is no statistical difference between the species richness, Simpsons Diversity Index or total abundance between spring and autumn (table to the right).

	Spring	Autumn	P<0.05
Mean Species Richness	6.87	6.89	No
Mean Simpsons Diversity Index	1.28	1.11	No
Mean Total Abundance	162	147	No

Langton Hive (The Fleet)

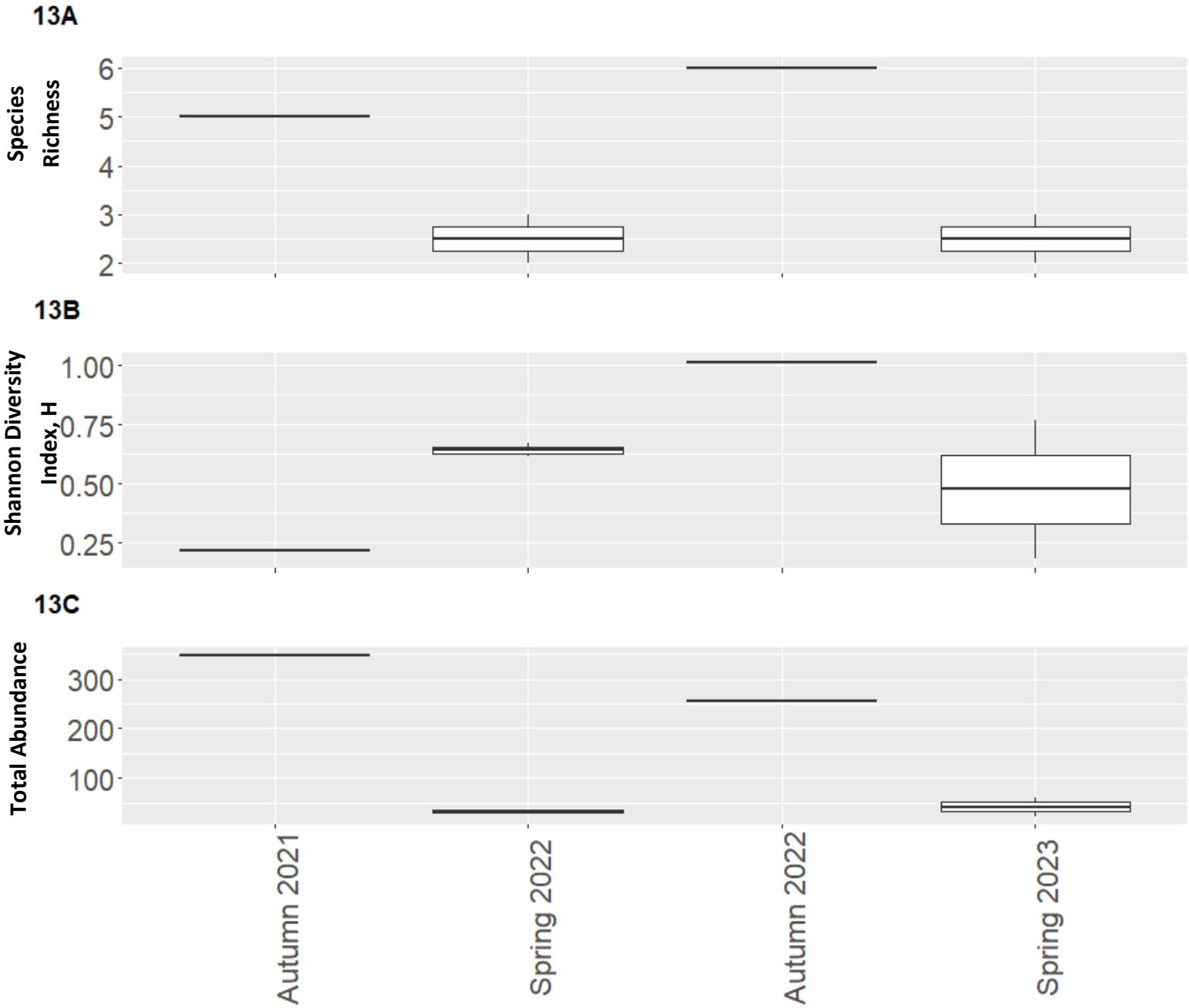


- Figures 11A (spring) and 11B (autumn) display the percentage relative abundance of each species during each survey.



- Figure 12A and 12B display the measured length of Bass and all Mullet species; only Bass and Mullet are displayed due to their commercial importance within the Southern IFCA district.
- All Grey Mullet sp. have been combined for Figure 12B due to difficulties in identifying the species as juveniles. Figure 12B displays distinct groups of sizes for Grey Mullet sp., which could be related to the presence of the different species.

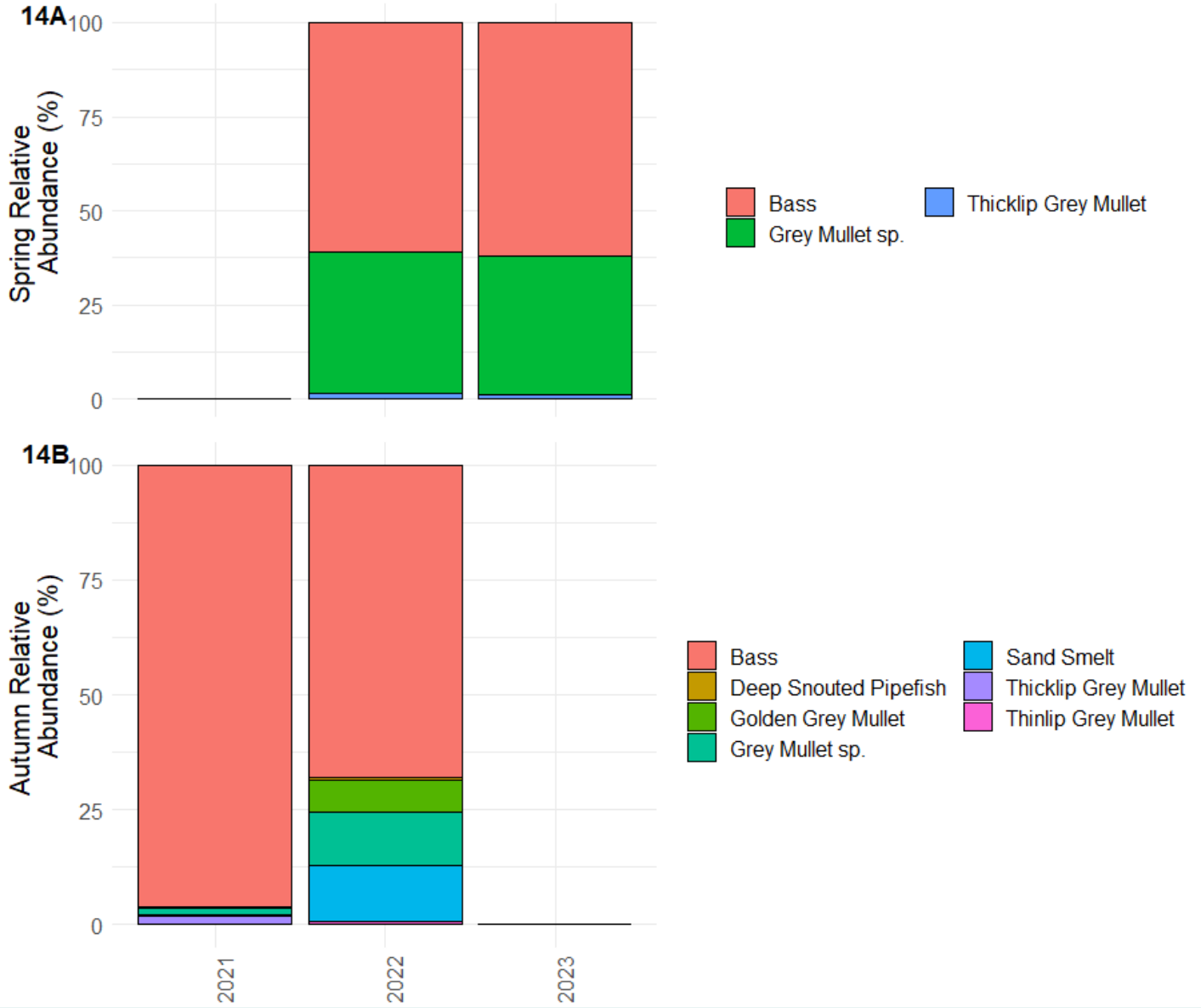
River Hamble



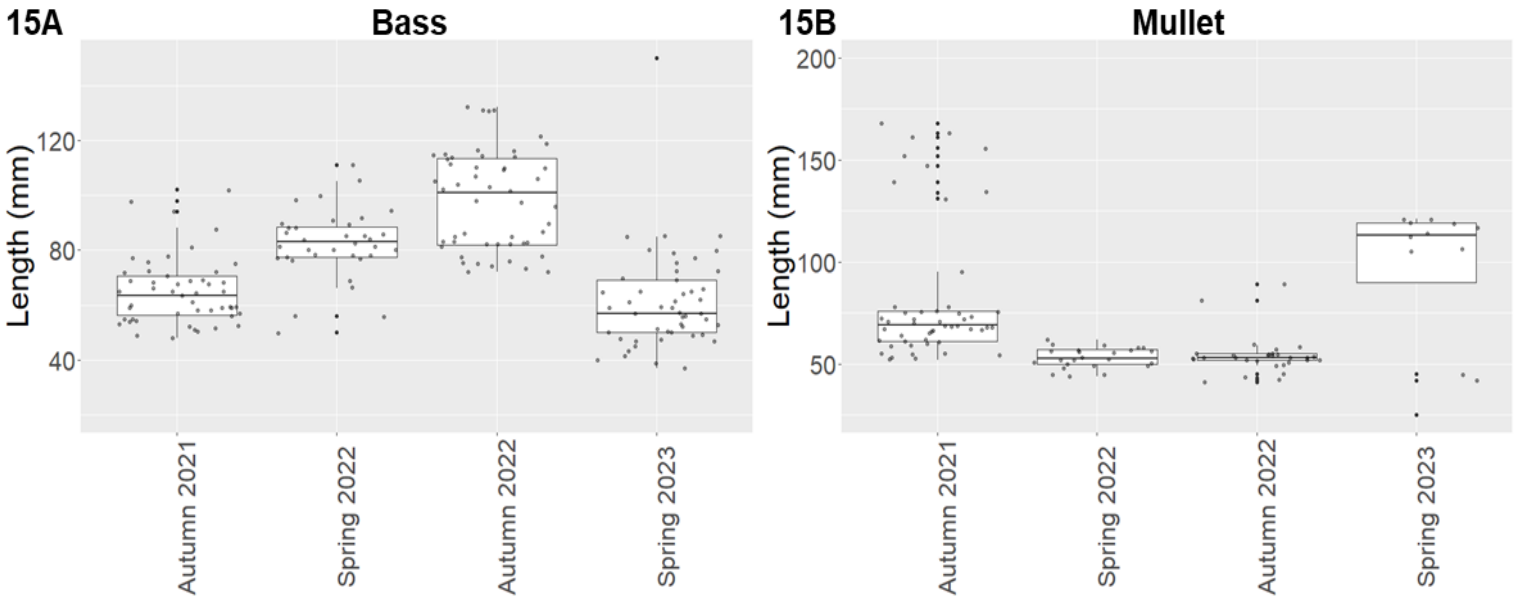
- Figures 13A,13B and 13C display the Species Richness, Shannon Diversity Index (H) and total abundance in each survey for the River Hamble site carried out between Spring 2017 and Spring 2023.
- Of the Autumn surveys mean species richness was highest in Autumn 2022 (6) and lowest in Autumn 2021 (5). Of the Spring surveys 2022 and 2023 had equal species richness (2.5).
- Of the Spring Surveys, 2022 had the highest mean H (0.64) and of the Autumn surveys, 2017 had the highest H (1.01).
- No statistical testing could occur due to a lack of repeat hauls in the Autumn surveys.
- Of the spring surveys, 2023 had the highest mean total abundance of fish (41) and 2022 the lowest (32). Of the autumn surveys, 2021 had the highest total abundance of fish (349) and 2022 the lowest (257). There is no significant difference within the Autumn surveys.
- There is no statistical difference between the species richness, Simpsons Diversity Index or total abundance between spring and autumn (table to the right).

	Spring	Autumn	P<0.05
Mean Species Richness	6.87	6.89	Yes
Mean Simpsons Diversity Index	1.28	1.11	No
Mean Total Abundance	162	147	No

River Hamble

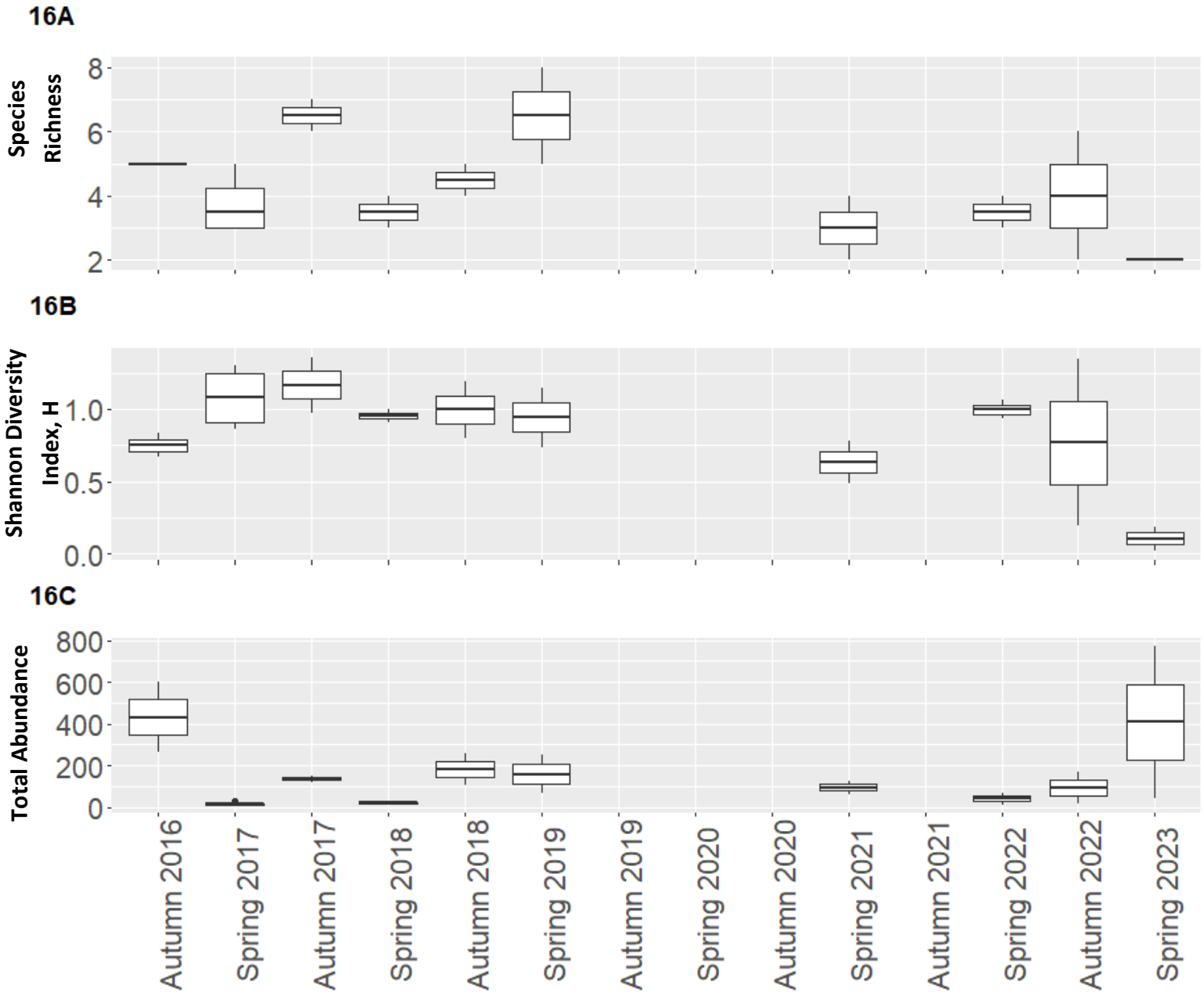


- Figures 11A (spring) and 11B (autumn) display the percentage relative abundance of each species during each survey.



- Figure 15A and 15B display the measured length of Bass and all Mullet species; only Bass and Mullet are displayed due to their commercial importance within the Southern IFCA district.
- All Grey Mullet sp. have been combined for Figure 15B due to difficulties in identifying the species as juveniles. Figure 15B shows distinct groups of sizes for Mullet sp., which could be related to the presence of the different species.

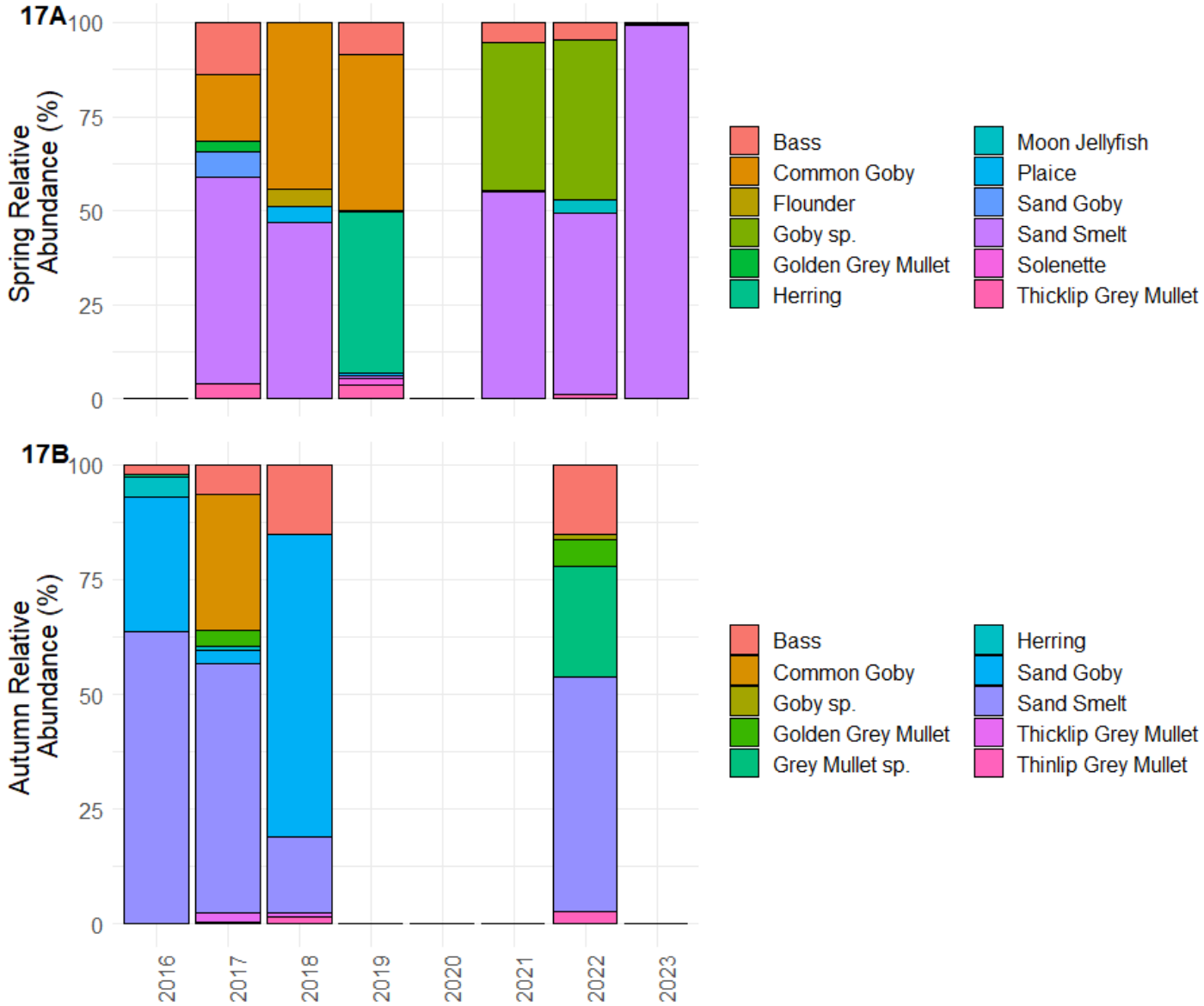
River Yar (Yarmouth Harbour)



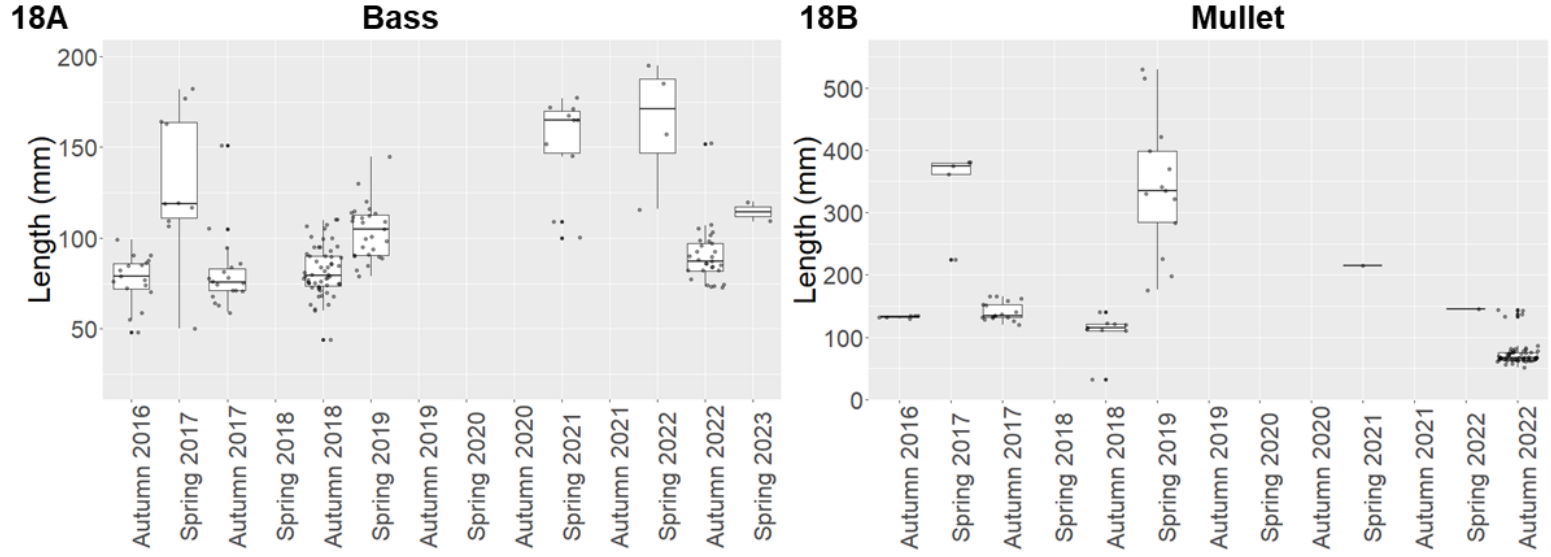
- Figures 16A,16B and 16C display the Species Richness, Shannon Diversity Index (H) and total abundance in each survey for the River Yar (Yarmouth Harbour) site carried out between Spring 2017 and Spring 2023.
- Of the Autumn surveys mean species richness was highest in Autumn 2017 (6.5) and lowest in Autumn 2022 (4). Of the Spring surveys mean species richness was highest in 2019 (6.5) and lowest in 2023 (2). There was no significant difference between any of the surveys species richness.
- Of the Spring Surveys, 2017 had the highest mean H (1.08) and of the Autumn surveys, 2017 had the highest H (1.17). There was no significant difference between H of any of the surveys.
- Of the spring surveys, 2023 had the highest mean total abundance of fish (408) and 2017 the lowest (18). Of the autumn surveys, 2016 had the highest total abundance of fish (432) and 2022 the lowest (95). There is no significant difference between the surveys.
- There is no statistical difference between the species richness, Simpsons Diversity Index or total abundance between spring and autumn (table to the right).

	Spring	Autumn	P<0.05
Mean Species Richness	3.71	5	No
Mean Simpsons Diversity Index	0.83	0.92	No
Mean Total Abundance	117	212	No

Yarmouth



- Figures 17A (spring) and 17B (autumn) display the percentage relative abundance of each species during each survey.



- Figure 18A and 18B display the measured length of Bass and all Mullet species; only Bass and Mullet are displayed due to their commercial importance within the Southern IFCA district.
- All Grey Mullet sp. have been combined for Figure 18B due to difficulties in identifying the species as juveniles. Figure 18B shows distinct groups of sizes for Mullet sp., which could be related to the presence of the different species.

Southern Inshore Fisheries and Conservation Authority
December 2022
OFFICER'S REPORT

MARKED G

Report by DCO Birchenough

A. Purpose of the Report

To provide a quarterly update on Southern IFCA's input into the marine licencing process between May and August 2023.

B. Recommendation

That members receive and note the report.

1 Background

1.1 Marine Licensing is one of the principal responsibilities of the Marine Management Organisation (MMO) as described under Part 4 of the Marine and Coastal Access Act 2009 (MaCAA). This is a delegated power from the secretary of state under the Marine Licensing (delegation of functions order) 2011 (amended). The purpose of marine licensing is to facilitate the sustainable use of the UK marine environment so that economically beneficial activities within the marine environment such as construction, deposits (e.g. of sediment), removals (e.g. of marine aggregates), and dredging can be permitted whilst minimising negative environmental effects and avoiding interference with navigation.

1.2 Southern IFCA is a consultee on Marine Licence Applications (MLAs). When an application is submitted to the Marine Management Organisation and is sent out for consultation, the authority is notified and provided the opportunity to comment and provide advice relevant to its remit on marine licence applications with a 21 day consultation period for each application.

2 South Marine Plan

2.1 The South Marine Plan introduces a strategic approach to planning within the inshore and offshore waters between Folkestone in Kent and the River Dart in Devon. The aim was to provide a clear, evidence-based approach, to inform marine users and regulators on where activities might take place within the Marine Plan area, allowing for national policies to be applied in a local context. The South Marine Plan came into force in July 2018.

2.2 The plan supports the development of proposals by:

- setting out requirements that apply irrespective of specific location, including how an activity or development is undertaken
- identifying factors within plan objectives which will improve chances of success within the decision-making process, for example encouraging proposals to sustain local jobs, draw on the local skills base and support diversification
- providing context for when 'imperative reasons of overriding public interest' are being considered such as the need for nationally significant infrastructure

- increasing awareness of which other relevant legislation, policy, regulations, existing measures and available guidance should or must be taken into consideration
- reiterating the importance of other relevant project-level regulation and assessment within the decision-making process

2.3 The plan sets out a number of policies aimed to address issues and encourage sustainable development within the marine plan areas. The policies cover a wide range of topics and include activities and uses, economic, social and environmental consideration. 53 policies are found within the South Marine Plan, with 23 of these specific to the area, whereas 30 fulfil nationally relevant policies and are found in other marine plans (e.g. East Marine Plan).

2.4 In responding to MLAs the authority should provide advice relevant to its remit as a fisheries regulator and with regard to the South Marine Plan. Annex 1 of this document includes those policies of particular relevance to the work to the exploitation of fishing activities.

3 Southern IFCA Marine Licence Procedure

3.1 On receiving a consultation, the application is logged by officers and an initial scoping exercise takes place to consider the application against relevant marine plan policies. Officers consider whether any further evidence/information is available that could be used to provide more information to the MMO on considering that application and consider whether any relevant marine plan policies could be impacted by the project.

3.2 Where appropriate to make comment a response letter is drafted highlighting those aspects of the South Marine Plan where there is the potential for conflict, as well as any other concerns or advice. This response undergoes a review by the MMO. If any follow up response is required, this is also provided by Southern IFCA to the MMO to consider in their licencing decision-making process.

3.3. A summary of MLA consultation requests and the nature of responses provided for this reporting quarter (May 2023 to August 2023) can be found in Table 1. Only those consultations where it was identified that a response was required are included in the table, all others were deemed to require no comment from Southern IFCA.

Southern Inshore Fisheries and Conservation Authority
December 2022
OFFICER'S REPORT

Table 1 – Summary of MLA consultation requests submitted to Southern IFCA

Project Name	Deadline	Application Number	Application Type	Applicant	Summary	Response
Swanwick and Universal Marinas – Maintenance Dredge and Disposal	14/06/2023	MLA/2023/00048	MLA	Premier Marinas Ltd.	Renewal of 10-year maintenance dredge licence for Swanwick Marina and inclusion of maintenance dredge licence for Universal Marina over the same time frame. Identification that dredging requirement for existing licence could be split across both sites, max. volume 20,000m3 in any 12-month period, but unlikely to need to dredge every year, removed using backhoe and deposited using split barges. Sept to May dredging period.	Response letter sent querying that the WFD Scoping Assessment indicates that there could be an affect on fish species but not specific on what any affects might be. Information provided on River Hamble being identified through SIFCA Net Fishing Review as having Essential Fish Habitat (EFH) which, combined with Southern IFCA Juvenile Fish Survey data indicates the presence of commercially and recreationally important fish species in the area which need to be assessed. Potential for contaminant and underwater noise impacts highlighted as needing assessment.
Fountain Lake Jetty Capital Dredge	16/06/2023	MLA/2023/00115	MLA	HMNB, Portsmouth	Proposed Capital Dredge to modify both alignment and depth of existing berth pockets, disposal at the Nab Tower. Dredging to cycle between loading and disposal supported by regular interim survey updates. Max. dredge volume of 50,000 cubic metres. Dredging methods to include suction dredging, back-hoe dredging and plough/bed-levelling. Works proposed to take place in 2024.	Response letter sent providing links to Southern IFCA survey data from most recent years as it was identified that older survey data had been referenced in associated reports. Identified that the area in question does not overlap with fishing grounds and similar work has been carried out in the past under a previous licence so dredging and associated methods here are ongoing.
Western Docks (Capital Dredge) Widening Project	31/07/23	MLA/2023/00237	MLA	ABP	Proposed Capital Dredge to widen part of the marine access channel to improve access and safety for commercial vessels to the Western Docks. Southern IFCA previously responded to a licence application to undertake	Response letter sent outlining the following points: • Information provided on the fisheries which occur in Southampton Water with specific information on net fishing activities in the River Test.

					sediment sampling ahead of the application for the Capital Dredge MLA.	• Outlined that whilst mitigation for the works is related to the species being mobile and opportunistic there is the potential for knock-on effects in areas away from the dredge site. • Outlined presence of commercial and recreational fisheries in proximity to Nab disposal site, outlined concerns raised by industry on decline in productivity of brown crab and lobster populations and suspended sediments • Recommended that a cumulative/in-combination assessment be carried out for the disposal site in relation to suspended sediment to assess concerns raised by industry • Information on potential contaminants and impacts to species provided along with indication that limiting exposure for all species would be most beneficial • Recommendation that pelagic species are considered as well as demersal species • Recommendation that industry (commercial and recreational) are consulted directly, reiterated that this was mentioned in the previous relevant licence response and repeated offer to facilitate connections for such liaison

Annex I – South Coast Marine Plan – Policies of particular relevance to the IFCA	
Policy	**Detail**
S-CO-1	Proposals will minimise their use of space and consider opportunities for co-existence with other activities.
S-FISH-1	Proposals that support the diversification of a sustainable fishing industry and or enhance fishing industry resilience to the effects of climate change should be supported.
S-FISH-2	Proposals that may have significant adverse impacts on access to, or within, sustainable fishing or aquaculture sites must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts, d) if it is not possible to mitigate the significant adverse impacts, proposals should state the case for proceeding.
S-FISH-3	Proposals that enhance access to, or within sustainable fishing or aquaculture sites should be supported.
S-FISH-4	Proposals that enhance essential fish habitat, including spawning, nursery and feeding grounds, and migratory routes should be supported. Proposals must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impact on essential fish habitat, including, spawning, nursery, feeding grounds and migration routes.
S-MPA-1	Proposals that support the objectives of marine protected areas and the ecological coherence of the marine protected area network will be supported. Proposals that may have adverse impacts on the objectives of marine protected areas and the ecological coherence of the marine protected area network must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts, with due regard given to statutory advice on an ecologically coherent network
S-MPA-2	Proposals that enhance a marine protected area's ability to adapt to climate change and so enhance the resilience of the marine protected area network will be supported. Proposals that may have adverse impacts on an individual marine protected area's ability to adapt to the effects of climate change and so reduce the resilience of the marine protected area network, must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts.
S-MPA-3	Where statutory advice states that a marine protected area site condition is deteriorating, or that features are moving or changing due to climate change, a suitable boundary change to ensure continued protection of the site and coherence of the overall network should be considered.
S-MPA-4	Until the ecological coherence of the marine protected area network is confirmed, proposals should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts on features14 that may be required to complete the network, d) if it is not possible to mitigate adverse impacts, proposals should state the case for proceeding.
S-AQ-1	Proposals for sustainable aquaculture in identified areas of potential sustainable aquaculture production will be supported. Proposals in existing or within potential sustainable aquaculture production areas must demonstrate consideration of and compatibility with sustainable aquaculture production. Where compatibility is not possible, proposals must demonstrate that they will, in order of preference: a) avoid, b) minimise c) mitigate significant adverse impacts on sustainable aquaculture, d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.
S-AQ-2	Proposals that enable the provision of infrastructure for sustainable fisheries and aquaculture and related industries will be supported.